Tim Dixon & John O'Mahony

Australia in the Global Economy



Year 12 Economics

2021 EDITION

AUSTRALIA

IN THE

GLOBAL ECONOMY

2021 Edition

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AUSTRALIA
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2020 Edition

YEAR 12 ECONOMICS

TIM DIXON
JOHN O'MAHONY

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Welcome



The textbook team (L-R) Tim Dixon, Diana Hu (previous editions), Natalie Baker, Zain Ahmed, Joel Bank, Rohan Garga, Nicholas Kamper and John O'Mahony. Not pictured: Michael Pahos, Luke Goldman, Ben Robinson and Michelle Mountford

We live in an extraordinary time in world history. The era of globalisation has seen a transformation in the size and power of the world's major economies. It has also seen a transformation in the way that people live, work and communicate all across the world. But the first two decades of the 21st century showed that globalisation has not brought about stability. Instead, it has contributed to rising uncertainty. By the end of the first decade, we had witnessed a global financial crisis and the worst economic downturn in 75 years. By the end of the second decade, the architecture for managing the global economy had begun disintegrating, with the United States - once the anchor of the global economy - abandoning many of the principles and institutions that had shaped American leadership of the global economy for almost a century. The third decade has begun with the largest downturn in economic activity since the Great Depression almost a century ago, following the onset of the COVID-19 coronavirus pandemic.

With the acceleration of technology, global supply chains and cross-border investment, governments have found that their power to implement domestic economic policies is becoming limited in the face of powerful global forces. It is made more challenging when many multinational corporations have a larger annual turnover than most national economies.

Globalisation is probably the most important force at work at this time in history. It is changing what products are bought, where people travel, what is studied, what careers are chosen, how people entertain themselves and what people believe in. It has increased living standards around the world, but its downsides have also created a backlash against globalisation that gained momentum in the past decade.

Despite the growth of the global economy and spread of new technology, significant gaps remain both between rich and poor countries and between the rich and poor people within countries, with just under half of the world's population living in poverty. Incomes have stagnated in many wealthier nations, jobs have become more insecure and there is heightened anxiety about the future.

Globalisation is also the most significant force at work in the Australian economy. Since the 1980s, Australia has embraced globalisation, placing a high priority on integrating its economy with other economies in its region and throughout the world. As a small economy in a world dominated by much larger economic powers, Australia cannot escape the impact of global economic developments. However, we've seen in the past three decades that a combination of good economic policy, a business sector that responds quickly to changing conditions, and good luck from developments like the global resources boom can all combine to produce surprisingly good results for the Australian economy, even when the general international economic climate is difficult.

The Year 12 Economics Course gives you the opportunity to grapple with many of these issues. It blends theory with current developments, a global perspective, a sensitivity to the factors that determine economic performance and government policies and a focus on the impacts of those policies. Quite apart from keeping you busy during Year 12, it introduces a smorgasbord of issues that you may choose to pursue in greater detail in further study or in your working life.

The first topic of this book examines the global economy. The second examines Australia's relationship to the global economy and trade performance. After these topics establish where Australia fits into the world economy, the third topic reviews the major problems and issues in the Australian economy, such as the goals of economic growth, low unemployment, low inflation, external balance and environmental sustainability. The final topic examines the macroeconomic and microeconomic policies used by governments to meet these challenges.

This textbook is a collaborative effort of a whole team of economic researchers. Each year, the book is comprehensively revised and refined to reflect feedback from students and teachers as well as changes in global and domestic economic conditions and developments in the economic policy environment. Updating for 2021 was a tougher challenge than for any of our past twenty editions, as the impacts of the COVID-19 recession are so far-reaching and fast-changing. Our thanks to all of the team involved in the production of this textbook both for this year and previous years. We hope that this text helps you make sense of the complex topic of Australia and the global economy and that we can pass on to you some of our passion for it.

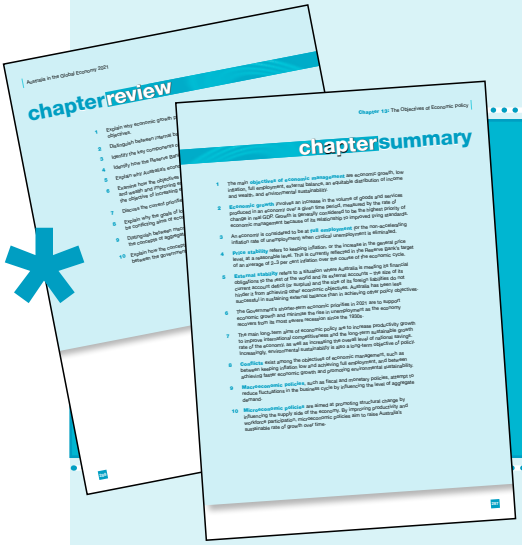
Tim Dixon and John O'Mahony

How to use this book

Congratulations on choosing ***Australia in the Global Economy*** as your text for Year 12 Economics. Before you use ***Australia in the Global Economy***, we'd like to highlight some of its key features.

The text is divided into four Topics, following the structure of the Year 12 Economics syllabus. Each Topic is introduced by a page that includes the relevant Focus, Issues and Skills for that Topic, reflecting the syllabus objectives. This is followed by a clear introduction to each chapter within the Topic.





Each Chapter concludes with a 10-point **Chapter Summary** and 10 **Chapter Review** questions. The Chapter Summary is a good starting point for your notes on each Chapter, and the review questions are a great way to test your understanding of the Chapter.

This year's edition also includes:

- analysis of the impact of COVID-19 on the Australian and global economies in two detailed summaries in chapters 3 and 7
- a detailed analysis of the 2020 federal budget can be found on your *Australia in the Global Economy 2021 Ebook* via www.pearsonplaces.com.au

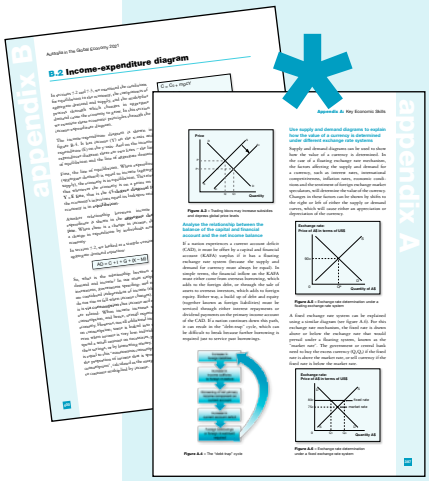




The comprehensive Glossary at the back of the text provides a ready reference for more than 350 key economics terms and concepts.

Throughout the text, you will find references to useful websites relevant to that area of study.





A unique feature of ***Australia in the Global Economy*** is its two appendices, located at the back of the book.

Appendix A: Key Economic Skills gives you the opportunity to master the 23 skills outlined in the Year 12 Economics syllabus. The appendix covers three main areas: drawing and interpreting economic diagrams, equations and calculations, and interpreting economic data and information. By working through this material you will develop and reinforce the key economic skills.

Appendix B: Advanced Economic Analysis provides extension material beyond the Year 12 Economics Syllabus for students seeking an extra challenge.

Australia in the Global Economy Workbook Tenth Edition

The accompanying workbook *Australia in the Global Economy Workbook Tenth Edition* is a great resource to further help you in your study of Year 12 Economics.



This year we have added **enhanced answers** to the workbook answers, including worked solutions for answers that require calculations and additional explanations for answers that require you to demonstrate a deeper understanding of key concepts and knowledge. These will allow you to not only confirm whether you arrived at the right or wrong answer, but to understand why.

How to access answers to the Workbook

You can download the answers to all multiple choice questions and example responses to short answer questions by following these simple steps:

1. Go to **www.pearsonplaces.com.au**
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We really hope that this text makes your study of economics more enjoyable and rewarding. The book is revised and updated each year to ensure it stays sharp and up to the minute – and to save you from having to spend time chasing down information when you should be focusing on understanding the content and developing your skills as an economist.

TOPIC 1

THE GLOBAL ECONOMY

Focus

The focus of this study is the operation of the global economy and the impact of globalisation on individual economies.

Skills

Topic 1 skills questions can ask you to:

- Analyse statistics on trade and financial flows to determine the nature and extent of global interdependence
- Assess the impact on the global economy of international organisations and contemporary trading bloc agreements
- Evaluate the impact of development strategies used in a range of contemporary and hypothetical situations

Issues

Topic 1 economic issues questions can ask you to:

- Examine the effects of globalisation on economic growth and the quality of life, levels of unemployment, rates of inflation and external stability
- Assess the potential impact on the environment of continuing world economic development
- Investigate the global distribution of income and wealth
- Assess the consequences of an unequal distribution of global income and wealth
- Discuss the effects of protectionist policies on the global economy

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Topic 1

Introduction

This section (chapters 1 to 3) covers Year 12 Topic 1 *The Global Economy* and focuses on the structure of the global economy and the key features of globalisation. To understand the Australian economy we need to start with a global perspective. Topic 1 is critical to the rest of the course because it provides the overall perspective for when we later examine other topics such as Australian economic issues and policy.

Chapter 1 provides an overview of the global economy. It discusses the main components of the global economy – international trade, international flows of finance and investment, and the role of technology and people movements in strengthening links between individual economies. These links are highlighted with a review of international and regional business cycles.

Chapter 2 examines the main economic theory that underpins globalisation – the concept of free trade and the economic benefits that trade brings. Chapter 2 then examines the reasons for countries restricting trade and protecting their own industries and how recent years have seen many international agreements to reduce barriers to trade. This chapter concludes with a look at the role of international organisations and government economic forums in managing the global economy.

Chapter 3 examines the divisions within the global economy. Understanding the gaps in the living standards between rich and poor nations is essential to an analysis of the global economy. This chapter looks at the distinction between economic growth and economic development. It discusses the main categories into which different economies are grouped and examines the global and domestic factors that contribute to inequality. Chapter 3 also discusses the impacts of globalisation on economic development.

After Chapter 3, this textbook has a special section analysing the impacts of COVID-19 on the global economy.

Topic 1 concludes with case studies of Brazil and Indonesia. Understanding the impacts of globalisation on individual economies is an important complement to any analysis of globalisation at the global level and is a requirement of the Year 12 Economics Course.

Brazil is one of the four largest emerging economies in the world and is the major economy of the Latin American region – a region of the world Australians often know little about. Like Australia, Brazil is a major commodity exporter, but unlike Australia it has recently experienced severe recession. Brazil been cautious in its response to globalisation and many of its experiences highlight the opportunities and challenges of increased economic integration.

Indonesia is the largest emerging economy of South-East Asia – a region that experienced rapid industrialisation and improvements in economic development in recent decades despite major international economic disturbances. The increasing linkages between Indonesia and Australia make understanding the Indonesian economy especially valuable for future Australian economists.

The case studies may complement another country that you choose to study. You may decide to compare the impacts of globalisation on these two economies or you may choose to make either Brazil or Indonesia your case study in 2021.

1 Introduction to the Global Economy

1.1 The global economy

1.2 Globalisation

1.3 The international and regional business cycles

1.1 The global economy

The study of economics has traditionally focused on how individual economies operate. While countries have always traded with each other, economic theories have generally assumed that economies operate separately from each other and that the structure and performance of economies is mainly the result of local developments and influences.

This way of looking at economics no longer describes the real world. Today we live in a **global economy** – where the economies of individual countries are linked to each other and changes in a single economy can have ripple effects on others. In the industrialised world, for example, the value of what many countries buy and sell from overseas is greater than half of the country's economic output. When conditions in the global economy change, these changes can have an impact on the economies of far-flung countries almost immediately. The importance of global factors in driving economies was starkly illustrated in 2020 by the COVID-19 pandemic, when many countries closed their borders to international tourists and travellers, international supply chains were disrupted, and the global economy plunged into its deepest recession in almost a century. Two special analyses of the global and domestic economic impacts of the COVID-19 pandemic are included in this textbook at the end of Chapters 3 and 7.

In many respects there is nothing new in the fact that major economic developments can have impacts across the world. For example, the Great Depression of the late 1920s and 1930s had a global impact with many countries experiencing a severe economic downturn. On the other hand, economies are more closely integrated now than at any previous time. The linkages between economies are stronger and more far-reaching than ever before. There are few aspects of life that have not been affected by the waves of global influences washing across the world. This is especially the case in a smaller economy such as Australia, which has embraced the global economy and pursued policies to integrate its economy with those of its region and around the world.

Globalisation refers to the integration between different countries and economies and the increased impact of international influences on all aspects of life and economic activity.

In the past three decades **globalisation** has become a dominant economic, political and social theme. Globalisation is the integration between different countries and economies and the increased impact of international influences on all aspects of life and economic activity.

Unlike many previous times in world history when one major empire often dominated the relationships between economies, globalisation in recent decades has involved layers of influences in all directions. Although the United States is still the leading world economy, its power is increasingly constrained by China and other major economies.

Globalisation is also a phenomenon with increasing impacts on national politics. The United Kingdom's "Brexit" from the European Union (EU) and the election of Donald Trump as US president on an anti–free trade platform in 2016 were both examples of rising public opposition to globalisation, with perceptions that it reduces national sovereignty and contributes to inequality. The COVID-19 pandemic added to concern about the impact of globalisation, as travel between countries accelerated the spread of the coronavirus and countries ran short of medical supplies because of their reliance on global supply chains.

From an economic point of view the major indicators of integration between economies include:

- international trade in goods and services
- international financial flows
- international investment flows and transnational corporations
- technology, transport and communication
- the movement of workers between countries.

There are many dimensions to globalisation and there are many statistics that can be used as measures of globalisation. For example, some indication of the extent of globalisation can be gained from examining the proportion of television programming taken by shows produced overseas or the influence of global fashions on what people wear in countries such as Australia. These would be classified as social or cultural indicators of globalisation. Each of these indicators provides an insight into the way in which economies are now linked to each other and re-shaping the global economy.

> "A couple of years ago, our former Chair Christine Lagarde described a world where the global economy was increasingly integrating, but where the global political system was fragmenting, in part because of a backlash against the disruptive effects of globalisation, and its perceived winners and losers.
>
> Over the last decade, opportunities and forces unleashed by technology and globalisation have accelerated, ushering in the Fourth Industrial Revolution. Innovation has created new business models, disrupting incumbents. Corporations strive to remove friction from supply chains and service delivery. However, governments, regulators, incumbent players and societies react to disruption with friction. Complex forces are at play.
>
> We are seeing a shift to multi-speed globalisation. The strategic challenge of the next decade is navigating a world that is simultaneously integrating and fragmenting. Stock markets have set new records and economic volatility has fallen to historic lows, while political shocks on a scale unseen for generations have taken place."
>
> *– Paul Rawlinson, Global Chair, Baker McKenzie*
> *"A prediction for globalisation in 2018", 22 January 2018*
> *World Economic Forum Annual Meeting*

1.2 Globalisation

Trade in goods and services

International trade in goods and services is an important indicator of globalisation because it is a measure of how goods and services produced in an economy are consumed in other economies around the world. The value of exports of goods and services has grown rapidly in recent decades, increasing from US$4.3 trillion (19 per cent of global output) in 1990 to over US$24.9 trillion (30 per cent of global output) in 2019. The size of the **Gross World Product (GWP)** – the aggregate value of all goods and services produced worldwide each year in the global economy – is now over fifty times its nominal level in 1960, but the volume of world trade has grown to over 125 times its 1960 level.

Gross World Product (GWP) refers to the sum of total output of goods and services by all economies in the world over a period of time.

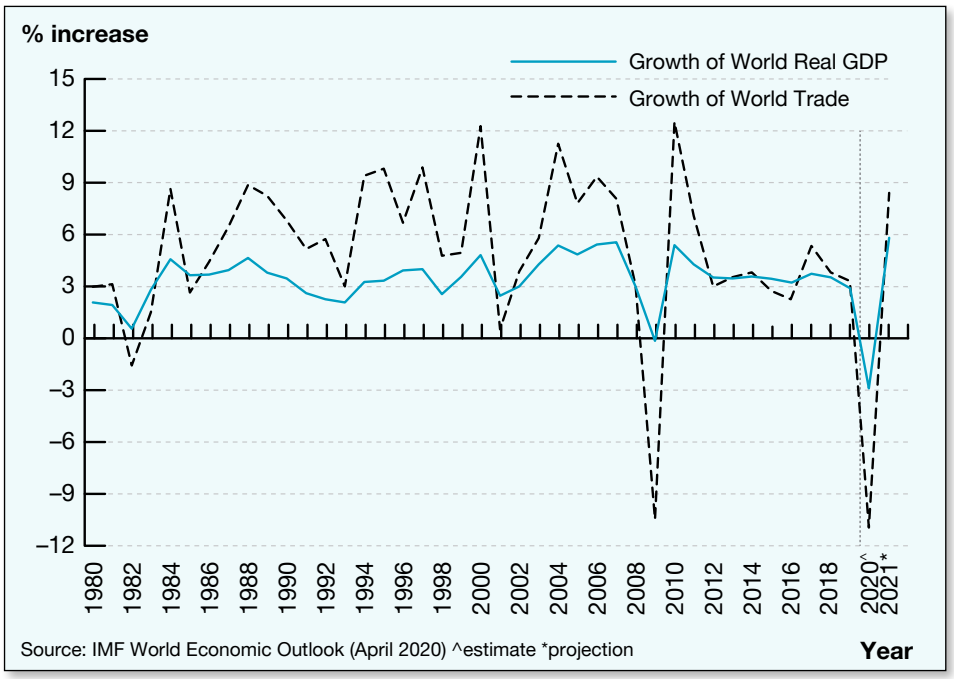


Figure 1.1 – Gross World Product and world trade

Annual growth in the value of trade has generally been around the same level as world economic growth since the global financial crisis, but between the 1980s and 2000s it grew at around double the global rate of growth, as shown in figure 1.1. During economic downturns, such as in the mid-1970s, early 1980s, early 2000s and again in the late-2000s, the growth of global trade has contracted faster than world economic output, highlighting the **greater volatility** of trade compared with the GWP. In mid-2020, the IMF forecast that global trade would contract by 11 per cent because of the impact of COVID-19 on goods supply chains, tourism, and international education services in 2020.

The high volume of global trade reflects the fact that economies do not produce all the items they need, or they do not produce them as efficiently as other economies, and have to import goods and services. Global trade has also grown strongly in recent decades because of new technology in transport and communications, which have reduced the cost of moving goods between economies and providing services to customers in distant markets. Over the same period, governments have encouraged trade by removing barriers and joining international and regional trade groups such as the **World Trade Organisation (WTO)**, European Union (EU), and the Association of South-East Asian Nations (ASEAN). These developments have been a major force behind increasing global trade.

World Trade Organisation (WTO) is an organisation of 164 member countries that implements and advances global trade agreements and resolves trade disputes between nations.

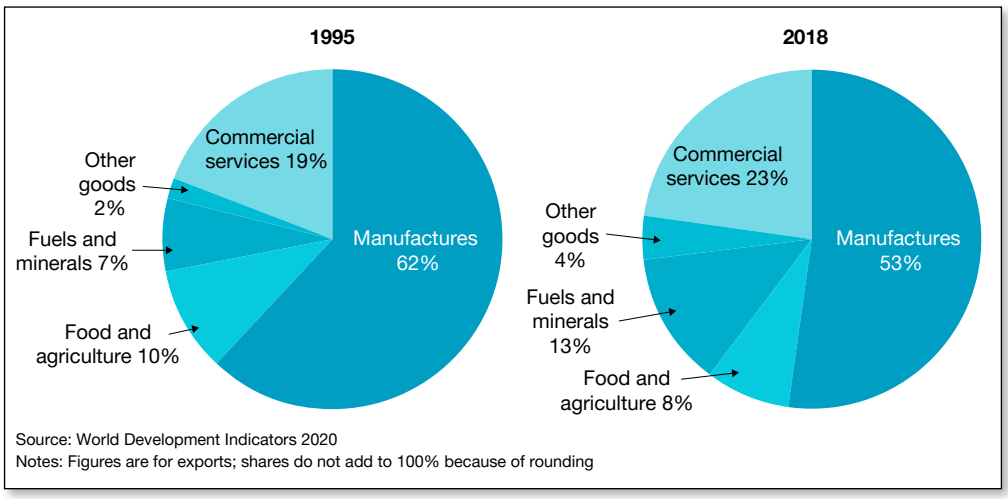
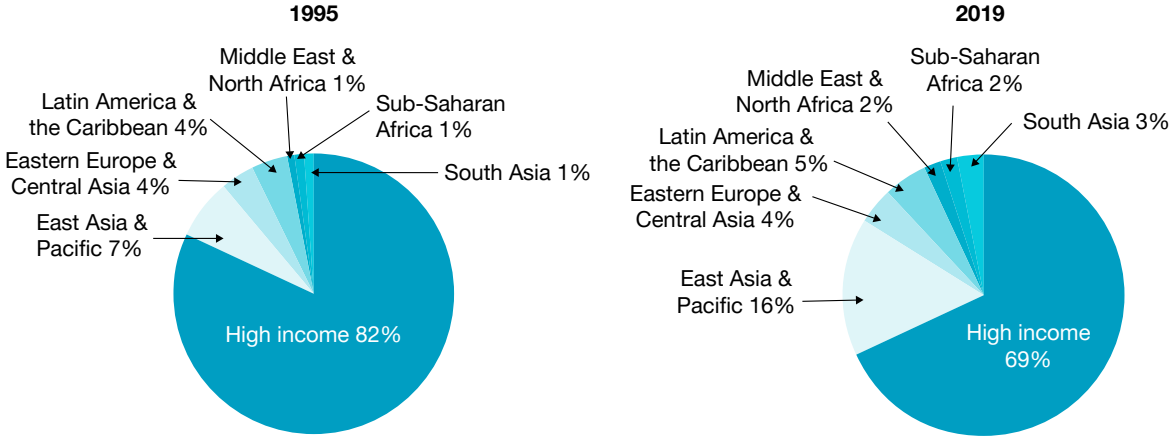


Figure 1.2 – Composition of global trade, 1995 and 2018

The mix of what goods and services are traded, known as the **composition of trade,** can have an impact on individual economies. Figure 1.2 shows that global trade is dominated by manufactured goods, such as vehicles, clothing and electronic goods. Trade in services such as finance and communication are the fastest-growing category of trade and make up two-thirds of global output, but they currently make up only one-quarter of global exports. Countries such as Australia are expected to benefit from the growth in services trade because countries with highly educated workforces are best positioned to compete in growing global markets for services. Nevertheless, the COVID-19 pandemic resulted in a change in the composition of world trade, at least in the short term, with services sectors such as tourism and international education severely affected by travel restrictions.

The **direction of trade flows** has changed in recent decades, reflecting the changing importance of different economic regions. Between 1995 and 2019, high-income economies (concentrated in North America and Western Europe) saw their overall share of global trade fall from 82 per cent of world merchandise exports to 69 per cent, as shown in figure 1.3. Over the same period, the fast-growing economies of East Asia and the Pacific region (which includes China, Indonesia and Vietnam) experienced the most rapid increase in trade, with their share of global trade surging from 7 per cent to 16 per cent.



Source: World Development Indicators 2020. Figures do not add up to 100% because of rounding

Figure 1.3 – Share of world's merchandise exports by region, 1995 and 2019

Trends in the direction of trade can also have an impact on individual economies. For example, with the Chinese economy playing an increasingly important role in global trade, other economies have placed an increased priority on their trade relationships with China. China's economy has grown rapidly in recent decades, and while it has recently been growing at a more moderate pace, it is still one of the world's fastest-growing economies. Countries such as Australia have responded by preparing for a larger trading relationship with China by encouraging students to learn Mandarin at school, negotiating trade agreements with China, and increasing investment in domestic industries whose goods and services are in greatest demand from China.

reviewquestions

1. Explain TWO reasons for the increase in trade in goods and services in the global economy.
2. Describe trends in the composition and direction of trade flows in the global economy.
3. Discuss the impacts of changes in global trade flows on economies.

Financial flows

International finance now plays a leading role in the global economy. Because finance is crucial to so many aspects of how modern economies work, the globalisation of finance has had a major impact in terms of linking economies around the world. Finance is the most globalised sector of the world economy because money moves between countries more quickly than goods and services or people.

International financial flows expanded substantially following financial deregulation around the world, which in most countries occurred in the 1970s and 1980s. Controls on foreign currency markets, flows of foreign capital, banking interest rates and overseas investments in share markets were lifted. Technological change also played an important role. New technologies and global communications networks linked financial markets throughout the world, allowing events in major international markets such as New York, Tokyo, London and Hong Kong to produce immediate results.

While there is no single measure of international financial flows, all have shown a dramatic increase during the globalisation era. Figure 1.4 shows the growth of exchange-traded derivatives, which are a major instrument in global financial markets. After falling significantly in 2008 after the global financial crisis and in 2013 after the Eurozone crisis, financial flows have recovered strongly. Exchange-traded derivatives reached almost US$95 trillion in 2019 (larger than the size of the GWP).

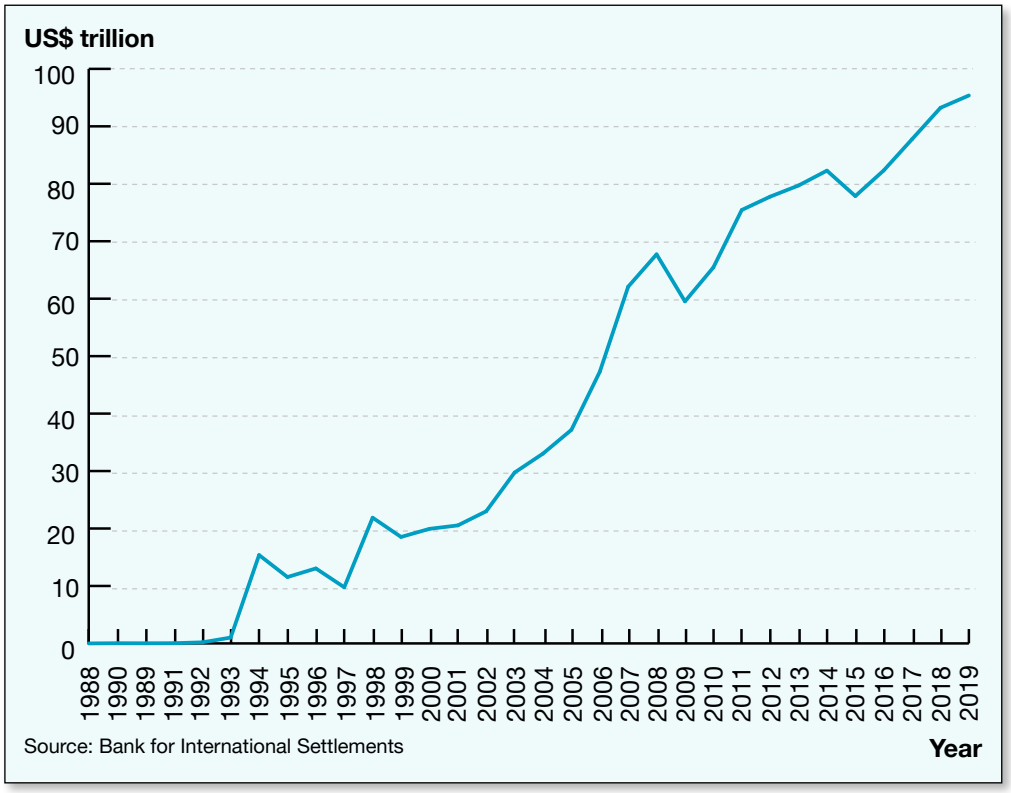
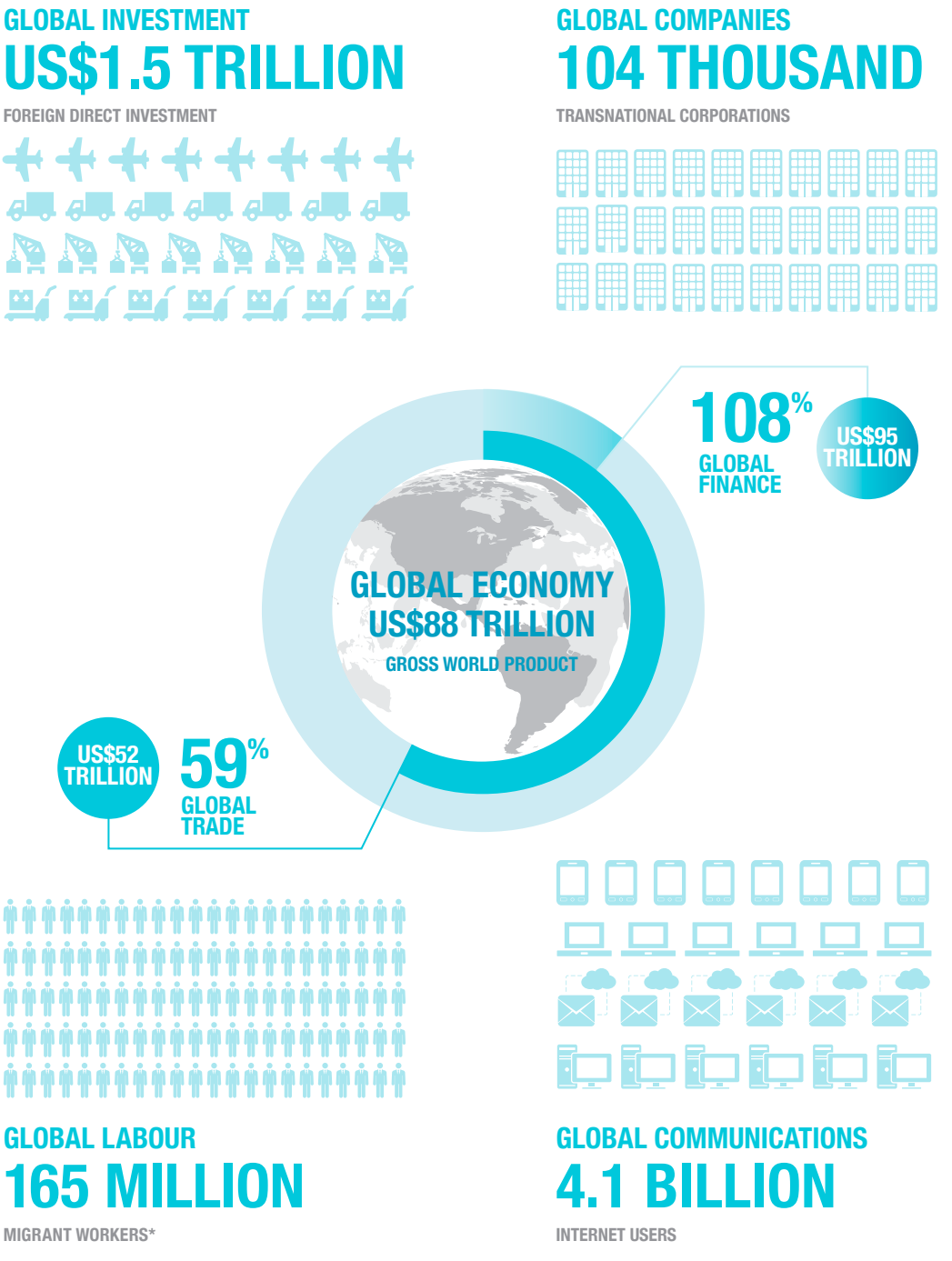


Figure 1.4 – The growth of global financial flows: exchange-traded derivatives

An important feature of international finance is **foreign exchange markets** (or forex markets), which are networks of buyers and sellers exchanging one currency for another in order to facilitate flows of finance between countries. Foreign exchange markets have experienced extraordinary growth in recent years, with average daily turnover reaching almost US$5.8 trillion by 2019, up from US$4.0 trillion in 2010. The value of a currency is expressed in terms of another currency and is known as the **exchange rate** between two currencies. As will be discussed in chapter 5, most countries determine the value of their currency through the interaction of the forces of supply and demand in foreign exchange markets.

The main drivers of global financial flows are **speculators and currency traders** who shift billions of dollars in and out of financial markets worldwide to undertake short-term investments in financial assets. Based on data from the Bank for International Settlements' Triennial Survey of foreign exchange transactions, only a small share is for "real" economic purposes such as trade and investment. The vast majority is for speculative purposes – to derive short-term profits from currency and asset price movements – or for technical purposes, such as hedging against future exchange rate movements and swapping funds between currencies. International investment banks and hedge funds, often based in the United States, are generally responsible for most of these transactions. The aim of these transactions is either to gain from short-term movements in asset prices – namely currency and share price fluctuations – and to generate profits, or to hedge against future movements and minimise the risk of losses.

Speculators are investors who buy or sell financial assets with the aim of making profits from short-term price movements. They are often criticised for creating excessive volatility in financial markets.



SOURCES: World Bank, Bank for International Settlements, International Telecommunications Union, United Nations Conference on Trade and Development
*Excludes migrants who have taken citizenship in their new country

The main benefit of greater global financial flows is that they enable countries to obtain funds that are used to finance their domestic investment. In particular, investors in countries with low national savings levels would not otherwise be able to obtain the necessary finance to undertake large-scale business and investment projects if their economies were closed off to global financial flows. In this regard, global financial flows may enable a country to achieve higher levels of investment (and therefore economic growth) than would otherwise have been possible if finance from overseas were not available.

However, changes in global financial flows can also have significant negative economic impacts. Speculative behaviour can create significant volatility in foreign exchange markets and domestic financial markets. This is because speculators are often accused of acting with a herd mentality, meaning that once an upward or downward trend in asset prices is established it tends to continue. Speculative activity has been blamed for large currency falls and financial crises in several countries over the past decade, including Britain in 2016, Turkey in 2018 and repeatedly in Argentina. As discussed further in chapter 2, the **International Monetary Fund (IMF)** is responsible for the overall stability of the global financial system. One of its roles is to stabilise individual economies experiencing currency crises or financial turmoil in order to prevent flow-on effects to other economies.

International Monetary Fund (IMF) is an international agency that consists of 189 members and oversees the stability of the global financial system. The major functions of the IMF are to ensure stability of exchange rates, exchange rate adjustment and convertibility.

reviewquestions

1 Account for the trends in international financial flows during the globalisation era.
2 Examine the role of speculators and currency traders in global financial markets.
3 Discuss the impact of global financial flows on economies.

Investment and transnational corporations

Another indicator of globalisation is the rapid growth of investment between countries over the past two decades. Since the 1980s, the global economy has witnessed rapid growth in movements of capital. While there are similarities in the growth of global finance and global investment, the two concepts can be distinguished by describing the shorter-term, speculative shifts of money as finance and the longer-term flows of money to buy or establish businesses as investments.

Foreign direct investment (FDI) refers to the movement of funds between economies for the purpose of establishing a new company or buying a substantial proportion of shares in an existing company (10 per cent or more). FDI is generally considered to be a long-term investment and the investor normally intends to play a role in the management of the business.

One measure of the globalisation of investment is the expansion of **foreign direct investment (FDI),** which involves the movements of funds that are directly invested in economic activity or in the purchase of companies. Reforms in developed and developing countries led to a surge in FDI flows from the 1980s onwards. Figure 1.5 demonstrates the dramatic increase in FDI flows over the past three decades. FDI flows are strongly influenced by the level of economic activity. The global recession in the late-2000s reduced FDI flows sharply, but they gradually recovered and the 2010s decade saw sustained high levels of FDI. The COVID-19 pandemic caused another sharp downturn in FDI flows, with UNCTAD forecasting flows of just $1 trillion in 2020, half their level of 2015.

FDI flows have traditionally favoured developed nations. With greater industrial capacity and larger consumer markets, economies in Europe, North America and Japan were the natural destination for foreign investment during the globalisation decades of the 1990s and most of the 2000s. But this dominance has changed, with the share of FDI destined for developing and other economies increasing from a quarter of the global total to around half in recent years. The majority of FDI inflows to developing countries flow to economies in Asia. Of the US$685 billion inflows to developing countries in 2019, US$474 billion went to Asia ($209 billion to China and Hong Kong, $92 billion to Singapore and $51

billion to India). The slower increase in FDI inflows to developing countries in the 2010s reflected a decline in returns on FDI, relative to the returns on investment in developed countries. The average annual return on FDI in developing countries fell from 11.0 per cent in 2010 to 7.8 per cent in 2019. In comparison, during the same period it fell only slightly in developed economies, from 6.4 per cent to 6.0 per cent.

Developing and transitional economies have also become a major source of investment funds in the global economy. In 2019 these economies contributed 30 per cent of global FDI funds, compared to around 15 per cent in the mid-2000s.

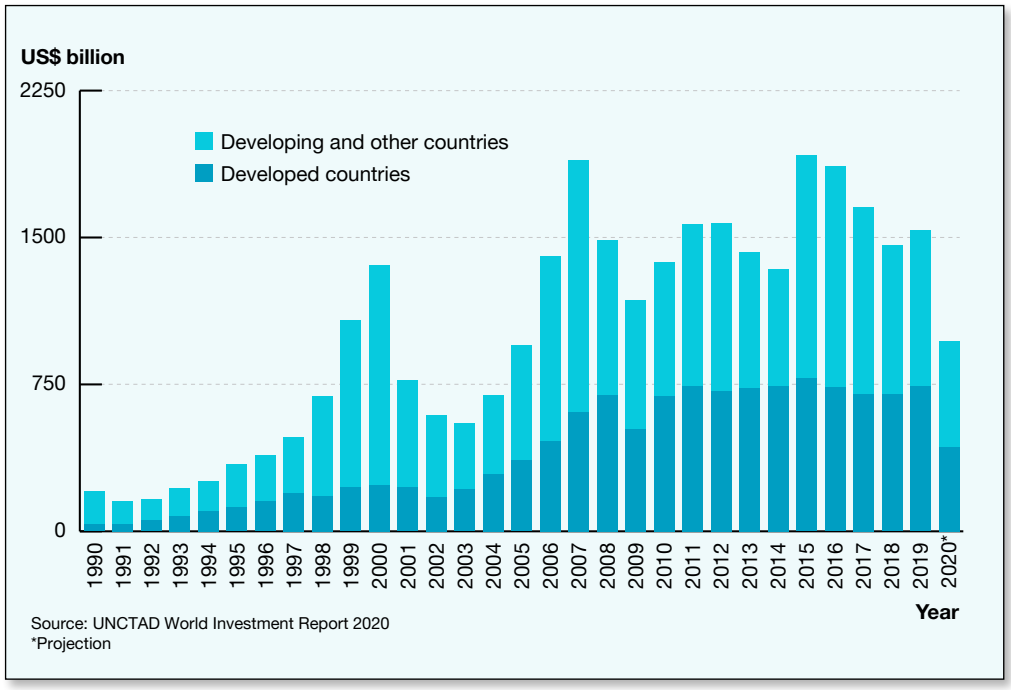


Figure 1.5 – Total world FDI inflows

Transnational corporations (TNCs) play a vital role in global investment flows. Often, they will have production facilities in countries around the world, sourcing inputs from some countries, doing most of the manufacturing in another country, and doing other packaging and marketing tasks in another country.

Transnational corporations (TNCs) are global companies that dominate global product and factor markets. TNCs have production facilities in at least two countries and are owned by residents of at least two countries.

As TNCs such as Apple, Shell and Toyota establish or expand production facilities in a country, they bring foreign investment, new technologies, skills and knowledge. Because of the capital and job opportunities they bring, governments often encourage TNCs to set up in their country through supportive policies like subsidies or tax concessions. Since the early 1990s, the number of TNCs has grown from 37,000 to 104,000 and the number of affiliates to TNCs has grown from 170,000 to over 1,116,000. Foreign affiliates of TNCs employ over 79 million people globally. As TNCs continue to increase in both volume and significance, there has been an associated increase in cross-border cartels between large corporations, which reduces competition in economies and disadvantages local consumers. According to the Organisation for Economic Cooperation and Development (OECD), over 240 cross-border cartels were penalised between 1990 and the mid-2010s, with a financial impact of US$7.5 trillion. Many more cartels are not uncovered by regulators.

A significant cause of the growth of international investment is the increased level of international mergers and takeovers. During recent decades, there has been a spate of mergers between some of the world's largest corporations – most recently between fast food chains Burger King and Tim Hortons, pharmaceutical companies Bristol-Myers Squibb and Celgene, technology and communications giants AT&T and Time Warner, media companies Walt Disney and 21st Century Fox, mining companies Glencore and

Xstrata and between other major companies in the resources, healthcare, and financial services industries. These mergers have seen the formation of companies worth hundreds of billions of dollars and reduced the number of truly global companies in different product markets. The peak year for cross-border mergers and acquisitions (M&As) was 2007, when US$1 trillion of mergers took place, as shown in figure 1.6. International M&As typically move in line with changes in global economic conditions – investment falls when economic growth is lower. In 2019, M&As declined by 40 per cent from the year before to stand at US$411 billion. This decline was driven by sluggish growth in Europe and by Brexit as well as weak activity in developing and transitioning economies.

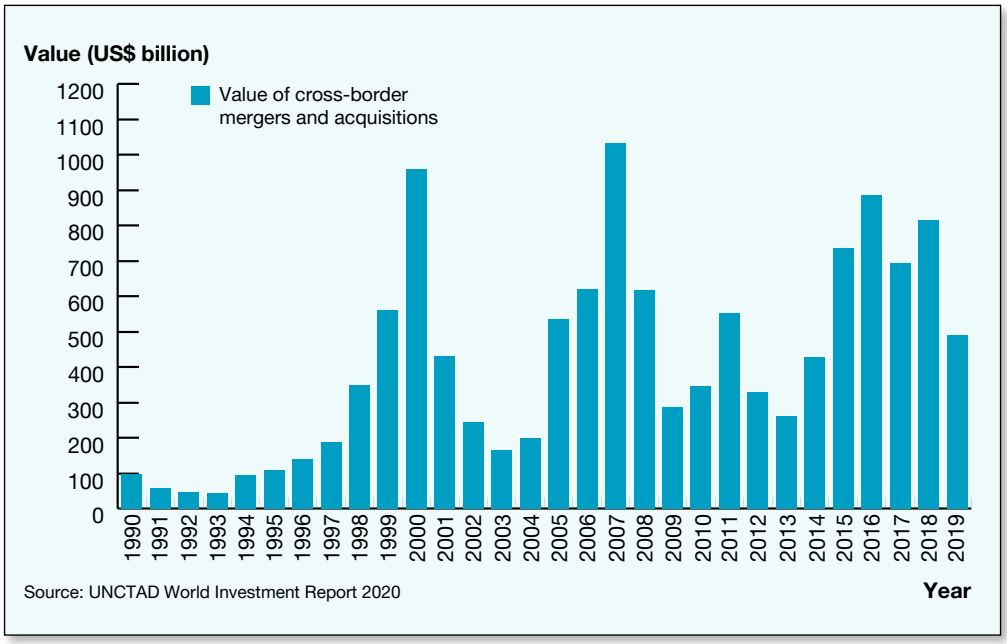


Figure 1.6 – Cross-border mergers and acquisitions

In overall terms, most investment in economies around the world still comes from domestic sources. FDI typically accounts for less than 20 per cent of total investment, meaning that over 80 per cent of investment still comes from within national economies.

reviewquestions

1 Distinguish between global financial flows and global investment flows.
2 Outline trends in the growth and direction of FDI flows.
3 Explain the role that TNCs play in global investment flows.

Technology, transport and communication

Technology plays a central role in globalisation. In part, this is because technological developments facilitate the integration of economies. Consider the following examples:

- Developments in freight technology such as standardised shipping containers (containerisation), cargo tracking and more efficient logistics systems facilitate greater trade in goods.
- Cheaper and more reliable international communication through high-speed broadband allows for the provision of commercial services to customers around the world. The proportion of the global population that uses the internet has increased from 7 per cent in 2000, to 54 per cent in 2019.

- In finance and investment, technology plays a key role in facilitating globalisation through the powerful computer and communications networks that allow money to move around the world in a fraction of a second.
- Smartphones and mobile internet access are fundamentally changing the structure of many industries, from retail and transport sectors to education, leisure and professional services. Technology is causing disruptive change to the structures of many of these industries as huge populations embrace online technologies. The number of mobile phone subscriptions is now almost 8 billion, which is roughly equal to the number of people in the world.
- Advances in transportation such as aircraft and high-speed rail networks allow greater labour mobility between economies, as well as increased accessibility to tourism and travel for consumers.

Technology is one of the strongest drivers of globalisation because it allows integration at a depth unthinkable in previous decades and centuries. Economies that adapt to new technologies rapidly also tend to be the economies that are most closely integrated with other economies in their region or around the world.

Another way that technology influences globalisation is as a driver of growth in trade and investment. For the leading technology innovators and exporters, technology represents a major trade opportunity. The United States earns substantial export revenues from its global leadership in many areas of new technologies. An analysis of the income flows from technology transfers between countries shows that the United States receives half of the royalties and licence fees from the world's technology transfers and that most of the remaining gains are shared amongst a small group of developed economies. Other countries rely on importing technology from these leading countries with the hope that over time, as they adopt new technologies, they can become innovators and develop their own technology exports as countries such as India, South Korea and Israel have done in recent years. Trade, therefore, spreads new technologies. Because innovation is an

SOCIAL MEDIA AND GLOBALISATION



Social media has accelerated globalisation at many levels. By creating new online communities, social media platforms such as Facebook, Instagram, YouTube and Twitter connect individuals on an unprecedented scale. Of all internet users, around three-quarters are active on social media. Facebook, for example, claims 2.6 billion members.

Although social media is contributing to "cultural globalisation", it is also having major economic impacts. Social media is central to marketing consumer products and services. Firms may use professional networks such as LinkedIn to source the best talent from global labour markets. Google Chief Economist Hal Varian has even suggested that word-search data for terms like *unemployment benefits* and *holidays* could be used to predict trends in consumer confidence and economic conditions.

Social media is also itself a global business opportunity. Google earned over US$150 billion in 2019, mostly from advertising revenue. LinkedIn was bought by Microsoft in 2016 for US$28.1 billion, six times its value after it was floated in 2011. Facebook acquired WhatsApp for US$19 billion in 2014, and Microsoft paid US$8.5 billion for Skype Communications to expand its new media operations. Apple Inc. became the world's first trillion-dollar company by selling the phones, tablets and laptops through which people access social media. Social media platforms can rise and fall quickly (TikTok, for example, launched globally in 2017 and had two billion downloads by 2020), but they are reshaping the economics of many industry sectors beyond media and telecommunications.

ongoing process, the leading country can often retain its technological superiority for a long period of time.

Business corporations that play a leading role in developing new technologies will often move directly into overseas markets in order to sell their products and services direct to local buyers. For example, leading information and communications technology corporations such as Google, Oracle and IBM all have extensive global operations. These corporations bring extensive know-how into a new market and will often invest substantially in the new countries that they enter, particularly in education and training. In this way technology drives increased foreign investment.

The internet provides a communications backbone that links businesses, individuals and nations in the global economy. This not only allows greater communication within and between firms but also reduces business costs that have in the past been a barrier to integration between economies. The World Information Technology and Services Alliance (WITSA) has estimated that the global marketplace for information and communications technology is worth almost US$5 trillion. The surge in worldwide internet usage to four billion users highlights the rapid spread of technologies across countries in recent years and the increasingly interconnected nature of the global economy. Figure 1.7 shows the number of internet users in selected countries.

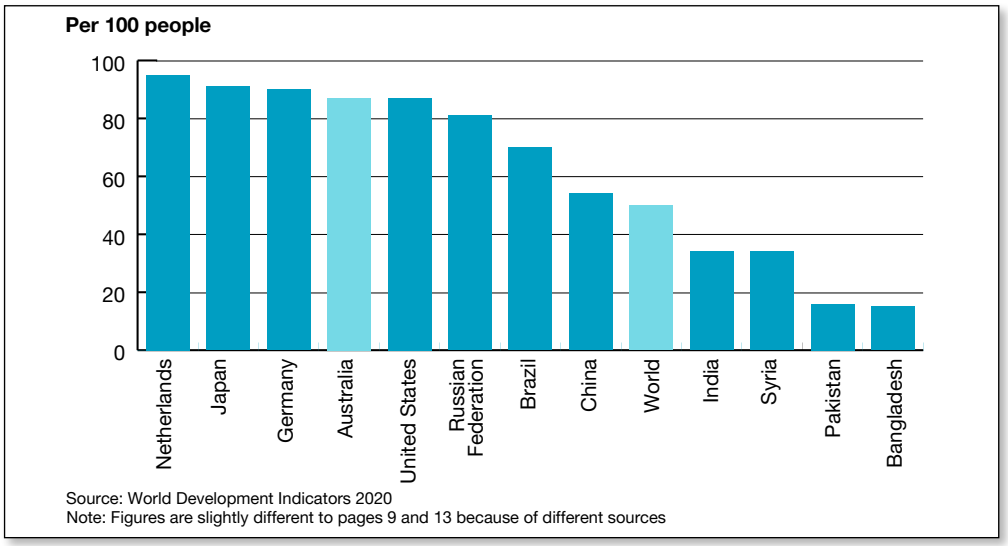


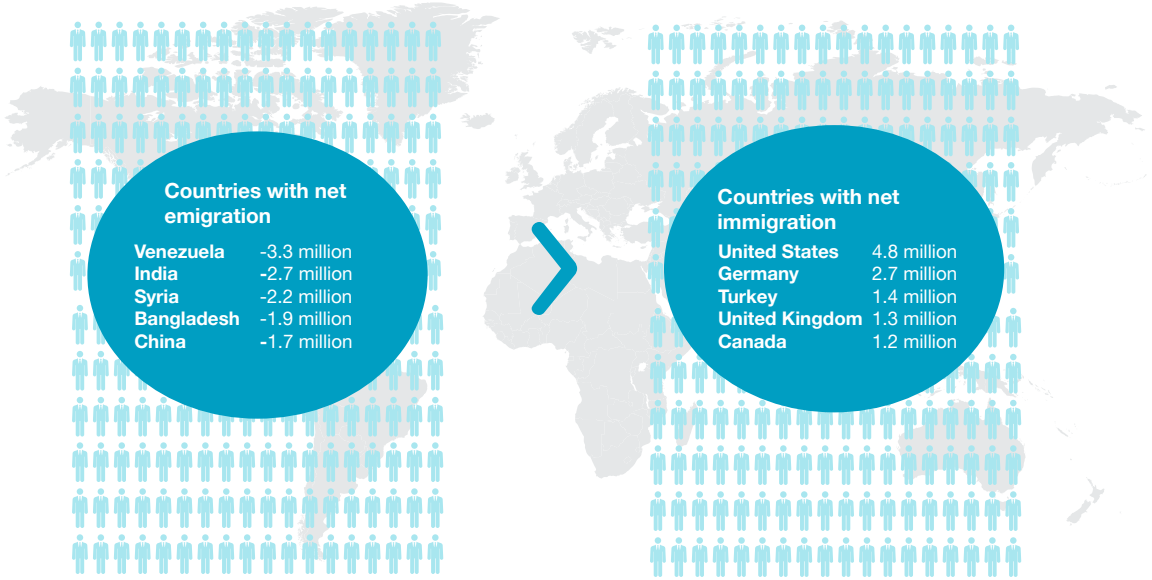
Figure 1.7 – Internet users in selected countries

International division of labour and migration

Labour markets differ from markets for goods and services, finance and investment, in that they are far less internationalised. While money can move around the world in fractions of a second, goods and services can move in days and investments can be made in weeks, people do not move jobs quite as freely. In fact, in recent years the industrialised world has become more restrictive about immigration of people from poorer countries.

Nevertheless, more people than ever before are moving to different countries to take advantage of the better work opportunities that other countries offer. The International Labour Organisation estimates that around 164 million people (around 2 per cent of the world's population) have migrated to work in different countries in the world, and that rising labour supply pressures and income inequalities could increase this level. Labour migration into OECD member countries fell because of reduced job opportunities following the global financial crisis, gradually recovering during the 2010s. While there are strong economic and financial motivations for migration, political unrest and conflict are also a significant factor driving movements, as is evident by the countries shown in figure 1.8.

Migration is the movement of people between countries on a permanent or long-term basis, usually for 12 months or longer.



Source: World Development Indicators 2020

Figure 1.8 – Net migration by region and country (over past five years)

The movement of labour between economies appears to be concentrated at the top and bottom ends of the labour market. At the top end, highly skilled workers are attracted to larger, higher-income economies such as Europe and the United States because of the higher pay and better job opportunities available in these countries. The International Labour Organisation estimates that two-thirds of international migrant workers have moved to high-income economies. Smaller advanced economies such as Australia and New Zealand suffer from a "brain drain" of some of their most talented and skilled workers, who are attracted to other countries by greater rewards. In effect, there is a global market for the most highly skilled labour.

At the bottom end of the labour market, low-skilled labour is also in demand in advanced economies where it may be difficult to attract sufficient people born locally to do certain types of work. Jobs that only require basic skills (and perhaps do not require any language skills) are often filled by migrants – in the United States by migrants from Latin America; in European countries by migrants from Eastern Europe and Africa; in richer Asian countries by migrants from lower-income economies in the region.

These trends in migration reflect an **international division of labour** whereby people move to the jobs where their skills are needed while the globalisation of the labour market is increasing but there are still significant barriers to working in other countries. These barriers include immigration restrictions, language, cultural factors and incompatible educational and professional qualifications. Most people would prefer to stay in the country of their birth, where their family and friends live, and where they are most familiar with the language and culture. Against this preference, domestic instability and geopolitical turmoil may force people to flee their countries, with the UNHCR estimating that 80 million people were forcibly displaced at the end of 2019, the highest figure since World War II.

International division of labour is how the tasks in the production process are allocated to different people in different countries around the world.

The international division of labour is also evident from another aspect of the world economy – the shift of businesses between economies, rather than the shift of people. Just as people may move countries in search of the best job opportunities, corporations shift production between economies in search of the most efficient and cost-effective labour. In a globalised business environment, many producers operate what is called a global supply chain (or global value chain), with production facilities in several countries. The process called "offshoring" allows companies to shift production between countries to reduce

BRAIN DRAIN OR BRAIN GAIN?

Around 164 million people worldwide have migrated because of work. The proportion of these "economic migrants" who are highly skilled heavily outnumbers those who are low-skilled in almost all countries. In some countries, like Haiti and Jamaica, more than 80 per cent of the skilled labour force has moved overseas. Not even high-income countries are immune to the brain-drain problem, with Hong Kong and Ireland losing between one-third to one-half of their college graduates.

Brain drains have traditionally been perceived as a negative outcome for an economy in terms of both development and welfare. High levels of skilled labour emigration increase the technological gap between developed and developing countries as human capital flows towards more advanced economies and the source country may experience shortages of skilled workers. For example, health systems in developing countries can suffer when qualified doctors and nurses move to high-income economies where they are in demand.



On the other hand, economies experiencing outwards migration can benefit from remittance inflows, interconnected business networks and increased sharing of technological developments. The World Health Organisation (**WHO**) and the EU recently launched a project focused on the migration of health workers: From Brain Drain to Brain Gain. The program aims to manage and improve the flow of health workers from developing economies in Sub-Saharan Africa and Asia to maintain health standards and ensure that source countries retain some ability to deal with potential medical crises.



Sources: IZA World of Labor; WHO Health Workforce Alliance and the Health Workforce Department

costs. This results in the development of export-oriented economies that can compete on the basis of their abundance of low-wage labour. While offshoring has been occurring for decades, particularly for labour-intensive manufacturing processes, recent years have also seen services functions such as IT support, data management and accounting move to more competitive locations to reduce costs. A 2019 paper by the International Monetary Fund found that global supply chains have gone furthest in the electric and machinery manufacturing sector. It also found that higher-income countries gain the most from participating in them.

The international division of labour reflects the economic concept of "comparative advantage" that is discussed in chapter 2. Essentially, this theory states that economies should specialise in the production of the goods or services that they can produce at the lowest opportunity cost. Developing economies have a large population of workers with only basic labour skills and education levels, giving them a comparative advantage in labour-intensive manufacturing. Advanced economies have generally shifted away from labour-intensive manufacturing to focus on specialised service aspects of the economy that use more highly skilled workers who are in greater supply in advanced economies.

reviewquestions

1. Explain the role of innovations in technology communications and transport in driving the process of globalisation.
2. Outline key trends in migration in recent years.
3. Explain how migration and offshoring reflect an international division of labour between different economies.

1.3 The international and regional business cycles

Business cycle refers to fluctuations in the level of economic growth due to either domestic or international factors.

Gross domestic product (GDP) is the total market value of all final goods and services produced in an economy over a period of time.

The level of economic activity in individual economies is never constant (that is, never in a state of equilibrium). Economic growth usually moves in cycles – in other words, instead of sustaining a steady rate of growth from year to year, most economies go through periods of above-average growth that then lead into periods of below-average growth. These ups and downs of the **business cycle** (that is, the general level of economic activity) are caused by changes in the level of aggregate supply and demand. This is shown in figure 1.9, which also shows that economies usually experience an overall trend of growth in output (measured by increases in **Gross Domestic Product**).

Just as individual economies experience stronger and weaker periods of economic growth, so too does the global economy. This ebb and flow of world economic growth is known as the **international business cycle**, which refers to the changes in the level of economic activity in the global economy over time. Although the levels of economic growth each year often differ greatly between countries, for most countries economic growth is stronger when the rest of the world is growing strongly and weaker when other countries are experiencing a downturn. The extent of synchronisation of economic growth levels across individual economies is highlighted by the extent to which the downturn in the United States in 2008 spread to other advanced industrialised economies and resulted in one of the largest falls in world trade in more than six decades. Similarly, the global recession resulting from the COVID-19 pandemic demonstrated the interconnectedness of economies. Even countries where the pandemic was less severe still suffered immense economic damage, in part because of the flow-on effects of the recession in other countries.

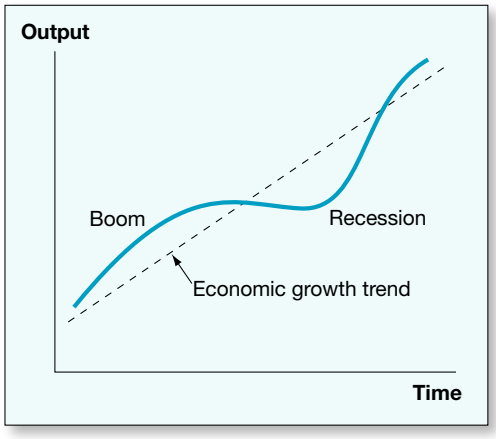


Figure 1.9 – The business cycle

International business cycle refers to fluctuations in the level of economic activity in the global economy over time.

Figure 1.10 highlights the strong relationship between the economic growth performances of the world's major economies. The United States, the Euro Area economies, Japan and Australia all experienced a long period of moderate growth during the 2000s, followed by a sharp collapse in growth after 2008. Each of these advanced economies experienced slower rates of growth during the 2010s before the severe impact of the COVID-19 recession in

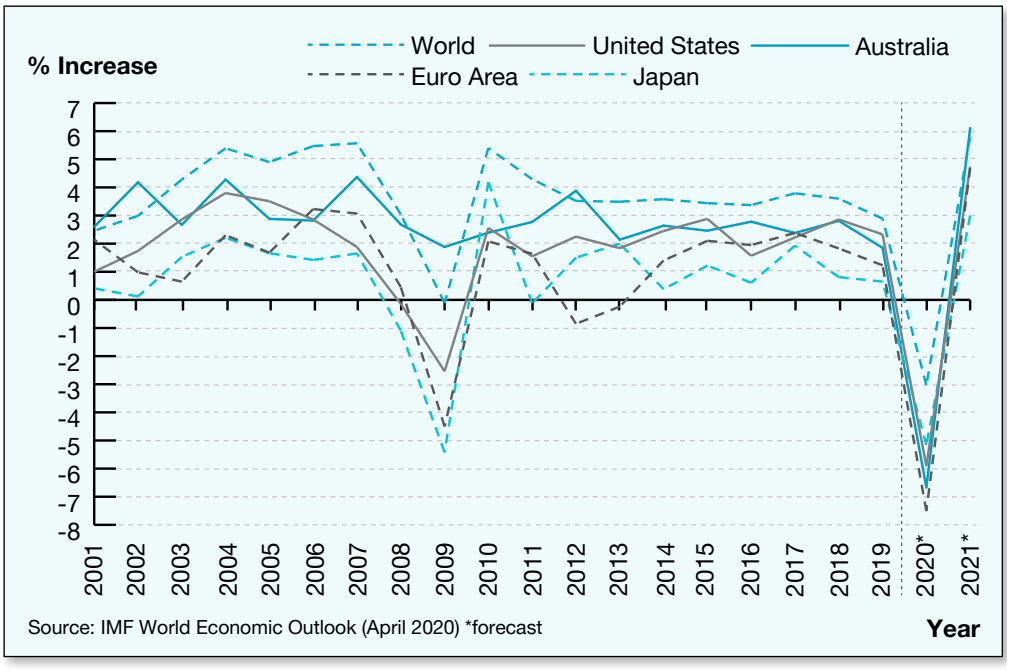


Figure 1.10 – Economic growth performance of major economies

2020. The IMF forecast substantial falls in 2020 across all these economies as a result of the COVID-19 crisis. As a small open economy, the Australian economy is particularly affected by economic growth rates overseas. Research by the Reserve Bank of Australia (RBA) has found that 63 per cent of changes in the level of output in Australia can be explained by the changes in interest rates, growth levels and inflation rates in the Group of Seven (G7) largest industrialised countries. This means that for Australia, domestic factors have half as much influence as international factors on economic growth in any given year.

The transmission of economic conditions from one country to another is made more immediate by the increased integration of economies during the globalisation era:

- **Trade flows**: If there is a boom or recession in one country, this will affect its demand for goods and services from other nations. The level of growth in an economy will have significant flow-on effects on the economic activity of its trading partners.
- **Investment flows**: Economic conditions in one country will affect whether businesses in that country will invest in new operations in other countries, affecting their economic growth. For example, the recent recession in Brazil resulted in a sharp fall in Brazil's investments in other economies in Latin America, with negative outflows of US$13 billion in 2018.
- **Transnational corporations**: TNCs are an increasingly important means by which global upturns and downturns are spread throughout the global economy. In 2019, German investment bank Deutsche Bank announced 18,000 job losses across its offices globally, including selling off some divisions, in response to a deterioration in its performance in the decade since the global financial crisis.
- **Financial flows**: Short-term financial flows also play an important role in transmitting the international business cycle. A 2016 paper by leading economists in the EU titled "International business cycle synchronisation: The role of financial linkages" concluded that countries with strong financial integration will experience an increase in financial flows between themselves, especially in response to common external shocks. This was experienced in mid-2016 when the Brexit referendum result in the UK saw increased financial flows among the other advanced economies.
- **Financial market and confidence**: Consumer confidence and the "animal spirits" of investors are constantly influenced by conditions in other countries. This is highlighted by the strong correlation between movements in share prices of the world's major stock exchanges – that is, they tend to go up and down at the same time. Events that threaten global stability – such as an increased risk of war, sovereign debt default or the collapse of a major business – can spark an immediate downturn in share values. This effect was seen throughout 2020 as markets reacted to developments in the COVID-19 pandemic.
- **Global interest rate levels:** Monetary policy conditions in individual economies are strongly influenced by interest-rate changes in other countries. If higher economic growth makes it necessary for the central bank to increase interest rates in the United States, this places pressure on central banks in other economies to follow suit. Furthermore, higher interest rates in a major economy will make borrowing more expensive for emerging and developing economies. When the US Federal Reserve raised interest rates in 2018, the World Bank predicted that this increase would reduce investment into emerging economies by up to 1.1 per cent of GDP, slowing their growth.
- **Commodity prices:** Global prices of key commodities such as energy, minerals and agricultural products play an important role influencing inflation, investment, employment, growth and other features of the international business cycle. Historically, changes in oil prices have had major impacts on global growth (with lower prices boosting growth overall). However, oil prices have become less important to global growth due to the increasing diversification of energy sources,

as a World Bank study concluded after evaluating the fall in oil prices between 2014 and 2016.

- **International organisations**: International forums such as the Group of Twenty (G20) or Group of Seven (G7) can play an important role in influencing global economic activity. Discussions of global economic conditions at summit meetings mean that the G20 or G7 can act as the unofficial forum for coordinating global macroeconomic policy, especially during periods of economic uncertainty. These meetings can also resolve tensions between countries that threaten the economic outlook.

Nevertheless, it is important to note that despite these linkages between economies, the pattern and the pace of economic growth differ between countries. Even countries that are at similar stages of economic development, such as the United States and European economies, experience differing levels of economic growth. Despite the global linkages described above, many of the factors that influence the business cycle differ between economies:

- **Interest rates** have a significant impact on the level of economic activity, and interest rates differ between countries (or regions, in the case of European countries that share a common interest rate policy). Higher interest rates will dampen economic activity while lower interest rates will stimulate economic activity.
- A government's economic policy decisions can influence their economic growth rate. For example, the UK's decision to leave the EU in 2016 reduced the rate of economic growth as investor confidence in Britain's economy fell. **Fiscal policies** also have a significant effect upon the level of economic growth in the short to medium term. If a government in one country raises taxes while the government in another country cuts its taxes, economic growth is likely to move in opposite directions in those two countries.
- **Exchange rates** differ between countries and impact on the level of trade competitiveness and confidence within economies. In turn, these factors will influence the level of economic growth. The Bank for International Settlements has noted that exchange rates are having an increased impact on domestic economies, particularly in the past decade as government policy has less ability to target economic shocks.
- **Structural factors** differ between economies. For example, countries have different levels of resilience in their financial systems; different levels of innovation and takeup of new technologies; different attitudes towards consumption and savings; different population growth rates and age distribution; different methods of regulating labour markets, educating and training employees and regulating businesses. These structural factors influence the competitiveness of economies and their level of growth.
- **Regional factors** between economies differ. Some economies are closely integrated with their neighbours and are therefore very influenced by the economic performance of their major trading partners. For example, geopolitical instability in countries like Egypt, Turkey and Yemen held back economic growth in other Middle Eastern economies throughout the 2010s. Other economies may be less influenced by changing growth in a specific region.

In summary, there is an international business cycle and when there is a substantial economic downturn, such as in the mid-1970s, the early 1990s, the late 2000s and early 2020s, this downturn is shared across almost all countries. However, the factors influencing individual economies differ and the level of world economic growth is one of several factors that influence economic conditions.

FACTORS THAT *STRENGTHEN* THE INTERNATIONAL BUSINESS CYCLE

- Trade flows
- Investment flows and investor sentiment
- Transnational corporations
- Financial flows
- Technology
- Global interest rates
- Commodity prices
- International organisations

FACTORS THAT *WEAKEN* THE INTERNATIONAL BUSINESS CYCLE

- Domestic interest rates
- Government fiscal policies
- Other domestic economic policies
- Exchange rates
- Structural factors
- Regional factors

Regional business cycles

Regional business cycles are the fluctuations in the level of economic activity in a geographical region of the global economy over time.

Similar to the international business cycle, the term **regional business cycle** refers to the changes in economic activity in a particular region. In the same way that countries' activity can be affected by global changes, they can also be affected by regional changes. While changes in the US economy will have ripple effects around the world, they can have more pronounced impacts in **North America,** on the nearby Canadian and Mexican economies, because of their integration through the North American Free Trade Agreement. Likewise, many of the 27 economies of the **EU** are influenced by activity levels in Europe's largest economies – Germany and France.

In the **East Asian region**, economic conditions are dominated by the influences of China and Japan – the world's second- and third-largest economies. While the regional business cycle in Asia has been weaker than in other regions, it has strengthened in recent years because of increased integration between Asian economies. On the other hand, as China and Japan both experienced a slowdown in recent years, the region continued to experience stable growth due to moderate upswing elsewhere in the region.

Other regions around the world have a higher proportion of developing or low-income countries, and they tend to be less regionally integrated. In **Sub-Saharan Africa,** for example, many economies such as Chad, Uganda and Sierra Leone are dependent on high-income economies for more than 80 per cent of their exports, and are therefore as likely to be influenced by conditions in the world economy as they are by neighbouring African economies. In the **South Asia and Latin American regions,** regionally dominant economies such as India and Brazil respectively play a key role alongside influences from outside the immediate region.

While regional business cycles tend to be dominated by the largest and most globalised economies, it is also important to recognise the complexity of conditions at the regional level. In the early 2010s, economic conditions in European economies were weakened by financial turmoil in the relatively small economy of Greece. Similarly, the East Asian financial crisis of the late-1990s was triggered by a substantial depreciation of the Thai baht. A financial crisis in Argentina and the severe impact of COVID-19 in Brazil weakened the Latin American region in 2020. Geographical tensions among Russia and Ukraine in the mid-2010s reduced growth, trade and economic policy across **Europe and Central Asia**. In this way, smaller economies can affect the performance of regional economies even if they are not dominant economies or strongly integrated.

Clearly, regional business cycles can be quite different from patterns in global economic activity with some regions performing more strongly than others and fluctuating more independently from other regions. However, regional cycles are also part of the phenomenon of globalisation because they result from increased cross-border integration. These business cycles of different regions interact in complex ways to drive the level of economic activity around the world.

reviewquestions

1. Define the terms *international business cycle* and *regional business cycle*.
2. Using examples from specific countries or regions, describe recent trends in the international business cycle and regional business cycles.
3. Outline the factors that strengthen and weaken the relationship between the economic cycles of individual economies.

chapter summary

1 **Globalisation** refers to the integration between different countries and economies, leading to the increased impact of international influences on all aspects of life and economic activity.

2 The **global economy** is a way of describing the activities of all the economies of the world as a whole, reflecting the fact that they are now increasingly linked together into one larger economic system.

3 The **gross world product** is the sum of the total output of goods and services produced by all economies in the world over a given period of time.

4 The growth of **world trade** is an important indicator of the extent of globalisation. During the period of rapid globalisation in the decades to 2010, trade grew at a much faster rate than world economic growth. In the 2010s, trade grew at close to the same level as overall growth.

5 The pattern and direction of world trade has changed to reflect the increasing importance of advanced technology and services and the growth of the Asia Pacific region.

6 The process of globalisation has occurred most rapidly in global finance which faces few barriers and is driven mostly by speculative activity (that is, investors seeking to make short-term profits out of fluctuations in exchange rates, interest rates and other financial indicators).

7 **Foreign direct investment (FDI)** is the injection of funds into an economy to establish a new business or purchase an existing business. FDI flows are driven by **transnational corporations (TNCs)** and often involve the transfer of technological innovations between economies.

8 **Technology, transport and communication** have driven increased economic integration by facilitating linkages between businesses individuals and nations in the global economy.

9 Globalisation has also contributed to the **international division of labour** in part because of the migration of workers to countries where jobs are plentiful or better paid, and also because of the shift of business between economies in search of the most efficient and cost-effective labour.

10 The concept of **international and regional business cycles** refers to the extent to which economies tend to experience a similar pattern of boom, downturn and recovery at similar times. Although the shape and the length of the business cycle differs from one economy to the next, the level of economic growth between different economies is closely related, and recessions and booms tend to occur around similar times.

chapterreview

1 Explain what is meant by *globalisation*, using recent trends to illustrate your answer.

2 'Just as the COVID-19 pandemic spread fast because of the contagious nature of the coronavirus, the COVID-19 recession spread fast because of the connected nature of the global economy.' Discuss what this statement is saying about the global economy in the 2020s.

3 Describe the role of trade flows in globalisation.

4 Summarise recent changes in the direction and composition of international trade in goods and services.

5 Explain how technology drives growth in the trade of goods and services.

6 Explain the difference between *investment flows* and *financial flows*.

7 Outline the role of foreign-exchange markets in international financial flows.

8 Discuss the role played by transnational corporations (TNCs) in globalisation.

9 Discuss the impact of globalisation on the international division of labour.

10 Explain how changes in the level of economic growth in one economy can impact on economic growth in other economies.

11 Examine the performance of an individual economy over the past decade. Discuss the extent to which this economy's performance has reflected world economic growth trends and the extent to which it has differed. Identify factors that might explain these similarities and differences.

Trade in the Global Economy

2

2.1 Advantages and disadvantages of free trade
2.2 Reasons for protection
2.3 Methods of protection
2.4 Trade agreements
2.5 International organisations
2.6 Government economic forums

Trade has played a critical role in the expansion of the global economy. The periods of the fastest growth in the global economy have also been periods of rapid growth in trade. In the 21st century the world's fastest-growing economies are typically economies with rising levels of trade. Trade has brought countries together, created wealth and re-shaped the structure of many economies.

This chapter examines the economic theory behind the reasons for trade relationships, government policies that have restricted and facilitated trade and the role played by international institutions in trade flows, financial flows and foreign investment.

2.1 Advantages and disadvantages of free trade

While economists differ on the detailed aspects of optimum trade policies, there is widespread agreement among economists on the principle that economies will achieve higher levels of growth in a free trade environment. Although barriers to trade remain significant, the broader trend in recent decades has been towards greater free trade in the global economy.

Free trade can be defined as a situation where governments impose no artificial barriers to trade that restrict the free exchange of goods and services between countries with the aim of shielding domestic producers from foreign competitors.

The argument for free trade is based on the economic concept of **comparative advantage**.The principle of comparative advantage states that even if one country can produce all goods more efficiently than another country, trade will still benefit both countries if each specialises in the production of the good in which it is comparatively more efficient. This comparative efficiency is measured by the **opportunity cost** of producing each good within that country. Thus if the opportunity cost of producing coal in Australia is lower than in China (that is, in order to produce an extra ton of coal, Australia gives up producing a smaller quantity of cars than does China), then Australia is said to have a comparative advantage in coal production. At the same time, if the opportunity cost of producing cars in China is lower than in Australia, then China is said to have a comparative advantage in cars.

Comparative advantage is the economic principle that nations should specialise in the areas of production in which they have the lowest opportunity cost and trade with other nations so as to maximise both nations' standards of living.

Opportunity cost represents the alternative use of resources. Often referred to as the "real" cost, it represents the cost of satisfying one want over an alternative want. This is also known as economic cost.

Free trade is a situation where there are no artificial barriers to trade imposed by governments for the purpose of shielding domestic producers from foreign competitors.

ADVANTAGES OF FREE TRADE

- Trade allows countries to **obtain goods and services that they cannot produce themselves** or in sufficient quantities to satisfy domestic demand. This would generally occur because of a lack of adequate resources. For example, a country may lack the necessary technology to produce certain manufactured goods.
- Free trade allows countries to **specialise** in the production of the goods and services in which they are most efficient. This leads to better resource allocation and increased production within countries and throughout the world.
- Free trade encourages the **efficient allocation of resources**. Resources will be used more efficiently because countries are producing the goods in which they have a comparative advantage.
- A greater tendency for specialisation leads to **economies of scale**, which will lower average costs of production while increasing efficiency and productivity.
- **International competitiveness** will improve as domestic businesses face greater competitive pressures from foreign producers, and governments will encourage domestic industrial efficiency.
- Free trade **encourages innovation** and the spread of new technology and production processes throughout the world.
- Free trade leads to **higher living standards** as a result of lower prices, increased production of goods and services and increased consumer choice, as countries have access to goods that a lack of natural resources may otherwise prevent. The opening up of global markets leads to higher rates of economic growth and increased real incomes.

DISADVANTAGES OF FREE TRADE

- An increase in **unemployment** may occur as some domestic businesses may find it hard to compete with imports. The short-term rise in unemployment should correct itself in the long term as the domestic economy redirects resources to areas of production in which it has a comparative advantage. Nevertheless, some specific industries, workers and regions may lose out in the longer term as a result of free trade.
- It may be more difficult for less advanced economies to establish new businesses and new industries if they are not protected from larger foreign competitors.
- Production surpluses from some countries may be **dumped** (that is, sold at unrealistically low prices) on the domestic market, which may hurt efficient domestic industries.
- Free trade may encourage **environmentally irresponsible production methods** because producers in some nations may win markets by undercutting competitors' prices – only because they also undercut environmental standards. For example, they may reduce or might not dispose of waste products safely.

Appendix B:
For more information on the economic theory of comparative advantage and gains from trade, go to section B.1 in the Advanced Economic Analysis appendix at the back of the textbook.

reviewquestions

1. Explain the principle of comparative advantage.
2. Describe how the idea of comparative advantage supports the arguments in favour of free trade.
3. Define *free trade*.
4. Examine the costs and benefits of free trade.

2.2 Reasons for protection

Protection can be defined as any type of government action that has the effect of giving domestic producers an artificial advantage over foreign competitors. The main protectionist measures include tariffs, import quotas and subsidies.

Protection refers to government policies that give domestic producers an artificial advantage over foreign competitors, such as tariffs on imported goods.

Despite the economic benefits of free trade, historically most countries have tended to impose at least some forms of protection to assist local producers in the face of foreign competition. A number of arguments have been put forward to justify why countries impose protectionist barriers to trade, including the need to assist infant industries, protecting industries from overseas firms dumping goods, reducing unemployment and arguments for self-sufficiency in certain items.

Infant industries

New industries generally face many difficulties and risks in their early years. They usually start out on a small scale with costs that are relatively higher than those of established competitors in other countries. These "infant industries" may need to be shielded from competitors in the short run to enable them to build capacity, establish markets and achieve economies of scale so that they can compete in the global economy. This approach to the development of new industries has been used by many emerging economies in recent decades.

The key test for economic credibility of the infant industry argument is whether industry protection is removed over time. If protectionist policies are not removed, there will be no real incentive for the industry to reach a level of efficiency that would enable it to compete without protection. This means that governments should provide temporary assistance only to industries that have a good chance of achieving some comparative advantage in the long run so they can compete in the global economy.

Historically, many industries that have received assistance as infant industries have continued to rely on this assistance for many years. The infant industry argument has been used to support many industries that would never have survived otherwise. For this reason economists are generally reluctant to accept businesses seeking protection based on the infant industry argument. When governments provide help to new industries now, this tends to involve direct assistance and lasts for a limited period of time.

Prevention of dumping

Dumping occurs when foreign firms attempt to sell their goods in another country's market at unrealistically low prices (that is, below the price charged in the home country's market). The practice of dumping may be used to dispose of large production surpluses or to establish a market position in another country. These low prices are usually only of a temporary nature but can harm domestic producers. Local firms that could normally compete with such foreign producers may be forced out of business causing a loss in a country's productive capacity and higher unemployment.

Dumping is the practice of exporting goods to a country at a price lower than their selling price in their country of origin.

The only gain from dumping is that it results in lower prices for consumers in the short term, but this does not last as foreign producers will put up their prices once the local competition is eliminated. Under such circumstances it is generally in the economy's best interest to impose restrictions on such imports. Using protectionist methods to prevent dumping is the only reason for protection that is widely accepted by economists. However, in recent years the World Trade Organisation has questioned whether countries might be unfairly accusing efficient low-cost foreign producers of dumping and abusing "anti-dumping" processes in order to protect their domestic industries.

Top five economies initiating anti-dumping measures	
India	972
United States	728
European Union*	521
Brazil	418
Argentina	388
Top five exporting economies affected*	
China	1392
South Korea	447
Taiwan	315
United States	298
India	241

Source: WTO statistics on anti-dumping, www.wto.org, July 2020 *Based on measures undertaken to December 2019

Figure 2.1 – Anti-dumping actions in force under WTO system

Almost 6000 anti-dumping complaints have been lodged by WTO members since the WTO was formed in 1995, with India and the United States responsible for the highest number. By 2020, there were almost 4000 anti-dumping measures (such as duties) legally in force. The sectors where anti-dumping measures are most common are base metals, chemicals, plastics, resin and rubber. Australia has lodged a relatively high number of complaints – sixth in the world (with over 351 complaints initiated). Figure 2.1 identifies the countries that have initiated the largest number of anti-dumping actions and the countries most affected by them.

Protection of domestic employment

One of the most popular arguments in favour of protection is that it saves local jobs. If local producers are protected from competition with cheaper foreign imports, the demand for local goods will be greater and this will create more domestic employment. This argument tends to gain more public support during times of recession when unemployment is rising, even though trade technology and automation often play a more significant role in job losses than trade.

However there is little support among economists for this argument. Protection will tend to distort the allocation of resources in an economy away from areas of more efficient production towards areas of less efficient production. In the long run this is likely to lead to higher levels of unemployment and lower growth rates. On the other hand, by phasing out protection it is hoped that better and more lasting jobs will be created in other sectors within the economy that are internationally competitive. Furthermore, if a country protects its industries it is possible that other countries will retaliate and adopt similar protectionist policies. The net result could be that the country would maintain employment in less efficient protected industries but lose employment in more efficient export industries.

Self-sufficiency for national security and other essentials

Countries sometimes have non-economic reasons for wanting to retain certain industries. For example, major powers generally want to retain their own defence industries so that they can be confident that in a time of conflict they would still be able to produce the equipment needed for their national security. For this reason a country such as the United States would not buy crucial defence equipment from overseas countries even if they could produce them cheaper because this could make it reliant on other countries for its national security. A recent example is the decision of the Australian, British and US governments to restrict Chinese telecommunications giant Huawei from participation in the construction of 5G mobile telecommunications networks, because of concerns about those networks being monitored by the Chinese government.

A similar argument for self-sufficiency of medical supplies as well as food and essential manufactured goods became a major economic policy issue in 2020, following the onset of the COVID-19 pandemic. Many countries confronted shortages of emergency medical supplies such as ventilators and personal protective equipment in 2020. An analysis by the Peterson Institute of International Economics found that almost half of the world's medical supplies are manufactured in China. With the onset of the pandemic, Chinese suppliers were unable to meet global demand, in part because producers needed to give priority to domestic needs. The shortages of protective equipment and other medical supplies contributed to the impact and spread of the pandemic.

As a result of these shortages, governments began making the case for ensuring medical needs can be met by local producers in the event of future pandemics or emergencies. Other shortages during the lockdowns that followed the pandemic underscored wider concerns that globalisation has made many economies too reliant on fragile global supply chains.

At one stage, disruptions to the supply of plastic biscuit trays from China threatened the domestic supply of Tim Tams in Australia, even though the biscuits themselves are manufactured locally by Arnotts. The debate between the efficiency of "just-in-time" global supply chains versus "just-in-case"-self-sufficiency has emerged as a significant issue in discussions of how nations respond to globalisation. When a country implements protectionist policies it must also accept that higher costs may be involved in producing those goods locally, compared to sourcing them from countries that have a comparative advantage in producing them.

Other arguments in favour of protection

Several other arguments are also used in favour of protecting local industries. For example:

- Because of the large difference in wage levels between higher and lower income economies, some economists argue that producers should be protected from competition with countries that produce goods with low-cost labour. They argue that labour costs are artificially low in many developing economies because of weak labour standards (such as restrictions on the rights of workers to form unions and low safety standards). They reason that it is legitimate to protect the living standards of workers in high-income economies through protectionist trade policies. Some economists also argue that in order to protect human rights, governments should prohibit trade with goods produced using forced labour (for example, prison workers) or child labour.
- Countries sometimes block trade in goods because of **environmental factors**, such as the environmental harm involved in the production of certain goods. Overseas producers may be able to produce some items cheaply because the producers are environmentally irresponsible and do not have to comply with the tougher environmental standards that apply in advanced economies.

THE 2018 LIVE SHEEP EXPORT CRISIS

Countries normally impose trade restrictions on imports to prevent goods from overseas being sold in their country. However, sometimes countries restrict their own producers from selling to other countries. This is normally done for non-economic reasons – for example, Australia restricts the export of uranium to reduce the risk of Australian uranium being used in the production of nuclear weapons.

Australian export restrictions became a front-page news story in 2018, after an episode of the current affairs televison program *60 Minutes*. The program showed footage of cruel treatment and the deaths of hundreds of sheep and lambs that had been exported from Australia to the Middle East, in clear breach of live export regulation. A public outcry followed, with thousands of Australian signing petitions to ban live animal exports and a series of public rallies and protests across the country.

Responding to public pressure, the Australian Government launched a series of reviews into the live export trade. Its initial recommendations included a reduction in live sheep export during the hotter months of the year, as well as consideration of a gradual phasing out of live animal exports completely.

Agricultural groups immediately criticised the recommendations from the report, saying that these recommendations would cause long-term damage to agricultural exports. Around 7 per cent of Australian cattle and 6 per cent of sheep are sent overseas alive rather than being slaughtered in Australia.

reviewquestions

1 Outline the major reasons why nations may argue in favour of introducing protectionist policies.

2 Identify which argument in favour of protection is most accepted by economists and explain why.

2.3 Methods of protection

Most countries use at least some measures to shield their domestic producers from foreign competition with protectionist policies, although the use of protectionist barriers has declined in recent years. There has also been a shift from traditional protectionist measures, such as tariffs and subsidies, towards less visible measures, such as administrative barriers and industry assistance plans.

Tariffs

Tariffs are taxes on imported goods imposed for the purpose of protecting Australian industries.

A **tariff** is a government-imposed tax on imports. It has the effect of raising the price of the imported goods, making the domestic producer more competitive. The effects of a tariff are shown in figure 2.2.

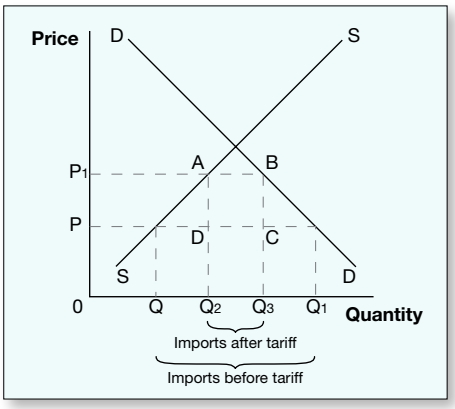


Figure 2.2 – The effect of a tariff

Figure 2.2 reveals the following:

- The curves SS and DD represent domestic supply and demand.
- 0P is the price of imported goods if there was **no tariff** applied (that is, in a situation of free trade). At this price consumers demand $0Q_1$, domestic producers supply 0Q and the quantity imported would be QQ_1.
- If a tariff of PP_1 is imposed, all of which is passed on to the consumer, demand will contract to $0Q_3$, domestic supply will expand to $0Q_2$ and imports will fall to Q_2Q_3.
- Following the imposition of the tariff the government will raise revenue of ABCD.

ECONOMIC EFFECTS OF A TARIFF

- Domestic producers supply a greater quantity of the good. Therefore the tariff **stimulates domestic production and employment**.
- More domestic resources are attracted to the protected industry. This leads to a **reallocation of resources towards less efficient producers** (that is, those who are unable to compete on an equal footing with foreign producers).
- Consumers pay a **higher price** and receive **fewer goods**. This redistributes income away from consumers to domestic producers. A 2019 study by the IMF estimated that if tariff rates of 15 per cent were imposed on $300 billion of Chinese goods and and China imposed similar measures on imports, it would cause world GDP to decrease 0.8 per cent, equivalent to $700 billion.
- The tariff raises **revenue for the government** but that is not the primary objective. In fact the more successful the tariff as a protectionist device (that is, the more imports it restricts), the less revenue it will raise. In 2018–19, the Australian Government collected $1.6 billion in tariff revenue, which is roughly 0.4 per cent of its total revenue.
- A **retaliation effect** can sometimes occur. In response to tariffs on imports other countries may impose tariffs on the goods that are exported to them. Increased production and employment gains for import-competing industries would be offset by the losses suffered by that economy's export industries. This was seen in 2018 when US President Donald Trump's sudden announcement of wide-ranging import tariffs prompted retaliatory action from several countries, including China, the European Union and Canada. The conflict escalated, with President Trump announcing further rounds of tariff increases, inviting further retaliatory action, and warnings that the escalating global trade war threatened the whole global trade system.

Quotas

Quotas refer to restrictions on the amounts or values of various kinds of goods that may be imported.

An import **quota** controls the volume of a good that is allowed to be imported over a given period of time. The quota guarantees domestic producers a share of the market. The effects of a quota are shown in figure 2.3.

Figure 2.3 reveals the following:

- The curves SS and DD represent domestic supply and demand.
- 0P is the price at which the imported goods would sell if there was **no quota** imposed. At this price, consumers demand $0Q_1$, domestic producers supply 0Q and the quantity imported would be QQ_1.
- If the government imposed a quota restricting imports to Q_2Q_3, this would have the effect of raising the price of imported goods to $0P_1$. This price would allow domestic supply to expand to $0Q_2$.

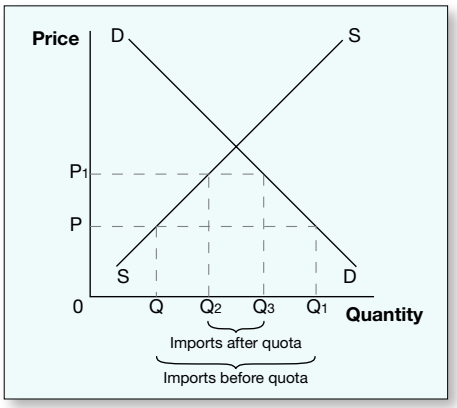


Figure 2.3 – The effect of an import quota

Countries sometimes use a system of **tariff quotas**. Under this protectionist method, goods imported up to the quota pay the standard tariff rate whereas goods imported above the quota pay a higher rate. In the past many of Australia's most highly protected industries (for example, textiles, clothing, footwear and motor vehicles) were shielded from foreign competition in this way.

ECONOMIC EFFECTS OF A QUOTA

- Domestic producers supply a greater quantity of the good. Therefore the quota stimulates **domestic production and employment** in the protected industry.
- More resources in that economy are attracted to the protected industry leading to **reallocation of resources** from other sectors of the economy (where production and employment will fall).
- Consumers pay a **higher price** and receive **fewer goods**. This redistributes income away from consumers to domestic producers in the protected industry and results in lower overall levels of economic growth.
- Unlike tariffs quotas **do not directly generate revenue** for the government. However, governments can sometimes raise a small amount of revenue from quotas by administering the quota through selling import licences allowing firms to import a limited number of goods.
- As with tariffs, the imposition of a quota on imports can **invite retaliation** from the country whose exports may be reduced because of the quota. This can result in lower exports for the country that initiated the import quota.

Subsidies

Subsidies are cash payments from the government to businesses to encourage production of a good or service and influence the allocation of resources in an economy. Subsidies are often granted to businesses to help them compete with goods and services produced overseas.

Subsidies involve financial assistance to domestic producers, which enables them to reduce their selling price and compete more easily with imported goods. In figure 2.4 this is shown by a rightward shift of the domestic industry's supply curve from SS to S_1S_1, which results in a lower market price. Businesses will be able to sell a higher quantity of their product on both domestic and global markets. The quantity produced increases from Q to Q_1. The size of the subsidy in per unit terms is the vertical distance between the S and S_1.

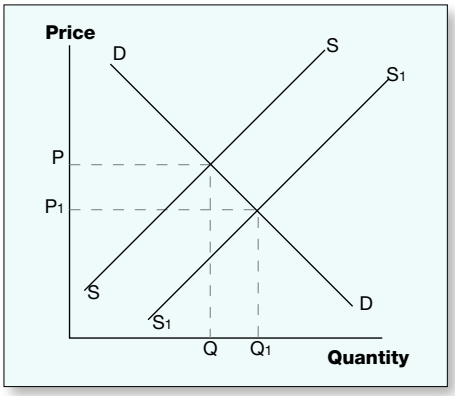


Figure 2.4 – The effect of a subsidy

ECONOMIC EFFECTS OF A SUBSIDY

- Domestic producers supply a greater quantity of the good. Therefore the subsidy stimulates **domestic production and employment** in the protected industry.
- More resources in that economy are attracted to the protected industry leading to **reallocation of resources** from other sectors of the economy (where production and employment will fall).
- Consumers pay a **lower price** and receive **more goods** because the subsidy shifts the supply curve for the sector to the right. However consumers still pay indirectly for subsidies through higher taxes.
- Subsidies impose **direct costs on government budgets** because they involve payments from the government to the producers of goods and services. This means that governments have fewer resources to allocate to other priorities such as education and health care.
- While economists are opposed to protectionist policies, they often prefer a subsidy to a tariff because subsidies tend to be abolished more quickly – since they impose costs on the budget rather than generating revenue.

Local content rules

Local content rules specify that goods must contain a minimum percentage of locally made parts. In return for guaranteeing that a certain percentage of a good will be locally made the imported components may not attract a tariff. One of the reasons why French defence contractor DCNS won the Australian Government's $50 billion submarine building contract in 2016 was their commitment to undertake some parts of the manufacturing and service in Australia. Although this was a protectionist measure relating to government procurement, not avoidance of a tariff, it is one illustration of how domestic industry may be protected through content rules. In the past, when motor vehicles were produced in Australia, manufacturers were allowed reduced tariffs on car components so long as they complied with local content rules.

Export incentives

Export incentive programs give domestic producers assistance such as grants, loans or technical advice (such as marketing or legal information) and encourage businesses to penetrate global markets or expand their market share. The popularity of such programs has grown considerably in recent years as nations have moved to a greater focus on capturing foreign markets rather than protecting import-competing businesses as a strategy to achieve higher rates of economic growth and employment. For instance, Australia has a program known as the Export Market Development Grant (EMDG) that reimburses companies

up to 50 per cent of their export promotion costs, and provides general assistance to local manufacturers looking to break into international markets. Technically export incentives do not protect businesses from foreign competition in the domestic market, but they are nevertheless an artificial barrier to free trade. The World Trade Organisation (WTO) agreement limits the scope of export incentives, but in general terms countries can still give exporting assistance to local producers.

OVERALL ECONOMIC EFFECTS OF PROTECTIONISM

In addition to the effects that protectionist policies have on domestic economies outlined above, they can also have overall impacts on the global economy.

Global protectionist policies have the overall effect of **reducing trade between nations**. For an individual economy protectionism means that exports and imports will be a smaller share of the national economy. Research cited by the World Trade Organisation during the failed negotiations for the Doha Round estimated that a far-reaching agreement would have expanded exports and increased the size of the global economy by between US$180 billion and US$520 billion every year.

Overall, protectionist policies **reduce living standards** and **reduce global economic growth** by shielding inefficient producers. A major study released in 2019 by the International Monetary Fund, *The Macroeconomic Consequences of Tariffs*, concluded that over the medium term, countries that raise tariffs experience lower output, weaker productivity, increased unemployment and increased inequality. The study examined the tariff policies of 151 countries over 50 years and noted that tariff increases tend to lead to an exchange rate appreciation, which can worsen the balance of trade. It also concluded that an average tariff increase (of 3.6 per cent) contributed to an average 0.4 per cent reduction in GDP over five years, with an average 1 per cent fall in GDP in advanced economies. The IMF also estimated in 2018 that a 10 per cent increase in trade barriers would reduce global trade by 16 per cent and decrease global investment by an average of 3.5 per cent, causing a 2 per cent reduction in Gross World Product.

Protectionist policies make it more difficult for individual economies to specialise in production in which they are most efficient. Businesses are less able to achieve economies of scale and therefore have lower profits and lower dividends. With less competitive pressures, prices for goods and services in individual economies are higher. This leads to slower economic growth in individual countries. For example, a report released by KPMG in 2019 estimated that tariff increases imposed under the Trump Administration will reduce Australia's GDP by 0.3 per cent or $36 billion by 2022.

The negative economic impact of the protectionist policies of trading blocs tends to be larger (relative to the size of those economies) for **developing economies** that are often excluded from access to the markets of advanced economies. It is estimated that two-thirds of the US$90 to US$200 billion annual welfare gains from trade liberalisation would flow to developing countries, lifting 140 million people out of poverty.

reviewquestions

1 Describe how quotas affect the price and quantity of goods sold in a market.

2 Discuss the impact of tariffs, quotas and subsidies on firms, individuals and the government in the domestic economy.

2.4 Trade agreements

As trade has grown and economies have become more integrated, countries have in recent years moved to form agreements and trading alliances to ensure that they are in the best position to gain from growing trade opportunities and also to avoid being excluded from emerging trading blocs.

Free trade agreements (or **trade agreements**) are formal agreements between countries designed to break down barriers to trade between those nations. When the agreement is between two countries it is said to be **bilateral**, and when the agreement is between three or more economies, it is said to be **multilateral** or regional. While these agreements are generally described as "free" trade agreements, it is often more accurate to call them preferential trade agreements because in effect they give more favourable access to goods and services from one nation or a group of nations compared to another. Sometimes they can even make it harder for nations outside the preferential trade agreement to trade. In this respect they may not create better conditions for free trade at all, particularly for developing economies that struggle to access global markets. In contrast, global free trade agreements conducted through the **World Trade Organisation** (WTO) are designed to remove barriers to trade uniformly across all economies.

Trade bloc occurs when a number of countries join together in a formal preferential trading agreement, to the exclusion of other countries.

A **trading bloc** occurs when a number of countries join together in a formal preferential trading arrangement to the exclusion of other countries, such as the European Union (EU) and the United States-Mexico-Canada Agreement (USMCA) or NAFTA.

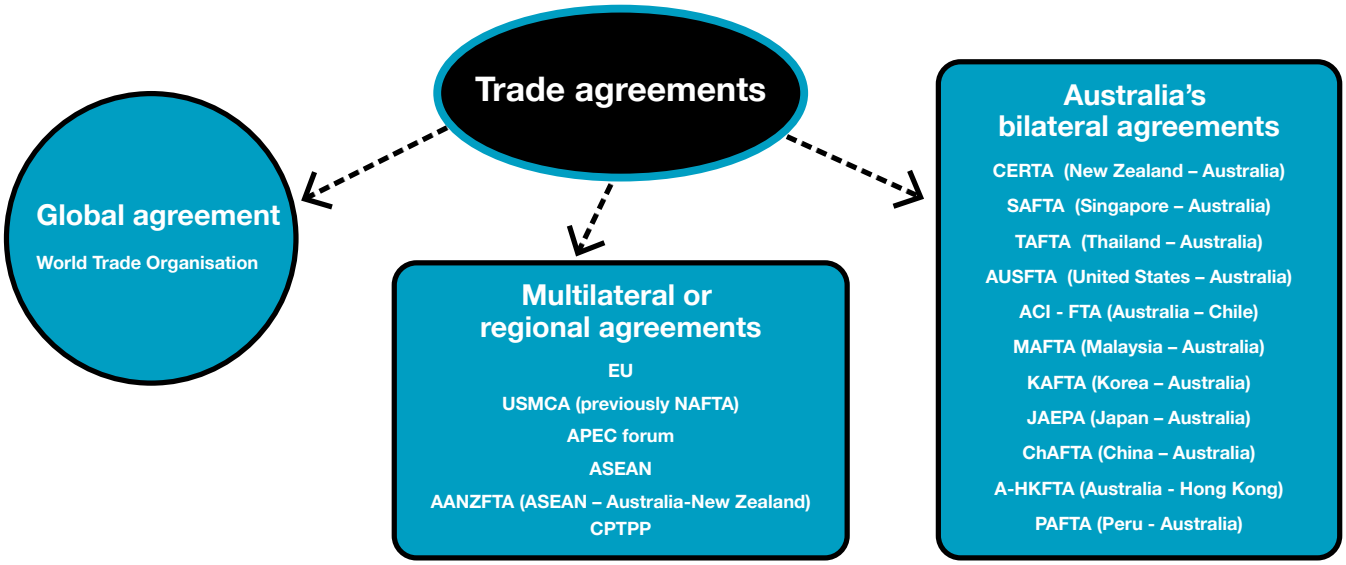


Figure 2.5 – Types of trade agreements

Regional trade agreements have multiplied in recent decades, with the number of agreements in force jumping from 27 in 1990 to 483 in 2020, according to the WTO. Although growth in regional trade agreements has slowed since 2016, rapid proliferation of these agreements in the 1990s and 2000s had led to what some economists described as **regionalisation**, not **globalisation**. While trade has generally increased between countries that have trade agreements, there are concerns that this is not all trade creation, but rather a lot of **trade diversion**, where a country's imports of a good or service switch from coming from the most efficient producer to another country because of the impacts of a trade agreement's provisions, such as tariff levels, import quotas or other rules.

Trade diversion is where a country's imports of a good or service switch from coming from the most efficient producer to another country because of the impacts of a trade agreement's provisions, such as tariff levels, import quotas or other rules.

The extent to which countries trade with other economies within their regional trade blocs varies between regions. Around two-thirds of European trade occurs within the European Union, demonstrating both its vast size and its tendency to be a more closed trade bloc due

to protectionist policies. On the other hand, the ASEAN economies primarily trade with countries outside their region, reflecting that they are smaller emerging economies and their economic growth strategies have centred around exports to industrialised economies. The economies of the United States-Mexico-Canada Agreement and ASEAN Free Trade Area in recent years have substantially increased the level of trade among themselves compared to trade with countries outside their trade area (although both continued to grow). This figure points towards the risk that regional trade blocs could result in global trade fragmenting into self-contained regions, hindering the spread of global free trade.

A GLOBAL TRADE WAR?

"As I have said for a long time, dealing with China is a very expensive thing to do. We just made a great Trade Deal, the ink was barely dry, and the World was hit by the Plague from China. 100 Trade Deals wouldn't make up the difference."

– US President Donald Trump, 14 May 2020

President Donald Trump's election in 2016 marked a dramatic departure from the United States' commitment to trade liberalisation since the Second World War. In 2018, President Trump began implementing a protectionist agenda, applying tariffs on specific imports from China and the European Union, beginning with steel and aluminium goods. By 2019, a general tariff rate of 15 per cent had been imposed on Chinese imports worth $250 billion per year, prompting retaliatory tariff increases from China and other trading partners. The IMF warned in early 2019 that a trade war between the US and China could cause a world economic downturn, but after months of negotiations China and the US signed a trade deal in January 2020 that at least temporarily suspended their conflict. The US agreed to reduce to 7.5 per cent many of the tariff rates that had previously been increased. China agreed to purchase $200 billion of American agricultural and manufacturing products (potentially creating a consumption diversion whereby producers with comparative advantage that export to China are replaced by American substitutes). However, relations again deteriorated later in 2020 as President Trump blamed the Chinese Government for the outbreak of the COVID-19 pandemic and questioned whether China's trade commitments were being honoured.

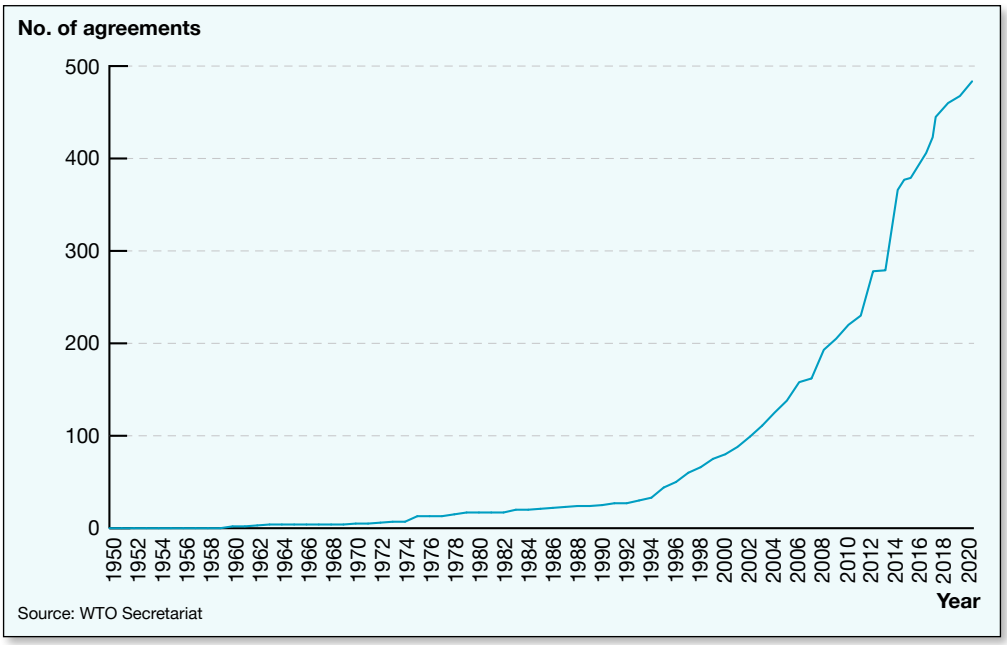


Figure 2.6 – The growth of bilateral and multilateral trade agreements

REGIONAL TRADE AGREEMENTS: STEPPING STONES OR STUMBLING BLOCKS?

Economists disagree on the extent to which regional and bilateral trade agreements assist or obstruct progress towards global free trade. Some say that the regional and bilateral trade agreements that have often led to the formation of trading blocs can hinder the progress towards global free trade because they slice the world up into separate trading areas. Others argue that the regional trade agreements act as a stepping-stone towards free trade, initially convincing economies to reduce their protection barriers against a small group of economies but eventually encouraging them to remove those barriers for the whole world.

Less a stepping stone, more a noodle bowl

"One angle of bilateral agreements usually ignored in all but the most academic analyses is … the increasing significance of Rules of Origin as a new form of non-tariff barrier that can make the task of extracting even the small gross benefits out of bilateral agreements almost impossible. That they are of significance should no longer be in doubt: Rules of Origin are at the heart of the US efforts being made to alter the North America Free Trade Agreement. In Australia, the noodle bowl of inconsistent rules we have created via bilateral negotiations is potentially going to be topped up further by bilateral deals ... It has been claimed in the past that bilateral agreements may one day help us transition to more liberal multilateral outcome. This will only be a realistic claim if Rules of Origin can be dissolved … [we need] to improve the bilateral model, not exacerbate its failings."

– Peter Harris, Chairman, Productivity Commission, Speech to the European Australian Business Council (EABC), 24 April 2018, Sydney

Complex, costly and time consuming?

"Preferential trade agreements are not as effective in improving national welfare as unilateral action to reduce or eliminate trade barriers (primarily through greater domestic competition) or multilateral trade and investment liberalisation … Preferential agreements also add to the complexity of international trade and investment, are costly and time consuming to negotiate and add to the compliance costs of firms (in the evaluation and utilisation of preferences) and administrative costs of governments …

Proponents of preferential bilateral and regional trade agreements argue that such arrangements are a pragmatic way of improving market access opportunities for Australian exporters in the absence of multilateral reform …

[But] current processes fail to adequately assess the impacts of prospective agreements. They do not systematically quantify the costs and benefits of agreement provisions fail to consider the opportunity costs of pursuing preferential arrangements compared to unilateral reform ignore the extent to which agreements actually liberalise existing markets and are silent on the need for post-agreement evaluations of actual impacts."

– Productivity Commission (2015) "Issues and concerns with preferential trade agreements" Trade & Assistance Review 2013–14

Or the best chance for progress in a time of uncertainty?

"Uncertainty is growing in international trade... we can no longer assume that the general trend in world trade is automatically towards openness. In both populist sentiment and in the policy settings of some countries there are movements towards unilateralism at the expense of cooperation or collaboration... debates about trade have become more volatile. Trade is often an easy, if misplaced, fall guy for societal impacts generated by other technological or economic trends...

For Australia's prosperity, it is important that we focus on trade and investment. Trade has meant that real income for the average Australian family is higher, by an estimated $8,448, those estimates driven particularly due to trade liberalisation undertaken in Australia since the 1980s by governments of all persuasions."

– Simon Birmingham, Minister for Trade, Tourism & Investment, Address to the Asia Society, 6 March 2019, Sydney

Asia-Pacific Economic Cooperation (APEC) forum

In the early 1990s countries in Australia's region established the Asia-Pacific Economic Cooperation (APEC) forum in response to the formation of trading blocs in other areas of the world such as the EU and NAFTA. The 21 member economies of the forum are: Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, the Philippines, Russia, Singapore, South Korea, Taiwan, Thailand, the United States and Vietnam. Although the APEC forum has only 21 member economies, in 2019 it accounted for 38 per cent of the world's population (2.9 billion people), 60 per cent of world GDP and 48 per cent of world trade.

The APEC forum's original vision of establishing free trade among member countries by 2020 was not achieved. Its relatively minor role in advancing free trade during the past three decades is exemplified by a 2019 report by PricewaterhouseCoopers that noted almost $800 billion of non-tariff trade barriers remain in place across APEC nations. Although APEC meetings have never resulted in a regional trade agreement, they have created a forum for annual meetings of the leaders of member countries to discuss the geopolitical priorities of the day. In addition to fostering stronger trade and investment links, the APEC forum has contributed to trade liberalisation. The tariff rates of forum members have fallen from an average of 10.2 per cent in 1999 to an average of 4.8 per cent in 2018, according to the United Nations Conference on Trade and Development. The APEC forum has also differed from other trade groupings as a non-discriminatory grouping, which means APEC forum members will trade with countries outside of the grouping on the same basis as members of the forum if they are prepared to give equal access to their markets. This contrasts with trade blocs such as the EU, which increase trade barriers for external countries.

Trans-Pacific Partnership (CP-TPP or TPP-11)

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (commonly known as both the CP-TPP and the TPP-11) is a multilateral trade agreement among 11 Pacific Rim countries that was formally signed and ratified in March 2018. At the time of ratification, its 11 members (Australia, Brunei, Chile, Canada, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam) represented over 13 per cent of global economic output and around 15 per cent of global trade, with a market of just under 500 million people. Even though the 11 TPP-11 economies only make up 6.8 per cent of the global population, their contribution to global trade is significant, especially for Australia's economy, representing 22 per cent of all Australian trade.

Although the United States' withdrawal from the TPP-11 in 2017 under President Donald Trump dealt a major blow to the agreement, the remaining 11 signatories ratified the TPP-11 in 2018. Commitments to lower 18,000 tariffs (representing over 98 per cent of all tariffs in the free trade area) reflected the sweeping ambition of the agreement. However, the TPP-11 lacks a clear implementation timeline and some members have up to 10 years to implement their commitments. The TPP-11 agreement also includes controversial provisions that give corporations the right to sue governments for policy decisions that might harm their investments.

Association of South-East Asian Nations (ASEAN)

The ASEAN group covers emerging and developing economies in South-East Asia. ASEAN has acted as a counter-weight to the APEC forum, which tends to be dominated by the large economies such as the United States, China, Japan and South Korea. ASEAN has become the most effective force for trade negotiations within the Asia Pacific region.

The ASEAN Free Trade Area (AFTA) comprises Indonesia, Thailand, Malaysia, Singapore, Philippines, Vietnam, Brunei, Burma, Cambodia and Laos. The **ASEAN-Australia-New Zealand Free Trade Area** (AANZFTA) agreement came into effect in 2010 with ASEAN nations committing to lowering and eliminating tariffs on 96 per cent of Australian exports to the region (compared to 67 per cent prior to the agreement). This is Australia's largest multilateral trade agreement by population, with the 12 nations comprising over 600 million people in 2019. Collectively the ASEAN region is Australia's second-largest trading partner with a combined GDP of over $3 trillion.

ASEAN members were central to the proposed Regional Comprehensive Economic Partnership (RCEP), a potentially major regional agreement expected to come into effect by early 2021 that has been spearheaded by China but which also includes India, and with coverage of 3.5 billion people would eclipse the TPP-11 agreement. RCEP has the potential to deliver significant opportunities for Australian businesses. The 16 RCEP participating countries account for almost half of the world's population, over 30 per cent of global GDP and over a quarter of world exports. Ten out of Australia's top 15 trading partners are participating in RCEP negotiations, and together with the other six participating countries, account for over 60 per cent of Australia's two-way trade, 17 per cent of two-way investment and over 65 per cent of Australia's goods and services exports.

The European Union

The European Union (EU) is the most important trade bloc in the world economy. Its 27 member countries span across the European continent, with a population of 450 million that account for around 15 per cent of world trade in goods, a market similar in size to the United States. At present there are five additional candidate countries that have begun negotiating potential membership of the EU: Albania, Montenegro, North Macedonia, Serbia and Turkey. Although the EU represents over 15 per cent of global GDP, it was weakened by "Brexit" (the departure of the United Kingdom in 2020, after many years of difficult negotiations).

The formation of the European Union (formerly the European Economic Community) in the late 1950s helped to dismantle trade barriers within Europe. A single market for European goods and services was established in 1992, and this has helped drive strong trade growth within the EU. However the EU has frequently used tariff barriers against non-member countries, resulting in accusations that the EU is a closed trading bloc.

This increase in protection has had major implications for non-European countries – some of them large players in international trade such as the United States and some of them relatively small such as Australia. The high rates of protection applied to agricultural products in the EU (direct subsidies and rural support provided under the EU's Common Agricultural Policy absorb just under 40 per cent of the annual EU budget, estimated at €167 billion in 2020) and the oversupply of agricultural commodities that this generated has contributed to the continuation of farm subsidies in the United States and the imposition of tariffs on a variety of EU exports in 2017. Smaller agricultural trading countries around the world, including Australia, have been squeezed in the ongoing conflict between the EU and the United States.

Within the EU, 19 member countries also participate in a voluntary monetary union that is commonly known as the eurozone. The monetary union involves the adoption of a common currency (the euro) and common interest rates, and it has played a major role in economic integration among the eurozone economies. While successful in promoting

trade and economic integration among member countries, since the global financial crisis in 2008 the eurozone has struggled to coordinate fiscal policies and had difficulty in accommodating for different economic conditions across the region. Economic hardship within the EU intensified again in 2020 due to the COVID-19 pandemic crippling economic activity, especially in Italy and Spain – the EU's fourth- and fifth-largest economies respectively.

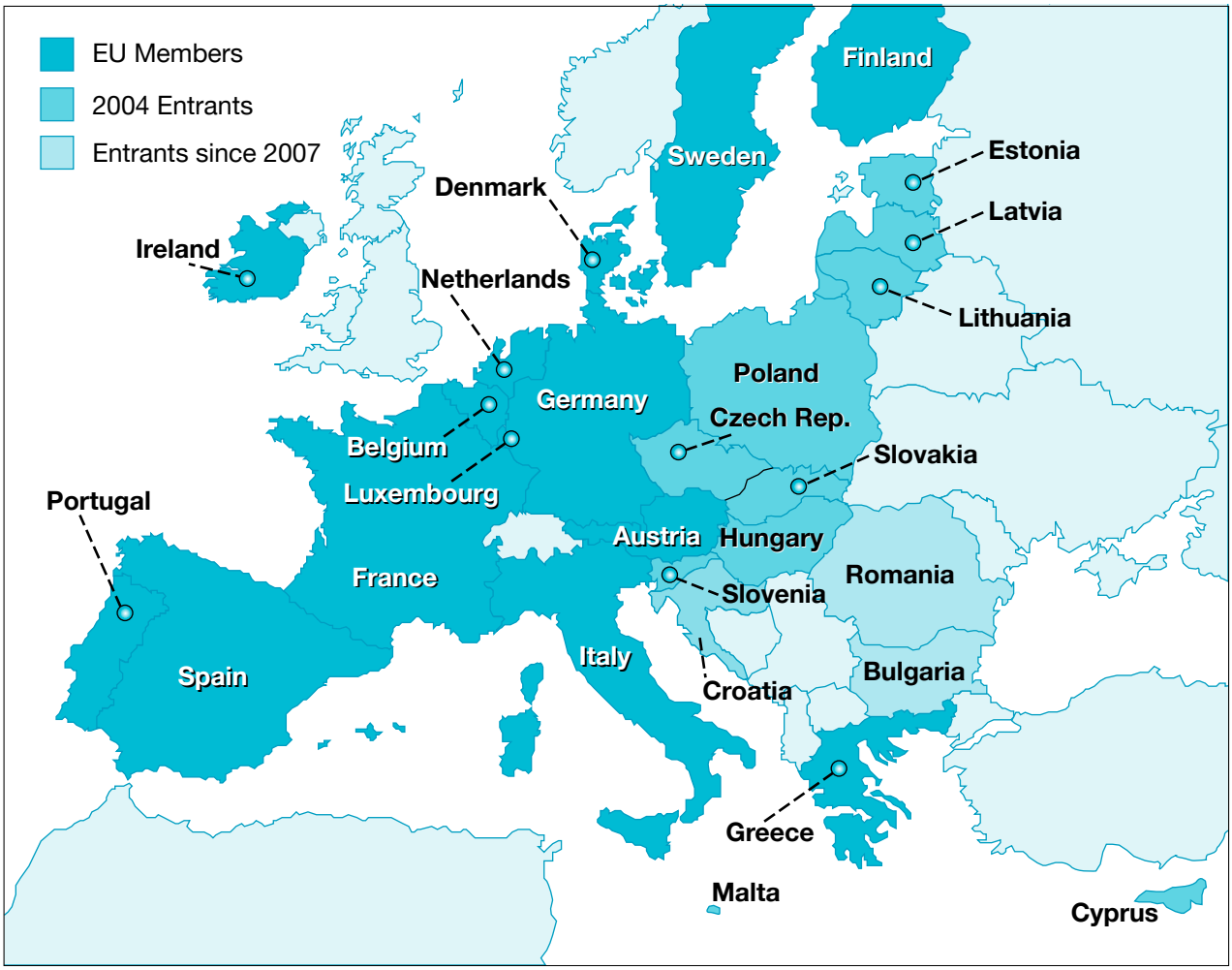


Figure 2.7 – European Union member states 2020

US-Mexico-Canada Agreement (USMCA)

The US-Mexico-Canada Agreement is a three-country trade deal previously known as the North American Free Trade Agreement or NAFTA. NAFTA contributed to the value of trade more than tripling between the three economies in the 25 years after its introduction. Access to the United States market has resulted in significant increases in exports for Canada and Mexico. In the United States, the impacts of NAFTA have been widely debated, and President Trump renegotiated some of its provisions, to address concerns that American manufacturing jobs had shifted to Mexico to take advantage of lower wages. The USMCA addresses some of these concerns by tightening requirements around "rules of origin" or local content rules for car manufacturers, improving US access to the Canadian dairy market and strengthening labour protections.

Bilateral trade agreements

In addition to global and regional agreements, economies also enter into bilateral agreements. A good example of such a bilateral agreement is the **Closer Economic Relations Trade Agreement (CERTA)** between Australia and New Zealand, which began in 1983 and is

one of the most comprehensive free trade agreements in the world. CERTA prohibits all tariffs and export restrictions, and has gradually been extended in recent years to include the harmonisation of business regulations and tax laws between New Zealand and Australia. Since 1983 it has contributed to an average annual increase in trade between Australia and New Zealand of around 7 per cent and is widely regarded as being successful in both countries.

Bilateral trade agreements have experienced a resurgence in recent years. This reflects a number of factors, including the slower progress of the World Trade Organisation's negotiations and the United States' increased use of its economic power to negotiate more favourable trade relationships on a country-by-country basis. These agreements are often as much concerned with shoring up open trading arrangements against a backdrop of rising protectionism as they are a means of unlocking new trading opportunities. In the past decade, Australia has concluded seven more bilateral agreements with Malaysia (2013), South Korea (2014), Japan and China (2015) and Peru, Hong Kong and Indonesia (2020).

Like regional trade agreements, economists are divided over the extent to which bilateral trade agreements assist or obstruct progress towards global free trade. A Productivity Commission study in 2017, *Rising protectionism: challenges, threats and opportunities for Australia,* noted that although governments often claim that bilateral trade agreements will deliver large increases in trade, in fact their impact is often much smaller because benefits are often exaggerated and the costs of establishing and implementing the agreements are underestimated. The report also noted that bilateral agreements can contribute to greater "trade diversion" – not adding to overall world trade, but simply diverting it to nations that are party to an agreement. The Commission concluded that a global rise in protection would lead to sluggish world economic growth and increase pressures on the Australian Government to follow suit and lift barriers to trade and foreign investment.

Pursuing further bilateral trade agreements remains a key component of Australia's trade policy. Against the backdrop of a weaker global trading environment following the global recession that began in 2020, Australia is giving priority to negotiating a bilateral agreement with the United Kingdom following its departure from the European Union in 2020. One of the advantages of negotiating bilateral agreements is that they are generally much faster to conclude than multilateral agreements, although this is not always true – the 10-year negotiation process that proceeded the China-Australia FTA showed that bilateral agreements with less open economies can be as slow as larger regional negotiations. Further, bilateral trade agreements do not provide the same certainty around trading arrangements as multilateral agreements. In May 2020 the Chinese imposed an 80 per cent tariff on Australian barley exports after the Australian Government demanded an international inquiry into the COVID-19 outbreak (although officially, the tariff was justified by a claim that Australia had been dumping barley exports in China). Nothing in the China-Australia FTA could prevent China from taking this action, underscoring the weakness of bilateral agreements when geopolitical tensions come into play.

reviewquestions

1. Assess the impact of regional and bilateral trade agreements on the global economy.
2. Account for the growth of bilateral trade agreements in recent years.
3. Describe the recent developments in free trade negotiations in Australia's region.

2.5 International organisations

The major institutions of the global economy are the **World Trade Organisation,** the **International Monetary Fund** and the **World Bank**. Both the IMF and the World Bank were established at the Bretton Woods conference in 1944, which designed the post-war global economic system. However, the enormous changes in the global economy since World War II have forced these institutions to adapt to new circumstances without necessarily being equipped to deal with the more complex flow of capital and goods across borders that has characterised the globalisation era.

In addition, there are several other organisations with substantial influence in the global economy, such as the Organisation for Economic Cooperation and Development, and the United Nations.

World Trade Organisation



For further information on international organisations visit:
www.wto.org
www.worldbank.org
www.imf.org
www.un.org
www.oecd.org
www.globalgoals.org

The role of the WTO is to implement and advance global trade agreements and to resolve trade disputes between economies. The WTO was formed in 1995 and is the first international organisation with powers to enforce trade agreements across the world.

Prior to the formation of the World Trade Organisation, the responsibility for developing trade agreements was borne by the **General Agreement on Tariffs and Trade (GATT)** process that began in 1947. Under the GATT process, regular rounds of trade negotiations were conducted; once agreements were reached, it was up to the individual member countries to put those agreements in place. The weakness of the GATT process was that there was no effective mechanism to enforce the trade agreements and as a result, many countries only implemented parts of the GATT agreements. This eventually led to an agreement in 1993 to form a new global trade organisation with enforcement powers.

The formation of the **World Trade Organisation** was significant not only because it had power to resolve trade disputes but also because its reach extended beyond trade in goods to include trade in services (such as insurance and banking) and intellectual property (such as patents, copyright, electronic circuits and trademarks).

One of the most important features of the WTO is its role in settling disputes between countries. A country that believes that it is suffering harm as a result of another country's failure to comply with its WTO obligations can lodge a complaint with the WTO. A process of **dispute resolution** is then commenced and if no agreement can be reached directly a WTO panel will hear the complaint and then issue a decision. If the country involved does not comply with the WTO's directive, the other country or countries may then impose trade sanctions that may include high tariffs on goods imported from the offending nation. Since 1995, just under 600 disputes have been brought to the WTO and over 350 rulings have been issued.

The WTO has proved effective in resolving disputes between smaller countries, although it has been less effective in resolving disputes between the two largest forces in the global economy – the United States and the European Union. Although the United States and the EU have not formally refused to comply with WTO determinations, they have delayed and continued to lodge appeals rather than accept WTO decisions.

The WTO's membership includes 164 member countries and 24 further "observer" countries negotiating to join the WTO. Since its formation in 1995 the WTO has overseen a halving in average tariff rates among member economies and has had some success in negotiating further agreements to free up world trade. For example, in 2014 the WTO formally agreed on a binding Trade Facilitation Agreement, which aimed at reducing the cost of trade by 10–15 per cent by making customs procedures simpler and more efficient. In a 25-year anniversary media publication in 2020, the Director General of the WTO identified this as one of the WTO's most important achievements. Some

WTO members have also signed voluntary agreements to reduce trade barriers in financial services, information technology, telecommunications and shipping.

While the WTO has been effective in resolving disputes and making progress on a series of voluntary agreements, its efforts to conclude a comprehensive global trade agreement since 2001 have been unsuccessful. The **Doha Round** of trade liberalisation talks – named after the city in the Middle Eastern nation of Qatar in which they were launched – began with ambitious goals to reduce agricultural protection, lower tariffs on manufactured goods and reduce restrictions on trade in services. It was claimed that trade liberalisation could create annual welfare gains of US$90 to US$200 billion per year and lift over 140 million people out of poverty in the developing world.

The Doha Round failed due to disagreements on access to agricultural markets, restrictions on the production of pharmaceutical medicines, disputes between developed and developing nations, and arguments relating to manufacturing protection. More generally, the past decade has seen a decline in public support for free trade in many countries and a shift towards a focus on bilateral and regional trade agreements. Nevertheless, the Doha negotiations have produced some results, such as the Nairobi Package, a voluntary agreement in 2015 to reduce export subsidies for farm exports.

A quarter of a century after its establishment, the WTO's role has been weakened by a rise in protectionist sentiment globally, led by the United States, which historically had been its most important advocate. In 2018 President Trump threatened that the US might withdraw from the WTO altogether, while also undermining the WTO's ability to resolve trade disputes. The US has repeatedly blocked replacement appointments to the WTO Appellate Body that resolves disputes, preventing a key part of the WTO system from operating since late 2019 and leaving the resolution of trade disputes to informal arbitration between the parties. Although an interim two-stage dispute settlement process was put in place in 2020, the absence of any long-term solution has undermined confidence in the WTO's ability to generate binding settlements to disputes – one of the key reasons why the WTO was created.

International Monetary Fund

The International Monetary Fund (IMF) is one of the most important institutions in the global economy. It has 189 members, covering almost all nations. Its role is to **maintain international financial stability**, particularly in relation to foreign exchange markets. In earlier times the role of the IMF was to oversee a system of fixed exchange rates that would stabilise economic relationships between economies. When the system of fixed exchange rates collapsed in the 1970s, the IMF's role widened to ensuring global financial stability. In situations where a financial crisis occurs in an economy, region or even across the world, the IMF plays a critical role in minimising the crisis. When a crisis occurs in an individual economy, the IMF will often develop a "rescue package" to help stabilise the economy. For example, in 2018 the IMF agreed a $57 billion loan package to Argentina, the largest package for a single country in its history, following a collapse of the peso (Argentina's currency) that caused inflation to surge to 55 per cent.

The IMF's role in ensuring stability in global financial markets was highlighted by its interventions following the onset of the COVID-19 pandemic in 2020. In response to the initial onset, the IMF doubled its emergency credit financing lines to meet the need for an estimated US$100 billion in debt relief and financial stabilisation measures, following requests from over 100 countries by May 2020. The IMF also established a new Short-term Liquidity Line aimed at providing one-off payments and interest free loans to assist developing and emerging economies in designing policy responses to COVID-19. Likewise, in the aftermath of the global financial crisis in 2008 and the subsequent sovereign debt crisis in Europe, the IMF oversaw large scale loans and relief packages over several years.

In the longer term, the IMF aims to support the free trade of goods and services and the free movement of finance and capital throughout world markets. The IMF often requires

countries to change their economic policies and open up their markets before they receive financial assistance. The policies that the IMF requires countries to adopt are generally known as **structural adjustment** policies, sometimes described as the "Washington Consensus" policies. The impact of the IMF's policy approach is increased by the fact that many international banks and other private lenders require that countries adopt IMF supported policies before they are willing to lend to those countries.

The IMF's structural adjustment policies have played an important role in the process of globalisation, by encouraging economies to adopt economic reforms and more open trade and investment policies. The IMF's support for reducing the size of government, privatising government businesses, deregulating markets and balancing government budgets has been a major reason why economies around the world have adopted these policies. The Global Financial Stability Report published by the IMF in May 2020 saw the Fund emphasise the risk posed by climate change on future global financial investment. The report estimated that climatic disasters cost the global economy $1.3 trillion annually, highlighting climate change as a rising policy focus for the IMF.

The IMF has often attracted criticism during financial crises where its policies appeared to make conditions worse for the economies affected. After widespread criticism about the negative impact of some of the reforms demanded by the IMF after a financial crisis in Asia in the late 1990s, the IMF adopted a different approach during the global financial crisis of the late 2000s, supporting expansionary macroeconomic policies and giving borrowing countries more freedom to increase their spending to avoid recession. The IMF also altered its governance structure to give developing and emerging economies a greater say over IMF policies.

However, the IMF's handling of the early 2010s sovereign debt crisis in Europe reignited old criticisms that the IMF was demanding that loan recipients implement policies that harmed the most vulnerable groups in society the most, while protecting banks and the monetary union. A 650-page internal IMF audit report in 2016 acknowledged that the measures demanded by the IMF had disproportionately harmed Greece's most vulnerable groups and intensified the collapse of Greece's nominal GDP, which fell 26 per cent lower than the IMF's projection. However a broader IMF evaluation of its 133 lending programs in operation between 2011 and 2017 was more positive in concluding that three-quarters of IMF programs were successful or partially successful in achieving their objectives, such as resolving balance of payment problems and fostering economic growth. According to the Review of Program Design and Conditionality, in most instances, the IMF's programs now protect social spending as a share of GDP in order to minimise negative impacts on the lowest income groups in countries where it is providing financial rescue packages.

World Bank

The World Bank's role in the global economy is primarily concerned with helping poorer countries with their **economic development**. The official title of its main organisation, the International Bank for Reconstruction and Development, gives an indication of its focus: to fund investment in infrastructure, reduce poverty, and to help countries adjust their economies to the demands of globalisation. The World Bank also has a number of organisations that provide specific assistance to lower-income countries including:

- the International Development Association, which provides "soft loans" (that is, loans at little or no interest to developing countries)
- the International Finance Corporation, whose role is to attract private sector investment to the Bank's projects
- the Multilateral Insurance Guarantee Agency, which provides risk insurance to private investors
- The International Centre for Settlement of Investment Disputes, which provides conciliation and arbitration of investment disputes between states, and between states and corporations.

The World Bank is funded by contributions from member countries and from its own borrowings in global financial markets. It makes loans to developing nations, at rates that are below standard commercial rates, to fund infrastructure projects such as power plants, roads and dams. Following the onset of the COVID-19 recession in 2020, the World Bank provided $160 billion for 100 lower-income countries that accounted for 70 per cent of the world's population. This funding helped countries to obtain urgently needed personal protective equipment and medical supplies to help prevent the spread of the coronavirus. In 2020, the value of the World Bank's active portfolio of investments was almost US$300 billion.

The World Bank's two major goals are:

- Reducing the rate of extreme poverty to less than 3 per cent of the world's population by 2030 (in contrast to current forecasts of 6–9 per cent of the world's population living on less than $1.90 per day by 2030). At the 3 per cent level those in poverty will mostly be experiencing "frictional poverty", that is, poverty related to short-term disasters such as extreme weather events rather than being in long-term poverty. This goal supports the United Nations Global Goals, although it is more narrowly focused.
- Reducing inequality by fostering income growth for the world's bottom 40 per cent.

In overall terms, the World Bank's global importance as a lender to developing countries has declined as private lending markets have expanded in recent decades. However, it played an important role in partnering with the International Finance Corporation to provide US$47 billion for credit support after the onset of the COVID-19 pandemic in 2020, when private credit markets seized up.

One of the most important actions of the World Bank in the past two decades has been its support of the Heavily Indebted Poor Countries Initiative, in which it aims to reduce debt by two-thirds in the world's poorest countries in Africa, South Asia and Latin America, whose debt levels are considered unsustainable. By 2020, 37 countries had received debt relief estimated to have saved them at least US$99 billion.

United Nations

The United Nations (UN) is a global organisation whose membership includes more nations than any other political or economic organisation. The UN was established in 1945 and has grown to cover 193 member states. Its agenda is broader than any other organisation, covering the global economy, international security, the environment, poverty and development, international law and global health issues. However, its decision-making powers are limited (because it relies on the support of its member states) and the budgets for the different arms of the United Nations are small compared to national governments in many advanced economies.

The UN has historically played an important role in supporting greater linkages between economies and promoting globalisation. A range of different UN agencies have developed international standards that make it easier for trade and investment flows to occur between nations, such as standards for food safety and rules on copyright and intellectual property. Key UN agencies include the World Health Organisation, the UN Development Programme, the UN Children's Fund (UNICEF), the UN Refugee Agency (also known as the UN High Commissioner for Refugees or UNHCR), the World Food Programme, the UN Conference on Trade and Development (UNCTAD) and the UN Environment Programme (UNEP).

The UN also has overseen the development of a large number of international agreements to enforce human rights and political freedoms. Research by the World Bank has consistently shown individual freedoms strengthen a country's prospects for economic growth and development. Several of these conventions were also developed with the intention of addressing the underlying causes of poverty in developing nations.

One of the most important roles played by the United Nations in recent years is establishing a set of Global Goals (or Sustainable Development Goals), which aim to reduce global poverty and inequality between 2015 and 2030. These goals build on the Millennium Development Goals which oversaw a reduction in the proportion of people living on less than $1 a day between 1990 and 2015 – from 29 per cent to 14.5 per cent of all people in low- and middle-income economies (chiefly as a result of rapid economic growth in China lifting 600 million people out of poverty). The Sustainable Development Goals comprise 17 goals covering global poverty, hunger, well-being, education, gender equality, clean water and sanitation, clean energy, economic growth, sustainable cities, climate action and sustainable use of land and oceans. They incorporate 169 targets that UN member states have pledged to take action towards during the period 2015 to 2030. The *Sustainable Development Goals Report 2019* showed that even before the onset of the COVID-19 global pandemic, the world was not on course to achieve the goal of ending poverty by 2030. In fact, only minor progress had been made on inequality since 2015. After the onset of COVID-19, development economists warned that without sustained international efforts, the pandemic could undo many years of progress on global health outcomes.

Organisation for Economic Cooperation and Development

The Organisation for Economic Cooperation and Development (OECD) is an international economic organisation of 36 countries committed to democracy and the market economy. The primary goal of the OECD is to promote policies "to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries while maintaining fiscal stability and thus contribute to the development of the world economy". In practice the main role played by the OECD is to conduct and publish research on a wide range of economic policy issues and to coordinate economic cooperation among member nations, such as towards the development of common policy agendas. For example, the OECD provided a forum for the member countries to share research and coordinate policy responses to the COVID-19 pandemic in 2020.

The OECD undertakes a large amount of original economic research as well as compiling more detailed economic and policy information on advanced economies than any other international organisation. Alongside research conducted by the IMF and the World Bank, OECD economic research is regarded as the most reliable and highest quality economic research in the world (and you will see OECD reports quoted frequently in subsequent chapters of this book). Although OECD publications generally advocate similar policies to those of the IMF and World Bank – in favour of globalisation, free markets, privatisation and deregulation – they often have a more in-depth analysis of a wider range of policy issues, especially in the context of advanced economies. The OECD has also championed a re-thinking of economic policies in recent years, advocating the need for "inclusive growth" strategies. The "inclusive growth" agenda builds on more recent research that has challenged traditional assumptions that policymakers must always trade off equity and efficiency (that is, inequality versus economic growth), reflecting concerns that the level of inequality in many economies has become a constraint on economic growth.

reviewquestions

1. Outline recent developments in global trade negotiations.
2. Identify and discuss the role of the international organisation responsible for maintaining international financial stability.
3. Explain why the IMF has been described as the world's financial firefighter.
4. Explain why in recent years the WTO has found it difficult to negotiate further cuts in protection.

2.6 Government economic forums

Organisations that exist as forums for world leaders play an important role in coordinating policies between major economies especially during times of economic or financial crisis. The aim of these forums is to enable heads of state along with their treasurers and central bank governors to discuss global economic issues with particular attention to economic stability and growth. Such forums were especially important in coordinating the international policy responses to the global financial crisis of the late 2000s.

Group of Seven Nations (G7)

In recent decades, the most important government economic forum has been the group of the seven largest industrialised nations, including the United States, UK, France, Germany, Canada, Japan and Italy. The inclusion of Russia in the group between 1997 and 2014 meant that during that period it was known as the G8, until Russia's membership was suspended after its military seizure of the Ukrainian territory of Crimea (subsequently, Russia quit the G8 permanently). The G7 has effectively operated as the economic council of the world's wealthiest nations, meeting annually to discuss conditions in the global economy since its formation in 1976. The G7 has been the unofficial forum coordinating global macroeconomic policy because of its influence over the fiscal and monetary policies of the world's largest economies. Because of the G7's status as the forum for the world's most powerful economies, its agenda has often included general political issues and current priorities such as climate change, global poverty and security.

The significance of the G7 is now in decline, reflecting the shift in the global balance of power towards emerging economies, in particular China (which, on some measures, is now the world's largest economy) and the United States' withdrawal from international institutions. The G7 did not function as an important forum for coordinating the global response to the COVID-19 recession in 2020, holding just one meeting of leaders (by video) during the initial crisis. At the same time as the meeting was taking place, President Trump announced plans to reduce US funding for the World Health Organisation, which was coordinating the global response to the pandemic, by US$400 million.

The membership of the G7 is no longer representative of the most important forces in the global economy (nations like China and India are more important to the global economy than Canada and Italy, but they are not included in the G7). The G7's share of global GDP shrunk from 68 per cent in 1992 to 38 per cent in 2019, and the G7 nations cover only 11 per cent of the world's population. For this reason, there have been recent attempts to expand the group to include five developing countries referred to as the Outreach Five (O5): Brazil, China, India, Mexico and South Africa. In 2020, the United States advanced the idea of including India, Russia, South Korea and Australia in the G7 meetings – a proposal noticeable by its exclusion of China, whose economy is 10 times the size of Australia's.

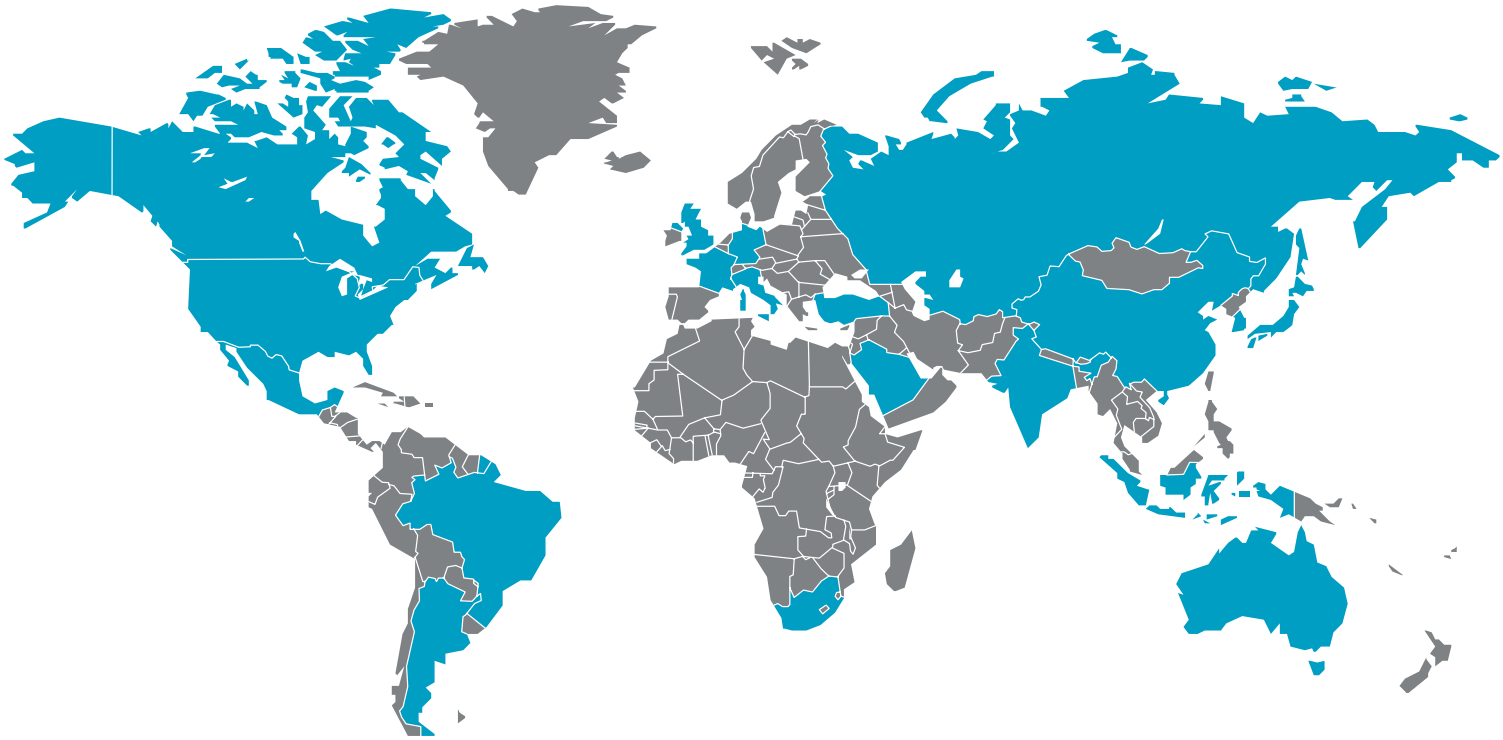


Figure 2.8 – Members of the G20

Group of Twenty Nations (G20)

The G20 includes 19 of the world's largest national economies plus the EU, covering 80 per cent of world GDP and two-thirds of the world's population. Importantly the G20 membership includes several emerging economies that have become the driving force behind world economic growth since 2008.

The G20 played a key role in the global response to the financial crisis in 2009 and had an important although less impactful response to the COVID-19 pandemic. During the global financial crisis, the G20 helped coordinate fiscal stimulus and improve supervision of the global financial system and international financial institutions. However, international economic cooperation has weakened in more recent years, in the absence of leadership from the US or other major economies. The economic policy responses to the COVID-19 pandemic in 2020 were mostly determined at a national level, although the G20 was successful in coordinating large-scale debt relief for developing countries in conjunction with the World Bank.

The extent to which the G20 or the G7 plus O5 group becomes the forum for international economic cooperation in future years is unclear, but at the moment the G20's main activity is its annual summit, and it does not have any permanent leadership or headquarters. The annual summit generally deals with a wide range of current issues, and does not advance specific economic goals. It therefore relies on individual heads of state to provide momentum and leadership to advance shared goals, but efforts towards international cooperation have been weaker in recent years.

reviewquestions

1 Explain the role of government economic forums in the global economy.
2 Discuss the role of the G20 in the global economy in recent years.

chapter summary

1 **Free trade** is a situation where there are no artificial barriers to trade imposed by governments that restrict the free exchange of goods and services between economies.

2 **Protection** can be defined as any type of government action that has the effect of giving domestic producers an artificial advantage over foreign competitors.

3 The **arguments in favour of protection** include that it can help "infant industries" to establish themselves, protect local jobs being lost because of cheaper imports, allow a country to remain self-sufficient in important areas such as national security and can help to prevent foreign companies dumping goods on domestic markets at unrealistically low prices.

4 The **arguments against protection** are that it results in a distortion in resource allocation towards less efficient sectors of the economy and in the longer term can lead to a less internationally competitive economy, higher unemployment and a lower standard of living.

5 The main **methods of protection** are: tariffs (a tax on imports), subsidies (a payment to local producers), local content rules (a requirement that a proportion of goods are made locally), quotas (a limit on the quantity of goods imported) and export incentives (other means to encourage local production).

6 **Trade agreements** are a way of reducing barriers to trade between nations. Recent years have seen a proliferation of multilateral and bilateral trade agreements, and while they have removed some trade barriers they have also made the global trading system increasingly complicated.

7 The **World Trade Organisation** is a global organisation that enforces the existing WTO agreement, resolves trade disputes and is the major forum for global trade negotiations pursuing the goal of global free trade.

8 The **International Monetary Fund** is a global organisation whose main role is to maintain international financial stability. The IMF plays a key role in monitoring the international financial system and assisting economies who face major economic crises.

9 The **World Bank** is a global organisation whose main role is to assist poorer nations with economic development through loans, development assistance and technical advice with the goal of reducing extreme poverty to 3 per cent of the global population by 2030 and raising income levels for the lowest 40 per cent of income earners.

10 The **G7** and the **G20** are the two most important forums for global economic policy coordination through annual meetings of national leaders. The **G7** includes the major advanced economies, while the G20 includes the large emerging economies that have recently been driving global economic growth.

chapter review

1 Define *free trade*.

2 Explain what is meant by *comparative advantage*.

3 Use the following terms to briefly outline the main methods of protection that can restrict free trade:

- tariffs • local content rules • export incentives • subsidies

4 Outline the arguments supporting the following statements on protecting local industries:

- "We should protect our infant industries so that they have a chance to establish themselves and become competitive in world markets."
- "To save lives, we need to build 'just-in-case' supply chains locally, and stop relying on 'just-in-time' global supply chains."

5 Discuss the economic arguments against the following justifications for protection:

- "It's time we made Australia great again, and stopped sending jobs offshore to China with all this free trade nonsense."
- "We need to protect our essential domestic industries just in case there's a war or global famine."

6 Discuss the impact of protectionist policies on globalisation.

7 Analyse the impact of the increase in preferential trade agreements and trading blocs on the global economy.

8 Explain how regional trade agreements in the Asia-Pacific might affect Australia's economic future.

9 Compare and contrast the role of the following institutions in the global economy:

- World Trade Organisation
- International Monetary Fund
- World Bank

10 Explain which international organisation would be most likely to play the major role in the following situations:

- A dispute between the United States and China about Chinese companies using the intellectual property of American technology firms
- Construction of a major dam and irrigation project in India
- A crisis in Latin American financial markets that poses a risk to the global economy.

3 Globalisation and Economic Development

3.1 Introduction
3.2 Differences in income and economic growth
3.3 Differences in economic development
3.4 Categories of development in the global economy
3.5 Causes of inequality in the global economy
3.6 The impact of globalisation

3.1 Introduction

The most disturbing feature of the global economy is the very large difference in the living standards of people around the world. People born into families with high living standards in wealthy countries have very different prospects in life than those born in families with lower living standards and in low-income countries. Their opportunities in life vary significantly in terms of health, education, income and life expectancy. Despite the extraordinary technological change and progress of the past, stark inequalities persist between wealthy and poor countries and between wealthy and poor people within countries.

While there is a large gap between rich and poor countries, it is also true that in overall terms, living standards are improving in most countries, rich and poor. Evidence of progress towards overcoming global inequalities is highlighted by the following facts:

- The percentage of people now living in extreme poverty has declined significantly, with less than 8.6 per cent of the population living below US$1.90 per day in 2018, compared to 40 per cent in 1981.
- The under-five mortality rate has been reduced by close to 60 per cent between 1990 and 2018.
- The global primary school net enrolment rate increased from 81 to 89 per cent between 1996 and 2018.
- Life expectancy for those born in countries with low human development increased from 49.6 to 61.3 between 1990 and 2018.

Sources: World Development Indicators 2020, Human Development Report 2019

On the other hand, evidence also demonstrates the major gaps between people in the developing world and the one billion people in developed countries who enjoy a high level of human development.

- An estimated 650 million people live in "extreme poverty", subsisting on less than US$1.90 per day in 2018. Half of this population lives in Sub-Saharan Africa (which has seen an increase in the number of people living in extreme poverty compared to 1990).
- 2.3 billion people live without access to basic sanitation, and around 1 billion have no access to electricity.
- It is estimated that 5.3 million children under the age of five died in 2018. Most of these occurred in Sub-Saharan Africa or Southern Asia.
- Across the world are an estimated 70.8 million refugees and forcibly displaced people, who had to abandon their homes to seek protection due to conflict or persecution.

Sources: World Health Organisation, UNHCR, World Development Indicators 2020

In this chapter we look at how to measure and understand differences in economic development in the context of globalisation.

3.2 Differences in income and economic growth

The most popular method for comparing living standards between different economies is income. It measures the ability of a nation's citizens to satisfy their material wants. **Gross National Income (GNI)** is the sum of value added by all resident producers in an economy plus receipts of primary income from foreign sources. Real GNI figures are obtained by discounting GNI growth for the effects of inflation.

Country	GNI 2018 (US$ bn)	Ranking
United States	20,837	1
China	13,557	2
Japan	5155	3
Germany	4058	4
France	2840	5
United Kingdom	2817	6
India	2691	7
Italy	2107	8
Brazil	1840	9
Canada	1694	10
World total	**85,998**	

Source: World Development Indicators 2020

Figure 3.1 – The world's 10 largest economies

Figure 3.1 shows that the United States economy is by far the largest in the world. It is over one-and-a-half times the size of the next largest economy, China, and almost five times the size of the third largest, Japan.

One of the limitations in comparing the size of economies is the exchange rate used. By using the United States dollar, we can make inaccurate comparisons about the living standards of developing countries. For example, if the prices of goods and services in developing countries are low relative to prices in the United States, then measuring GNI in terms of the United States dollar will underestimate the true income of people in these developing countries. For this reason, economists usually make an adjustment using **purchasing power parity (PPP)** before comparing GNI levels between countries. Measuring purchasing power parity adjusts measurements of the size of an economy to reflect the purchasing power of currencies within a national economy. PPP-adjusted figures provide a standard comparison of real income levels between countries.

Purchasing power parity (PPP) is a theory that states that exchange rates should adjust to equalise the price of identical goods and services in different economies throughout the world.

Figure 3.2 groups the global economy into low-, middle- and high-income economies, a distinction made by the World Bank. It shows raw GNI and then the figures adjusted for purchasing power parity between these countries. Making these adjustments results in substantially higher comparative figures for developing countries, whose exchange rates tend to be undervalued.

Grouping	Population (million)	GNI (US$ billion)	GNI measured at PPP ($Int'l billion)
Low income	705	606	1666
Lower middle income	3023	6667	22,998
Upper middle income	2656	24,136	49,826
High income	1210	54,634	61,709
Global economy	**7594**	**85,998**	**135,907**

Source: World Development Indicators 2020

Figure 3.2 – Adjusted GNI for major country groups

Figure 3.2 shows that high-income economies (also known as advanced economies or industrialised economies) receive around two-thirds of the world's income as measured in raw GNI figures. This is nearly half of the world's income using PPP-adjusted GNI figures. A high level of inequality clearly exists in the global economy, given that high-income economies make up just over one billion of the world population of over seven billion. The population of low-income economies makes up almost 10 per cent of the global population but less than 1 per cent of the size of the global economy.

The population size of different countries must also be considered. The population size and rate of population growth vary between countries. Allowances can be made for this by dividing the real GNI of each country by its population, generating a **GNI per capita** figure.

As figure 3.3 shows, people in high-income regions (around one in seven people in the world) enjoy income levels that are nearly five times those in low- and middle-income countries, even after adjusting for purchasing power parity. The table also details information about the regions where income is the lowest. Living standards in Sub-Saharan Africa and South Asia, where over one-third of the world's population lives, are exceptionally low.

Region	Population (million)	GNI per capita (US$)	GNI measured at PPP per capita ($Int'l)
High income	**1210**	**43,922**	**50,986**
Low and middle income	**6384**	**4660**	**11,666**
Latin America & Caribbean	609	8982	15,615
Europe & Central Asia	418	9217	21,370
East Asia & Pacific	2082	6440	16,026
Middle East & North Africa	383	4364	13,763
Sub-Saharan Africa	1078	1597	3845
South Asia	1814	1886	7074

Source: World Development Indicators 2020

Figure 3.3 – Global comparison of living standards measured by GNI per capita

Almost all nations have experienced some **economic growth** in recent decades, enjoying higher incomes as a result of an increase in their **Gross Domestic Product** (GDP). While the gap in income between the richer and poorer countries appears to be lessening, the reduction of income inequality in the global economy is occurring very slowly.

Another dimension to global inequality is the unequal **distribution of global wealth**. Wealth is an important safety net for people when they do not have income and can be used to improve a person's education or find other ways to generate income. According to research by Credit Suisse, in 2019 the richest 10 per cent of the world's population owned 82 per cent of global wealth, and the top 1 per cent alone owned 45 per cent. Most of this wealth is concentrated in households across Europe, North America and in Asia-Pacific countries like Japan, China and Australia. People in Latin America, India and Africa, by contrast, hold only a small percentage of global wealth. Wealth is distributed even more unevenly than income throughout the global economy.

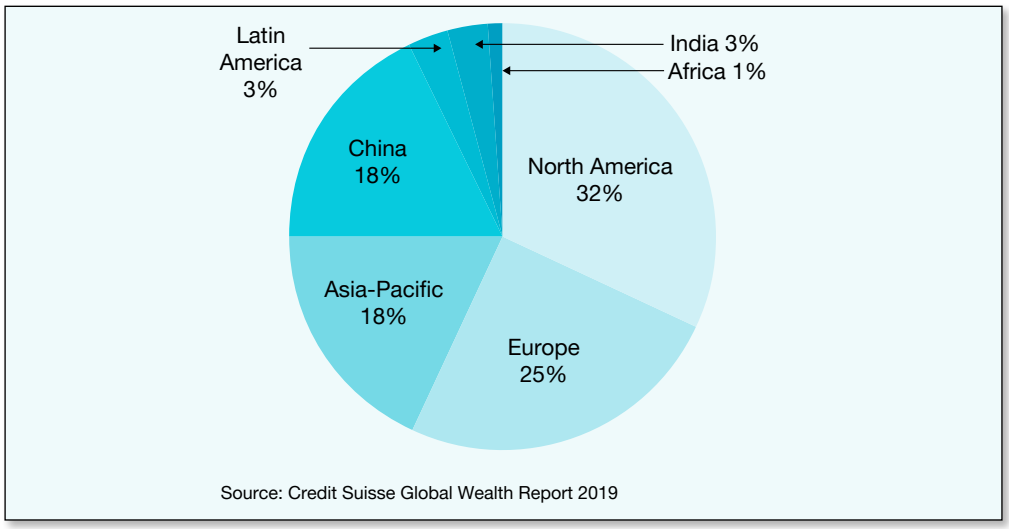


Figure 3.4 – Global distribution of wealth

reviewquestions

1. Explain why real GNI per capita (PPP) is used to measure income levels in the global economy.
2. Identify THREE economic regions that have low income or middle income levels and state their level of GNI per capita (PPP).
3. Discuss what statistics on income levels in economies reveal about the level of inequality in the global economy.

3.3 Differences in economic development

It is important to look beyond simple measures of income and economic growth to assess the differences in living standards in the global economy. **Economic development** is a broader concept than economic growth. It attempts to measure improvements in well-being or welfare, rather than simply how much extra money people have. Higher incomes play a crucial role in improving well-being, especially for those living in poverty. However, development also takes into account other **quality-of-life indicators,** such as health standards, education levels, domestic work that is not given a financial value, the level of damage to the environment and inequalities in income distribution.

Economic development is a broad measure of welfare in a nation that includes indicators of health, education and environmental quality as well as material living standards.

Human Development Index (HDI) is a measure of economic development devised by the United Nations Development Programme. It takes into account life expectancy at birth, levels of educational attainment and material living standards (as measured by Gross National Income per capita).

Human Development Index

A number of indicators have been developed to compensate for the limitations of economic growth measurements. The main alternative measure to GNI is the **Human Development Index (HDI)**, devised by the United Nations Development Programme (UNDP) to measure economic development. It takes into account:

- **Life expectancy at birth**. This is indicative of the health and nutrition standards in a country. High levels of longevity are critical for a country's economic and social well-being.
- **Levels of educational attainment**. Education is important for the development of the skills of the workforce and the future development potential of an economy. The HDI measures the average number of years for which adults aged 25 attended school and the expected years of total school attendance for school-age children.
- **Gross National Income per capita**. This measures the sum of gross value added by all resident producers in the economy, plus income from foreign sources on a purchasing power parity basis. This is used as a measure of a decent standard of living and is an essential determinant of the access that people have to goods and services.

The HDI is a score between 0 for nations with no human development and 1 for maximum human development. The 2019 Human Development Report gave Norway the highest HDI at 0.954 and Niger the lowest at 0.377. Australia ranked sixth after Norway, Switzerland, Ireland, Germany and Hong Kong with an HDI of 0.938.

Comparing HDI and GDP statistics reveals the differences between growth and development across the globe. The comparisons highlight the importance of a broader measure of welfare than just GDP figures.

In making these comparisons, it is important to emphasise that economic growth is still crucial for high levels of development – as illustrated by countries such as Norway, which have very high rates of both per capita income and human development.

Country	GNI per capita (2011 PPP, US$)	Human Development Index value	HDI ranking	Country	GNI per capita (2011 PPP, US$)	Human Development Index value	HDI ranking
Very high human development				**Medium human development**			
Norway	68,059	0.954	1	Vietnam	6220	0.693	118
Switzerland	59,375	0.946	2	Iraq	15,365	0.689	120
Australia	44,097	0.938	6	Guatemala	7378	0.651	126
Estonia	30,379	0.882	30	India	6829	0.647	129
Kuwait	71,164	0.808	57	Bangladesh	4057	0.614	135
High human development				**Low human development**			
Serbia	15,218	0.799	63	Papua New Guinea	3686	0.549	155
Cuba	7811	0.778	72	Nigeria	5086	0.534	158
Brazil	14,068	0.761	79	Afghanistan	1746	0.496	170
China	16,127	0.758	85	Yemen	1433	0.463	177
Indonesia	11,256	0.707	111	Niger	912	0.377	189

Source: UNDP Human Development Report 2019

Figure 3.5 – Comparison of GDP per capita and the Human Development Index

In some cases, countries had similar HDI levels but very different income levels. This suggests that in some countries the benefits of income are not well distributed as a result of their high levels of inequality. For example, Vietnam and Iraq share very similar HDI values, but have very different income levels. Vietnam has a GNI per capita of US$6220, while Iraq has a GNI per capita of US$15,365. Similarly, Cuba and Guatemala have income levels around US$7500, yet Cuba has a HDI rank of 72 while Guatemala is more than 50 places lower at 126.

THE GLOBAL GOALS

In September 2015 in New York, world leaders agreed to 17 new Global Goals, or Sustainable Development Goals (SDGs). The SDGs promote 15-year targets aimed at tackling poverty with a renewed focus on sustainability issues such as climate change, ecology and biodiversity, consumption and production, food security, energy provision and infrastructure. The goals listed below are supported by nearly 170 individual targets, to be achieved by 2030.

17 Sustainable Development Goals	
Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts
Goal 14	Conserve and sustainably use the oceans, seas and marine resources
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Strengthen the means of implementation and revitalise the global partnership for sustainable development

Source: United Nations Sustainable Development Goals Report 2017

The SDGs were developed based on the previous Millenium Development Goals (MDGs). At the United Nations Summit in 2000, 189 countries agreed to eight MDGs to guide efforts by international organisations to improve economic development in poorer countries. Many of these goals had measurable targets, to be achieved by 2015. These goals reflect the importance of income, education, health and the environment to improving quality of life.

At the conclusion of the 15 years, the progress of these goals was mixed. Between 1990 and 2015, the global proportion of people living in extreme poverty (Goal 1) fell from 1.9 billion to 987 million in 2015. However, this progress was primarily driven by reductions in certain Asian regions, particularly China, where the proportion of people living in extreme poverty reduced from 61 per cent in 1990 to 4 per cent in 2015. This masks the widespread levels of extreme poverty in regions such as Sub-Saharan Africa where extreme poverty rates remain at 41 per cent.

Progress was also made in other areas, such as child mortality (Goal 4) and improving access to safe water (Goal 7). However, many other targets have not been met, including achieving universal primary education (Goal 2), eliminating gender disparity in education (Goal 3), and reducing maternal mortality by three-quarters (Goal 5).

reviewquestions

1 Explain the difference between economic growth and economic development and discuss their relationship in the global economy.

2 Outline how the Human Development Index is calculated and assess its adequacy as a measure of economic development.

3.4 Categories of development in the global economy

In examining economic data on living standards and development, we have referred to descriptions of high-income, middle-income or lower-income economies. In this section, we examine these distinctions in greater detail, and consider the use of other categorisations such as advanced, developing and emerging economies.

Countries are generally categorised into groups because they tend to confront similar issues according to their stage of economic development. The main categories that economists use are:

- **Advanced economies:** These countries have high levels of economic development, close economic ties with each other and liberal-democratic political/economic institutions. The 40 advanced economies identified by the International Monetary Fund make up most of the high-income economies in the world (the others are very small nations) and comprise most of the members of the Organisation for Economic Co-operation and Development (OECD). High-income countries have Gross National Income per capita levels (PPP) above US$12,376 and are mostly found in North America and Western Europe, with a smaller number in the Asia-Pacific and Latin American & Caribbean regions.

Developing economies experience low living standards, low education levels and generally have agriculture-based economies with poor infrastructure and economic and political institutions.

- **Developing economies**: These countries generally have low income levels, human resources with poorer education and health outcomes and have only experienced industrialisation to a limited extent. The major consequence is that developing nations have large numbers of people living in absolute poverty (defined as less than $1.90 per day in 2011 US dollars), as shown in figure 3.6. Developing countries are often divided into the two groups of low-income and middle-income countries.

While there are significant differences between developing countries, some common characteristics may include:

- high levels of income inequality within their economies

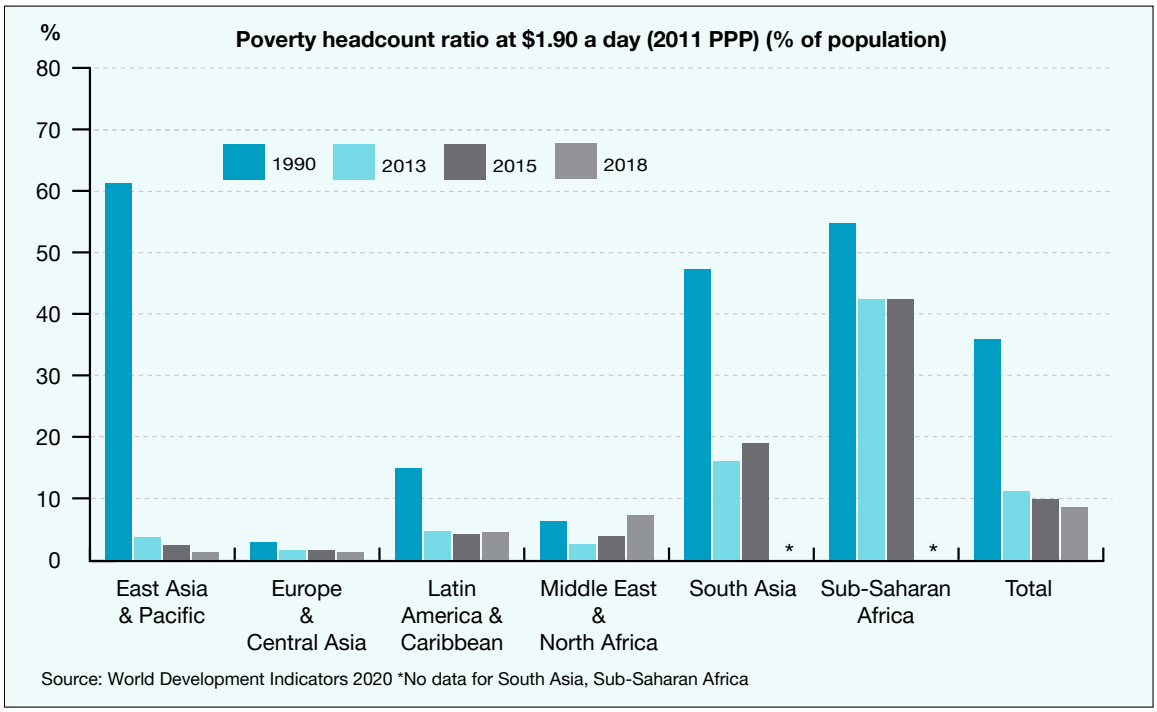


Figure 3.6 – Proportion of people in absolute poverty throughout the global economy

- dependence on agricultural production for income, employment and trade opportunities
- reliance on foreign aid and development assistance as a major source of income
- low levels of labour productivity, industrialisation, technological innovation and infrastructure development
- weak political and economic institutions and a high prevalence of corruption.

The United Nations Conference on Trade and Development (UNCTAD) has also identified a sub-group of 47 **least developed countries (LDCs),** with the lowest GNI per capita levels in the world (less than US$1035 per year based on a three year average); weak human assets (based on health and education indicators); and high economic vulnerability (based on economic structure, size, and exposure to shocks). Thirty-three of the 47 LDCs are located in Sub-Saharan Africa, highlighting what is sometimes called the "Africanisation" of poverty.

Another classification for economies is **emerging economies**. These economies are in the process of industrialisation or modernisation and experiencing sustained high levels of economic growth. This classification includes a range of economies that are neither high income, nor share the traditional characteristics of developing economies. They include the economies previously known as newly industrialised economies (such as Malaysia and the Philippines), economies previously known as transition economies, which were making the transition from socialist economies (such as China and Hungary), and developing economies with improved prospects (such as India and Indonesia).

Emerging economies are in the process of industrialisation and experiencing sustained high levels of economic growth.

Type of economy	Income levels	Economic growth	Structure of economy	Examples
Advanced	High income levels with GNI per capita above US$12,376	Slower growth in recent decades	Large service industries and advanced manufacturing	Singapore Portugal Czech Republic
Developing	Low income levels with around half of population in absolute poverty	Moderate growth rates but population growth also high	Heavily reliant on agriculture and (in more extreme cases) foreign aid	Madagascar Yemen Myanmar
Emerging	Income levels vary, but what these economies have in common is fast growth in income levels	Strongest growth rates in the world (5–10 per cent) and favourable prospects	Industrialising usually with substantial manufacturing sectors	China Brazil Indonesia

It is important to acknowledge the limitations of classifications systems. Classifications are very broad and can group dissimilar economies together. For example, Brazil and Indonesia might both be considered emerging economies, but they have very different living standards. Likewise, some economies do not fit neatly into one of these three categories. Bulgaria is much better off than a developing economy, yet it is not quite an advanced economy or emerging economy. Despite these limitations, classifying economies is still an important step towards understanding the reasons for economic inequalities between nations.

reviewquestions

1 Summarise the main categories of development and the typical features for each classification.

2 List FOUR economies that have the characteristics of each of the main categories of development.

3.5 Causes of inequality in the global economy

Understanding the reasons for differences in levels of development between nations has been a central issue of economic debate for over half a century. During the globalisation era, differences in living standards between rich and poor countries have come into sharper focus because of the increased interaction between the more prosperous and less prosperous regions of the world.

The severe and widening extent of global inequalities between economies raises fundamental questions. Why have some economies succeeded in achieving rapid industrialisation and economic development while others have achieved little or no progress in reducing poverty? What factors explain this growing divergence of income, health and education outcomes between and across economies?

Such issues are the domain of **development economics**, which attempts to identify and enable the conditions required for sustainable economic growth and development. By comparing the characteristics of high-income and developing economies, development economics highlights the specific problems faced by poor countries, such as high rates of population growth, low levels of skills development, weak legal and financial institutions, and endemic corruption.

In an era of increased integration between economies, it is important to also understand how the relationships between nations, the overall structure of the global economy, and the roles of international organisations influence global inequalities. These global factors are set out below, alongside the domestic factors that contribute to low levels of development.

Global factors

Many features of the global economy and the process of globalisation contribute to the inequalities between countries. Although globalisation also creates opportunities for economic growth and development, some aspects of the global economy appear to entrench rather than reduce global inequalities.

Global trade system

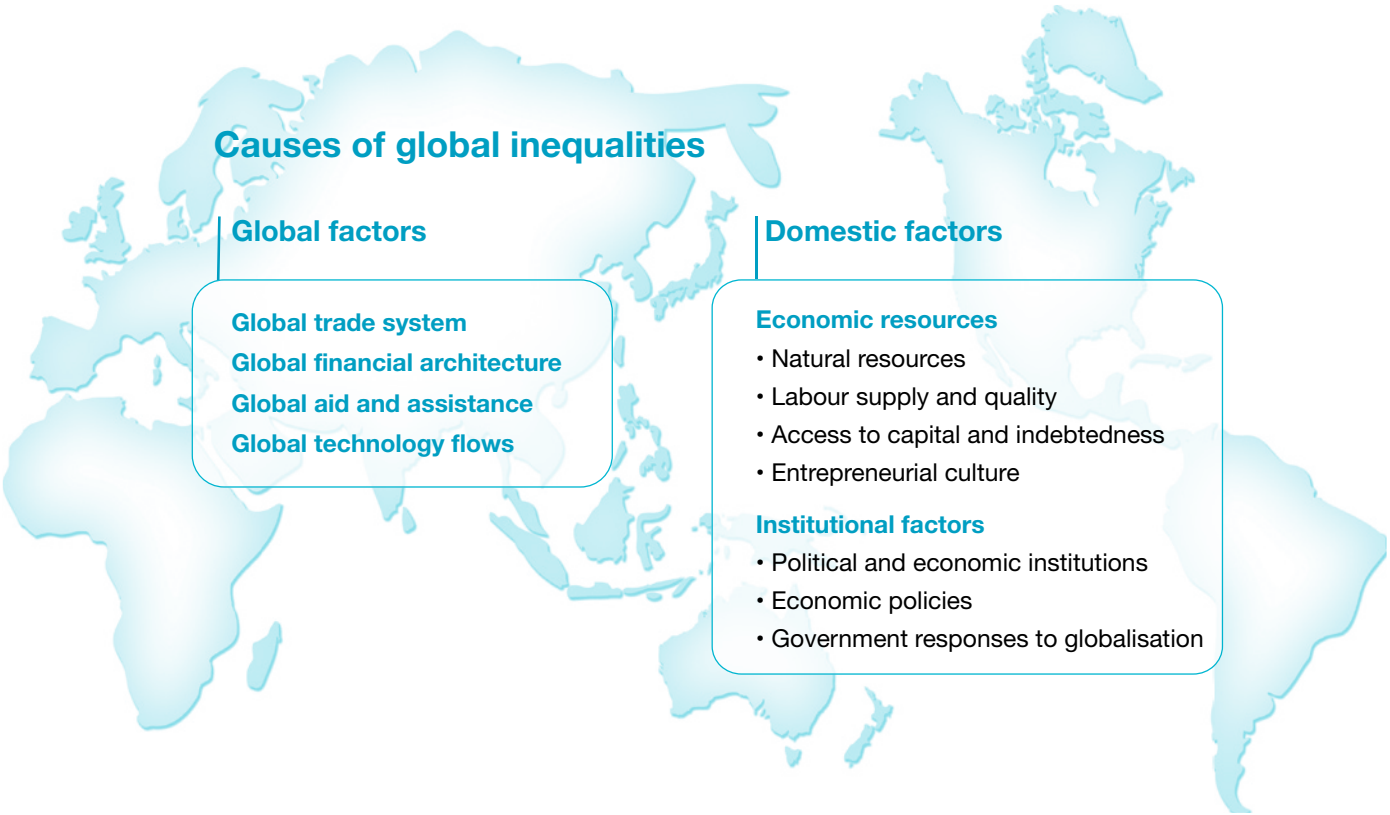


For further information on global aid issues, visit the website of non-government aid and advocacy organisation Oxfam International **www.oxfam.org**

Using this website, outline some of the recent policy proposals of Oxfam to address global poverty.

Several features of the global trade system work to reinforce rather than reduce global inequalities:

- Wealthy countries protect their domestic agricultural sector because it is not competitive with agricultural producers in many developing nations. Developing countries that export commodities are severely affected by high levels of global **protectionism in the agricultural sector**. While total agricultural support to producers in OECD has fallen by almost half since the mid-1980s, it remained high at US$247 billion in 2018, providing 20 per cent of income for farmers in rich economies such as Japan, Korea and the European Union.
- **Regional trading blocs** such as the European Union and North American Free Trade Agreement can exclude poorer nations from gaining access to lucrative global consumer markets. Exclusion from trade opportunities has an enormous impact on poor countries because bilateral agreements are rarely as comprehensive as regional trading blocs.
- The World Trade Organisation's **Doha Round** of trade negotiations in the early 2000s was promoted as the "development round" because of its focus on trade reforms to benefit poorer nations. A major reason for its failure was that high-income nations resisted making concessions on the issues that would provide the greatest benefit to developing countries. Recent WTO negotiations



have focused on a smaller package that only tries to expand tariff-free access for exports from the least-developed countries and postpones more complicated trade negotiations into the future.

- The benefits of free trade agreements are often not accessible to developing nations because of the substantial cost in implementing international agreements and lodging appeals against other countries' protectionist measures. Economists at the World Bank have concluded that a 1 per cent increase in administrative costs associated with trade would decrease gross world product by US$75 billion. The complexity of many trade agreements further tilts the benefits of the global trade system towards richer countries and can entrench rather than reduce global inequalities.

Global financial architecture

Although deregulated global financial markets and the global financial system are intended to create development opportunities by enabling the free flow of funds around the world, the global financial system can also entrench global inequalities:

- Historically, long-term international flows of investment heavily favoured developed countries. This has changed over the last decade, with developing economies receiving around half of global FDI flows. However, faster-growing emerging economies and developing economies such as China, Brazil, India and Russia have benefited the most. In contrast, the world's 47 least developed countries held just 1.1 per cent of the global stock of Foreign Direct Investment inflows in 2018.

- Short-term financial inflows heavily favour the more prosperous emerging economies, which offer better financial returns for currency and stock market speculators. However, these regions as a result are exposed to **economic volatility** as witnessed by the dramatic financial crises of East Asia in the late 1990s and of Latin America in the early 2000s. When those crises occur they can set back economic development for years while global financial market speculators simply move on to invest in other countries. On the other hand, financial liberalisation

can be an important corollary of trade liberalisation. A 2019 IMF research report found that low-income countries that had stronger banking sectors were better able to manage when sudden changes in their terms of trade caused volatility in their export earnings.

- International financial rules have not kept pace with the globalisation of the economy and in some areas have tolerated loopholes that contribute to large flows of income or wealth to those who already hold substantial wealth. According to an IMF Working Paper, around US$600 billion of profits are held in tax havens, representing almost 40 per cent of multinational profits. The absence of basic global rules, such as requiring transnational corporations to report their earnings or profits in individual countries (known as country-by-country reporting), has fostered this rapid growth of the use of tax havens in developing economies.

- The role of the International Monetary Fund, the international organisation that oversees the global financial system, has been under greater scrutiny in recent years, in particular because of its impact on developing countries. The major criticism of the IMF is that the "structural adjustment" policies it advocates serve the interests of rich countries, and may not be appropriate to the conditions of many developing countries. Acknowledging this concern, the IMF's assistance package in response to the global economic recessions of the late 2000s and early 2020s included zero-interest loans with limited conditions to low-income countries and a range of credit facilities (or "reserves") that could be tailored individually to the different needs of developing countries. Nevertheless, some have argued that the IMF gives priority to protecting the interests of rich countries' financial institutions rather than the long-term economic interests of developing countries.

- Many developing countries have **large foreign debt burdens**. Total external debt for low- and middle-income economies was estimated at US$7.8 trillion in 2018, an increase of 5 per cent since 2017, according to the 2020 International Debt Statistics report. Interest repayments on these past loans reduce the income available for governments to promote growth and development through spending on education, healthcare and infrastructure. As a result, many developing countries spend more on debt servicing than public health. Recent years have seen major efforts by the World Bank and International Monetary Fund to provide "debt relief" to Heavily Indebted Poor Countries (HIPCs) in part because much of this debt accrued because of bad lending practices by rich-country financial institutions to authoritarian leaders in developing countries such as Uganda and the Democratic Republic of the Congo.

Global aid and assistance

The relatively small-scale efforts made by developed countries to address the problem of global inequalities are insufficient to overcome the large differences in living standards:

- The total level of development aid provided by high-income economies was US$153 billion or 0.3 per cent of gross domestic product in 2018. This is less than half the level promised by high-income economies since the 1970s (0.7 per cent of GDP). The OECD *Official Development Assistance 2020* indicated that only seven of its member countries have reached the 0.7 per cent UN target.

- Critics of the aid policies of developed countries argue that a significant proportion of official development assistance is "phantom aid" – that is, aid funds that do not improve the lives of the poor. According to the OECD, almost one in every six dollars of foreign aid is "technical cooperation", which is often paid to consultants in donor countries. Another 11 per cent of aid is debt-related, such as for relieving or refinancing past loans, which does not contribute to new development. A further

5 per cent of the foreign aid budget is spent on administration. These disbursements reduce the amount available for development projects and humanitarian relief. Additionally, these figures do not reveal the proportion of aid that is "tied aid" – that is, aid that must be spent on overpriced or unnecessary goods and services that are produced by the donor country. For example, when the United States provides food support to very poor countries it often buys American crops and ships them all the way to countries in Africa, at a far greater expense than buying those crops in the local region.

- The distribution of aid by high-income countries often reflects strategic and military considerations rather than the needs of the world's poorest countries. A recent Briefing Paper by Oxfam International, a non-government aid organisation, *Whose aid is it anyway?: Politicizing aid in conflicts and crises*, found that since 2002 almost half of the US$178 billion increase in global aid from wealthy countries went to Iraq and Afghanistan, while much smaller shares were received by other developing countries.

- While multilateral development aid (distributed by the World Bank, IMF and United Nations) is better targeted at the world's poorest countries, it is less than one-third of the value of total development assistance from the Development Assistance Committee members. One recent initiative is the Aid for Trade programme, established by the WTO to assist developing countries in overcoming the structural difficulties that limit their ability to successfully trade out of low economic development.

Global technology flows

Technology has the capacity to contribute to closing the gaps in living standards, but it can also entrench inequalities. New technologies can be adopted much more quickly in economies that have better infrastructure, higher levels of education, and that already have high penetration rates of related technologies, such as broadband infrastructure. In 2019, the International Telecommunications Union estimated that almost half the world's population did not use the Internet, and most of those without it lived in developing economies. This means that these businesses and consumers have limited access to online opportunities to sell and purchase goods and services, which is a rapidly expanding market, and reinforcing economic isolation from the digitally connected and developed world. The gaps in people's access to new communications technologies are called the "digital divide".

New technologies are also largely geared to the needs of high-income countries because they choose the priority areas of scientific research. Much of this technology – like labour-saving devices and pharmaceuticals that deal with the health problems of ageing people in rich countries – are of little benefit to poorer nations that have abundant labour supplies, a young population whose main health risks are common infectious diseases, and limited capital resources. For example, around 10 per cent of the global population (approximately 800 million people) do not even have access to basic electricity, according to the International Energy Agency.

Developing nations also find it difficult to gain access to new technologies. Intellectual property rights restrict the benefits of technological transfer to poorer countries because they cannot pay developed country prices for those technologies. The Agreement on Traded Related Aspects of Intellectual Property Rights (TRIPS), for example, has been criticised for requiring all countries to implement complex intellectual property regimes that are difficult to implement for developing economies. This issue has been highlighted in the Doha Round of trade negotiations, in which wealthy nations fought to resist giving concessions that would reduce the intellectual property rights of their businesses.

Domestic factors

Economic resources

The simplest explanations for contrasts in levels of development focus on the difficulties most economies face in acquiring and maintaining sufficient resources for the production process – namely natural resources, labour, capital and entrepreneurship.

Natural resources include all the resources provided by nature that are used in the production process. These are often simply referred to as "land". The reward (return) to the owners of natural resources is called "rent".

- **Natural resources**: Natural resources are important inputs for production, such as non-renewable or renewable energy supplies, a fertile agricultural land, water supplies and minerals. Economies that have an abundant and reliable supply of cheap natural resources clearly have better opportunities for economic development than those that do not, even if some have been spectacularly unsuccessful in using these opportunities. Oil-rich countries in the Middle East, Africa and Latin America have achieved higher growth rates than their neighbours largely as a result of their exploitation of natural resources. But an abundance of natural resources can also hamper a country's economic development if it leads to an overvalued exchange rate, a narrow export base and an over-reliance on a small number of industries to drive economic growth. Countries that rely on natural resource exports are also exposed to downturns in commodity prices, which can result in sudden falls in national income.

- **Labour supply and quality**: Labour is an input to the production process for many sectors of the economy and therefore influences development levels. Whereas high-income countries tend to have highly educated and skilled labour resources, low-income nations are characterised by high population growth, lower levels of educational attainment and low health standards that result in lower productivity levels. In Singapore, for example, a strong commitment to creating a highly educated workforce has played a central role in the development of a sophisticated service-based economy. In South Africa, by contrast, the quality of the labour supply is diminished by inadequate education facilities and high rates of HIV/AIDS, which affects almost one in four South Africans aged 15 to 49 years and reduces workforce participation and productivity. Barriers to girls' access to education in many developing countries also contribute to lower productivity and workforce participation.

- **Access to capital and technology**: Difficulty in gaining access to capital for investment and development contributes to lower rates of economic growth and lower living standards. Low income levels provide little opportunity for savings that can be used for investment. Poorly developed financial systems makes it difficult for businesses to gain easy access to loans for investment purposes. To improve access to finance, microfinance organisations have been established in many developing economies to provide small loans to help the poorest people in the world manage their farms or start a business. Additionally, with small research organisations and limited funds for business innovation, developing countries have fewer opportunities to develop new technologies or to pay for the patents to use technologies developed in other countries.

- **Entrepreneurial culture**: While it is difficult to quantify differences in culture between economies and how this can impact upon economic performance, evidence suggests that a country's history and social institutions can impact on its economic success. In particular, strong civil society institutions, cultural disapproval of corruption, respect for the rule of law and aspirations towards work, enterprise and personal responsibility can support economic growth and development.

- **High levels of inequality:** Large gaps in the distribution of income and wealth are a common characteristic of developing countries, and especially of countries with high concentrations of poverty. Oxford University's Poverty and Human Development Initiative has found that 70 per cent of the world's poorest billion people live not in

Differing views on globalisation

Globalisation: Unparalleled growth, increased inequality

The architects of Bretton Woods were deeply influenced by events between the two world wars, when multilateralism and the liberal international order broke down amid protectionism, the malfunction of the gold standard, and competitive devaluations.

The implosion of world trade deepened the Great Depression and ultimately gave fuel to fascism, communism, and war. But in the aftermath, lessons were drawn. There was a new-found appreciation of how much national and global economic interests were interconnected. The founders at Bretton Woods resolved that economic development and global financial stability are necessary conditions for peace.

It was the original multilateral moment. We know the results. Tremendous gains in human wellbeing — life expectancy, educational attainment, child and maternal mortality. Global GDP per capita is five-fold higher than in 1945. Over one billion people breaking free of poverty. And billions more reaping the mutual benefits generated from trade.

Our world is experiencing a broader set of changes that are contributing to a breakdown of trust and social cohesion, especially in the advanced economies. Trade and globalization — along with technology — have reshaped the economic map, and the fallout is front and center here in Europe, as well as in the United States: rising anger, political polarization, and populism. We are at risk of what one could call a reverse Bretton Woods moment.

A large part of the problem is the rise of excessive inequality. This is both a national and a global challenge. Although poverty rates have declined worldwide since 1980, the top-tenth of the top one percent worldwide has garnered roughly the same economic benefits that have accrued to the bottom 50 per cent. We must prove that the benefits of globalization outweigh the costs and that integration can help to address our shared challenges.

– The Future of Bretton Woods
Speech by David Lipton, IMF Acting Managing Director
16 July 2019
https://www.imf.org/en/News/Articles/2019/07/12/sp071619-the-future-of-bretton-woods

The hyperglobalisation of finance

At the end of the 1970s, the election of a new British prime minister and the selection of a new head of the Federal Reserve paved the way for a new era of globalisation.

While economic ideas were the spark plug of this neoliberal project, the newly liberated financial sector was its engine. Setting capital free from regulation and public oversight opened up huge rent-seeking opportunities for an energised banking sector, while a new set of trade rules (covering financial services, investment and intellectual property rights) extended greater protections to footloose capital.

Alan Greenspan (chairman of the US Federal Reserve at the time), had no doubts that the liberation of capital combined with innovative financial products would turbocharge the global economy. This, he claimed, was Adam Smith's invisible hand working at the international level.

Things did not turn out quite as smoothly as Greenspan anticipated. Beginning with the Savings and Loans crisis in the United States, boom and bust became a recurrent feature of the new order, culminating, in 2008, in the deepest economic crisis since the 1930s, and revealing the darker side of a world driven by private credit creation, underregulated banks and financial chicanery.

What is needed is a Global Green New Deal that combines environmental recovery, financial stability and economic justice through massive public investments in decarbonising our energy, transport and food systems while guaranteeing jobs for displaced workers and supporting low carbon growth paths in developing countries.

– To salvage multilateralism we need a Global Green New Deal
Richard Kozul-Wright,
United Nations Conference on Trade and Development
15 October 2019
https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2214

the poorest countries, but in highly middle income countries. High levels of wealth concentration tend to lead to lower rates of economic growth and development. We need to examine both differences in living standards within countries and between countries, if we are to understand the overall differences in living standards across the global economy.

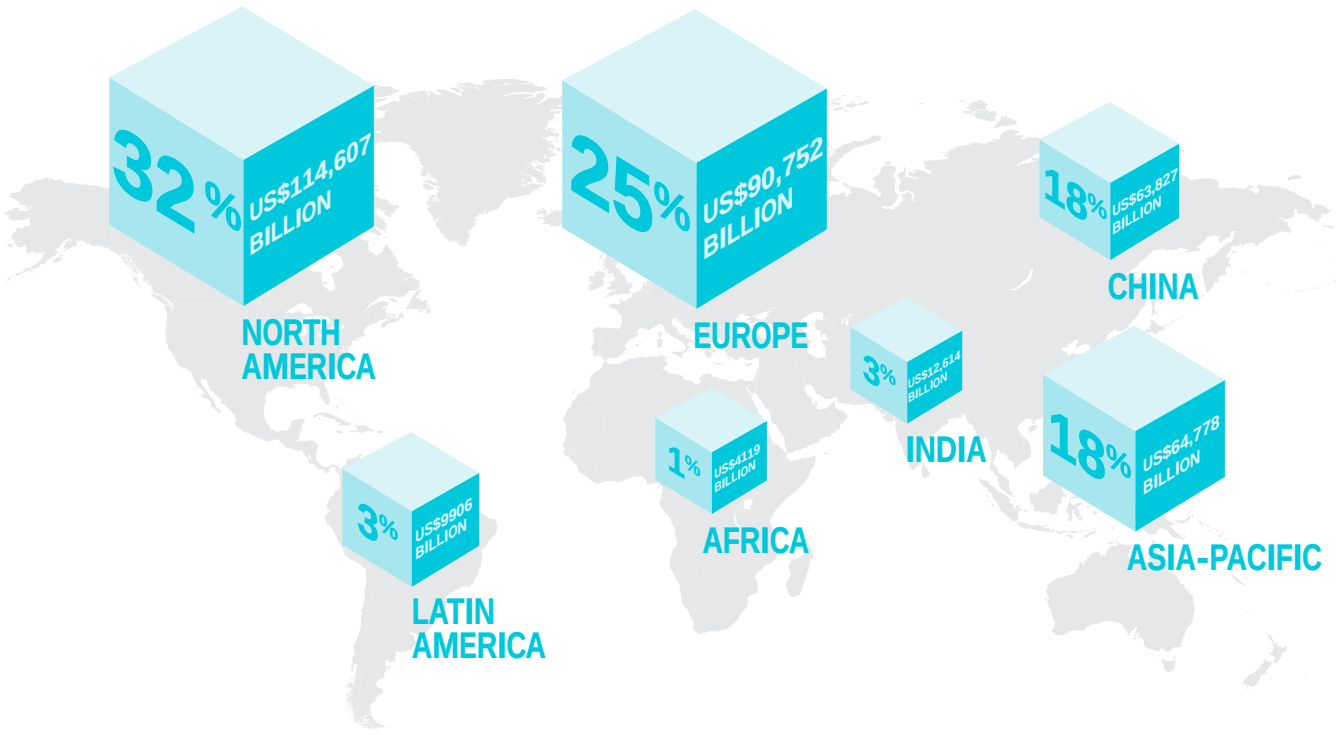
Institutional factors

Institutional factors – ranging from political stability, legal structures, central bank independence, extent of corruption, strength of social institutions and the government's domestic and external economic policies – can affect the ability of a nation to achieve economic development.

- **Political and economic institutions**: Institutional factors in individual countries can have a dramatic influence on the economic environment for businesses, investors and consumers, and thus have implications for a nation's level of economic development. Countries with high levels of institutional fragility or violent conflict will usually have lower levels of economic development. For example, 37 per cent of people in countries with "Fragile and conflict affected situations" live in extreme poverty, according to the World Bank, four times the global average. Political instability, corruption and a lack of law enforcement by government agencies can also undermine the confidence of investors, who will be reluctant to take risks if their business interests are threatened by an inadequate structure for resolving legal disputes, corruption or other institutional problems. The impacts of weak political institutions on economic development are difficult to quantify. One attempt to do so is the Corruption Perception Index, compiled each year by Transparency International. The Corruption Perception Index is a score

DISTRIBUTION OF THE WORLD'S WEALTH

Around 95% of the world's US$360 trillion in wealth is held by individuals in Europe, North America and in Asia-Pacific countries like China, Japan and Australia. By contrast, people in Latin America, India and Africa hold only small shares of global wealth. Wealth is distributed more unevenly than income throughout the global economy.



SOURCE Credit Suisse Global Wealth Report 2019

between 0 for countries with a relatively high level of corruption and 100 for countries with a relatively low level of corruption. Figure 3.7 shows that developed economies have, in general, lower levels of corruption than developing and emerging economies.

Country rank	Country	Corruption Perception Index (0–100)
1	Denmark	87
2	New Zealand	87
3	Finland	86
12	Australia, Austria, Canada, United Kingdom	77
23	United States of America, France	69
80	China, India	41
106	Brazil	35
137	Russia	28
172	Korea (North)	17
178	Syria	13
180	Somalia	9
Source: Corruption Perception Index 2019		

Figure 3.7 – Corruption Perception Index, selected countries 2019

- **Economic policies**: Government economic policies can have a substantial impact on development, in particular how governments balance the roles of market forces and government intervention in the economy. If all major decisions are left to market forces, a country may achieve a high level of economic growth, but it may not improve education, health care and quality of life. On the other hand, excessive government control over economic decision-making can constrain entrepreneurship and innovation, reducing economic growth. Countries with the highest levels of human development, such as Norway and Australia, typically have both a strong market economy and significant government investment in human development. By contrast, when they were under Communist rule between the Second World War and 1989, with a command economy rather than a market economy, Latvia and Poland experienced slower growth in development. A widely cited IMF paper, *Income Inequality and Fiscal Policy,* found that a major reason for higher inequality in Latin America compared with European economies was that developing economy governments are less able to reduce inequality because they have less comprehensive tax systems and therefore cannot provide the same level of public services and social welfare.

- **Government responses to globalisation**: Government responses to globalisation can have a substantial influence on a nation's ability to achieve economic development. Policies relating to trade, financial flows, investment flows, transnational corporations and the country's participation in regional and global economic organisations will influence an economy's ability to take advantage of the benefits of integration, such as economic restructuring, efficiency, access to foreign capital and technology and access to overseas goods markets. For example, East Asian economies that have been most open to trade and foreign investment have experienced the strongest rates of economic growth in recent decades. The role of government policy via responses to globalisation in influencing economic performance is discussed in both case studies after this chapter.

reviewquestions

1 Assess the extent to which global and domestic factors cause inequality in the global economy.

2 Discuss the extent to which globalisation may increase or reduce the extent of inequality in the global economy.

3.6 The impact of globalisation

In this section, we address one of the most important questions of modern economics: what is the impact of globalisation on individual economies and the world as a whole? We look at how the forces of globalisation have affected economic growth and development, changed production processes, influenced the gap between rich and poor, and impacted on the natural environment. While the overall impact of globalisation is to foster improved economic outcomes, we also note some of the downsides to greater economic integration.

Economic growth and development

Globalisation has affected countries in different ways. Developing economies have greater opportunities to grow by producing goods for global consumer markets, and can also benefit from greater access to new technologies and foreign investment. High-income economies, especially through transnational corporations, have found growth opportunities in global supply chains and new global service markets. Nevertheless many economies have not gained as much as might be expected from globalisation and greater economic integration has caused disruptive structural changes in some regions. Moreover, the relatively free movement of people, goods and data across national borders also increases risks – from cybercrime and the hacking of computer networks, to the spread of pandemics such as COVID-19.

Overall, there is evidence that globalisation has produced an acceleration of economic growth, though the effect has been distributed unevenly across geographical regions. As the world economy has become more integrated over recent decades, global real GDP growth has increased from 3.1 per cent per year during the 1980s and 1990s to 3.8 per cent from 2000 until the onset of the COVID-19 pandemic in 2020.

In recent decades, the fastest growing economies have been emerging economies such as China and India, while the slowest growing economies have been the advanced economies. Since 1990, a group of emerging and developing economies have been "catching up" to advanced economies, although this is not the case for many, especially when we assess per capita incomes.

- The **East-Asia and Pacific** region (excluding high-income countries) has been the fastest growing region in the world (9.0 per cent per year on average across the 1990s and 2000s, though it fell to 6.7 per cent on average between 2011 and 2019). In particular, strong growth in China during this period (10.4 per cent in the 2000s, falling to 7.3 per cent in the 2010s) demonstrates the role of industrialisation and globalisation in economic growth. IMF forecasts in 2020 suggested East-Asia and Pacific would be the only region in the world with projected positive growth that year, with growth of 1 per cent.

- Economies in **South Asia** have also experienced successful growth since 2000 (6.7 per cent), particularly India after its steps towards greater integration with the global economy (7.0 per cent), as well as Bangladesh (6.3 per cent). The IMF projected growth in South Asia to be flat or slightly negative for 2020.

- The former socialist economies of eastern **Europe and Central Asia**, which grew by 5.0 per cent in the 2000s, and 2.9 per cent between 2011 and 2019, made a successful transition to becoming market economies after experiencing a severe contraction in their economies during the 1990s (–0.9 per cent) because of the difficult process of transition. Europe and Central Asia was expected to record negative growth of 5 per cent in 2020.

- The **Middle East** experienced strong economic growth (5.1 per cent) throughout the 1990s and 2000s, including in Egypt (4.5 per cent) and Saudi Arabia (4.6 per cent). Higher growth in the Middle East compared with the 1980s (3.1 per cent) was underpinned by higher prices for energy resources during the globalisation era. However, political instability and a decline in oil prices has seen growth averaging only 3.2 per cent since 2011, with projected growth of negative 3 per cent for 2020. Many economies in the Middle East are also characterised by very high levels of inequality.

- **Sub-Saharan Africa** recorded an average growth rate of 4.8 per cent from 2000 to 2019, with strong growth in Ethiopia (9.1 per cent), Mozambique (6.8 per cent) and Nigeria (6.3 per cent). However other African countries have been less successful, including Sudan and the Central African Republic, having growth rates so low that they are experiencing very little improvement in living standards. The economies of Sub-Saharan Africa were expected to contract by 2 per cent in 2020.

- **Latin American** economies experienced strong annual growth in the first decade of the 2000s (3.1 per cent), improving from the 2.4 per cent average of the 1980s and 1990s. However, growth fell back to 1.6 per cent annually in the 2010s, reflecting weaker commodity prices and political instability in some countries in the region. The IMF predicted Latin American economies to contract by 5 per cent in 2020, demonstrating the devastation external shocks can wreak on economies with weaker institutions.

- **High-income economies** (or advanced economies) grew by just 2.2 per cent on average in the 1991–2019 period, slower than the 3.3 per cent recorded during the 1980s. Over this period, average annual growth rates were 2.5 per cent in the United States, 1.8 per cent in the European Union and only 1.0 per cent in Japan. The IMF projected the group of high-income economies to contract by 6 per cent in 2020.

The implications of these trends are mixed. On the one hand, the remarkable growth experienced by emerging and developing economies that have embraced international trade, foreign investment and the participation of transnational corporations may indicate that globalisation facilitates higher rates of economic growth. For example, sustained economic growth in China and India is linked to policies in both countries that have encouraged increased trade and foreign investment.

On the other hand, the most globally integrated economies are the advanced economies, and they have experienced comparatively weak growth over the past two decades, especially since the global recession of the late 2000s. The 2010s saw a long period of lacklustre growth, despite record low interest rates and very low inflation. High levels of indebtedness constrained governments from using fiscal policy to stimulate growth. Growth rates also weakened in African and Latin American economies.

While globalisation also has impacts on **economic development** or the well-being of individuals and societies, this influence occurs mainly because of the link between globalisation and economic growth. If globalisation lifts economic growth rates in individual economies, it also raises income levels, and provides more resources for education and health care, and for programmes to clean up the natural environment. Of course, globalisation could have negative consequences for development if, while contributing to growth in individual countries, it also caused income inequality to increase and accelerated climate change and environmental damage.

The slowness of the global response to the threat of climate change is likely to widen the gap between growth and development indicators in coming decades, as countries will need to allocate more resources to addressing accelerating climate change impacts, such as extreme weather events.

Any statistical analysis of the impacts of globalisation during recent decades is inevitably dominated by the rising economic power of China, since China has the world's largest population. The rise of China is a major structural change in the global economy that is occurring in parallel to the process of globalisation. There is no question that globalisation has also contributed to the extraordinary speed of China's economic development. Trade has been central to China's rapid industrialisation since China's growth has been led by export-oriented manufacturing industries. China's growth is also in turn accelerating the process of globalisation, by deepening trade and financial links among economies. The speed and scale of China's economic expansion dwarfs any other emerging economy and so in examining the impact of globalisation it is important to focus specifically on the role of China.

Trends in the **Human Development Index** (which measures a combination of material living standards, education and health outcomes) shows that over long periods of time (between 1980 and 2018) almost all countries have experienced major improvements in economic development. There is little evidence that globalisation, on balance, contributed negatively to economic development. Declines in economic development are restricted to a handful of countries that have experienced upheaval in transition to market economies (Russia, Moldova and Tajikistan) or serious political turmoil (Zimbabwe, Democratic Republic of Congo and Afghanistan). Figure 3.8 shows the changes in HDI levels for selected countries over the past three decades.

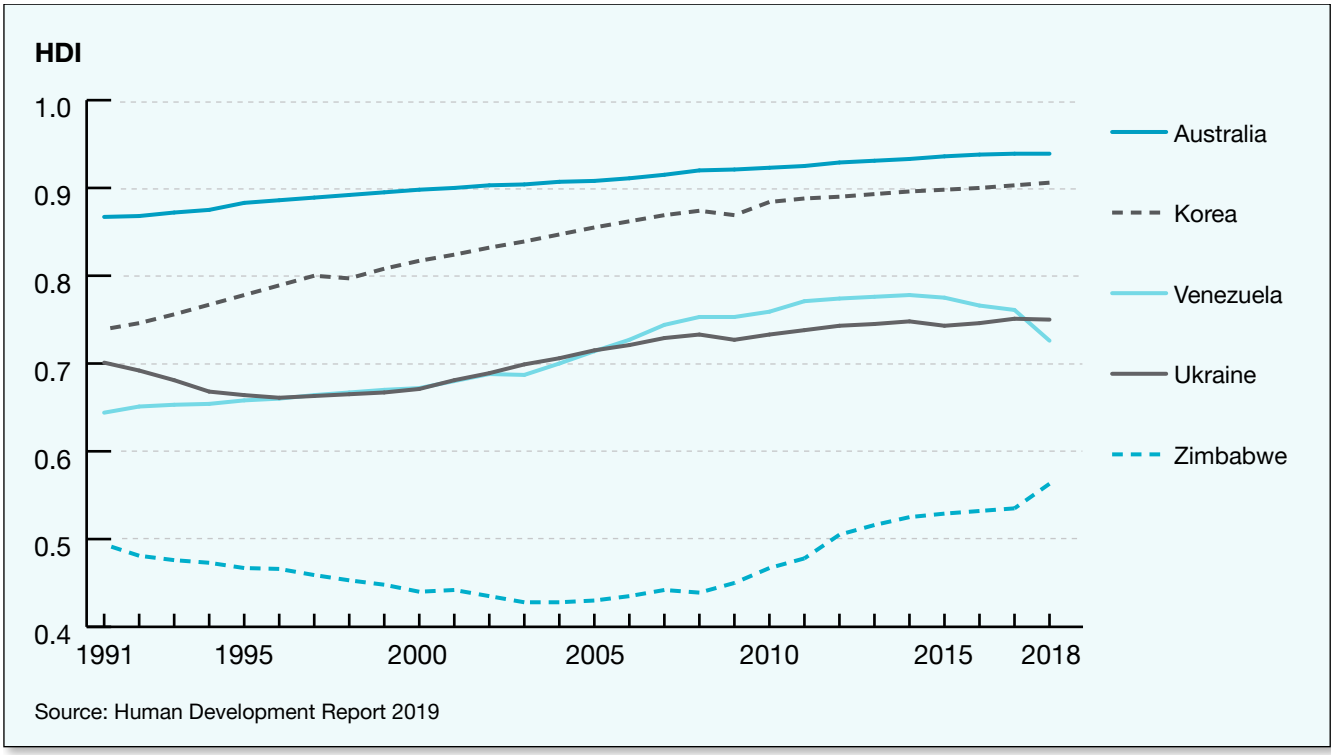


Figure 3.8 – HDI performance of various countries

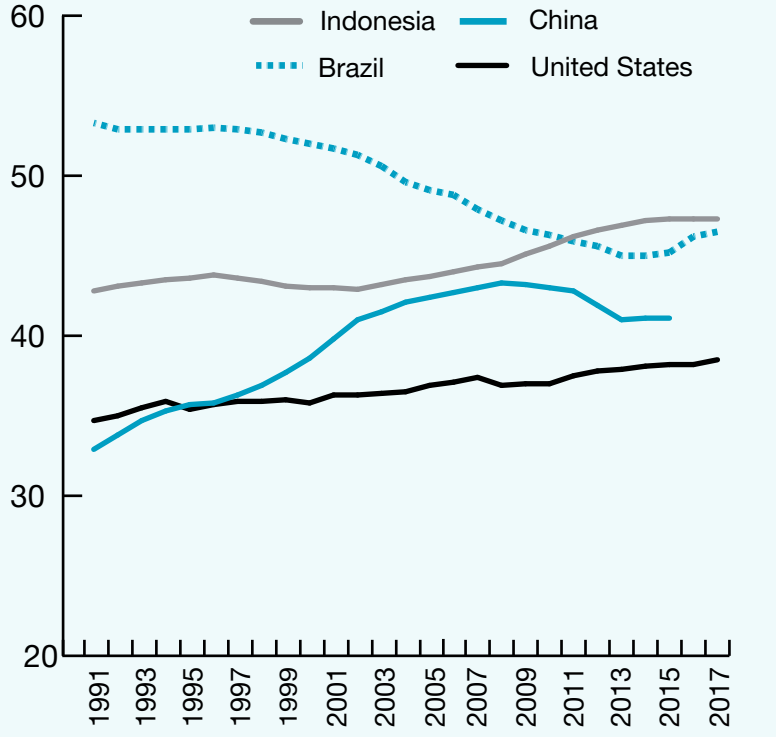
Income inequality

In addition to the impact of globalisation on the growth rates of developing and developed economies, it also has impacts on income inequalities within countries because as trade and financial flows grow, it changes the structure of economies:

- Increased openness to trade provides more export opportunities, which can raise the incomes of "trade-exposed" or agricultural workers in developing countries. Lower tariffs on imports improve standards of living for the poor by reducing the prices of goods. In advanced economies, higher levels of trade may shift employment towards higher-paid services industries, but it may also depress the incomes of workers in import-competing sectors (for example, employees in the American motor vehicle industry have seen their incomes decline as US car producers have sought to compete against cheaper imports from Asia).
- Increased financial flows provide greater employment opportunities and fuel economic growth, but FDI flows also tend to be concentrated in higher skill and higher technology sectors, favouring those who are already better off. IMF research has found that financial globalisation increases income inequality within countries.
- Income inequality has increased in many emerging economies because the global mobility of skilled labour means that highly skilled workers may emigrate to more advanced economies with higher paying jobs unless they receive higher pay. This contributes to large increases in pay for highly skilled workers while incomes for other workers grow at a much slower rate.

According to the IMF, income inequality rose by almost 0.45 per cent per year during the three decades up until the mid-2000s, as measured by the Gini index (a common measure of inequality where a higher number indicates a higher level of inequality). IMF studies have also found that increased inequality reduces economic development. Increases in the share of income for the top 20 per cent of households are associated with a corresponding 8 per cent fall in average growth rates over the following five years. In contrast, an increase in incomes for the lowest 20 per cent of household income leads to a 38 per cent increase in average growth rates over the same medium-term period.

The general trend of rising inequality is evident in figure 3.9. According to the IMF about one-fifth of the increase in income inequality globally is a result of globalisation. A major part of this increasing inequality is the impact of technological change which shifts production processes away from low-skilled labour towards higher-skilled jobs. This benefits people with higher levels of education but increases unemployment for less skilled workers.



Source: Solt, Frederick. 2016. "The Standardised World Income Inequality Database". SWIID Version 8.1, May 2019.

Figure 3.9 – Income inequality in selected countries

Trade investment and transnational corporations

Globalisation has resulted in substantial increases in the size of trade flows and foreign investment. Because of the key role played by transnational corporations (TNCs) in both trade and investment flows, TNCs are increasingly dominating business activity around the world.

We saw in Chapter 1 that international trade in goods and services continues to grow at least at the same rate as the global economy's growth in most years, and is now equal to around two-thirds of global output. All regions in the world have experienced this trend as changes in technology and government policy have fostered trade growth. An important feature of trade growth during the globalisation era is that goods are produced through multiple stages in different economies through global value chains (or supply chains) where countries engage in "vertical specialisation", focusing on just one or two parts of the production process.

The different stages of production for consumer goods such as iPhones might see the manufacturing of computer chips, logic boards, camera parts, screen casings and the final assembly occurring in different countries. Figure 3.10 demonstrates how the globalisation of production processes means there could be many international trade transactions rather than just the export of a finished iPhone from one country to another. For the first time in history, intellectual property and commercial know-how is being mass-traded across economies, while investment is expanding beyond physical capital into productivity training for labour and long-term business relationships. Since the early 1990s, trade through global value chains (as opposed to traditional trade of finished goods from one country to another) has increased its role from less than half to over 60 per cent of total trade.

The COVID-19 pandemic caused the most significant disruption to international supply chains of the globalisation era. Prior to March 2020, there was an assumption that supply chains would continue to become ever more interconnected. But the



Figure 3.10 – The global supply chain for Apple iPhones

COVID-19 pandemic highlighted the vulnerability of countries to global chains – when every country needed respirators and personal protective equipment, they could not obtain enough supplies from China, and many economies did not have the capacity to manufacture those goods themselves. In addition, the pandemic resulted in huge disruptions to air travel and major delays in a range of agricultural, mining and pharmaceutical supply chains. Finding alternative options for sourcing materials (or at least improving the reliability of supply chains) became a key focus for both TNCs and governments after the onset of COVID-19.

The globalisation of financial markets has seen an increased reliance on foreign sources of finance for investment. From another perspective, more countries now have greater access to overseas funds for investment than ever before. Either way, foreign direct investment is now playing a greater role in generating economic activity in every region around the world. Between 1990 and 2018, foreign direct investment increased more than sixfold. Very large increases were recorded for high-growth, emerging economies that have relaxed barriers to foreign investment. However, as discussed in Section 3.5, the benefits of increased FDI flows have mostly been enjoyed by economies with already favourable economic prospects, and there has only been a trickle of FDI flowing to the LDCs. In addition, the growth of short-term financial flows has had a destabilising impact on many economies.

The removal of restrictions on foreign ownership and the development of global capital markets have spurred the growth of transnational corporations, of which there are now more than 104,000. In 2017, the foreign affiliates of these TNCs accounted for one-third of total world exports and employed over 73 million people. The combined value-added by the world's TNCs accounted for over one-quarter of gross world product in 2017, with foreign affiliates contributing around 10 per cent. They dominate the world's major industries such as motor vehicles, telecommunications and pharmaceuticals, and merger activity continues to concentrate the number of these companies, as TNCs prepare for a world where many global industries will feature just a handful of global companies.

TNCs generally perform better than domestic firms on a range of indicators including productivity, quantity sold, production size and export market share. However, World Bank research has found that on average benefits to the local community were lower as foreign firms tend to use less domestic capital and labour. The full advantages of FDI inflow can only be realised if TNCs are connected to local suppliers. Another concern relating to TNCs is that they do not operate under the laws of any one country and so can move their production facilities to countries with the weakest laws and artificially structure their financial flows to avoid paying taxes. The IMF estimated in 2019 that developing countries lose around US$200 billion in corporate taxes each year because of these measures. Lower labour standards and environmental protection laws in developing nations can also lead to the exploitation of workers and environmental degradation.



For a critical view of the practices of transnational corporations in developing countries visit the website of CorpWatch
www.corpwatch.org

Explain concerns regarding the conduct of transnational corporations held by this organisation. Outline one proposal to improve TNC practices.

Environmental sustainability

The relationship between globalisation and environmental factors is complex. Globalisation can have negative environmental consequences for several reasons. Low-income countries that are desperate to attract foreign investment and earn higher export revenue may engage in economic behaviour that harms the environment. This may occur through deforestation for paper or woodchip industries; depletion of marine life through unsustainable fishing practices or poisoning of water supplies by mining operations; pollution caused by manufacturing industries; and increased carbon dioxide emissions from power plants, contributing to global warming. Additionally, the growth in global trade itself is increasing consumption of non-renewable fuels for transport by air, road, rail and sea.

The most significant environmental threat in the early twenty-first century is **climate change** because the warming of the atmosphere has potentially irreversible and catastrophic impacts on all aspects of the natural environment including oceans, marine life, the weather, wildlife, air quality and water supplies. While the carbon emissions that contribute to climate change come from individual countries the impacts of climate change affect the whole world. This means that nations need to work together to address climate change.

Efforts to reach agreements between economies on reducing carbon emissions are coordinated by the United Nations Framework Convention on Climate Change (UNFCCC). In 1997, the UNFCCC summit of world leaders produced the Kyoto Protocol on Climate Change, which set carbon emission reduction targets for industrialised countries. After the Kyoto Protocol expired in 2012, the United Nations Climate Change Conference was unable to forge a new deal so it extended the Kyoto Protocol to 2020.

The 2015 UNFCCC Conference in Paris produced an agreement among representatives from 197 countries to keep "the increase in global average temperature to well below 2 degrees Celsius above pre-industrial levels" – the benchmark scientists believe is necessary to prevent the most dangerous impacts of climate change. The agreement, to become effective in 2020, was significant because, for the first time, it included developing nations, such as China and India, alongside the United States, which had refused to ratify the Kyoto Protocol. In contrast to the Kyoto Protocol, the Paris Agreement has greater inbuilt mechanisms for transparency and review process, with the intention of increased global scrutiny to further encourage countries to meet their respective contribution to global emissions reduction. Nevertheless, countries set their own targets to reduce emissions. The Paris Agreement came into force in November 2016, with 195 countries having ratified it by mid-2020. Further progress is expected at the "COP-26" Climate Conference in Glasgow in 2021.

Globalisation also offers opportunities to protect the world's environment from harm by forcing individual nations to address their global responsibility for environmental preservation. It makes it possible for the costs of preservation to be shared and to increase scrutiny of the environmental practices of transnational corporations. Globalisation has also facilitated the transfer of new technologies to improve energy efficiency and reduce environmental pollution. Over time, globalisation may create international mechanisms to enforce agreements on preventing environmental damage. In recent years, however, problems that have involved global environmental resources, such as fish stocks or climate, have proved difficult to tackle and progress in making agreements to combat global environmental problems has been slow.

The role of financial markets

The influence of global financial markets on economies has increased substantially during the globalisation era. Driven by global information and communications networks, global financial markets dominate financial flows around the world. Governments have encouraged the development of global financial markets by removing "capital controls" on the flow of finance, floating their exchange rates and deregulating their domestic banking sectors.

Global financial markets can have positive impacts on economies. Countries would be unable to conduct international transactions without foreign exchange markets. Businesses would find it more difficult to access loans or attract investors if they were confined to domestic financial markets. Efficient international financial markets should encourage greater transparency of the actions of businesses and governments and should foster economic development.

However, global financial markets have also produced negative results during the globalisation era. Financial markets shift massive volumes of money around the world every day. If investor sentiment turns against a particular economy, it can result in a collapse in exchange rates, a shock to the economy and a recession accompanied by rising unemployment.

In the late 2000s global financial markets played a part in producing the worst economic crisis since the Great Depression of the 1930s. With its origins in the United States housing market, the global financial crisis of 2008 saw a collapse in worldwide investor confidence and the seizure of the global financial system. Central banks subsequently flooded financial markets with liquidity, governments guaranteed banking deposits to improve confidence and many governments provided "bail-outs" to prevent troubled banks and financial institutions from collapsing. Although these emergency measures helped avoid global economic depression, the world economy still contracted by 2 per cent.

The experience during the onset of the COVID-19 pandemic in 2020 showed how global financial markets can exacerbate volatility in economies. During the height of the pandemic, a loss of investor confidence saw US$100 billion in investment outflows from emerging economies, twice as big as outflows during the GFC. As many economies cut interest rates to record lows, some economists raised concerns that government and corporate borrowers might take on more risk and create over-indebtedness problems in the future. Managing financial market volatility was expected to be a big focus for the IMF in the period of recovery after COVID-19.

The international business cycle

The deepening linkages between economies hold benefits and risks for countries in the global economy. The benefit of integration is that it allows countries to achieve faster rates of economic growth by specialising in certain types of production and by engaging in trade. Countries that have a higher level of trade also experience faster economic growth. In particular, during times when world economic growth is higher, individual economies are likely to benefit from the upturn in growth.

However, closer economic integration also makes economies more exposed to downturns in the international business cycle and to developments in their regions. One of the reasons for the strength of global economic growth in the mid-2000s was the simultaneous upswings in the United States and China that propelled the global economy to its fastest growth rates in 30 years. Equally, the closer links between economies resulted in the downturn in the US economy in the late 2000s and the economic fallout from COVID-19, spreading more quickly to other developed and developing economies. As the extent of trade and financial integration continues to increase, there is likely to be greater synchronisation of the international business cycle, intensifying both the downturns and the upswings in the global economy.

Greater synchronisation of business cycles between different countries has also increased the need for macroeconomic policies to be coordinated. Following the late 2000s recession, for example, the IMF recommended that countries use their combined budgets to stimulate the world economy by 2 per cent of global GDP in response to the global economic recession. However, economies generally do not coordinate their macroeconomic policies unless they are in a global crisis, as seen during the COVID-19 pandemic. A series of macroeconomic policies were announced by governments around the world to combat stalling economic activity as a result of the measures to curb the spread of COVID-19, with many governments copying each other's policy approaches. The COVID-19 pandemic struck at a time when global growth was already weak, making it even more likely that the early 2020s will go down in history as an era of slower growth. The economic outlook for

the 2020s has also been weakened by the prospect of intensifying trade conflicts between the US and Chinese economies – bringing damage to both – alongside the longer-term threat of climate change, where global action has not matched the extent of the economic risks.

reviewquestions

1. Analyse the impact of globalisation on economic growth and development in the global economy.
2. Explain the impact of globalisation on environmental sustainability in the global economy.
3. Describe the role of financial markets and the international business cycle in globalisation.

chapter summary

1 The global economy is characterised by stark **inequalities**. Out of a world population of over 7.5 billion, just over 1.2 billion live in high-income countries with high standards of living, while around 650 million people live on less than US$1.90 per day. While inequality between economies globally has fallen, inequality within economies has increased.

2 **Standards of living** are most commonly measured by Gross National Income (GNI) per capita adjusted for exchange rate impacts or purchasing power parity (PPP). However economists recognise that this measure has limitations.

3 **Economic growth** is an increase in the real Gross Domestic Product over a specific time period. Per capita GDP growth is the most common traditional measure used to compare the performance of economies.

4 **Economic development** is concerned with economic growth alongside other quality of life factors such as income distribution in a population, education levels, health standards and quality of environment. The most common measure of economic development is the United Nations **Human Development Index** (HDI), which is based on a combination of GNI per capita, life expectancy at birth and levels of educational attainment.

5 The main two categories of economies are **developing economies** and **advanced economies**. Advanced economies are also sometimes known as high-income, industrialised, western and first-world economies.

6 **Emerging economies** are in the process of industrialisation or modernisation and experiencing sustained high levels of economic growth. This classification includes a range of economies that are neither high income nor share the traditional characteristics of developing economies.

7 While many features of individual economies can contribute to a lack of economic development, such as a lack of quality inputs to production and the nature of economic and political institutions, the globalisation era has highlighted how certain **features of the global economy** – trade finance, foreign aid and technology – may work to entrench rather than alleviate inequalities between nations.

8 Opinion about the impacts of globalisation is divided. While globalisation does not appear to have accelerated economic growth overall, many emerging economies have experienced rapid economic growth and development through global trade and investment.

9 Globalisation has contributed to a greater synchronisation of economic growth rates through the **international business cycle**, reflecting the increased integration of economies through trade and financial flows.

10 Globalisation has increased the need for national governments to coordinate their economic policy with other nations, but recent years have seen significant failures in policy coordination, both on shorter term issues such as tariff disputes and the longer term threats from climate change.

chapterreview

1 Explain the difference between the concepts of economic growth and economic development.

2 List examples of indicators that measure economic growth and economic development and outline what factors they include.

3 Discuss the distribution of income and wealth in the global economy. Assess whether inequality is increasing or decreasing.

4 Identify what categories are used to group economies. Discuss the key features of these groupings.

5 Analyse the reasons for differences in levels of development between economies.

6 Explain how globalisation has changed the role of trade investment and transnational corporations in economies.

7 Discuss how globalisation has impacted on the distribution of income and wealth within countries.

8 Analyse the positive and negative impacts that globalisation might have on the natural environment.

9 Explain how globalisation has increased the need for national governments to coordinate economic policy with other nations.

10 Critically analyse the argument that the negative impacts of globalisation have been greater than its positive impacts.

COVID-19 The economic dimensions of a global pandemic

Within months of the first identified case in the Chinese city of Wuhan in late 2019, the coronavirus had spread to every inhabited continent in the world and caused the greatest economic disruption since World War II. Governments scrambled to contain the spread of COVID-19, shutting international borders, implementing new health measures, and imposing unprecedented restrictions on social life in major cities, as case numbers soared into the tens of millions. Along with the significant health consequences of the pandemic, the COVID-19 pandemic is a case study of the power of external shocks in the era of globalisation.

While the world has experienced international pandemics in previous centuries, the COVID-19 virus became a global pandemic faster because of **globalisation** and the integration of economies. By January 2020, at the precipice of the crisis, annual international travel movements had soared to 1.5 billion, the biggest on record, following several years of strong growth. Unsurprisingly, COVID-19 began spreading from major nodes for global production and trade (first in Wuhan, a hub city for central China, and then from northern Italy, a key manufacturing and trade hub for Europe).

By April, border controls had reduced air travel to levels not seen since the early 1970s. Border controls disrupted supply chains, while government-imposed lockdown reduced production and consumption in many sectors of economies. Businesses were forced to dramatically change their operations, or cease trading altogether.

The global economic consequences of COVID-19 and the government policy responses were severe and sudden. The International Monetary Fund's assessment of the impact of COVID-19 (released in mid-2020) estimated:

- A 5 per cent fall in global GDP. Even with a projected recovery of 5.4 per cent in 2021, this would leave the world some 6.5 percentage points below pre-COVID-19 projections. Figure 1 highlights the reach of the economic consequences of COVID-19 across the world, with the vast majority of economies in recession in 2020.
- The largest falls in economic growth were expected for advanced economies (–8 per cent in 2020), with some European economies expected to contract by almost 13 per cent.
- Economic growth was expected to be negative in most emerging and developing economies (–3 per cent on average in 2020) but with significant variations across countries, ranging from 1 per cent growth in China to a 10 per cent fall in Mexico.
- Unprecedented increases in unemployment, putting some 200 million people worldwide out of work.
- Inflation down to record low levels – with almost no price movement in OECD economies, and just 4 per cent on average in developing countries. This reflects a combination of price increases due to supply chain disruptions, offset by deflation from lower demand and falling fuel prices.

Beyond these initial impacts, COVID-19 also threw the momentum for globalisation into reverse. World trade volumes were forecast to fall by 12 per cent, led by reductions in international services. In the months to May 2020, the World Trade Organisation recorded 59 new restrictions on imports around the world, taking the stock of import-restrictions to then affect over 10 per cent of imports amongst the world's largest economies (those in the G20 group of nations). Earnings for multinational corporations, which account for over 20 per cent of global output and 70 per cent of total trade, were forecast to fall by over 30 per cent for 2020. While international financial markets recovered quickly from their initial slump in March 2020, foreign investment fell 40 per cent and some countries tightened their rules on foreign investment. International tourism numbers were projected to fall by close to 80 per cent, putting over 100 million jobs at risk.

The crisis prompted an unprecedented economic policy response by national governments. In the short term, many governments stepped in to pay the wages of millions of private sector employees, in order to prevent permanent job losses. Government injected spending of around US$8 trillion to support economic growth roughly one-tenth the size of global income. Central banks dropped interest rates to below zero while also engaging in "unconventional" monetary policy such as the direct purchase of public and private sector debt.

In the longer term, the changes to policy making could be even more profound. Governments were expected to face a significant challenge to balance the short-term needs of stimulating economies and supporting employment while repairing the enormous fiscal damage done to government budgets by the crisis. The IMF forecast that a second wave of COVID-19 in

2020 could cause government budget deficits to rise by 15 per cent of GDP in advanced economies and by 10 per cent in emerging and developing economies. "Buy local" and "self-sufficiency" rhetoric grew, as some governments and some business groups argued that local production of medical supplies and other essential goods should be "on-shored" to mitigate against the risk of supply shortages during the crisis.

COVID-19 highlighted the role of international institutions in responding to global economic challenges. The World Health Organisation (WHO) led the initial response, calling for swift closure of borders, social distancing and improved hygiene practices. It also jointly established the COVAX Facility, a mechanism designed to guarantee fair and equitable access to COVID-19 vaccines worldwide. The International Monetary Fund (IMF) more than doubled its capacity to lend to debt-distressed countries, while the World Bank provided over US$160 billion to developing countries. But efforts to strengthen international cooperation were resisted by the Trump Administration in the US, which criticised the WHO for the spread of the virus and announced it would cut off funding to the organisation.

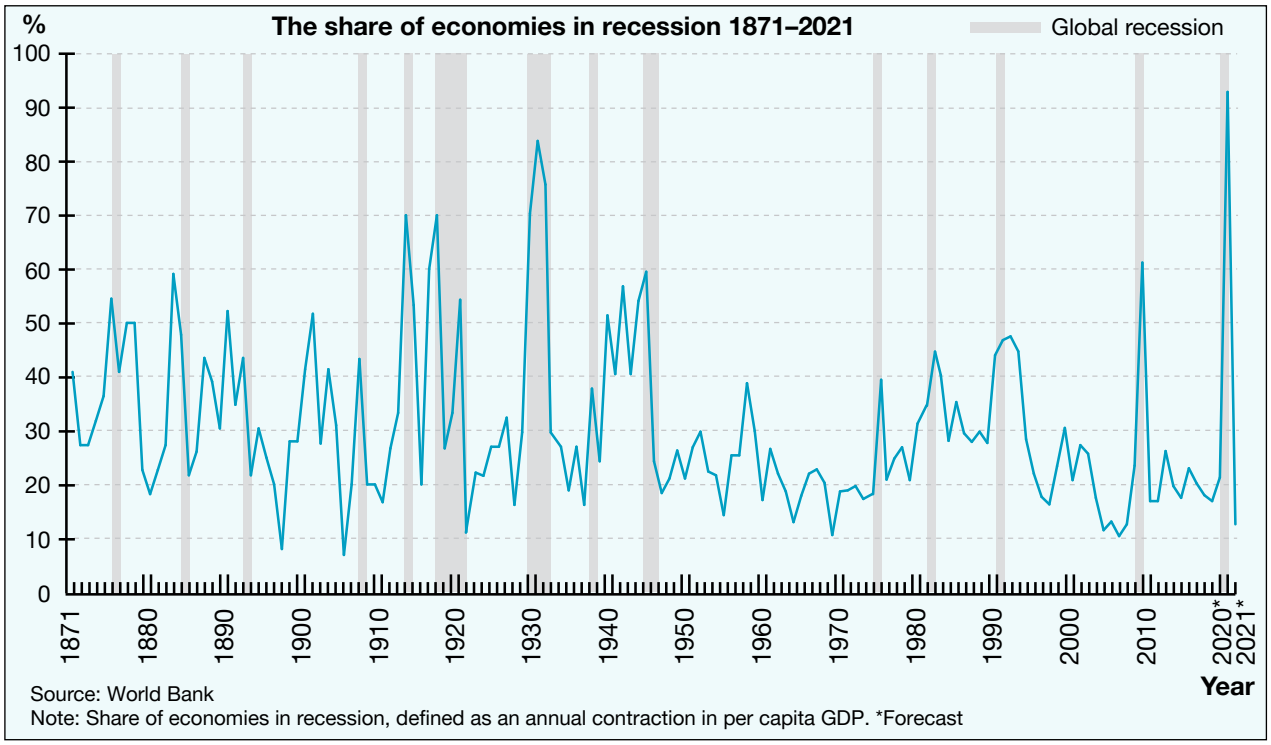
While COVID-19's impact was most immediately felt in advanced economies, it grew more slowly – but more devastatingly – in poorer and less globalised developing economies. With poorly resourced health systems and less capacity to enforce social distancing, disease control measures and working from home, their plight highlighted the consequences of global economic inequalities. The World Bank forecast that between 70 and 100 million people would be pushed into **extreme poverty** in 2020 due to COVID-19. Almost half of the new poor will be in South Asia and more than a third in Sub-Saharan Africa. While a small decline in poverty is expected in 2021, projected impacts of COVID-19 are likely to be long-lasting.

COVID-19 has impacted almost all dimensions of globalisation and the world economy. It has re-shaped the trajectory of globalisation for the 2020s, in ways that will not be fully clear for many years.

"Even before the COVID-19 pandemic, globalisation was in trouble. The open system of trade that had dominated the world economy for decades had been damaged by the financial crash and the Sino-American trade war. Now it is reeling from its third body-blow in a dozen years as lockdowns have sealed borders and disrupted commerce … As economies reopen, activity will recover, but don't expect a quick return to a carefree world of unfettered movement and free trade …

Poorer countries will find it harder to catch up and, in the rich world, life will be more expensive and less free. The way to make supply chains more resilient is not to domesticate them, which concentrates risk and forfeits economies of scale, but to diversify them. Moreover, a fractured world will make solving global problems harder, including finding a vaccine and securing an economic recovery. Wave goodbye to the greatest era of globalisation—and worry about what is going to take its place."

– The Economist, May 2020



Source: World Bank
Note: Share of economies in recession, defined as an annual contraction in per capita GDP. *Forecast

Case Study:

Brazil



Brazil serves as a case study in the variations between different countries' economic performance, despite the increased integration of the global economy. Since 2015, it has been one of the worst-performing economies in the G20 group of the world's 20 largest economies. But in the 2000s decade, Brazil was one of the fastest-growing economies, and widely seen as a global success story. Like other Latin American economies, it had been slower to embrace globalisation than the East Asian region. A global commodity boom, combined with major new resource discoveries, resulted in years of rapid growth and rising incomes. Suddenly, however, this collapsed. Brazil went into recession in 2014 as commodity prices slumped and a corruption crisis engulfed the government. Years of weak growth were followed by catastrophic mismanagement of the COVID-19 pandemic in 2020, which left Brazil among the worst-affected countries in the world.

Brazil is the world's ninth-largest economy, and is the third-largest of the "BRIC" emerging economies (behind China and India but ahead of Russia). In the past decade its population topped 200 million – making it the world's fifth-largest country by population – and it is the world's fifth-largest country in land area. Brazil also increased its international profile in the past decade, hosting the 2016 Olympic Games and the 2014 FIFA World Cup.

FIGURE 1 – DEVELOPMENT INDICATORS: SELECTED COUNTRIES

	Brazil	Indonesia	Poland	China	Egypt	USA
Population (millions, 2018)	209	268	38	1393	98	327
Gross Domestic Product (current US$ billion, 2018)	1885	1042	586	13,608	251	20,544
GNI per capita (current international dollar, PPP, 2018)	14,530	11,290	30,410	15,320	11,350	63,780
Population below US$1.90 per day (%) (2018, *2017, ^2016)	4.4	4.6	0.3*	0.5^	3.2*	1.2^
Gini index (2018, *2017, ^2016)	53.9	39	29.7*	38.5^	31.5*	41.4^
Mean years of schooling (2018)	7.8	8.0	12.3	7.9	7.3	13.4
Life expectancy at birth (1990, 2018)	65.3 75.7	63.3 71.5	70.9 77.8	69.3 76.7	64.6 71.8	75.2 78.5
Human Development Index (rank) (2018)	0.761 (79)	0.707 (111)	0.872 (32)	0.758 (85)	0.700 (116)	0.920 (15)

Sources: World Bank 2020; Human Development Report 2019

1. Economic performance

In recent decades, Brazil emerged as a rising power in the global economy. It made significant progress in economic development, with reductions in poverty and improvements in health. Its reputation as one of the world's most unequal societies changed as innovative policies saw 40 million Brazilians climb out of poverty. It also became more open to the global economy, although trade remained a relatively small part of its economy. However, Brazil experienced a major reversal in fortunes beginning in the mid-2010s.

This case study will examine Brazil's efforts to recover from its worst recession on record (in 2014, prior to COVID-19). It resulted in unemployment almost doubling, a sharp fall in living standards for tens of millions of Brazilians, the collapse of Brazil's government in 2017 and an increasingly divided society. But the case study will also examine the reasons for Brazil's past successes, which have been only partially undone in recent years. One of the challenges in understanding Brazil as a case study of globalisation is that it comprises both major successes and major failures – and it is not yet clear whether its future is leadership of the Latin American region and an increasing role in the global economy, or a return to the economic stagnation of the last decades of the 20th century.

1.1 Social and economic progress

Brazil is a large economy with many billionaires and a growing middle class. Its gross national income per capita (US$14,530 in 2019) puts Brazil in the category of upper-middle-income economies. However, as one of the world's most unequal societies, it has always ranked poorly for its levels of economic development. Brazil has made major progress in recent decades, but from a low starting point. The 2019 Human Development Report ranked Brazil well down the global league table at 79th in the world for its Human Development Index of 0.761 (up from 0.68 in 2000). This put it slightly ahead of the average levels of development for the Latin American region, reflecting improvements in health, education and income during recent years:

- Brazil now ranks 71st in the world for life expectancy, which has increased from 63 years in 1980 to 76 years.
- 92 per cent of Brazil's adult population has basic literacy skills, up from 82 per cent in 1990 (even though the average period of formal education in the workforce is relatively low).
- Brazil's infant mortality rate has fallen significantly, from 53 per thousand live births in 1990 to 12.8 in 2018 – an outcome that places it alongside Mexico, El Salvador and Colombia but with slower progress more recently than in many other emerging economies.

One of the most significant achievements is Brazil's progress in **poverty reduction**. Historically, Brazilian society has been characterised by very high levels of **inequality**. Income inequality remains high – according to World Bank statistics, 28 per cent of income goes to Brazil's top 1 per cent of income earners, a more unequal outcome than any other economy except Qatar. Nevertheless, Brazil has made progress: the Gini index (a measure of income inequality) fell from around 60 in 2000 to 55 in 2017. Research published by the OECD in 2014, just prior to the recession, estimated that around half of the reduction in inequality in previous years had been the result of economic growth, and the other half came from government policies to redistribute income. The success of these policies made former President Luiz Inácio Lula da Silva (President da Silva, often known simply as "Lula") the most popular Brazilian president in living memory at the time when he finished his term in 2010 – with an approval rating of 80 per cent. During his first term in office, President da Silva prioritised policies that aimed to redistribute wealth in Brazil, including raising the minimum wage and pensions.

The flagship policy introduced during the Lula administration was the Bolsa Família (Family Fund) program. Introduced in 2004, it aims to assist poor households by providing small cash transfers in return for them keeping their children in school and attending preventive health care visits. These programs, known as conditional cash transfer policies (CCTs), have been adopted in other countries and are regarded as one of the most effective economic strategies to combat poverty. Between 2002 and 2018, the percentage of Brazilians living on less than US$2 per day fell from 23.2 per cent to 4.4 per cent. An International Monetary Fund working paper in 2020 also found that the Bolsa Família program was successful in helping more people gain employment in the formal economic sector over time.

1.2 Economic recession

The first decade of the 21st century appeared to offer Brazil a new era of sustained growth, rising living standards and economic development. In the 2000s decade, Brazil's economy grew by an average of 3.7 per cent annually. But the 2010s decade was dismal. The average rate of growth in the 2010s was only fractionally above zero. The recession of 2015 and 2016 was so severe that it came close to the technical definition of a depression (a recession that lasts eight or more straight quarters in which there is a decline in real GDP of 10 per cent or more). Per capita incomes in 2019 had still not recovered to pre-recession levels in 2014. The result was that millions more Brazilians were living in poverty by the end of the 2010s: some 55 million, or more than one in four Brazilians.

The recession was so severe that Brazil experienced inflation and unemployment surging at the same time (the textbook definition of "stagflation", which has rarely been seen in the world economy since the 1970s). Unemployment reached a record high of 13.7 per cent in early 2017, leaving close to 14 million Brazilians out of work (compared to 2013, when unemployment had fallen to 6 per cent). Inflation rose to 9 per cent during the recession, before stabilising at around 4 per cent as the economy went into recovery.

FIGURE 2 - ECONOMIC INDICATORS

	2012	2013	2014	2015	2016	2017	2018	2019	2020*	2021*
Real GDP growth	1.8	3.0	0.1	-3.8	-3.6	1.0	1.3	1.1	-9.1	3.6
Inflation (CPI)	5.8	6.2	6.3	9.0	8.7	3.5	3.7	3.7	3.6	3.3
Current account (% of GDP)	-2.2	-3.0	-4.3	-3.2	-1.3	-0.7	-2.2	-2.7	-1.8	-2.3
Unemployment rate	5.5	7.1	6.8	8.5	11.3	12.8	12.3	11.9	14.7	13.5
Fiscal balance	-2.3	-3.0	-6.0	-9.7	-7.4	-6.4	-5.6	-6.3	-16.0	-5.9

Source: IMF World Economic Outlook, July 2020, April 2020 *Forecasts

In response to rising inflation, Brazil's main interest rate was raised to 14.25 per cent, giving Brazil the highest interest rates of any comparable economy. Sharp falls in tax revenues also created a vicious cycle of further cuts in spending by state and local governments – even to the point that many of Brazil's famous annual Carnival parade celebrations were cancelled in 2016.

Between 2017 and the onset of the COVID-19 recession in 2020, Brazil experienced a sluggish economic recovery, with average annual growth of only 1 per cent. The damage done by revelations of large-scale corruption was enduring, notwithstanding improvements in economic indicators such as inflation (down to 4 per cent) and the current account deficit (down to 1–2 per cent of GDP). Investors remained concerned about the slow pace of economic reform, such as the restructuring of the pension system and simplification of business taxation. The severe health impact of COVID-19 contributed to the depth of the recession in 2020, with the IMF estimating a contraction of 9 per cent in 2020 – a more severe downturn than even the recession of the mid-2010s.

Although Brazil has now experienced two severe recessions in less than a decade, one of the positive features of its performance is that Brazil's financial system has remained stable and financial markets have operated relatively smoothly. This was surprising to some observers, given Brazil's history of financial crises. The mechanism of the floating exchange rate (which fell by 50 per cent in the four years to 2016) helped improve competitiveness, while stronger regulatory and capital controls helped maintain stability in the financial sector. Brazil's large store of international reserves also provided a defence against financial market volatility, as did the fact that its public sector debt was mostly denominated in Brazilian currency rather than foreign currencies. In addition, despite the recession of the 2010s, longer-term foreign investment inflows continued. Brazil's share market also performed strongly during this period, with over a 100 per cent increase in its index between 2016 and 2019. Likewise, after a sharp slump at the onset of COVID-19 in March 2020, the stockmarket index had risen 60 per cent by mid-year.

THE REASONS FOR RECESSION

How did a country that had been held up as a Latin American tiger economy just a few years before, and which had become the first South American country to host the Olympic Games, suddenly become the G20's worst-performing economy?

Seven key factors that explain the deep recession that Brazil experienced between 2014 and 2016:

1. Brazil is a major commodity exporter, so the sharp fall in the prices for oil, iron ore and agricultural output after 2011 resulted in **lower export revenues and a fall in national income**. Eight of Brazil's top ten exports in 2015 were commodities, accounting for the 25 per cent fall in the value of exports. However, the fact that Brazil is a major commodity exporter does not explain the depth of its recession. Other major commodity exporters also experienced an economic slowdown, but Brazil's recession was much worse.
2. **Brazil was unprepared for a fall in commodity prices**: for different reasons, other sectors in the economy could not fill the gap left by the collapse in revenues for oil, iron ore and other commodities. The government's budget was already in deficit, households already held high levels of debt, businesses were reluctant to invest given Brazil's high interest rates, and the strong commodity prices had masked a long period of very weak productivity growth.
3. After 2014 **a major corruption scandal engulfed Brazil's business and political elites**, halting the progress of economic reforms and shelving investment plans. The investigation revealed massive bribery and corruption involving Petrobras, Brazil's large state-controlled oil company, and some of the country's leading political and business figures. The scandal was at such a scale that Petrobras suspended its plans for energy exploration. Meanwhile, the judicial investigation into the scandal engulfed so many major businesses and politicians that it crowded out almost all other issues, meaning that Congress did not advance the government's proposals for economic reform. The scale of the political crisis and corruption in government have continued to hinder economic recovery and undermine confidence.
4. Investors were **losing confidence in Brazil's ability to address its budget problems** with a fiscal deficit that reached 11 per cent of GDP by 2016. Public spending had grown at an annual average of 6 per cent per year for two decades, well above the rate of economic growth. But expenditure restraint had weakened even further since President Dilma Rousseff had come to power in 2011, with primary expenditures rising from around 30 to 36 per cent of GDP, and the budget moving from a "primary surplus" (that is, excluding interest payments on government debt) of 3.1 per cent of GDP to a "primary deficit" of 2.7 per cent of GDP. When added to interest payments of almost 8 per cent of GDP, Brazil was running a massive budget deficit of 11 per cent of GDP by 2016.
5. That loss of confidence was reflected in the **downgrading of Brazil's sovereign debt by ratings agencies** to below "investment class", making it more difficult (and more expensive) for the government to obtain loans. Public debt rose from 52 to 68 per cent of GDP between 2013 and 2016, and was on course to rise to an unsustainable level of 130 per cent of GDP by 2023.
6. Many of the **policies implemented by the Brazilian government had failed to overcome economic problems**, including price controls that failed to rein in inflation, aggressive lending by state banks that failed to stimulate new investment and infrastructure project plans that failed to attract private investors.
7. Brazil had **made little progress on a series of deep-seated structural problems** affecting its labour productivity, transport infrastructure, education levels and reputation as a difficult place to do business. This left Brazil exposed when the favourable environment of high commodity prices disappeared.

1.3 Brazil's environmental challenges

Brazil has a mixed environmental record of progress in some areas and rapid resource depletion in others. Brazil has faced significant challenges in managing its natural environment, which remains central to the Brazilian economy. Like many developing economies, Brazil suffers from a high level of water and environmental pollution. Only 30 per cent of waste water is treated, and almost half of the country's garbage and other solid waste is not collected. Only 47 per cent of the population lives in housing that benefits from sewage collection, and poor sanitation is a major contributor to public health problems.

The dimension of Brazil's environmental policies that attracts the most international concern is its management of its vast forests, in particular the Amazon, the world's largest tropical rainforest. The Amazon is sometimes described as the "lungs of the planet" because it produces 20 per cent of the world's oxygen supply and soaks up vast amounts of carbon dioxide (while destruction of the forest releases large quantities of carbon dioxide). The Amazon basin has over 400 billion individual trees and more than 16,000 species.

Brazil's economic development has resulted in large-scale forestry "clearing" or "deforestation" (80 per cent of the destruction of the Amazon forest is for cattle farming, with other uses including soybean farming, mining and infrastructure projects). Brazil's forest coverage declined from 72 per cent to 59 per cent between 1990 and 2015, and its destruction accelerated under President Bolsonaro, so much so that stories about forest fires and land-clearing in the Amazon have regularly been in the global headlines since he came to office in 2019. After the Brazilian government's own data showed that deforestation had surged to the fastest rate on record, President Bolsonaro sacked the head of the government agency that releases this data and announced he would change the way the data is recorded because he does "not want negative propaganda for Brazil". Even after the 2019 G7 summit highlighted the Amazon fires as a matter for urgent action, President Bolsonaro refused offers of financial aid to step up firefighting efforts. In June 2020, 29 global financial institutions wrote a letter to the government warning that its failure to protect the Amazon was undermining investor confidence, as businesses threatened to boycott exports from Brazil. In response, the government announced an "Adopt-a-Park" program in which investors could pay to preserve 132 forest areas, equivalent to 15 per cent of Brazil's portion of the Amazon.

President Bolsonaro has also abandoned Brazil's previously prominent role in international efforts to address climate change, such as the formulation of the 2015 "COP 21" climate accord. Brazil had also made a voluntary pledge to reduce emissions by between 36.1 per cent and 38.9 per cent by 2020. While Brazil is still expected to have met this target, emissions have begun increasing again. President Bolsonaro has rejected the scientific evidence for climate change, threatened to quit the Paris Accord and signalled that he plans to expand the use of fossil fuels.

Brazil has been a world leader in the development of sustainable biofuels (ethanol and biodiesel), which play a role in replacing fossil fuels and reducing carbon emissions. Biofuels have contributed significantly to reduced carbon emissions from the road transport sector in Brazil. Ethanol, which is mostly made from sugar cane, now accounts for around 45 per cent of fuel usage domestically in Brazil. Overall, Brazil is the world's second-largest ethanol producer (after the United States), and it exported around 1.8 billion litres of ethanol in 2019 (out of a total production of 34 billion litres).

2. Influence of globalisation

2.1 Influence of trade

Trade has played an increasingly important role in the Brazilian economy during the globalisation era, particularly during the global resources boom in the years from 2003 to 2011. Brazil is a large supplier of mineral resources, including iron ore, manganese and nickel. As prices for these commodities increased, driven especially by demand from China and India, the value of Brazil's exports increased and the trade surplus rose. In the decade from 2000 to 2010, the value of goods exports soared from US$55 billion to US$202 billion. In contrast, in the decade after 2010 there was barely any export growth, with $226 billion of exports in 2019 – some $30 billion lower than in 2011. Just as greater integration with the global economy can be beneficial in times of global growth, the opposite can also occur. Slower growth in China after 2008 resulted in weaker export growth for Brazil, and after five years of surpluses, the balance of trade fell into deficit, reaching a record of US$65 billion in 2014 (with the current account deficit at 4.2 per cent of GDP). The balance of trade only began improving after a sharp depreciation and severe recession resulted in a dramatic fall in imports, leading to a return of trade surpluses in 2016. In 2019, prior to the impact of the COVID-19 recession, Brazil recorded a surplus on the balance of goods of US$41 billion, which was largely offset by a US$35 billion deficit on services.

Primary industries remain the key drivers of Brazil's trade performance. Although commodity prices have fallen since the global resources boom, they remain above historic averages and this has contributed to Brazil's export revenues. Brazil remains vulnerable to changes in commodity prices, with its three largest exports (iron ore, soybeans and oil) accounting for one-third of total exports. Oil has become more important to the Brazilian economy since the discovery of enormous oil reserves in the "pre-salt" fields three kilometres below the ocean's surface in the early 2000s. Exploration has resulted in further discoveries, with estimates of oil reserves rising from 6 billion barrels in 2010 to 15 billion barrels by 2019. However, Brazil has experienced a series of crises and major disruptions to its commodity exports in the past decade. The Petrobras corruption scandal undermined investment in oil exploration after

2014. The "Weak Flesh" scandal involving the use of red dye to mask putrefying meat undermined Brazil's large meat export industry in 2017. The collapse of a dam at mining company Vale's Brumadinho site in 2019, and an order to close several of its mining sites because of a COVID-19 outbreak in 2020, undermined Brazil's iron ore exports.

2.2 Influence of external accounts

One of the few benefits of Brazil's period of slow growth since the recession of 2014 is an improvement in its external accounts. The IMF's 2019 report on the Brazilian economy projected an ongoing current account deficit over the medium term of 2 per cent of GDP (consistent with its average of 2 per cent of GDP in the five years to 2019, and slightly below the 2019 deficit of 2.7 per cent of GDP). This is within the 1.2–2.0 per cent range that the IMF previously said was compatible with long-term economic stability. Overall, the IMF's report concluded that "Brazil's external vulnerability is low" because "compared to other emerging markets, Brazil exhibits a smaller current account deficit, smaller public external debt, and a higher level of foreign reserves".

Historically, the most significant problem underlying Brazil's external vulnerability has been its high level of **foreign debt**, which was once amongst the highest in the developing world. Brazil's high level of debt fell during the 2000s as Brazil achieved trade surpluses and exercised greater fiscal discipline and stabilised in the 2010s. While a large debt problem may not necessarily cause economic instability (Australia experienced similar growth in foreign debt during this period), specific characteristics of the debt problem have made Brazil's debt a matter for concern:

- Prior to the global resources boom, the cost of servicing Brazil's foreign debt reached 89 per cent of the value of exports by 2000. After falling to 21 per cent in 2011, and rising again to 56 per cent in 2015, the debt servicing ratio fell to 44 per cent in mid-2020.
- Around 70 per cent of Brazil's total debt is owed to foreigners and is denominated in foreign currency. As a result, any depreciation of the Brazilian currency, the real, immediately increases debt servicing costs.
- More than 40 per cent of the total debt is owed by the public sector, and there is persistent concern about the growth and sustainability of public spending in Brazil.
- Servicing the foreign debt cost approximately 6 per cent of GDP in 2019, a level that makes the Brazilian economy vulnerable to increases in international interest rates, particularly in the US, which is the source of a large proportion of Brazil's foreign borrowings.

FIGURE 3 – BRAZIL'S EXTERNAL INDICATORS

Year	External debt (US$ millions)	External debt to GDP ratio (%)	Debt servicing ratio (% of exports)
1980	53,847	27.0	70.9
1990	96,545	26.3	65.1
2000	215,414	36.6	88.6
2010	256,804	12.0	23.0
2015	283,605	18.6	55.7
2016	269,970	18.2	55.4
2017	266,017	15.4	44.7
2018	241,665	16.0	38.1
2019	252,894	17.3	43.4
2020	326,095	18.6	41.0

Source: Banco Central do Brasil 2020 (Economic Indicator Table V.28)

Brazil made significant progress in managing its external debt in the 2000s. Better current account outcomes, contractionary fiscal policy and a build-up of international currency reserves helped Brazil make significant inroads into the size of its foreign debt, and while it has grown since then, Brazil entered the 2020s with external debt levels that were below historic averages for recent decades. Overall, net public-sector debt declined from a peak of 63 per cent of GDP in 2002 to 33 per cent in 2014, before the successive recessions saw it rise to 54 per cent by mid-2020. Public-sector debt has also been transitioned out of short-term foreign borrowings, which in the past made Brazil far more exposed to exchange rate crises. Instead, most public borrowings are now denominated in the Brazilian real currency. As already noted, Brazil has also substantially increased its foreign currency reserves (to $355 billion in August 2020), which in the event of a sudden depreciation in the exchange rate can be used to buy up Brazilian currency and stabilise its value. This substantial stock of foreign currency proved useful during the first half of 2020, when Brazil intervened in the foreign exchange market to the tune of US$40 billion to stabilise the currency after a sharp depreciation.

2.3 Influence of financial markets

Many Brazilians view the influence of globalisation through the lens of the financial shocks that have been a regular feature of recent Brazilian economic history. Some of these crises had dramatic effects, such as the early 1990s collapse of the exchange rate that saw inflation reach 1000 per cent. Similarly, major financial shocks had occurred at different times in the 1980s and 1990s. The last time that a financial crisis in the region spilled over to Brazil was in 2002, when Brazil's GDP shrunk by 40 per cent in US dollar terms (to US$459 billion), interest rates soared to an average of 23 per cent and both unemployment and inflation rose sharply. The IMF stepped in and provided an emergency loan of US$30 billion to Brazil, one of its largest loans ever. In return for its IMF loan, the Brazilian government agreed to adopt a range of economic reforms, as outlined in a Memorandum of Economic Polices. The IMF intervention was successful in restoring investor confidence in the Brazilian economy, and by 2005 Brazil had repaid its entire borrowings from the IMF, eight months ahead of schedule. Financial markets have been more stable since, with relatively more stability during the global financial crisis and the severe recessions of 2014 and 2020. Although Brazil remains vulnerable to external shocks, its decision to maintain a high level of foreign reserves had provided a buffer against short-term instability in financial markets.

3. Brazil's response to globalisation

3.1 Brazil's approach is different from the Asian tiger economies

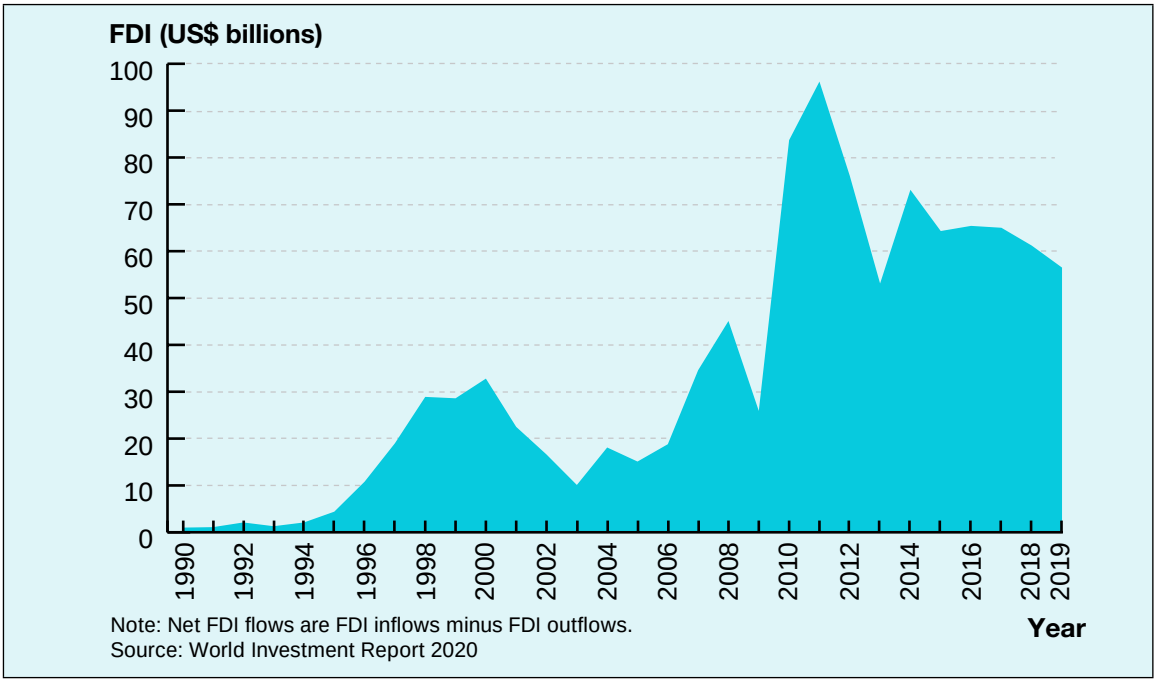
Like most Latin American nations, Brazil has been more cautious in its response to globalisation than many East Asian economies. For much of the 20th century, Brazil insulated itself from the global economy. Successive governments sought to create a large industrial base and minimise Brazil's dependency on imported manufactured goods in the hope of developing greater self-sufficiency. Brazil relied largely on foreign borrowing to fund its industrialisation, but rather than increasing its economic integration, these financial inflows were used to reduce Brazil's reliance on the global economy by substituting imports with domestically produced goods and services.

The contrast in the growth rates of East Asia and Latin America in the 1980s and 1990s led many observers to question the Latin American approach of a more closed economy. Latin American governments were gradually persuaded to give greater priority to opening their economies, attracting foreign investment and pursuing export markets. Brazil has been taking a more open approach since the 1990s, becoming more integrated with regional and global markets. Brazil benefited from several developments in the global economy, including the global commodities boom, China's demand for resources and growth in regional Latin American economies. The expanding middle class also developed an appetite for consumer imports.

Brazil's response to globalisation reflected the model of economic development that is less reliant on export demand. Brazil gives a higher priority to retaining control over its natural resources, such as in the rapidly expanding oil and gas industry, where until recently, there was a requirement that Brazil's state business Petrobras must own at least 30 per cent of new oil and gas projects. Brazil is also more cautious about the adverse impacts of globalisation, such as unrestrained financial flows, and has enacted measures to restrict

short-term financial speculation by foreign investors. Brazil's democratic system has also resulted in a different approach to economic reform. There has been slower progress on some of the changes demanded by foreign investors, and a greater priority given to domestic social programs.

FIGURE 4 – BRAZIL'S NET FDI FLOWS



Note: Net FDI flows are FDI inflows minus FDI outflows.
Source: World Investment Report 2020

3.2 Brazil's increased openness to foreign investment

Since the mid-1980s, Brazil has sought increased foreign investment, rather than merely borrowing funds from overseas to provide the capital for economic development. To increase its attractiveness to foreign investors, Brazil has embarked on a far-reaching program of market reforms, including the deregulation of most industries and the abolition of state monopolies. It also gave priority to low inflation as a major goal of macroeconomic policy.

These measures dramatically increased the participation of foreign enterprises in the Brazilian economy. Transnational corporations (TNCs) play an important role in the telecommunications, chemical, pharmaceutical, automotive and mechanical industries. Foreign Direct Investment (FDI) flows have played an important part in the economy during recent years, with Brazil receiving the highest level of FDI inflows in the Latin American region. Brazil, like the other BRIC economies, has become a hotspot for FDI inflows – especially in the resources sector, but also in retail, financial services and construction. Brazil has also sought to encourage more FDI through liberalising rules surrounding foreign investment.

Another important aspect of Brazil's response to globalisation is an **increasing level of investment** by Brazilian companies into other countries. Brazil's stock of foreign direct investment assets was worth $392 billion in 2020, more than double its level of $173 billion in 2010. While some of this investment involves establishment of new businesses and facilities, most of Brazil's offshore FDI has involved mergers and acquisitions of other businesses. The substantial focus of Brazilian FDI outflows to other developing countries reflects an historic shift in FDI flows, which traditionally involved flows from developed to developing countries – but now comprise a growing share of flows between developing nations. Large Brazilian TNCs such as Petrobras (oil and gas), Vale (mining), and Embraer (aircraft manufacturing) were all previously state-owned enterprises that went through partial or full privatisation. Brazil also has TNCs that are making large offshore acquisitions in the steelmaking, beef cattle, cement, banking and construction sectors.

3.3 Brazil's economic model has been less export-focused, but it is changing

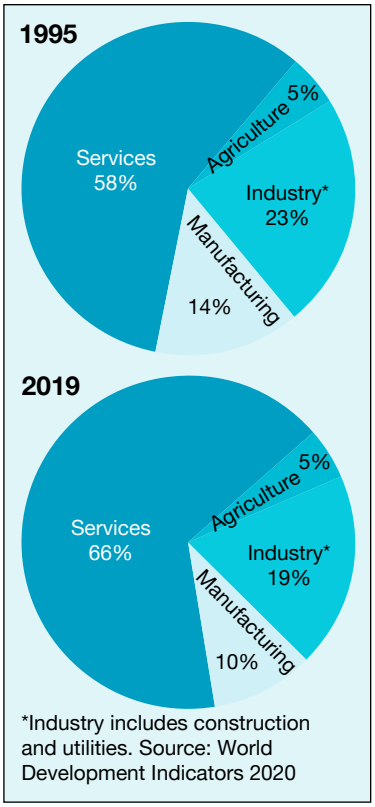
Despite Brazil's embrace of financial and investment flows, it has been relatively slow in liberalising trade flows. For several decades, Brazil's economic development strategy was focused on developing

domestic industries that could substitute locally made goods for imports, rather than focusing on overseas markets. This strategy was implemented through tariffs and subsidies. While this approach helped to keep import levels down, it also made Brazilian industry less internationally competitive and less successful in developing export markets. While East Asian economies were pursuing growth through exports, in Brazil exports barely grew as a share of the economy during the 1970s and 1980s.

> "Brazil has remained on the side lines of an increasingly integrated world economy. This reflects several decades of inward oriented policies including a strategy of industrialisation through import substitution. Trade has been persistently falling, with imports plus exports amounting to less than 30 per cent of GDP … Brazil has so far not fully reaped the benefits that integrating into the world economy can offer. High tariff and non-tariff barriers have shielded large parts of the economy from international competition, with detrimental effects for their competitiveness, but also for consumers in higher prices."
>
> *– OECD 2018 Economic Survey of Brazil, Chapter 2, "Fostering Brazil's Integration into the World Economy".*

Although Brazil remains more closed than other economies in the region, it has become more outward-oriented since the 1990s, implementing **substantial reductions in industry protection**. Between 1990 and 2010, the average level of tariffs fell from 32.2 to 7.6 per cent (remaining around the same level throughout the 2010s), and all quantitative restrictions (such as import quotas) were abolished. Following these reforms, Brazil's economic integration increased significantly, with foreign trade increasing from just 10 per cent of GDP in 1995 to 30 per cent by 2019. This is nevertheless very low by international standards, making Brazil one of the least open among the G20 group of the world's most industrialised nations. The very strong export growth of the 2000s (an average of 16 per cent per year) came to an abrupt end in 2011. At the end of the decade in 2019, the total value of goods and services exports was $260 billion, still below its peak of $292 billion in 2011.

FIGURE 5 – STRUCTURE OF THE BRAZILIAN ECONOMY



*Industry includes construction and utilities. Source: World Development Indicators 2020

Brazil still actively intervenes in the economy to support domestic industries, through tariffs as well as taxes and restrictions on credit facilities that give preference to companies who purchase locally produced equipment. While Brazil is under pressure to further reduce protection, it has suspended additional steps to dismantle trade barriers without reciprocal benefits from other countries, arguing that this strategy allows Brazil to maximise its bargaining power in trade negotiations.

Nevertheless, Brazil's greater economic openness has contributed to a change in industry structure, including a relative decline in the importance of domestic manufacturing industries, as shown in figure 5. The manufacturing sector has become smaller as a share of the economy, but more internationally competitive. Manufactures still make up the largest share of merchandise exports, although since 2000, their share of exports fell from 58 to 33 per cent, while there were increases in food (from 23 to 34 per cent), ores and metals (from 10 to 13 per cent) and fuels (from 2 to 14 per cent). Brazil's services sector makes up the largest share of its economy, but its services contributed only 13 per cent of export earnings in 2019.

3.4 Brazil's role in the global economy

In recent years, Brazil's role in the global economy has diminished. Its poor economic performance since 2014, combined with corruption crises, political instability and erratic leadership under President Bolsonaro, has reduced its capacity for leadership among developing economies. This stands in sharp contrast to the 2000s, when Brazil emerged with India as joint leaders of a bloc of developing economies in the global trading negotiations that had been hoped to lead to a new World Trade Organisation agreement (the Doha Round) but which ultimately failed. Brazil achieved some successes on issues such as challenging the interests of developed economies on intellectual property rules that made medicines more expensive for poorer countries.

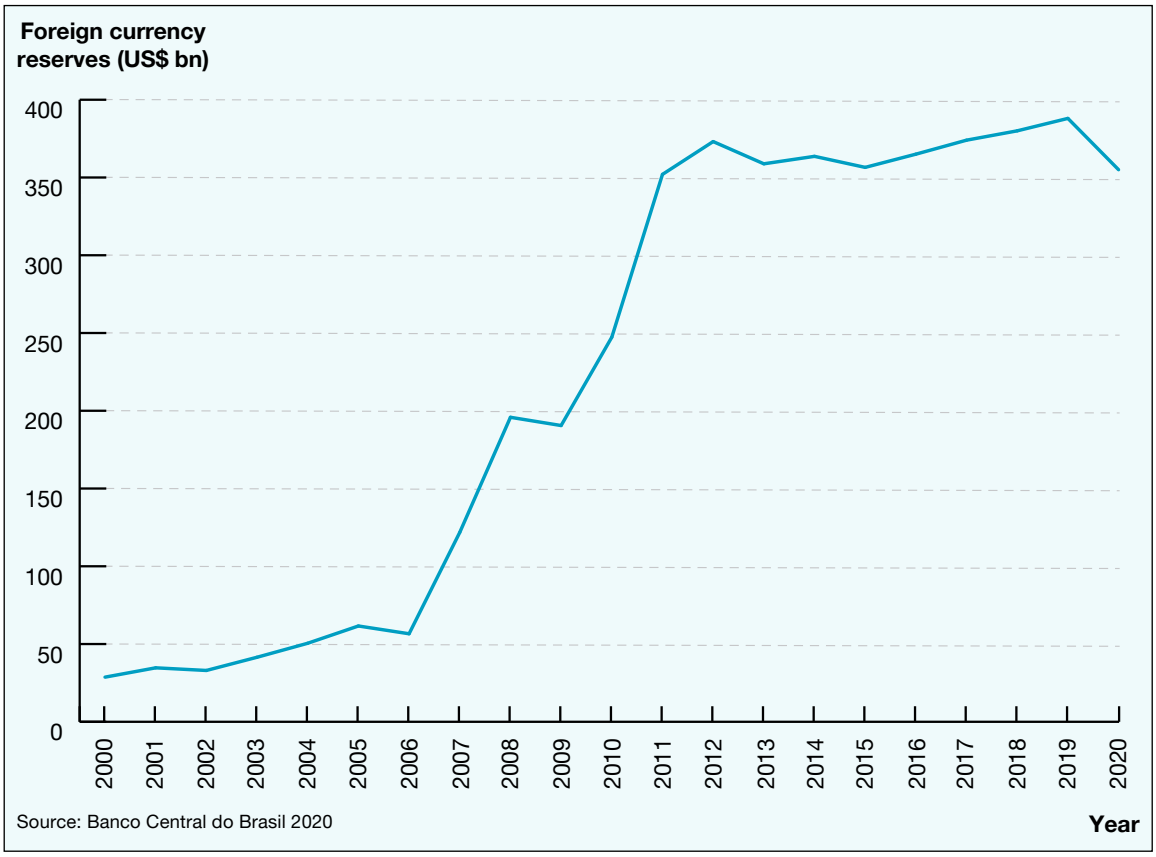
One aspect of Brazil's role in the global economy that has been more consistent in recent decades is its support for greater **regional economic integration**, especially through preferential trade agreements. Within the South American continent, Brazil supported the formation of the Mercado Común del Sur (Mercosur), a customs union between Brazil and four other Latin American nations (Argentina, Paraguay, Uruguay and Venezuela), which came into effect in 1995. Trade within the Mercosur bloc is mostly tariff free, with common external tariffs ranging between 0 and 20 per cent and averaging 14 per cent. In 2019 the Mercosur bloc concluded a trade agreement with the European Union after nine years' negotiations. The trade deal will lead to the removal of tariffs on 92 per cent of goods trade between the two blocs, many of which previously attracted tariffs of up to 35 per cent. It covers combined markets of 780 million people. Brazil also wants to negotiate a trade agreement with the US, but this would not be possible without changing the rules of Mercosur, which prevents member countries from signing bilateral trade agreements.

3.5 Brazil's currency reserves have helped stabilise financial markets

Financial instability is one of the most undesirable impacts of globalisation for developing economies. As already noted, Brazil has experienced numerous exchange rate crises caused by sudden shifts of sentiment on financial markets. Those crises often pointed to Brazil's underlying problem of high foreign debt and slow export growth, and its exposure to changing foreign investor sentiment.

Brazil responded to its history of financial instability by floating its exchange rate and building up its currency reserves. Floating exchange rates are generally less vulnerable to excessive speculation on foreign exchange markets than fixed exchange rates, and while Brazil has continued to experience volatility in its currency during economic crises (such as a 30 per cent depreciation following the onset of the COVID-19 pandemic in 2020), these currency movements have assisted the economy in adjusting to changed economic conditions. The large currency reserves have also been used during periods such as in 2020 to curb excessive volatility in financial markets.

FIGURE 6 – BRAZIL'S CURRENCY RESERVES



Source: Banco Central do Brasil 2020

Since the global financial crisis of 2008, Brazil has taken steps to cushion itself from financial speculation and from the risk of further global financial volatility. Brazil has built large reserves of foreign currency –

from just US$54 billion in 2005, these reserves in 2020 were US$355 billion, the tenth-largest volume of foreign currency reserves in the world. The OECD has criticised the size of the international reserves held by Brazil, noting the high cost in interest payments by the central bank, but for Brazil the reserves have provided a safeguard against instability in global financial markets.

BRAZIL'S POLITICAL CRISES: FROM IMPEACHMENT TO COVID-19

In modern economies, governments play an important role in responding to changing economic conditions and establishing policy priorities. But it is rare for political crises to have such economic impact as Brazil has seen in recent years.

Brazil's recent political crises have seen corruption charges made against the last three presidents, with one (Lula da Silva) going to prison, another (Dilma Rousseff) losing office before her presidential term ended and the current president (Jair Bolsonaro) also accused of interfering into investigations into corrupt dealings by his family.

Brazil's recent political crises began in 2014 with a scandal that engulfed the country after the exposure of a massive corruption scandal involving billions of dollars of contracts at the state-owned energy company Petrobras. The scandal was far-reaching, implicating both ministers in President Rousseff's government and members of many other parties. Indeed, 352 of the 594 members of Congress in Brazil faced accusations of criminal wrongdoing, alongside 27 of Brazil's leading construction companies. Inevitably, the blame rested to some extent with President Rousseff, who had been the chair of Petrobras at the time when the alleged corruption took place, even though there was no evidence she was directly involved.

The Petrobras scandal (and what became known as "Lava Jato", the extensive criminal investigation that followed) brought the economy to a halt. At the same time, falling commodity prices were undermining Brazil's export revenues. President Rousseff lost popular support amidst growing public anger over corruption, the weak economy, poor government services, inadequate infrastructure and rising prices. Across Brazil, large public rallies were calling for her resignation, while politicians in Brazil's congress who were themselves facing corruption charges were hoping that their own careers might be saved if they could bring down President Rousseff's administration and end the Lava Jato investigation. In 2016, Brazil's congress voted President Rousseff out of office. The official reason for her impeachment was that she had used accounting tricks to make the fiscal deficit look smaller than it really was, so that she could increase public spending before the 2014 election.

Instead of restoring stability, President Rousseff's removal only worsened Brazil's political crisis. Within months of taking office, the new president, Michel Temer was caught up in even more serious corruption allegations. President Temer's own attorney general charged him with corruption as part of a wider investigation into the "Weak Flesh" scandal, in which meat packers had bribed politicians and officials to turn a blind eye to breaches of food safety laws. (This even included widespread use of red dye to disguise out-of-date and putrefying meat for sale.) The scandal resulted in a ban on Brazilian meat exports to the US and European Union.

The popular former president, Luis da Silva, was expected to win the 2018 presidential election, but was prevented from standing because of a prison sentence for involvement in the corruption scandal. Instead, the 2018 presidential election was won by a populist anti-establishment candidate, Jair Bolsonaro. He earned the nickname "Trump of the Tropics" because of similarities in his style to that of the US president. Bolsonaro had a reputation for causing outrage through offensive and extreme remarks, including his support for Brazil's past military dictatorship.

Brazil's political crises continued under President Bolsonaro, with a series of new scandals involving members of his family and successive resignations by senior officials and cabinet ministers. Bolsonaro has been widely blamed for the severity of the COVID-19 pandemic outbreak in 2020, which left Brazil with the world's second-highest death toll. Bolsonaro downplayed the risks of COVID-19 as "just a little flu", and said that those who caught it were "weak" until he himself contracted the virus. Bolsonaro criticised state governors for imposing lockdowns, sacked his health minister for urging more aggressive action to fight COVID-19, and even participated in street protests against social distancing.

4. Brazil's recent policy developments

4.1 Macroeconomic policy

The five strongest themes concerning economic management emerging from Brazil's recent economic history are:

- investor concerns about corruption and incompetence, following a series of crises that culminated in the election of President Jair Bolsonaro
- poor management of **fiscal policy** due to structural problems in public finances
- better management of **monetary policy** to reduce inflation
- slow progress on **microeconomic reform**

- the recognition that despite political instability, Brazil has made progress on several fronts, including the management of financial instability and the independence of judges from the government.

The immediate macroeconomic challenge for the early 2020s is to weather the COVID-19 recession. Brazil entered the global recession in a weakened condition after its sluggish recovery from the recession that began in 2014. Public debt had risen, private investment had not recovered and growth was stuck at 1 per cent per year. Ongoing fights between President Bolsonaro and state governors over his resistance to measures fighting COVID-19 further undermined confidence in Brazil's future economic prospects.

Fiscal policy is caught between the economy's need for support and the need to address a blowout in public debt levels in recent years, which has been driven by the rising cost of pensions. To stabilise public debt at current levels, an overall public-sector surplus of 1.1 per cent is required. Prior to the COVID-19 recession, the IMF forecasted in 2019 that the deficit should improve from −1.9 per cent of GDP in 2019 at a rate of 0.5–0.6 per cent of GDP each year through to 2024, meaning that for the foreseeable future, public debt was going to continue to rise even before the impact of the COVID-19 pandemic. The centrepiece of efforts to address Brazil's fiscal problem is a constitutional amendment passed in 2016 that imposes a spending cap, which effectively freezes the national budget in real terms for 20 years. This was introduced in response to a structural deterioration in the budget after 2009 that had led international ratings agencies in 2014 to downgrade Brazil's sovereign rating to the bottom rung of investment grade. The constitutional provision operates alongside the Fiscal Responsibility Law, which imposes transparency requirements for fiscal policy and requires that fiscal policy focus on reducing public debt and maintaining a medium-term target for the "primary fiscal surplus" (the fiscal surplus before payments on government debt).

To mitigate the impacts of COVID-19 on the economy in 2020, Brazil's Congress announced an economic support package worth approximately 12 per cent of GDP. The Congress also declared a state of "public calamity" in March 2020, which suspended the government's obligation to comply with fiscal targets in 2020. The government also invoked the "escape clause" of the constitutional expenditure ceiling to accommodate this exceptional spending, effectively suspending the Fiscal Responsibility Law.

The fiscal measures include temporary income support measures to vulnerable households (bringing forward pension payments, expanding the Família program to another million households, providing cash transfers to informal and unemployed workers and advance payments to low income workers), employment support (partial compensation to workers and incentives for firms that preserve employment) and lower import levies on essential medical supplies.

The one significant breakthrough on economic reform achieved in recent years in Brazil (and just prior to the outbreak of COVID-19) was a major structural reform of the pension system to put fiscal policy on a more sustainable path and address structural problems in national and state budgets. Less than 15 per cent of expenditure in Brazil is discretionary, with fixed spending commitments imposing significant burdens on state and local governments, some of which have come close to insolvency in recent years. Brazil's age pension system is one of the world's most generous. Almost 14 per cent of Brazil's GDP (and 56 per cent of the national budget) is spent on pensions, and this spending actually makes income distribution even more unequal: 53 per cent of spending on pensions goes to the country's wealthiest 20 per cent of the population, while just 2.5 per cent goes to the poorest 20 per cent. Brazil also has low levels of workforce participation because workers retire so early. Compared to an average retirement age of 66 in the OECD, the average retirement age is 54 years. The pension reform plan aims to save over US$230 billion over 10 years, although this will only stabilise spending at current levels. It raises the retirement age for men to 65 years, and for women to 62 years, and requires 40 years of contributions to qualify for a full pension. It also reduces entitlements for those under 70 and removes differences between public- and private-sector employees.

The role of monetary policy in Brazil's economic policy mix has changed significantly in recent years. During the period of high inflation preceding the recession of 2014, monetary policy played the central role in bringing inflation back into its target range. The inflation target for Brazil has been 4.5 per cent since 2005, with a target band of 1.5 per cent on either side of the central target (effectively, a target range of 3 to 6 per cent). A surge in inflation (which reached 9 per cent in 2015) prompted a

sharp rise in the official interest rate, or "Selic" rate, from 7.25 to 14.25 per cent in the two years to 2015. This strategy was successful in bringing inflation back into the target range, but at the price of a severe recession. In conjunction with the fiscal stimulus announced in response to COVID-19, Brazil's central bank announced a series of measures to ensure the stability of the financial system. These included lowering the Selic rate to a historical low of 2.25 per cent, relaxing the requirements on the amount of money banks need to hold as safety-nets in their accounts (which allows them to lend out more money to businesses and people) and intervening in the market to stabilise the currency after a sharp depreciation.

"Brazil needs decisive **structural reforms** to raise potential growth, including tax reforms, privatization, trade liberalisation, and measures to enhance the efficiency of financial intermediation.

Given the high and increasing level of public debt, fiscal consolidation is essential … Pension reform is necessary but not sufficient for fiscal sustainability … the savings from the pension reform would account for only a third of the fiscal adjustment that is needed to comply with the expenditure ceiling by 2024 …

To comply with the constitutional expenditure ceiling in outer years, the government should lower the public wage bill (which would also make earnings more equitable relative to private employees) and reduce other current expenditures. While pursuing fiscal consolidation, it is critical to protect effective social programs, including Bolsa Familia, and support public investment. The overly complicated and distortive tax system should be reformed, and efforts to strengthen revenue administration should continue …

Brazil is also vulnerable to external shocks, including a sudden tightening in global financial conditions and a possible global slowdown. However, the limited degree of trade integration, the solidity of the financial system, and sound external position—adequate foreign exchange reserves, low current account deficit, and large Foreign Direct Investment inflows—act as buffers."

– International Monetary Fund, Brazil: Article IV Consultation report, July 2019

4.2 Microeconomic policy

Comprehensive reviews of the Brazilian economy undertaken by the IMF and OECD in 2018 and 2019 set out a detailed agenda for microeconomic reform in Brazil. They highlight a set of policy challenges that Brazil needs to address to ensure the economy is on a path towards long-term, sustainable growth:

- The pension reforms mentioned above are regarded as a microeconomic reform as well as an important change in fiscal policy. Economists believe that the pension system has undermined incentives for savings, and contributed to Brazil's very low savings rate (13 per cent of GDP).
- Brazil remains, in the words of the IMF in 2019, "one of the most closed major economies in the world". Tariffs have not fallen since 2010 and Brazil has been the world's third most active user of anti-dumping actions in the WTO. By the measure of trade as a proportion of GDP, Brazil is much less integrated with the global economy compared to other emerging economies such as Chile, Colombia, Mexico, Thailand and Turkey. Although Brazil is the world's ninth-largest economy, it represents just 1.2 per cent of the value of global trade and it is not well integrated into global value chains. As a proportion of GDP, trade is lower in only five other countries in the world.
- Brazil needs to increase labour productivity, which is low by international standards, and around one-third the level of regional competitor Argentina. Productivity growth will be the main engine of growth in the longer term. Strengthening it will require more competition in many sectors to allow labour and capital to move to activities with strong potential.
- Brazil has a young population but it is achieving relatively poor education outcomes for them. The percentage of students in secondary education who are enrolled in vocational programs is lower than in all comparable countries other than South Africa, and less than half the average for the OECD. Only 15 per cent of Brazilians aged 25–64 have a tertiary degree, compared to 36 per cent on average for OECD countries (2016 data).
- More rapid progress is needed on infrastructure development. Transport infrastructure is important in a country as large and heavily populated as Brazil. Its road, rail and port quality ranks poorly according to international studies. The IMF's 2019 report on the Brazilian economy noted that over the past two decades, Brazil invested an average of just 2 per cent of GDP in public infrastructure – around one-third the average level of other emerging economies.

- Reforms are needed in government itself. The political crises of recent years have revealed high levels of corruption throughout government, implicating hundreds of politicians, including Brazil's three most recent presidents. In 2019, Brazil was ranked 106th among 180 countries on Transparency International's annual corruption index, with a score of 35/100 (on a scale where 0=highly corrupt and 100=very clean).
- An overhaul of the tax system is needed to reduce the notorious cost of compliance with Brazil's tax system. The IMF's 2019 review of the Brazilian economy recommended that Brazil replace its complex indirect taxes with a single broad-based value-added tax and remove other distortions to the tax system that make tax compliance expensive and complicated. The World Bank's 2018 "Ease of Doing Business" report ranked Brazil 125th out of 190 countries, noting for example that on average it takes almost 2000 hours for a business to prepare its returns in Brazil, more than any other country (and compared to an average of around 200 hours for most economies).
- Regulation more generally needs to be simplified and enforced. The OECD's Product Market Regulation Indicators report measures the regulatory barriers to entrepreneurship for the world's leading advanced and emerging economies, and it has ranked Brazil third most restrictive of those 46 countries. Excessive regulations have encouraged a culture of "jeitinho", or finding a way around a law or a rule, sometimes illegally. For example, Brazil's complex system of environmental licences for developments is often criticised by foreign investors, and often evaded by local developers. In other areas, Brazil's problem has been a failure to enforce regulations. In 2018 the European Union announced a ban on imports from seven of Brazil's meat processing factories because of food safety concerns.

Brazil has nevertheless created some successful and innovative social policies, such as the Bolsa Família (Family Fund) policy, introduced in 2004 to assist poor households. The success of the Bolsa Família policy has resulted in its expansion into a wider income support, education, elderly care, health and micro-lending package called Brasil Sem Miséria (Brazil Without Misery). This program incorporated one of the previous government's cornerstone projects – the Fome Zero (Zero Hunger) program – and by 2015 it was giving 14 million of Brazil's poorest families up to 95 reals per month. By merging a range of income distribution payments, the government aimed to target inequality more effectively, and its cost – just 0.6 per cent of GDP – is very small compared to the 14 per cent of GDP spent on pension benefits that mostly go to Brazil's less needy middle class.

5. Conclusion

After a period of extraordinary boom and bust, Brazil's economy has returned to a slow rate of growth. The surge in revenues from minerals, energy and agricultural exports in the 2000s is long forgotten, and Brazil is dealing with the fallout of a once-in-100-years pandemic that took root in addition to the difficult economics it often faced in past decades. The challenges of tackling the country's economic, social and health problems given the collapse in trust in the nation's political leaders are daunting.

Although in the years before COVID-19 Brazil went through its worst recession in a century, it is worth noting that things could still have been worse. The corruption scandals were very serious, but Brazil's political and judicial institutions have been fearless in exposing those crimes and sending powerful business leaders and politicians to jail for crimes. For a country that only became a democracy in 1988, Brazil's institutions proved to be strong, independent and stable – all important elements of a positive environment for long-term investment and growth. A key question now is whether these institutions will have their independence undermined under the presidency of Jair Bolsonaro, who is in office until an election in late 2022. President Bolsonaro has regularly attacked Congress and the Supreme Court, and removed officials critical of his administration.

Brazil has the potential to play an important role in the future of the global economy both because of the size of its population and economy, and because of its proven potential in a diverse range of export markets including minerals, fuels, food and manufactures. But it will take time for Brazil to rebuild confidence in its economic future. The events of recent years underscore the importance of political stability, anti-corruption measures and the rule of law in providing foundations for confidence and growth. Brazil entered the COVID-19 recession of the 2020s in a much weaker condition than it entered the 2010s, and many challenges lie ahead.



Case Study:
Indonesia

The East Asian economic region has been strongly influenced by globalisation over recent decades, through increased international trade, foreign investment and rapid industrialisation. East Asian economies have become more closely integrated at a regional level, and with economies around the world. With strong economic growth and development over recent decades, East Asia is fast becoming an economic centre of gravity to rival North America or Europe. Although North Asia has the largest regional economies – China and Japan – economies in the South-East Asian region are growing fast. They demonstrate the growth opportunities that come from more open markets, but also highlight the challenges of managing rapid economic change.

Indonesia is the **largest economy of the South-East Asian economic region**. With the world's fourth-largest population and sixteenth-largest economy, it is an emerging economy that has become more integrated with the global economy in recent decades. As it has opened its economy to global forces since the mid-1980s, Indonesia has experienced the growth of trade and investment and the increased participation of TNCs in the economy. Across a range of quality-of-life indicators, economic development has improved. However, Indonesia has also been exposed to major international economic disturbances, including a regional financial crisis in the late 1990s and ongoing volatility in global commodity markets. In 2020, the severe impacts of the COVID-19 pandemic again highlighted the fragility of the country's economic and social progress. Beyond the immediate response to economic downturn, Indonesia also faces major policy challenges to build more competitive industries, improve regulations and make government revenue and services more sustainable.

Indonesia is an excellent case study of globalisation because of the mixed influences of globalisation on its economy and the challenges it faces in sustaining economic development. Indonesia also has enormous long-term importance to Australia's economy and security. With trade and financial linkages between the two countries growing stronger, understanding the Indonesian economy is especially valuable for Australia's economic future.

FIGURE 1 – DEVELOPMENT INDICATORS: SELECTED COUNTRIES

	Indonesia	Poland	China	Egypt	Brazil	USA
Population (millions, 2018)	268	38	1393	98	209	327
Gross Domestic Product (current US$ billion, 2018)	1042	586	13,608	251	1885	20,544
GNI per capita (current international dollar, PPP, 2017)	11,290	30,410	15,320	11,350	14,530	63,780
Population below US$1.90 per day (%) (latest available)	4.6	0.3	0.5	3.2	4.4	1.2
Gini index (latest available)	39	29.7	38.5	31.5	53.9	41.4
Mean years of schooling (2018)	8.0	12.3	7.9	7.3	7.8	13.4
Life expectancy at birth (1990, 2018)	63.3 71.5	70.9 77.8	69.3 76.7	64.6 71.8	65.3 75.7	75.2 78.5
Human Development Index (rank) (2018)	0.707 (111)	0.872 (32)	0.758 (85)	0.700 (116)	0.761 (79)	0.920 (15)

Sources: World Bank 2020; Human Development Report 2019

1. Economic performance

1.1 Indonesia's economy and development

With a Gross Domestic Product (GDP) of just over US$1 trillion, Indonesia is the world's sixteenth-largest economy. Indonesia is much smaller than the world's largest economies, such as China, which is 12 times as big, or the United States, which is nearly 20 times bigger. However, Indonesia is larger than other economies in its region, such as Thailand and Malaysia, whose economies are around half the size of Indonesia's.

Although Indonesia has a large economy, it also has a very large population, which is now near 270 million. The living standards in Indonesia remain low despite significant improvements. In 2018 output per capita was US$3894 (without adjusting for purchasing power, as done in figure 1). This is nearly five times larger than the level recorded in 2000 (US$780). Living standards are similar to those of some nearby economies such as the Philippines and Vietnam, but less than half those of other South-East Asian neighbours such as Thailand and Malaysia. The World Bank classifies Indonesia as a **lower-middle-income country**.

Indonesia's low income levels mean that it suffers from a relatively high incidence of poverty. Around five per cent of the population lives on less than US$1.90 per day. While this is lower than the world's poorest regions – Sub-Saharan Africa and South Asia – poverty rates in Indonesia are almost double the average for the East Asian region.

Indonesia also suffers from a relatively low level of **economic development**. According to the United Nations, Indonesia's Human Development Index of 0.707 is below 110 other economies. Mostly this reflects Indonesia's low standard of living, as measured by its per capita income. Indonesia also has a relatively poor performance for other key indicators like adult literacy and life expectancy at birth. Health outcomes in Indonesia are especially low. Only half of the population have access to improved sanitation facilities, and one in five Indonesians do not have access to an improved water source. Expenditure on health, now US$115 per person each year, is barely above the average of the world's least developed region, Sub-Saharan Africa.

Despite these poor outcomes, Indonesia's development indicators have improved substantially in recent decades. Life expectancy has improved by eight years since 1990. Over the same period, the under-five child mortality rate has decreased by around 70 per cent, from 86 deaths per 1000 births to 25 deaths.

Income inequality in Indonesia, as measured by its Gini index of 39, is similar to other economies in the region such as Malaysia and Vietnam. The distribution of income is more equal than in many countries beyond the region such as the United States and Brazil.

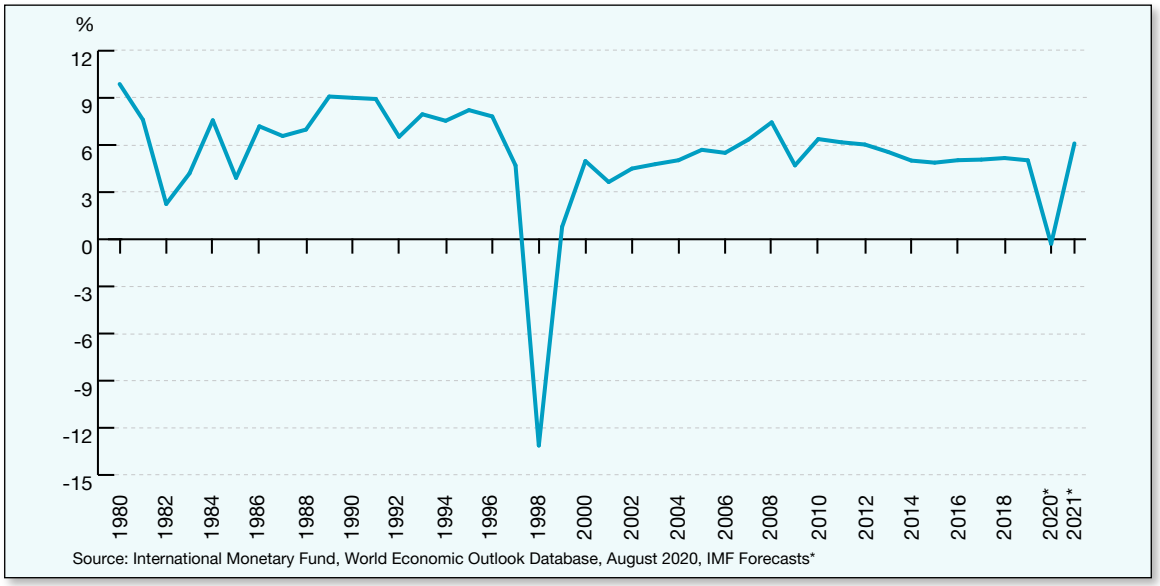
1.2 Indonesia is an emerging economy

In previous decades, Indonesia was considered a developing economy, and later, a newly industrialised economy. Indonesia is now considered an **emerging economy** because of its strong growth performance and prospects. In the four decades since 1980, Indonesia has grown at an average annual rate of over 5 per cent. Although not as fast as some neighbouring economies in East Asia, this growth rate puts Indonesia well ahead of most economies around the world, including advanced economies in Europe and North America, and emerging and developing economies in Latin America, Central and Eastern Europe, and Africa. In 2011, the Indonesian Government set goals of becoming a middle-income country and becoming one of the world's 10 largest economies by 2025. Doing so would have put Indonesia alongside the world's largest emerging economies, the so-called BRIC economies of Brazil, Russia, India and China. This objective is now unlikely to be achieved, with economic growth rates averaging closer to 5 per cent per year than the 7 per cent per year required. Further, short-term growth forecasts were slashed to almost zero at the height of the COVID-19 pandemic in 2020.

The **international business cycle** and regional business cycle have also had significant impacts on the economic performance of the Indonesian economy in the past half century. While most economies experienced a downturn in growth during the 1970s because of rapid increases in global oil prices, Indonesia, as a major oil exporter, experienced an acceleration of economic growth. During the 1980s, the opposite occurred, as the glut of oil supply pushed prices down, and with them the growth rates

of the Indonesian economy. During the 1990s, Indonesia was part of an economic growth boom that spread across East Asia after the end of the Cold War. However, this growth came to an abrupt end in 1997 with the Asian financial crisis, which saw the Indonesian economy contract by 13 per cent in one year, with devastating consequences. By 2000, economic growth had returned to a slightly slower annual rate of around 5 per cent, which was sustained for two decades.

FIGURE 2 – ECONOMIC GROWTH IN INDONESIA

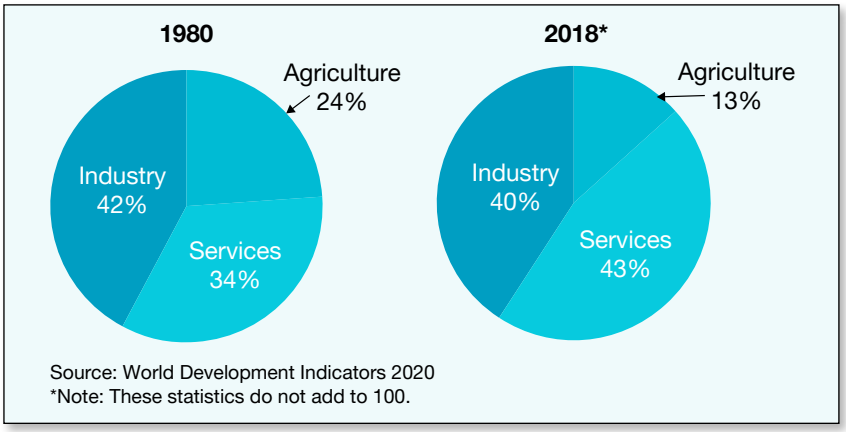


Source: International Monetary Fund, World Economic Outlook Database, August 2020, IMF Forecasts*

Over the past decade, Indonesia recorded an average economic growth rate of 5.4 per cent. Indonesia's growth rate in 2020 is expected to be just 0.5 per cent, owing to the impact of the COVID-19 pandemic, which reduced consumer spending, business investment and exports. A major reason for not reaching economic growth targets in recent years has been Indonesia's underinvestment in physical infrastructure and human capital. This underinvestment increases costs to business and negatively impacts the productivity of the economy. The overall unemployment rate had fallen to 5 per cent in early 2020, before the COVID-19 recession saw unemployment rise again, with the IMF forecasting a peak of 7.5 per cent. Indonesia has experienced occasional volatility in inflation, spiking several times over the past decade and a half because of increases in fuel prices (2005 and 2013) and food prices (2008). Inflation was forecast to fall below 3 per cent in 2020 owing to slower economic conditions during the COVID-19 downturn.

One characteristic of Indonesia that is typical of an emerging economy is the transformation of its industry structure in recent decades. Like many other economies in East Asia, Indonesia has seen the economic importance of the agricultural sector fall, while manufacturing industries and services have become more important. As shown in figure 3, the past three decades have witnessed substantial structural change in the Indonesian economy.

FIGURE 3 – STRUCTURE OF ECONOMY



Source: World Development Indicators 2020
*Note: These statistics do not add to 100.

ASIAN FINANCIAL CRISIS

The Asian financial crisis of 1997 and 1998 was an early example of some of the possible negative impacts of globalisation. As the economy most severely affected by the crisis, Indonesia's experience highlights how volatile global financial markets, combined with economic mismanagement, can have devastating consequences for economic growth and development.

The rapid growth of South-East Asian economies for much of the 1990s (as shown in figure 4) had led to a flood of short-term financial inflows that was increasingly flooding into stock markets, consumer finance and real estate. Inadequate banking regulations saw finance flow to customers that did not meet normal creditworthiness standards.

In July 1997, sentiment changed as foreign investors reassessed the value of their assets and loans and suddenly withdrew their funds – known as "capital flight". Beginning with the Thai baht, the currencies of South-East Asian economies depreciated rapidly as financial outflows mounted. The financial "contagion" of the crisis also spread to other economies including Indonesia, Korea and Malaysia.

To obtain an emergency US$18 billion financial assistance loan from the IMF, the Indonesian Government was required to undertake policy measures including spending cuts, budget surpluses, dramatically raising interest rates (to 80 per cent), closing some banks, cutting fuel subsidies, and undertaking long-term structural reforms. Although designed to strengthen the Indonesian economy in the long term, these policies had the immediate effect of further undermining confidence and choking off economic activity. By mid-1998, as panic spread to Indonesia's businesses, households and other deposit holders, the rupiah had lost 85 per cent of its value against the US dollar (to be worth as little as Rp 16,000 to the US dollar) and the managed float was abandoned.

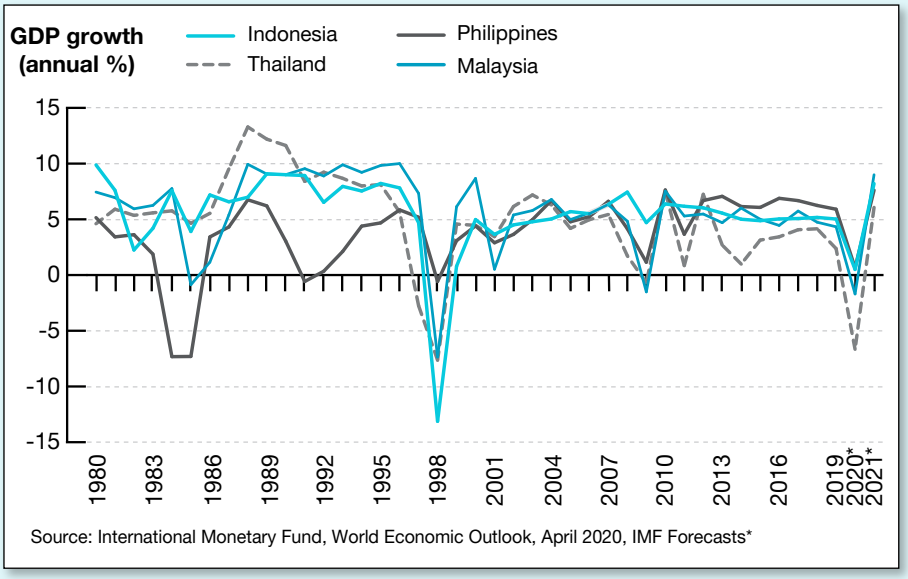
The Asian financial crisis had devastating economic consequences for Indonesia. The economy shrank by over 13 per cent. Unemployment increased and the Indonesian Government's official estimate of the number of people in poverty almost doubled from 11 per cent to 19 per cent as a result. As the exchange rate depreciated and the price of imported goods soared, inflation was recorded at over 75 per cent. Foreign debt increased to US$148 billion. In May 1998, Indonesian President Suharto was forced to step down after over 30 years in office. It took six years before living standards returned to pre-crisis levels.

Aside from the mishandling of the crisis by the IMF and Indonesian Government, economists often cite two causes of Indonesia's problems during the crisis. The first was the combination of open financial markets with a fixed exchange rate. The rupiah became overvalued, and because it was fixed, there was no mechanism for it to adjust to its market value. A second cause of the crisis was excessive financial speculation and the poor regulation of the financial sector during a period of rapid globalisation. The Asian financial crisis in Indonesia highlights how, without an appropriate policy framework, global economic forces can destabilise an economy and cause extensive economic and social harm.

The Asian financial crisis saw new policies introduced for the Indonesian economy, including the establishment of an independent central bank (Bank Indonesia), a new bankruptcy law, and measures to promote competition and improve the social safety net. The Indonesian Bank Restructuring Agency (IBRA) oversaw the reforms to the financial sector.

The Asian financial crisis also forced a change in the way that the IMF responds to financial crises. In contrast to its policy prescriptions for Indonesia in the late 1990s, during the global financial crisis and the COVID-19 recession in the following two decades, the IMF recommended that economies pursue massive fiscal stimulus programs, reduce interest rates to support economic activity, and boost liquidity for credit markets. As one of the first major crises of the modern era of globalisation, the Asian financial crisis helped shape future economic policy.

FIGURE 4 – EAST ASIAN GROWTH RATES



Source: International Monetary Fund, World Economic Outlook, April 2020, IMF Forecasts*

Indonesia's **primary industries** nevertheless remain important. Outside the formal economy, the majority of Indonesia's rural population still survives on subsistence agriculture, with wages in the form of crop shares. The main agricultural product is rice, and other crops include rubber, coffee, cocoa and spices. Unlike other economies in the region, Indonesia also has a large oil and gas industry. Until 2008, Indonesia was Asia's only member of the Organisation of the Petroleum Exporting Countries (OPEC), the international oil cartel. Petroleum and liquefied natural gas are Indonesia's largest single exports, making up a quarter of total exports.

Indonesia's **manufacturing sector** includes a large textile and garment industry and some other labour-intensive manufacturing. However, Indonesia's manufacturing sector is less competitive than other similar economies. Manufacturers confront poor infrastructure, limited access to finance, complex regulations and increased barriers to imports (which raise the cost of capital goods). Nevertheless, Indonesia has two key advantages that create the potential for growth in manufacturing: a large, low-cost labour force and a huge domestic market.

Indonesia's fastest-growing sector is its **services sector**. In 2018, the services sector contributed to 43 per cent of GDP, employing 47 per cent of the workforce. Indonesia's main services are tourism and retail. In the future, information and communications technology is expected to be the primary driver of the services sector. Indonesia's services sector is enjoying increasing foreign direct investment (FDI) flows, with services accounting for 40 per cent of Indonesia's investment inflow. The growth in information and communications services is evidence of the positive role of investment by foreign technology companies in helping to lift the skills of the Indonesian workforce. Nevertheless, the services sector is still held back by poor infrastructure and technology and by inadequate workforce skills.

Indonesia did not meet all of the Millennium Development Goals (MDGs) by the target year of 2015, but made significant progress in many areas. The Indonesian Government is committed to delivering progress in the Sustainable Development Goals (or SDGs, also known as Global Goals), building on the progress achieved with the MDGs, such as reducing poverty (goal 1), promoting gender equality (goal 3), and dealing with the long-term impacts of climate change (goal 7).

FIGURE 5 – INDONESIA'S PERFORMANCE ON THE MILLENNIUM DEVELOPMENT GOALS

Goal	Performance
1	Poverty headcount (proportion of people living below US$1.90 a day) has fallen from 67 per cent (1998) to 4.6 per cent (2018). The proportion of underweight children under five decreased from 31 per cent (1989) to 18 per cent (2018).
2	The net enrolment rate for primary children is almost 100 per cent, and primary school completion improved from 62 per cent (1990) to 100 per cent by 2010. The literacy rate of the population is 96 per cent (2018).
3	The proportion of males aged above 25 who have completed at least primary school is 82 per cent (2015). For females, it is 74 per cent (2015).
4	The mortality rate of children under five years has decreased from 97 (1991) to 25 (2017) per 1000 live births.
5	The maternal mortality rate has fallen from 390 (1991) to 126 (2015) per 100,000 live births. Issues with access to contraception remain.
6	The prevalence of tuberculosis decreased from 449 (2000) to 316 (2018) cases per 100,000 people, and the proportion of people with HIV/AIDS has decreased.
7	Carbon emissions are high. Only 43 per cent of people have access to sustainable drinking water, and only 56 per cent have access to basic sanitation. The proportion of the urban population living in a slum has decreased from 51 per cent (1990) to 22 per cent (2014).
8	Foreign debt (as a per cent of gross national income) has been reduced from 69 per cent (1990) to 38 per cent (2018). The debt servicing ratio has been reduced from 17 per cent (1999) to 9 per cent (2018).

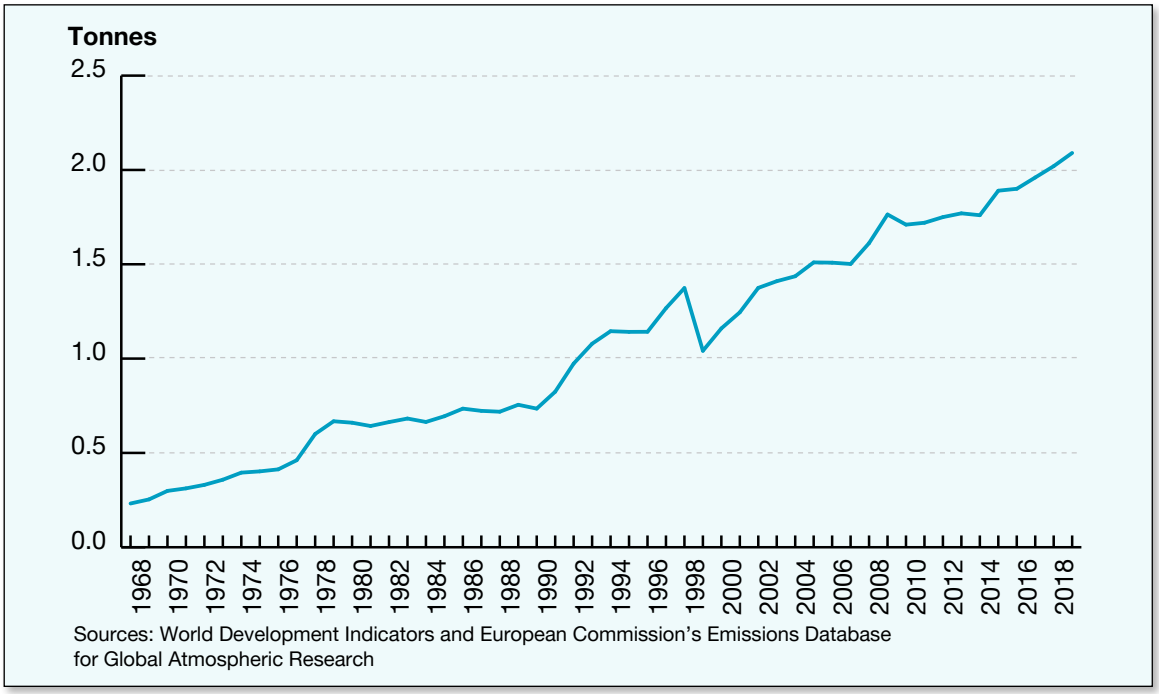
Sources: Report on the achievement of the Millennium Development Goals Indonesia 2013, World Bank World Development Indicators 2018; Indonesia Economic Quarterly (2016)

1.3 Indonesia's growth has had negative environmental impacts

Degradation of the natural environment has been a significant cost of the industrialisation and globalisation of the Indonesian economy. Indonesia has one of the world's highest rates of deforestation, with more than 74 million hectares – an area twice the size of Japan – of rainforest cleared in the last half century. This is the result of commercial logging, land clearing for agriculture, mining developments and population expansion. The Indonesian Government has a moratorium on new clearing for around 60 million hectares of primary forest and peatland. Other key environmental concerns include loss of species and water and air pollution:

- Economic activity has affected natural habitats and regeneration, with some 975 animal and plant species in Indonesia now considered threatened.
- Protection of the marine environment is a major challenge because of Indonesia's vast coastline, pollution from industry and over-exploitation of fishing stocks.
- Indonesia's capital city, Jakarta, has worse air pollution than all but a handful of major global cities such as Cairo, Chongqing and Delhi.

FIGURE 6 – INDONESIA'S CO_2 EMISSIONS PER CAPITA



Sources: World Development Indicators and European Commission's Emissions Database for Global Atmospheric Research

Indonesia is more vulnerable to the future impact of **climate change**, with the World Risk Index ranking Indonesia's exposure to natural hazard-related risk at the highest level. As a cluster of islands, it will be more affected by coastal inundation, and like other countries, Indonesia faces more extreme weather events, such as droughts and floods, which will affect its agricultural sector and food security. As shown in figure 6, Indonesia's emissions of carbon dioxide from energy use and industry, which contribute to climate change, are low in per capita terms (2.1 tonnes per year), but they are growing rapidly because of economic and population growth. If the emissions caused by deforestation are also included, **Indonesia is the world's fifth-largest contributor to global carbon dioxide emissions**.Forest fires are deliberately lit every year by companies clearing land for palm oil and timber plantations. In 2015 the Government introduced measures to stop forest fires including moratoriums and restoration targets. However, these policies did not come in time to prevent the 2019 land and forest fires, during which over 600,000 hectares were burned. The fires were made worse by weather patterns. The economic impact from the fires was severe, with an estimated cost of US$5.2 billion. Around 900,000 people had respiratory illnesses due to the fires.

Reducing carbon dioxide emissions while maintaining economic growth will be a key environmental management challenge in the future. Indonesia is unlikely to meet its Paris Agreement commitment to reduce carbon emissions by 29 per cent by 2030 (compared to business-as-usual levels). Indonesia is currently on track to reduce its emissions by only 19 per cent. Indonesia's high emissions are due to its

reliance on fossil fuels and deforestation. Currently, government policy around climate change is limited to a range of specific policies, such as issuing a moratorium on new licenses to clear primary forests.

Indonesia is taking steps to increase the supply of renewable energy. The Indonesian Government has committed to a 23 per cent renewable energy target by 2025, as part of its commitments to the Paris Agreement. However, despite large sources and investment in geothermal and hydropower, it is unlikely to meet this target. Government efforts in renewable energy have been focused on small-scale projects, such as installing solar panels in villages. Despite efforts on renewable energy, Indonesia has plans to install over 27 GW of coal-fired power generation by 2028.

Indonesia has a number of other environmental issues that also need addressing, particularly in relation to resource management. For example, Indonesia has the second-highest plastic waste amongst the world's 146 coastal countries. The Government has a policy to slash marine litter by 70 per cent by 2025. In 2016, the Government introduced a charge on plastic bags. Within three months, this step had reduced plastic bag use by 25 per cent. Although this policy was abandoned after a legal challenge from industry groups, it does highlight the potential effectiveness of targeted policies in solving Indonesia's environmental issues.

2. Indonesia's path to globalisation

Since the Indonesian economy opened up to global forces in the 1980s, globalisation has reshaped the Indonesian economy. Reforming the economy has been necessary so that Indonesia can keep pace with other economies in the South-East Asian region and avoid relying too heavily on commodity exports, whose value on global markets tends to be volatile. As the oil boom of the 1970s subsided, Indonesia needed to find more sustainable foundations for long-term economic growth, and exporting manufacturing goods was central to this strategy.

Since the mid-1980s, Indonesia has lowered protectionist barriers to trade, resulting in greater competitive pressures and making businesses more export-focused. Indonesia has taken opportunities to participate in multilateral efforts to reduce protectionism. Greater foreign investment has provided a source of capital, while also creating financial market and economic volatility. Transnational corporations have played a greater role in the economy for both traditional commodity sectors and other exports.

2.1 Indonesia has reduced protectionist barriers since the 1980s

Trade liberalisation has been a crucial component of Indonesia's integration with South-East Asia and the global economy. In the mid-1980s, Indonesia **shifted away from a policy of import substitution towards export-led development**. In 2016, the simple mean tariff rate applied to imported goods was 6 per cent, down from 17 per cent in the early 2000s, and similar to the 5 per cent average for the East Asia and Pacific region.

Prior to the mid-1980s, Indonesia was a highly protected economy. Indonesia's oil boom in the 1970s saw the imposition of strict trade barriers to protect government-sponsored and government-owned business enterprises. The methods of protection included tariffs, licensing requirements, local content rules and import monopolies. One area that historically has faced high non-tariff barriers has been agriculture. In the mid-1980s, under the control of Indonesia's sole approved rice importer, Bulog, the country was able to achieve self-sufficiency in rice production and phase out all rice imports.

Indonesia's shift towards trade liberalisation began in the mid-1980s. The average level of tariffs was reduced by almost one-third. Between 1987 and 1995 the effective rate of tariff protection for the manufacturing sector fell from 86 per cent to 24 per cent. For agriculture over the same period it halved, from 24 per cent to 12 per cent. The government has also relaxed the complicated network of import licensing restrictions. Annual deregulation and liberalisation packages aimed to reduce barriers to foreign trade and investment.

After the Asian financial crisis in 1998, Indonesia continued to pursue trade liberalisation under the auspices of an IMF program. Tariff and non-tariff barriers were reduced, together with an easing of the restrictions on foreign investment. However, in recent years Indonesia has gradually raised import tariff rates. Between 2000 and 2017, Indonesia raised its average import tariff rate by 1.3 percentage points.

2.2 Indonesia has joined regional trade agreements

At the same time as it has been reducing protectionist barriers, Indonesia has become increasingly integrated with the global economy through participation in global, regional and bilateral trade agreements. Indonesia has also become more prominent on the global stage, in particular through its membership in the Group of 20 (G20) major economies.

Indonesia has been an active member of the **World Trade Organisation** (WTO) since 1995. With almost half the population employed in the rural sector, Indonesia supported the failed Doha Round of trade negotiations, hoping for reductions in agricultural protection by advanced economies. However, Indonesia also argued that "special and differential treatment" provisions must be at the heart of a negotiated agreement. This refers to provisions in WTO agreements that give developing countries special rights, such as a slower tariff reduction schedule.

The process of regional integration has seen the **Association of South-East Asian Nations (ASEAN) emerge as the most important regional organisation**. Formed in 1967 by Indonesia, Malaysia, the Philippines, Singapore and Thailand, ASEAN has since expanded membership to include Brunei, Burma, Cambodia, Laos and Vietnam. The ASEAN Free Trade Area (AFTA) agreement, signed in 1992, aims to reduce tariff and non-tariff barriers within the region. It uses a Common Effective Preferential Tariff scheme, where tariffs are less than 5 per cent for goods originating among member economies. In 2007, ASEAN leaders adopted a blueprint for the creation of the ASEAN Economic Community (AEC), intended to create a single market of around 600 million people, allowing the free flow of goods, services, capital and labour. The vision for the AEC is to enhance the attractiveness of South-East Asia as a foreign investment destination and improve the level of regional integration. While the initial plan was to establish the AEC by 2015, this was revised under the AEC Blueprint 2025, which gives members another decade to pursue the reforms and initiatives needed to achieve the vision of a highly integrated, cohesive and competitive economic region.

Indonesia is also a party to a number of other trade agreements through the ASEAN Plus Three framework. ASEAN has concluded free trade agreements with China, South Korea, Japan, India, Australia and New Zealand. Indonesia is also a member of the Asia-Pacific Economic Cooperation (APEC) forum, which has aimed to advance regional and global trade and investment liberalisation. Indonesia is also pursuing other regional trade opportunities, including the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP).

The Indonesia-Australia Comprehensive Economic Partnership Agreement was signed in March 2019, reflecting the growing significance of economic relations between the two countries. Under this agreement, almost all import tariffs in both countries are reduced or eliminated, effective from 2020. Australian primary industry exports such as frozen beef and sheep meat will be processed quicker at the border, reducing "red tape" barriers to free trade.

Indonesia also has a comprehensive bilateral trade agreement with Japan that took effect in 2008. Japan accounts for 11 per cent of Indonesia's exports and is Indonesia's largest single export destination. Indonesia is also currently negotiating trade agreements with the EU, EFTA (European Free Trade Area), South Korea, India, Chile, Turkey, Mozambique, Tunisia and Morocco. Figure 7 outlines Indonesia's trade agreements.

FIGURE 7 – INDONESIA'S TRADE AGREEMENTS

Global	Regional	Bilateral
Founding member of the World Trade Organisation (1995)	• ASEAN Free Trade Agreement (1992) • Asia-Pacific Economic Cooperation forum	Japan (2008) Australia (2019) Pakistan (2012)

2.3 Changes in trade in goods and services

Trade liberalisation has improved Indonesia's access to overseas export markets and led to stronger economic growth. Exports of goods and services have grown at an average annual rate of over 6 per cent since 1985. Nevertheless, in recent years the contribution of trade to Indonesia's economy (as measured by percentage

of GDP) has significantly fallen. In 2020, trade in goods and services was equal to around 43 per cent of Indonesia's GDP. Prior to the global financial crisis, this figure was above 50 per cent of GDP. A major reason for the declining contribution of trade is that Indonesia still relies on a **relatively narrow base of commodity exports**.

The importance of trade to the Indonesian economy is lower than the regional average for East Asian economies (58 per cent). This means that Indonesia is less integrated through international trade than other East Asian economies. It also means that, through trade linkages at least, Indonesia is less exposed to the international business cycle than some other economies. Also, with around three-quarters of its trade being with other Asian economies, Indonesia is most closely integrated at a regional level with economies such as Japan, China, Singapore, Malaysia and Korea.

FIGURE 8 – INDONESIAN EXPORTS



Since the mid-1990s, Indonesia's export base has shifted back towards food and fuels, with manufactured exports falling as a share of trade. High-technology exports contribute less than 5 per cent of Indonesia's total export revenues. Unlike many other economies in the region, Indonesia has not emerged as a major low-cost manufacturer for global markets, relying instead on its commodity exports. In part, this reflects the fact that some commodity prices have remained strong. However, it also highlights Indonesia's need to do more in coming years to develop sustainable exporting industries. Service exports, particularly tourism, represent an area of potential growth for Indonesia. Despite the economic reforms of recent decades, in 2019, Indonesia's main exports were oil and gas, electrical appliances, plywood, textiles and rubber.

2.4 Barriers to finance and investment have also been liberalised

Indonesia has reduced barriers to financial and investment flows during the globalisation era to encourage economic growth and development. From the mid-1980s, Indonesia pursued tax reforms, deregulation of industry sectors, and the removal of restrictions on foreign ownership. While previous decades saw FDI flow mainly to the oil and mining sectors, in the 1990s Indonesia saw an increased flow of investment into manufacturing.

Insufficient domestic private investment means that FDI plays an important role in Indonesia's economy. FDI has been steadily increasing in Indonesia and was US$28 billion in 2019. However, FDI inflows (as a share of GDP) are lower than in comparable economies. Instability in government policy settings relating to foreign investment is blamed as one factor contributing to lower FDI flows.

Encouraging FDI, along with continuing to reduce trade barriers, is important to ensure Indonesia can secure export-led development. Figure 9 sets out some key features of foreign investment and integration of Indonesia with the global economy.

In recent years, China has become an important source of FDI for Indonesia. This reflects China's growth and the importance of the Belt and Road Initiative (BRI). The BRI is a Chinese Government program that loans money for infrastructure in developing economies. Around 60 countries, representing almost two-thirds of the world's population, have signed on to BRI initiatives. The BRI has made China the largest source of FDI in Indonesia, with 1562 individual projects valued at US$2.3 billion.

FIGURE 9 – FOREIGN DIRECT INVESTMENT IN INDONESIA

Trends	FDI inflows were US$28.2 billion in 2019. FDI was lower in 2019 than the previous year. Although the Government has stated this was a one-off and it will increase in 2020, this is unlikely given that FDI comes from many nations heavily impacted by COVID-19.
FDI source country (2019)	Singapore (23%); China (17%); Japan (16%); Hong Kong (10%); Netherlands (9%); Others (25%)
Destination region within Indonesia	East Java (21%); Special Territory of Jakarta (15%); Central Java (10%); Banten (7%); Central Sulawesi (6%); Others (42%)
Destination sector (2019)	Electricity, gas and water supply (21%); Transport, warehouse and telecommunication (17%); Metal and equipment (13%); Housing, industrial estate and office building (10%); Mining (8%): Chemical and pharmaceutical industry (5%); Food industry (5%)
TNCs in Indonesia	• About 170 pharmaceutical companies operate in Indonesia • Commodity sector attracts TNCs like ExxonMobil • L'Oréal and Toyota have manufacturing facilities in Indonesia
Benefits of FDI	• More investment when domestic savings are low • Employment in production and management • New technologies and business processes • Links to export markets and international supply chains
Risks of FDI	• Exchange rate and financial market volatility • Structure of FDI may limit technology and training benefits for local economy • Environmental sustainability of FDI in natural resource sector
Drivers of FDI	• Large endowment of natural resources • Large consumer market • Relatively low labour costs
Constraints on FDI	• Inadequate transport and energy infrastructure • Inadequately trained staff • Complicated regulations • Exchange rate volatility undermines investor confidence • Economically disconnected regions

Source: BKPM – Indonesia Investment Coordinating Board
Note: Numbers do not add to 100 due to rounding.

Financial markets have also been liberalised in recent decades to encourage economic growth, beginning with the shift in Indonesia from a fixed exchange rate to a managed float in 1978. The currency, the Indonesian rupiah, was devalued during the 1980s as a deliberate strategy to improve the competitiveness of exports. The managed float was abandoned during the Asian financial crisis in August 1997, and currency was allowed to float freely because the central bank's attempts to stabilise the currency were unsuccessful. The rupiah suffered a massive depreciation, causing major turmoil in financial markets and the economy.

Currency volatility is a continuing problem in Indonesia, with major shifts in the rupiah caused more by global factors than domestic factors. To reduce instability (and encourage longer-term foreign investment), the Indonesian Central Bank has strengthened capital controls in financial markets – with investors in government bonds required to hold them for a minimum of six months, slowing the pace of any "capital flight". IMF research has found currency volatility reduces private sector investment – for every 1 per cent increase in volatility, there is reduction in investment of almost 0.2 per cent.

2.5 Foreign aid and assistance have supported economic development

Economic development in Indonesia has been supported by foreign aid and assistance. In addition, the World Bank funds many active projects in Indonesia with a cumulative lending value of US$7 billion. These programs have targeted community empowerment, government administration, energy and infrastructure development. Australia allocated $298.5 million in aid to Indonesia in 2019–20.

3. Recent developments in economic policy

Indonesian economic policy has evolved gradually in recent years, with governments aiming to achieve macroeconomic stability, promote economic development, attract foreign capital and increase social expenditure.

The conduct of **monetary policy** is led by Indonesia's Central Bank, **Bank Indonesia**, which has been independent from the government since 1999 and has had a medium-term inflation target of 4 to 6 per cent since 2005. During the 2010s, the main central bank interest rate moved within a band between 4 and 8 per cent. Monetary policy was loosened throughout 2016 and 2017, and after increasing rates in 2018, Bank Indonesia began reducing rates again in 2019, to support economic growth in a period of weak global growth.

President Joko Widodo was re-elected in 2019, after a five-year term focusing on reducing inefficient spending, lifting tax collections and investing in infrastructure development and social programs. However, policy change has been constrained by the fact that growth has fallen short of the 7 per cent annual growth rates needed to achieve the longer-term objectives of Indonesia being a top 10 and middle-income economy by 2025.

FUEL SUBSIDIES



A continuing drain on Indonesia's public resources for many years was the large government expenditure on fuel subsidies, which have been larger than all central government social and capital spending combined. At their peak, fuel subsidies accounted for 20 per cent of Government spending. Petrol prices have previously caused political turmoil, forcing a reversal of subsidy cuts in 2008 and 2011. In early 2015, the President announced a plan to gradually abolish petrol subsidies and drastically reduce diesel subsidies, and Indonesia has joined many international forums that have sought to reduce fossil fuel subsidies. However, in 2018 the program was partially reinstated in response to commodity prices. The fuel subsidies policy underscores the failure of the government to use fiscal policy to improve socio-economic outcomes. Fuel subsidies mainly benefited the middle class, with the poorest 10 per cent of households receiving just 2 per cent of fuel spending.

Fiscal discipline has played an important role in maintaining the confidence of international investors and in providing macroeconomic stability. During the 1990s, the Government achieved budget surpluses, using those surpluses to retire government debt. In the past two decades, the Government has been successful in restraining spending. Government debt has fallen from 87 per cent of GDP in 2000 to just under 30 per cent of GDP in 2019. The government achieved sustainable fiscal settings through increasing total revenues (by 14.6 per cent) and reducing energy subsidies.

The Indonesian Government implemented a major fiscal policy response to COVID-19. The budget deficit was expected to reach 5.1 per cent of GDP as a result, above the government's self-imposed ceiling of 3 per cent. Total spending due to COVID-19 is expected to be US$28 billion, split mainly into the following areas:

- Healthcare spending (US$5 billion), which includes purchase of medical equipment and incentives for medical workers.

- Social Protection (US$8 billion), which includes food support programs for up to 20 million families, extending the pre-employment card program for around 5.6 million impacted workers, free electricity for around 30 million customers, supporting low-cost housing and providing other support needs.
- Tax incentive and credit for business (US$5 billion), which includes offering income tax exemptions, deferring import tax and debt payments and reducing corporate tax from 25 per cent to 22 per cent.
- Economy recovery program (US$11 billion), which is focused on providing credit restructuring and financing for small and medium businesses.

Bank Indonesia complemented the fiscal strategy with monetary policy support, through quantitative easing, macroprudential policy relaxation and acceleration of the digital payment system. The Indonesian Government also implemented a number of non-fiscal measures, including reducing and simplifying import restrictions, relaxation of credit scoring and loan restructuring requirements, and a ban on the export of medical equipment.

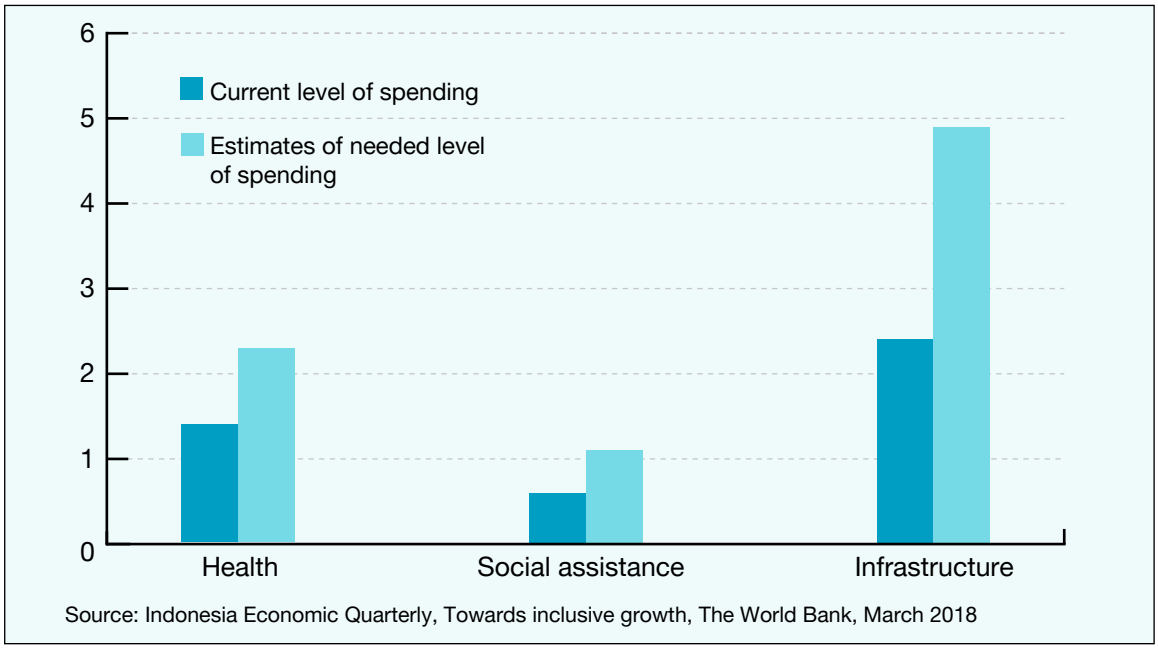
A key constraint on the sustainability of Indonesia's fiscal policy is the narrowness of the tax base. Indonesia's ratio of tax revenues to GDP is low compared to similar economies and has been declining since 2013. This is due to economic and governance factors. Indonesia's tax revenues are heavily linked to the cyclical commodities sector. There are many gaps in the tax collection system, and a large number of exemptions in the tax system. Some improvements have nevertheless been experienced since President Widodo came to power, with 2018 revenues showing growth of 23 per cent (in nominal terms), which is the fastest rate in 10 years. This reflected tax reforms (particularly relating to tobacco) and increased compliance, as well as higher commodity prices. Measures to improve tax compliance include a tax amnesty (which allows the declaration of previously untaxed assets), the simplification of compliance processes for taxpayers, and more effective use of banking data. However, over-reliance on commodity prices to drive revenue remains a critical problem. In 2019, revenue growth was just 1.7 per cent in part due to weak commodity prices.

One of the weaknesses of current policy settings is that the tax and transfer payment system makes no overall difference to the level of inequality. Fiscal policy's failure to promote inclusive growth reflects low-quality spending in infrastructure, education and health. The Indonesian Government has identified the need to substantially increase spending across these areas. The 2018 Macroeconomic and Fiscal Policy Framework committed to spending more funds more efficiently on a range of education, welfare and child-care initiatives. Key social spending policies include the Family Hope Program (PKH) to alleviate poverty and economic inequality and the subsidised health insurance policy (PBI-JKN).

The Indonesian Government has also recognised the need to invest in infrastructure, evidenced through the development of its National Medium-Term Development Plan (RPJMN). Under the RPJMN, the Government committed to spending around US$83 billion on infrastructure between 2015 and 2019, focusing on transport (including roads, rail and airports), electricity, water and sanitation. Between 2014 and 2018, infrastructure spending grew 22 per cent a year on average. However, Indonesia still has a large infrastructure deficit and it is unlikely to be dealt with soon as projected growth in infrastructure spending was just 1.1 per cent in 2019. Private investment will need to play a role too, but it has been hampered by regulatory issues, inadequate planning and issues in securing finance. The Government has established a Public Private Partnership Unit within the Ministry of Finance to facilitate faster project approval and delivery and has made steps to reduce regulatory burdens. International assistance can also help address infrastructure needs, such as through the recent US$125 million loan from the World Bank for the upgrade of more than 140 dams throughout the country.

Indonesia's expenditure on education and health care is inadequate for population needs. Education spending is around 3 per cent of GDP, despite a commitment that 20 per cent of government expenditure should be spent on education. Inadequate investment in education contributes to Indonesia's high rate of youth unemployment, which at 20 per cent is six times higher than for other age groups. Educational outcomes are also poor, with around 55 per cent of Indonesians completing education functionally illiterate. The Government has expanded its Program Indonesia Pintar (PIP) policy, which provides a

FIGURE 10 – INDONESIAN SPENDING ON INFRASTRUCTURE, HEALTH AND SOCIAL ASSISTANCE



Source: Indonesia Economic Quarterly, Towards inclusive growth, The World Bank, March 2018

cash subsidy for school-age children in poor households. However, the PIP does not rise when education costs rise in secondary years (a time when many students drop out of schooling) and it is more expensive than necessary, because around 36 per cent of people from non-poor backgrounds also receive the PIP.

Public spending on health programs is below 1.5 per cent of GDP, lower than in most South-East Asian economies, such as the Philippines or Cambodia. Improved health outcomes have been achieved since the introduction of a universal health insurance program in 2014, the *Jaminan Kesehatan Nasional* (JKN). The cost of JKN for individuals depends on their ability to contribute, with the poorest households having no requirement to contribute. Around 218 million Indonesians participate in the scheme, with the Government targeting all 268 million Indonesians to participate.

Indonesia has made several reforms to attract foreign investment and international trade to drive growth. In 2018, the Government relaxed foreign investment restrictions for energy, technology, media and telecommunications, health care, manufacturing and transport industries. In the technology industry, overseas companies (such as Amazon) are now permitted to provide online retail services without partnering with an Indonesian company. Yet at the same time, President Widodo has championed "economic independence", which could mean that Indonesia is less open to globalisation in the years ahead. Indonesia has increased the use of non-tariff measures on goods and service imports, such as onerous product-quality conformity requirements. For services, Indonesia has restrictions for many industries such as legal services and retail distribution. These measures increase costs for consumers and businesses and reduce Indonesia's links with the global economy.

A consistent hurdle for reforming the Indonesian economy is the organised resistance from established interest groups whose power and wealth have been threatened by the removal of regulations that advantaged them. In previous decades, parts of the Indonesian economy suffered from "crony capitalism", where economic policies were set up for the benefit of corrupt officials and relatives of important political leaders. Recent years have seen a shift in Indonesia towards a more decentralised state, with large areas of public expenditure and services being transferred from the central government to the nation's 440 local governments. Significant reforms are still required for the legal system to improve corporate practices, with the World Bank ranking Indonesia 73 out of 190 countries for ease of doing business in 2019.

4. Conclusion: Is Indonesia a globalisation success story?

Indonesia provides a complex picture of globalisation. Since the 1980s, Indonesia has progressively liberalised trade, investment and financial flows. Global and regional integration have delivered Indonesia substantial benefits and have allowed for progress towards reducing poverty. At the same time, the case study of Indonesia highlights the importance of good governance of markets and finance. The severity of the Asian financial crisis in the late 1990s resulted in lasting reforms and improved governance. Yet managing the Indonesian economy is difficult, with its huge population, diverse range of cultures and a population scattered across 6000 inhabited islands. Indonesia's experience highlights that globalisation is not an economic "silver bullet" and countries still need to build competitive industries, reform their economies and undertake major investment in education, health and infrastructure to achieve economic development.

Despite sustaining growth rates above 5 per cent in recent decades, Indonesia is faced with a number of challenges. In the short term, it faces the enormous challenge of containing the COVID-19 pandemic, while also trying to engineer an economic recovery. It must also manage the volatility associated with greater financial inflows. While the government cannot ensure the stability of the currency, it can contribute to investor confidence. In the long term, a key economic challenge will be reorientating government spending towards efficient spending on education and infrastructure, improving coordination between the national and local governments and attracting more foreign investment that can diversify the Indonesian economic base. Stronger economic growth is needed to reduce the incidence of poverty and improve quality of life. Indonesia aims to mark its 100 year anniversary of independence in 2045 by achieving high income status and reducing poverty to zero. This is an ambitious goal, and will require the Government to continue to provide a strong policy framework and support the development of human capital.

TOPIC 2

AUSTRALIA'S PLACE IN THE GLOBAL ECONOMY

Focus

The focus of this topic is an examination of Australia's place in the global economy and the effect of changes in the global economy on Australia.

Issues

By the end of Topic 2, you will be able to examine the following economic issues:

- Assess the impact of recent changes in the global economy on Australia's trade and financial flows
- Examine the effects of changes in trade and financial flows on Australia's economic performance
- Analyse the effects of changes in the value of the Australian dollar on the Australian economy
- Discuss the impact of free trade and protection policies on the quality of life in Australia
- Propose likely changes to the structure of industry within Australia as a result of current trends in the global economy

Skills

Topic 2 skills questions can ask you to:

- Calculate the main components of Australia's balance of payments
- Analyse the relationship between the balance of the capital and financial account and the net income balance
- Explain the relationship between the current account balance and the balance of the capital and financial account
- Use supply and demand diagrams to explain how the value of a currency is determined under different exchange rate systems
- Analyse the impact of changes in the components of the balance of payments on the value of the Australian dollar

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Topic 2

Introduction

Australia is a big country in terms of its physical size, yet its economy is relatively small compared to the rest of the world. As economies throughout the world become more integrated, Australia's economy is increasingly affected by developments in the global economy. Global economic forces have changed the Australian economy and the lives of Australians dramatically in recent years, and these changes will accelerate as globalisation continues.

Chapters 1 to 3 covered Year 12 Topic 1 – *The Global Economy* and reviewed some of the main features of the global economy. It was noted that economies have become far more integrated in recent years because of flows of trade, finance, investment, technology and labour. International institutions have become more important as economies have become more closely linked to each other. There has been significant progress in recent years to remove trade barriers between nations. Yet with the increasing integration of the global economy, there remains an extraordinary gap in wealth between rich and poor nations.

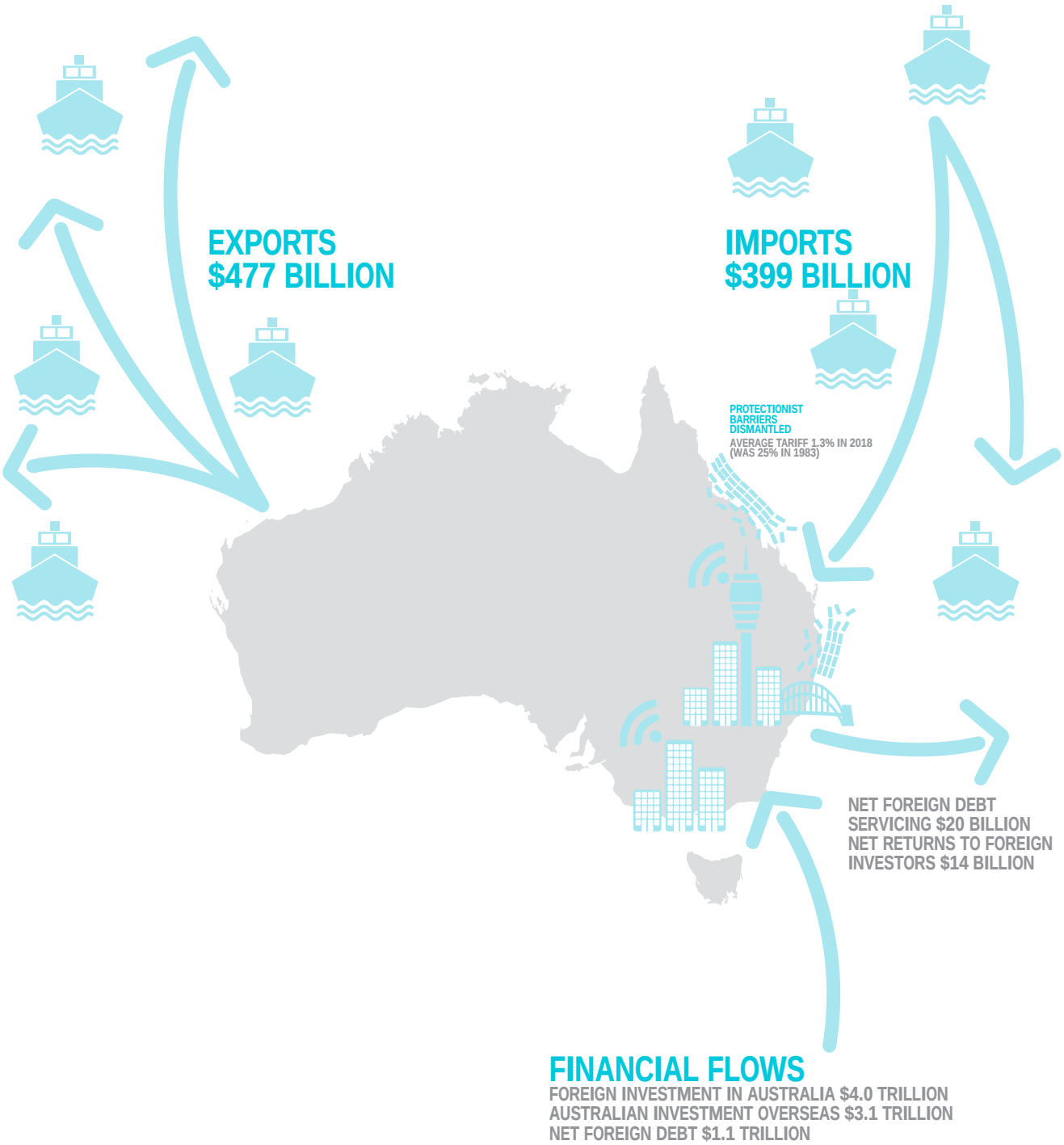
This topic – *Australia's Place in the Global Economy* – will focus on examining where Australia fits into the global economy and the impact of changes in the global economy on Australia's internal and external stability.

Chapter 4 outlines Australia's trade and financial flows. It looks at how Australia's trade patterns have changed over time, and how Australia's trading partners have also changed. Chapter 4 also examines the key topic of the balance of payments. The balance of payments tracks Australia's trade and financial relationships with the global economy. Chapter 4 sets out the structure of the current account and the capital and financial account, along with links between key balance of payments categories. This chapter also analyses recent trends in the size and composition of Australia's balance of payments.

Chapter 5 explains the role that Australia's exchange rate system plays in Australia's relationship with the global economy. It gives an overview of how exchange rates are determined, and looks at the influences on the demand for and supply of Australian dollars. This chapter also examines the role of government policy in influencing the exchange rate, and the effects that exchange rates can have on other economic outcomes.

Chapter 6 examines free trade and protection with a particular focus on Australia's trade and protection policies, which have changed significantly in the past three decades. These changes have had impacts for many participants in the economy. The chapter concludes with a look at the implications for Australia of the free trade and protectionist policies of other countries and international organisations and the future of Australian industry in the global economy.

AUSTRALIA'S PLACE IN THE GLOBAL ECONOMY



SOURCE ABS cat. no. 5302.0 Table 10, 11, 16, 29, 30

4 Australia's Trade and Financial Flows

4.1 Understanding Australia's place in the global economy

4.2 Trends in Australia's trade patterns

4.3 Trends in Australia's financial flows

4.4 The balance of payments

4.5 Trends in Australia's balance of payments

4.6 The consequences of a high CAD

4.1 Understanding Australia's place in the global economy

In the first section of this book we examined the key features of the global economy, including the trends towards greater integration among countries, trade and financial linkages, trade policies, important global institutions, and the income gap between advanced and developing economies. In this section, the focus is on where the Australian economy fits into the global economy and in particular the nature of Australia's trade and financial links with the rest of the world.

By global standards, Australia is large in some respects and small in others. On size alone, the Australian economy ranks fourteenth in the world – placing it in the middle ranks of advanced economies, around the same size as Spain. This means that the Australian economy is larger than almost 200 other countries, but if it is compared to the giants of the world economy, such as the United States, the EU, China or Japan, then it is relatively small. Another way to compare Australia with other countries is to look at standards of living. In 2019, Australia was ranked sixth in the world in terms of quality of life, according to the United Nations' **Human Development Index**. This demonstrates that Australia has a very high level of economic development.

Measures of the size of the economy and living standards only provide a snapshot comparison between economies. To really understand the **impacts of changes in the global economy on the Australian economy**, we must understand the linkages between Australia and the global economy. This requires an analysis of Australia's trade patterns and trade policies, Australia's financial relationships with overseas countries, and the influence of the exchange rate on the **structure and performance of the Australian economy**.

4.2 Trends in Australia's trade patterns

Despite Australia's geographic isolation from the rest of the world, trade has always represented a high proportion of Australia's economic activity. In part, this is because there

have always been overseas markets for Australia's primary commodities, such as minerals and agricultural products, and because Australia's level of development has made it an exporter of services such as tourism and education. It is also partly because Australia has needed to trade in order to obtain new technology and goods that are not produced in Australia because of its relatively small population.

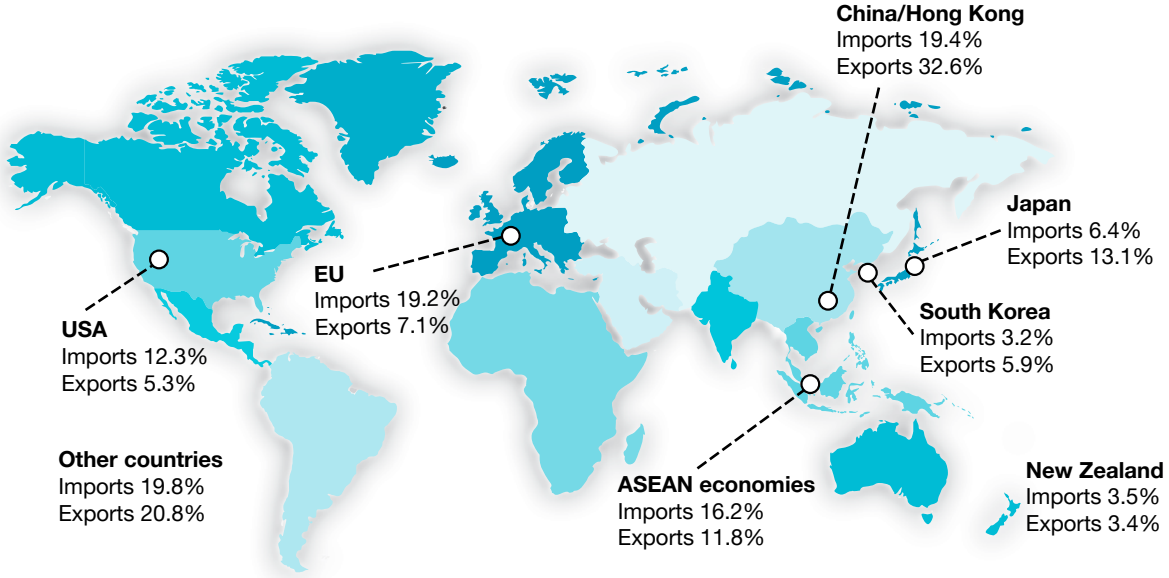
In the context of the global economy, Australia is sometimes referred to as a small, open economy. The Australian economy makes up only a small proportion of the global economy, producing around two per cent of the Gross World Product. However, trade is central to the Australian economy. We export almost one-quarter of what we produce, and we import the equivalent of almost one-quarter of gross domestic product. As a result, although the Australian economy does not have much influence on developments in the global economy, world economic developments can have a very significant impact on Australia.

The changing direction of trade

The direction of Australia's trade has changed considerably over recent decades. China has become Australia's dominant trading partner in the past decade, while South Korea and ASEAN countries have also become more important. Meanwhile, the key export markets for Australia in previous decades – Japan, the United Kingdom and Europe – have declined in importance. Figure 4.1 illustrates the importance of each of these regions to Australia's merchandise trade (which includes trade in physical goods but not trade in services).

There was an historic shift in the direction of Australian trade after the United Kingdom joined the European Economic Community (EEC) trading bloc, now known as the European Union (EU), in 1973. The United Kingdom had been Australia's major trading partner prior to this period, reflecting the historic ties going back to when Australia was a colony of Britain. Once the United Kingdom joined the European trading bloc, it was required to impose the same barriers to trade with Australia as with other countries, in effect giving a preference to trade from European countries. Australia soon lost many of its traditional export markets for agricultural products in the United Kingdom.

As Australian exporters found it increasingly difficult to gain access to European markets, there was a shift in the focus of exporters to other areas, particularly the North-East Asian and ASEAN countries, for trade opportunities. By the 1960s, the Japanese economy was



Source: Department of Foreign Affairs and Trade, Composition of Trade Australia 2018–19, goods and services

Figure 4.1 – Australia's major trading partners

sustaining rapid economic growth and its demand for production inputs such as minerals and energy products was increasing rapidly. Australia responded to this opportunity and Japan became our largest export market. Japan's share of Australia's trade began declining around 1990 and has continued to shrink since then, reflecting both Japan's weak growth and Australia's increased focus on other markets in the region.

In the early 2000s exports to China began a sustained period of rapid growth which since 2007 has made China **Australia's largest trading partner** (calculated by adding imports and exports together). This reflects both China's increasing dominance in the global economy and Australia's position as a major world commodity supplier. China is Australia's dominant export market, overshadowing all other countries. China makes up a larger share of exports than the sum of our second-, third- and fourth-largest export markets: Japan, the ASEAN and the EU. In 2019, China accounted for more than one-third of Australia's export earnings from merchandise trade, and as figure 4.2 shows, the growth in exports to China since 2000 has been extraordinary, with annual exports to China exceeding $100 billion since 2017.

The 2020s are likely to see ongoing shifts in the direction of Australian trade towards other rapidly growing Asian economies. While the COVID-19 recession has sharply altered the trajectory of global trade for the immediate future, Asian economies are expected to make up a larger proportion of world trade in the 2020s. While trade with North Asia will still account for Australia's largest trading relationships, with China and Japan remaining our top two trading partners, Australia is also likely to experience growth in markets in South-East Asia and South Asia, most notably in India, which is now a larger export market for Australia than the United States.

Figure 4.2 shows that the trends in the direction of Australia's exports and imports differ. Although Australia does not sell a high proportion of its output to other advanced economies, it still buys a substantial amount from these economies, in particular Europe and the United States. This reflects the importance of imports from these countries, both for capital equipment and for many consumer items. China and ASEAN economies are also large sources of imports, reflecting Australia's demand for manufactured imports that these economies specialise in producing. China's share of Australian imports has grown dramatically in the past three decades, and in 2016 China became our largest source of imports.

Country/region	Annual exports (%)							Annual imports (%)						
	1990	2000	2010	2015	2017	2018	2019	1990	2000	2010	2015	2017	2018	2019
China/Hong Kong	5.8	8.0	24.3	30.6	33.9	37.4	36.1	4.4	8.1	16.0	18.6	18.9	23.0	24.5
Japan	26.5	17.5	16.2	13.4	12.2	15.6	15.8	15.6	11.2	7.4	6.4	6.5	7.4	7.0
ASEAN	12.6	13.9	10.4	12.2	11.6	10.5	11.1	7.0	14.0	18.3	16.3	15.9	15.7	16.0
European Union	16.9	13.6	9.5	7.4	7.5	5.8	5.5	26.1	21.9	19.2	18.7	19.0	17.9	17.6
South Korea	5.3	6.8	7.9	6.3	8.5	6.8	6.9	1.9	3.3	2.8	4.5	6.0	9.2	3.9
United States	13.1	11.5	5.1	7.0	5.4	3.9	3.9	23.4	19.8	12.8	13.6	12.6	10.5	10.6
New Zealand	6.5	6.4	3.9	4.0	3.6	3.0	2.7	4.4	4.0	3.6	3.2	3.6	2.6	2.5
Other countries	13.4	22.3	22.7	19.1	19.7	16.9	18.0	17.2	17.7	19.9	18.7	15.0	13.6	17.9

Source: Department of Foreign Affairs and Trade, Composition of Trade Australia 2018–19, goods and services
Note that DFAT data differs from ABS data due to a number of statistical adjustments

Figure 4.2 – Australia's direction of merchandise trade by country and region

The changing composition of Australia's trade

Primary industries have always been the main focus of Australian exports, as Australia has a comparative advantage in commodities due to its vast natural resources. Australia has exported high volumes of agricultural products such as wheat, wool and beef, and

minerals such as coal, iron ore, gold and alumina. Together, agricultural and mineral exports account for two-thirds of Australia's export earnings. Australia has been less competitive in manufacturing. While other advanced economies generally developed substantial manufacturing industries in the second half of the twentieth century, Australia has continued to rely on its primary exports while importing large quantities of capital goods and manufactured consumer goods.

Australia has experienced significant changes in the composition of its export base. In 2019–20, Australia's total exports increased from $403 billion to $470 billion. Of these, metal ores and minerals (particularly iron ore) were Australia's largest single goods export category (valued at $132 billion, up from $110 billion in 2018-19), followed by the fast-growing LNG sector and other mineral fuels (worth $59 billion, double their value just three years before) and then coal (worth $55 billion, down from $70 billion in 2018–19). The largest services export was tourism (with travel earnings of $58 billion, down $63 billion in 2018–19 and reflecting the impact of the COVID-19 travel restrictions in the final quarter of the financial year). Agriculture contributed $47 billion in export earnings, just below its level in 2018-19, and reflecting its trend of growing at a much slower rate than minerals and metals. Figure 4.3 highlights some significant changes in the composition of Australia's exports. While agriculture and manufacturing have declined in relative importance as export earners, exports of minerals and metals have increased in relative importance, reflecting the impact of the global commodities boom in the past two decades.

Several factors have contributed to the decline of agricultural exports as a proportion of Australia's trade over recent decades. Large fluctuations in world prices as well as the trade protection policies of other countries have influenced the export revenue from agricultural commodities. In addition, most agricultural trade involves commodity items to which little extra value is added in processing, unlike other areas of world trade, such as elaborately transformed manufactures, which are high in added value. More recently, weather patterns have become more extreme, thereby reducing the output and productivity of the agricultural sector.

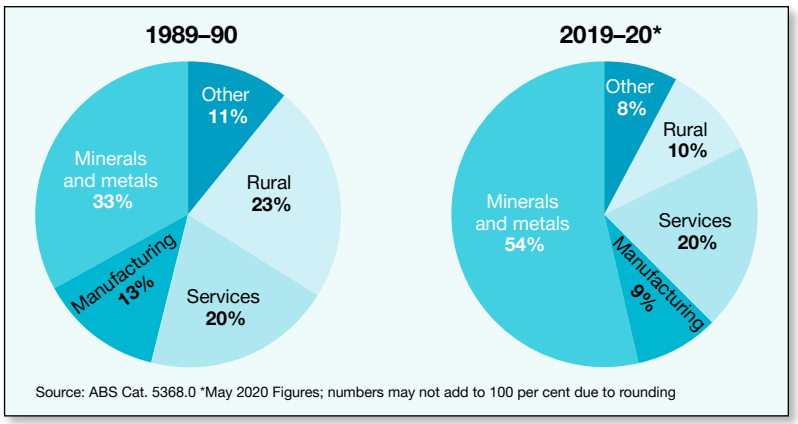


Figure 4.3 – Australia's composition of exports

Manufactured goods make up only a small share of exports but are at a low level compared with most advanced economies, and their share fell during the era of the mining boom. While Australia does not compete well in the manufacture of high-volume, low-cost products, its sales of sophisticated, niche-market-manufactured goods picked up in the 1990s. But since the mining boom increased the value of the Australian dollar, Australian manufacturing exporters have encountered more difficult conditions, alongside increased competition from goods manufactured in China and other low-cost economies in Asia.

The global resources boom stirred debate about whether Australia can continue to rely so heavily on exports of commodity items. Some economists argue that the prospects for high commodity prices are positive in the medium to longer term because of the rapid growth of China, India and other developing economies. However, others point to the

risks of Australia being too reliant on commodity exports and one major export market (China), especially given the tensions between the Chinese and Australian governments. Australia's resource exporters have experienced considerable volatility in the past two decades, although commodity prices have since the early 2000s remained well above historic averages. There are specific risks in Australia's reliance on global demand for coal, which is likely to fall as demand continues to shift to energy sources with lower carbon emissions.

Australia's best long-term alternative to relying too heavily on mineral and energy exports is to diversify exports towards goods and services demanded by the growing population of middle-class consumers across Asia. Services exports hold the greatest potential for growth over the medium to longer term. Australia has sophisticated service industries and a highly skilled workforce, nearly three-quarters of which is employed in service industries. In recent decades, Australia has grown substantial export markets for education services, financial services, insurance and tourism, as well as smaller markets for transport, health and communications services. However, the COVID-19 pandemic had a devastating impact on service exports (in particular, tourism), with recovery dependent on the widespread availability of effective vaccines and treatment. In the meantime, economists expect that Australia will continue to rely heavily on its resource exports (notably iron ore) whose prices proved resilient during the early stages of the global downturn.

Year	Capital goods (%)	Consumer goods (%)	Intermediate goods (%)	Services (%)
1981–82	16.5	14.4	39.7	23.3
2001–02	17.4	24.1	35.0	22.1
2011–12	20.8	22.3	33.7	21.3
2012–13	19.5	22.9	33.2	22.8
2013–14	18.0	23.7	33.8	23.2
2014–15	18.3	24.6	32.8	23.1
2015–16	17.9	26.8	30.0	24.0
2016–17	18.6	26.9	29.3	23.5
2017–18	18.6	25.9	30.3	23.6
2018–19	18.6	24.8	31.5	23.8
2019–20	18.4	27.9	31.8	22.2
Source: ABS cat. no. 5368.0, Table 2				

Figure 4.4 – Australia's composition of imports

Figure 4.4 illustrates trends in the composition of Australia's **imports** as a percentage of total import expenditure. During this time, the composition of Australia's imports has changed moderately. The share of capital goods has remained largely unchanged at around one-fifth of imports. Part-finished intermediate goods and services imports have both fallen slightly. Consumer goods as a proportion of imports have increased. These changes can be explained by the shift away from large-scale manufacturing in Australia, especially with the gradual reduction of tariffs and local content rules. In 2019–20, Australia's total imports were valued at $399 billion. Intermediate goods accounted for $120 billion, followed by consumption goods ($97 billion) and capital goods ($77 billion).

reviewquestions

1. Identify the key changes in the direction and composition of Australia's trade over recent decades.
2. Discuss whether Australia's reliance on commodity exports is beneficial or harmful for the Australian economy.

4.3 Trends in Australia's financial flows

While Australia's trade flows have increased substantially over recent years, the rate of growth in financial flows has been much greater, as international businesses have bought Australian assets and invested in Australian businesses, and as Australian companies have increased their overseas investments.

International financial flows were less important in the post-war economic boom of the 1950s to the early 1970s while exchange rates remained fixed and international capital markets remained largely closed. However, during the early 1970s the international system of fixed exchange rates (known as the Bretton Woods system) came to an end. Exchange rates around the world were floated and restrictions on the movement of capital across national borders were removed. Financial flows began growing rapidly as international capital markets opened up, exchange rates were floated, and technological changes made it easier to shift finance between countries. The level of foreign investment in Australia and investment overseas by Australians has doubled in the past decade, and has been rising rapidly since the 1980s.

Year	Foreign investment in Australia ($m)			Australian investment abroad ($m)		
	Direct	Portfolio	Total	Direct	Portfolio	Total
1990–91	106,636	145,942	**309,330**	44,715	22,702	**115,583**
1995–96	156,172	256,288	**482,952**	84,786	49,964	**204,281**
2000–01	253,467	475,407	**888,811**	218,371	150,145	**516,419**
2005–06	386,425	831,380	**1,456,020**	352,019	314,393	**918,882**
2010–11	557,150	1,190,110	**2,109,426**	458,567	498,911	**1,334,455**
2011–12	597,306	1,224,653	**2,212,528**	455,263	520,871	**1,402,969**
2012–13	647,040	1,331,448	**2,422,248**	508,666	643,093	**1,618,467**
2013–14	696,504	1,458,866	**2,643,010**	552,638	711,769	**1,787,753**
2014–15	798,631	1,604,245	**3,012,083**	638,104	850,013	**2,150,667**
2015–16	877,167	1,639,433	**3,264,828**	624,395	899,019	**2,270,579**
2016–17	926,527	1,695,917	**3,302,461**	679,559	975,800	**2,356,225**
2017–18	1,018,755	1,882,174	**3,605,780**	763,186	1,130,508	**2,621,701**
2018–19	1,078,706	1,961,860	**3,864,204**	826,103	1,245,569	**2,847,475**
2019–20	1,087,936	1,898,068	**3,980,251**	862,115	1,234,346	**3,069,660**

Source: ABS cat. no. 5302.0
Note that direct and portfolio investment differ from calculations of foreign debt and equity

Figure 4.5 – The changing pattern of Australia's financial flows

Figure 4.5 shows a change in the composition of financial flows between **direct investment** and **portfolio investment**. Direct investment includes the establishment of a new company, or the purchase of a substantial proportion of shares in an existing company (10 per cent or more). When a business undertakes direct investment, it is generally considered to be a longer term investment and the investor normally intends to play a role in the management of the business. This is different from portfolio investment, which includes loans, other forms of securities and smaller shareholdings in companies. Businesses and individuals that undertake portfolio investment generally do not intend to play a role in the running of the business.

Prior to the deregulation of the financial sector, most financial flows came into Australia in the form of direct investment. Governments preferred direct investment, because it brought the benefits of job creation and technology transfer. Portfolio investment was not as important, as the level of overseas purchase of shares was relatively small and, in an environment where financial markets were regulated, overseas loans were not common.

The removal of restrictions on financial flows changed this situation, as Australia saw the benefit of attracting the growing flows of finance into the economy, injecting money into Australian companies through loans and share purchases.

Following the deregulation of the financial sector and the floating of the Australian dollar in the 1980s, foreign investment inflows began to grow rapidly, a trend that has been sustained for the past four decades. The rate of growth of portfolio investment into Australia – the shorter-term and more speculative inflow – has been significantly faster than the growth in longer-term foreign direct investment. Similarly, Australian investment overseas is six times what it was in 2000 and the level of portfolio investment is significantly higher than the level of direct investment. Financial flows have grown at a faster rate than the growth in trade.

Another significant feature of the financial flows between Australia and the global economy is the imbalance between investment in Australia and Australian investment overseas. Australia has always been a **net capital importer**, with the level of foreign investment in Australia consistently remaining well above the level of Australian investment abroad. In part, this reflects the historically **low level of domestic savings** within Australia. For many years, Australia has relied on financial flows from overseas to make up for the shortfall between savings and investment in Australia, and this remains a feature of financial flows between Australia and the global economy today. However, it is important to note that these flows are not all one-way – even though there is a much higher level of foreign investment in Australia, with almost $4 trillion invested in the Australian economy in 2019–20, Australia had also invested around three quarters as much overseas ($3.1 trillion). Australian businesses have substantial overseas assets, and Australia also has significant shorter-term overseas investments such as overseas loans and shares on overseas stock markets. One reason for this is that as overseas capital markets have become more open to international investors, Australia's large superannuation funds have increasingly pursued investment opportunities overseas.

reviewquestions

1. Explain the difference between direct and portfolio investment flows.
2. Identify TWO factors that have influenced financial flows into and out of Australia in recent years.
3. Discuss the extent to which Australia's financial flows have been influenced by globalisation.

4.4 The balance of payments

Balance of payments is the record of the transactions between Australia and the rest of the world during a given period, consisting of the current account and the capital and financial account.

The **balance of payments** is the single most important economic indicator of the relationship between Australia and the global economy. The balance of payments summarises all transactions that Australia has with the rest of the world over a given period of time. It shows the trade and financial flows in and out of the Australian economy. All money that flows in is referred to as a **credit**, and all money that flows out is referred to as a **debit**. For example, if Australia exports goods to New Zealand, the money we receive for these exports is an inflow, and thus a credit on the balance of payments. On the other hand, if Australia imports goods from New Zealand, the money paid out for these imports is a debit. In these accounts, credit entries are considered positive transactions, while debit entries are negative (denoted with a minus sign).

The balance of payments figures are presented in two accounts – the **current account** and the **capital and financial account**. These accounts are compiled according to a

set of international accounting standards, which make it easier to compare Australia's balance of payments with other countries.

The current account

The **current account** shows the money flow from all exports and imports of goods and services, income flows and non-market transfers for a period of one year. In effect, the current account covers external transactions that are not reversible in the sense that once commenced, these transactions cannot be undone. Figure 4.6 shows a simplified current account for the Australian economy.

Current account is the part of the balance of payments that shows the receipts and payments for trade in goods and services, transfer payments and income flows between Australia and the rest of the world in a given time period. These are non-reversible transactions.

In order to analyse the information in this table, one must understand the meaning of the items that appear on the current account:

Net goods

This refers to the difference between what Australia receives for its exports and pays out for its imports of goods. There are three possible outcomes: Australia could be in balance (where export receipts equal import payments), Australia could have a surplus (where receipts exceed payments), or Australia could have a deficit (where payments exceed receipts). Figure 4.6 shows that net goods recorded a surplus of $70.5 billion in 2019–20.

Net services

This refers to services that are bought and sold without people receiving a "good" – for example, transport, travel, insurance charges, telephone calls or tourist accommodation. Services that Australia sells are an inflow of money and are shown as credits. Services that Australia buys are an outflow of money and are shown as debits. The net services surplus of $6.9 billion in figure 4.6 shows that the value of Australia's services exports is lower than the value of its services imports.

Balance on goods and services

The balance on goods and services (BOGS) is the amount that is derived by adding net goods and net services together. Figure 4.6 shows a surplus of $77.4 billion in 2019–20.

Net primary income

This refers to earnings on investments, that is, income that is earned as a return from a factor of production. It covers interest payments on borrowings and returns on other foreign investments, such as foreign-owned companies in Australia or foreign land ownership. When foreigners invest in Australia, income in the form of rent, profits, interest and dividends flows overseas. When Australians invest overseas, there is a flow of income back to Australia. Figure 4.6 shows a deficit in the net primary income account of $40.2 billion in 2019–20, detracting significantly from the large surplus on the BOGS.

Component	2018–19 ($bn)	2019–20 ($bn)
Goods		
Exports	373.3	382.6
Imports	–320.0	–312.1
Net goods	53.3	70.5
Services		
Service credits	97.4	94.0
Service debits	–101.7	–87.1
Net services	–4.3	6.9
Balance on goods and services	49.1	77.4
Primary income		
Credits	70.4	69.0
Debits	–132.7	–109.2
Net primary income	–62.3	–40.2
Secondary income		
Credits	10.0	9.9
Debits	–10.9	–11.3
Net secondary income	–0.9	–1.4
Balance on current account	–14.1	35.8

Source: ABS Cat. 5302.0

Figure 4.6 – Structure of the current account

Net secondary income

This refers to non-market transfers, that is, income that is not earned through a factor of production. These occur when products or financial resources are provided without a specific good or service being provided in return. This is a small and relatively technical account, which has little importance in the scope of the overall balance of payments. Net secondary income includes payouts on insurance claims, workers' remittances (for example, foreigners working in Australia and sending money overseas) and funds taken out of Australia in the form of unconditional aid to developing nations (such as funds given as a gift to a foreign government without a specified purpose). Pensions received by residents from foreign governments (which would be a credit on net secondary income) are also included.

Balance on current account

This refers to the addition of the BOGS, net primary income and net secondary income. Figure 4.6 shows that in 2019–20 the balance on the current account was a surplus of $35.8 billion.

The capital and financial account

Capital and financial account records the borrowing, lending, sales and purchases of assets between Australia and the rest of the world.

The other side of the balance of payments is the capital and financial account. This is concerned with financial assets and liabilities – the money flows that result from international borrowing, lending and purchases of assets such as shares and real estate for a period of one year. The major feature of the capital and financial account is that these transactions are reversible, in the sense that after the transactions occur, they can be undone in the future. For example, borrowings can be paid back, and assets that are bought can be sold again.

Figure 4.7 shows a simplified capital and financial account for the Australian economy. The main features of the capital and financial account are as follows:

Capital account

The **capital account** consists of two main components. The first item is capital transfers, mainly in the form of "conditional" foreign aid grants (which are linked to specific capital projects) and debt forgiveness. This may be in the form of assistance to other countries to build up their infrastructure or capital stock (such as an Australian donation to build a bridge in the Solomon Islands). The second item is entries for the purchase and sale of non-produced, non-financial assets – mainly intellectual property rights such as patents, copyrights, trademarks and franchises (such as an Australian company buying the rights from an American company to operate a Subway outlet in Australia). Figure 4.7 shows a capital account deficit of $1.1 billion.

Component	2018–19 ($bn)	2019–20 ($bn)
Capital account		
Capital transfers	–0.8	–0.8
Net acquisition/disposal of non-produced, non-financial assets	0.0	–0.4
Total capital account	**–0.8**	**–1.1**
Financial account		
Direct investment	66.2	27.6
Abroad	0.3	–11.9
in Australia	66.0	39.5
Portfolio investment	–86.1	–29.7
Abroad	–73.0	–17.2
in Australia	–13.1	–12.5
Financial derivatives	-9.8	4.8
Other investment	46.2	–55.8
Reserve assets	3.8	18.5
Total financial account	**20.3**	**–34.6**
Balance on capital and financial account	19.5	–35.7
Net errors and omissions	–5.4	–0.1

Source: ABS cat. 5302.0

Figure 4.7 – Structure of the capital and financial account

Financial account

The **financial account** shows Australia's transactions in foreign financial assets and liabilities. It is categorised by the type of investment, with five main categories: direct investment, portfolio investment, financial derivatives, reserve assets and other investment. The size of the financial account can change substantially from one time period to the next. This is a result of the large money flows that underlie the balance on the financial account.

Credit entries in the financial account represent net inflows. These come about because of either an increase in foreign investment in Australia or a reduction in Australian investment overseas. Debit entries represent net outflows. Australia consistently records a positive financial account balance, which shows that during each year the rise in Australia's liabilities to the rest of the world is higher than the increase in the liabilities of the rest of the world to Australia. In effect, Australia draws on the savings of the rest of the world to finance a deficit on its current account.

The five main financial account components are:

- **Direct investment**: Direct investment covers foreign financial transactions to fund new investment in Australia or overseas or to buy more than 10 per cent of shares in an existing company. This might include a Japanese company bringing in funds to build a motorway in Sydney or BHP Billiton sending funds to Indonesia to fund the construction of a copper mine. Figure 4.7 shows a direct investment surplus of $27.6 billion.
- **Portfolio investment**: Portfolio investment refers to the buying of land, shares and other marketable securities (that is, securities that can be easily sold) in existing companies. This is also where most foreign debt is recorded. Portfolio investment is often the largest item on the capital and financial account. Figure 4.7 shows a $29.7 billion deficit in portfolio investment in 2019–20 (in other words, the value of Australian portfolio investment overseas exceeded the value of overseas portfolio investment in Australia in 2019–20).
- **Financial derivatives**: Financial derivatives are a category of complex financial assets that have become increasingly significant in recent years. The value of these investments is normally derived from the performance of specific assets, interest rates, exchange rates or indices. Financial derivatives are an important part of global financial markets. Figure 4.7 shows an $4.8 billion surplus in financial derivatives.
- **Reserve assets**: Reserve assets refer to those foreign financial assets that are available to and controlled by the central authorities for financing or regulating payment imbalances. Reserve assets include monetary gold (gold held by the Reserve Bank), Special Drawing Rights, reserve positions in the International Monetary Fund and foreign exchange held by the Reserve Bank of Australia. Figure 4.7 shows a surplus of $18.5 billion.
- **Other investment**: Other investment is a residual category that captures transactions not classified as direct investment, portfolio investment, financial derivatives or reserve assets. Other investment covers trade credits, loans including financial leases, currency and deposits, and other accounts payable and receivable that do not meet the classification requirements of the above categories. Figure 4.7 shows a $55.8 billion deficit for this category.

Balance on capital and financial account

The overall balance of the capital and financial account is determined by adding the categories together. The outcome should be approximately equal to the deficit on the current account. Figure 4.7 shows a $35.7 billion deficit in 2019–20.

Australia's balance of payments figures are derived in the following way:

The current account is calculated as:

net goods + net services
(the balance on goods and services)
+
net primary income + net secondary income

The capital and financial account is calculated as:

capital account + direct investment + portfolio investment
+
other investment + reserve assets + financial derivatives

The balance of payments is calculated as:

current account + capital and financial account
+
net errors and omissions = 0

The final part of the balance of payments is the category of **net errors and omissions**. This refers to statistical discrepancies. It is included because under a floating exchange rate system, the balance of payments would always balance to zero (that is, a deficit of $12 billion on the current account would be offset by a surplus of $12 billion on the capital and financial account). For convenience, the balancing item is often added on to the capital and financial account figure to ensure the balance of payments sums to zero. It is therefore often reported with the capital and financial account. In 2019–20 the net errors and omissions item was minus $0.1 billion.

Links between key balance of payments categories

An important relationship exists between the current account and the capital and financial account on the balance of payments. Firstly, the two accounts add up to zero – together, they represent a "balance of payments". The deficit on the current account is equal to the surplus on the capital and financial account (allowing for the small category of net errors and omissions). An increase in the current account deficit (CAD) will result in a rise in the capital and financial account surplus.

In theory, the floating Australian dollar plays the key role of ensuring that there is a balance in the balance of payments. Under a freely floating exchange rate, equilibrium occurs where:

Supply of A$

The supply of A$ is represented by:
- Payments for imports of goods and services (M)
- Primary & secondary income/transfers overseas (Y debits)
- Capital and financial outflow (K outflow)

=

Demand for A$

The demand for A$ is represented by:
- Receipts for exports of goods and services (X)
- Primary & secondary income/transfers from overseas (Y credits)
- Capital and financial inflow (K inflow)

Therefore, for equilibrium in the foreign exchange market:

$$\text{Supply of A\$} = \text{Demand for A\$}$$

Which in turn implies:

$$\text{M + Y debits + K outflow} = \text{X + Y credits + K inflow}$$

Rearranging the equation:

$$\text{M – X + Y debits – Y credits} = \text{K inflow – K outflow}$$

OR

$$\text{Deficit on the current account} = \text{Surplus on the capital and financial account}$$

The strongest link between the current account and the capital and financial account can be seen on the net primary income part of the current account. In the longer term, a capital and financial account surplus will result in a larger deficit on the net primary income account. This is because any foreign financial flow that comes to Australia must earn some kind of return for its owner, and these earnings are a debit (or an outflow) recorded on the primary income account. Financial inflows can create debits on the primary income category of the current account in two ways:

- **International borrowing** (that is, foreign debt) will require regular interest repayments. These interest payments, or servicing costs, are not recorded on the capital and financial account; they are recorded as debits on the net primary income part of the current account. Only the repayment of the principal (the original amount borrowed) is recorded on the financial account. Australia's high level of borrowing from overseas has contributed significantly to the net primary income deficit due to the servicing costs of foreign debt.
- **Foreign investment** (that is, foreign equity) will require returns on the equity investment. Equity financial inflows are related to the foreign purchase of Australian assets such as land, shares, or companies. Foreign owners of Australian land will receive rent, owners of shares will receive dividends, and owners of companies will receive profits. These returns on investment are also recorded as debits on the net primary income part of the current account.

Over a period of time, a high level of capital and financial account surpluses will result in a widening CAD because of the servicing costs associated with increased foreign liabilities (that is, higher foreign debt and foreign equity). In extreme cases this may lead to a "debt trap" scenario, where an economy borrows from overseas merely to pay the interest-servicing costs on its existing foreign debt.

Another perspective on the links between the two sides of the balance of payments can be seen by examining savings and investment. Australia's historically low savings level (relative to investment demand) makes it necessary to attract a large inflow on the financial account. This perspective suggests that Australia's CAD is not simply the result of a trade imbalance. Between the mid-1980s and mid-1990s, economists generally associated Australia's balance of payments' problems on Australia's lack of international competitiveness (that is, on the BOGS on the current account). This encouraged successive governments to introduce a series of microeconomic reforms in trade, financial and labour markets with the aim of achieving greater competition and growth in productivity. More recently, there has been a focus on the gap between savings and investment as the cause of Australia's balance of payments problems, because low savings result in a need for foreign capital inflow to fund investment within Australia (that is, making the CAD a capital and financial account problem).

reviewquestions

1 Identify the main components of the balance of payments.
2 Explain the main components of the capital and financial account.
3 Explain the relationship between the TWO sides of the balance of payments.

4.5 Trends in Australia's balance of payments

The balance of payments is an important indicator of the health of the economy and the ability for Australia to make good with its obligations to the rest of the world. It reflects key features of the structure of the economy, and it highlights imbalances in the relationship between Australia and the global economy. Balance of payments figures are watched carefully by financial markets and have a significant influence on business confidence and foreign investors.

The main focus of analysis of trends in the balance of payments is the current account deficit, and in particular its main components, the BOGS and net primary income. Figures 4.8 and 4.9 highlight the trends in Australia's balance of payments since the 1980s, when the CAD first emerged as a significant economic concern. Calculated as a **percentage of GDP** (which provides the most accurate comparison across time and between countries), the CAD averaged 1.1 per cent in the 1970s and 4.0 per cent in the 1980s. This sudden increase in the CAD alarmed economists and prompted a range of major structural reforms to restore the competitiveness of the Australian economy. From the 1980s to the 2010s, the CAD moved in a range of around 3 to 6 per cent of GDP, averaging 4.1 per cent in the 1990s, 4.9 per cent in the 2000s and 2.5 per cent during the 2010s. The improvement in the current account during the 2010s has made it a lesser concern for policymakers than in the past (an issue examined in further detail in chapter 10).

The current account data shown in figures 4.8 and 4.9 reveals a number of important points. Australia's CAD moves in cycles, reflecting a mix of short and longer-term domestic and external influences. The size and movements on the BOGS and primary income account are influenced, to varying degrees, by both cyclical and structural factors. **Cyclical factors** are those which vary with the level of economic activity – such as changes in global demand for commodities, Australia's terms of trade and the value of the exchange rate. On the other hand, **structural factors** are those which are underlying or persistent influences on the balance of payments – such as the structure of Australia's export base, the international competitiveness of Australia's exports, and the level of national savings.

During the 2010s, Australia's CAD improved markedly. After reaching a record level in 2007–08 of 6.6 per cent of GDP, the size of the CAD has been much lower. In 2019–20, the current account recorded its first financial year surplus since 1973. The improvement in Australia's current account was driven by strong commodity prices, low global interest rates and a larger contraction in imports than exports. However the short-term nature of some of these factors were reflected in the Treasury forecast for a return to a small current account deficit of 1.25 per cent of GDP in 2020–21.

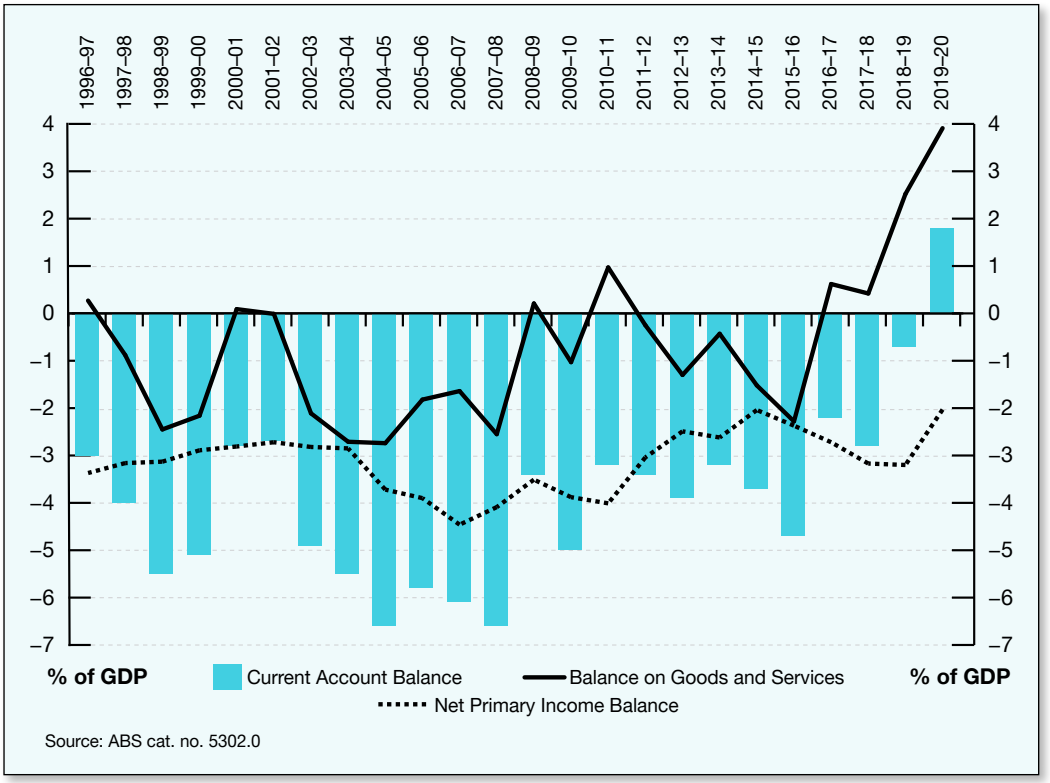


Figure 4.8 – The current account deficit

Year	Balance on goods & services ($bn)	Net primary income ($bn)	Net secondary income ($bn)	Balance on current account ($bn)	Capital and financial account ($bn)	CAD as % of GDP
1990–91	–0.6	–16.8	0.6	–16.7	16.0	–4.0
1995–96	–2.4	–18.7	0.4	–20.7	19.1	–3.9
2000–01	0.6	–19.8	–0.4	–19.6	16.9	–2.8
2005–06	–18.1	–38.8	–0.8	–57.7	55.7	–5.8
2006–07	–17.9	–48.5	–0.2	–66.6	64.0	–6.1
2007–08	–30.0	–48.1	0.1	–78.0	77.2	–6.6
2008–09	2.7	–44.2	–0.9	–42.4	43.9	–3.4
2009–10	–13.4	–50.5	–1.3	–65.2	68.7	–5.0
2010–11	13.7	–56.9	–2.1	–45.3	45.2	–3.2
2011–12	–3.7	–45.6	–2.1	–51.4	49.7	–3.4
2012–13	–19.9	–38.2	–2.3	–60.4	58.1	–3.9
2013–14	–6.8	–41.8	–2.1	–50.8	49.3	–3.2
2014–15	–24.8	–33.2	–1.8	–59.8	60.9	–3.7
2015–16	–37.8	–39.3	–0.9	–77.9	79.3	–4.7
2016-17	10.9	–47.9	–1.7	–38.8	39.0	–2.2
2017–18	7.6	–57.8	–1.1	–51.3	57.5	–2.8
2018–19	50.2	–60.9	–1.3	–12.0	23.6	–0.6
2019–20	77.4	–40.2	–1.4	35.8	–35.7	1.8

Source: ABS cat. no. 5302.0, 5206.0

Figure 4.9 – Australia's balance of payments performance

The balance on goods and services

The balance on goods and services (BOGS), also sometimes referred to as the trade balance, has recorded an improving trend in recent years, with a run of surpluses beginning in 2016–17. During the 2010s, on average Australia achieved a surplus on its trade in goods and services. Exports averaged 21.0 per cent of GDP while imports averaged 21.2 per cent of GDP across the decade, resulting in an average deficit on the BOGS of 0.1 per cent of GDP (compared to an average deficit of 1.5 per cent of GDP in the previous decade). The $35.8 billion BOGS surplus recorded in 2019–20 was the highest on record, as a result of two main factors. The first was sustained higher prices for bulk commodities (iron ore, metallurgical coal and thermal coal). While coal prices fell after the onset of the COVID-19 recession, iron ore prices remained resilient. The second factor was weaker spending on imports, reflecting lower levels of household demand and business investment in Australia. In the final quarter of 2019–20, international border closures resulted in larger reductions in services imports than services exports.

Cyclical factors

The BOGS is affected by a range of cyclical factors, including the exchange rate, the terms of trade, and the rate of economic growth in the Australian economy and the global economy.

Movements in the exchange rate affect the international competitiveness of Australia's exports and the relative price of the goods and services that Australia imports. A depreciation decreases the foreign currency price of Australia's exports, increasing the international competitiveness of Australian exports on world markets. At the same time, a depreciation increases the Australian dollar price of imports and discourages consumers from purchasing imports, also improving the BOGS account. The record trade surplus that was recorded in 2019–20 was partly a result of a depreciation in the value of the dollar, which fell from an average of US77 cents in 2017–18 to US67 cents in 2019–20. Just five years before, in 2013–14, its average was US91 cents.

The greatest influence on Australia's balance of payments in recent years has been changes in Australia's terms of trade. The terms of trade shows the relationship between the prices Australia receives for its exports and the prices it pays for its imports. If export prices are increasing relative to import prices, Australia's terms of trade will improve. On the other hand, if import prices are increasing relative to export prices, then the terms of trade will deteriorate.

The terms of trade index is shown in figure 4.10. An improvement in the terms of trade means that the same volume of exports can buy more imports. Unless there is a significant decrease in export volumes compared to import volumes, then this would lead to an improvement on the BOGS (either a larger surplus or a smaller deficit), and a decrease in the CAD.

In the 2000s, Australia experienced the largest sustained terms of trade boom in its history. This reflected the impact of the global commodities boom, which was the strongest influence behind changes in the CAD for over a decade. As commodities are Australia's largest export, this had significant impacts upon the terms of trade and the BOGS. Australian exporters received higher prices for their exports, increasing export revenue and thus increasing the value of Australian exports. This improved the BOGS, while the rise of China and other low-cost emerging economies also flooded world markets with low-cost manufactured goods, reducing import prices and further increasing Australia's terms of trade.

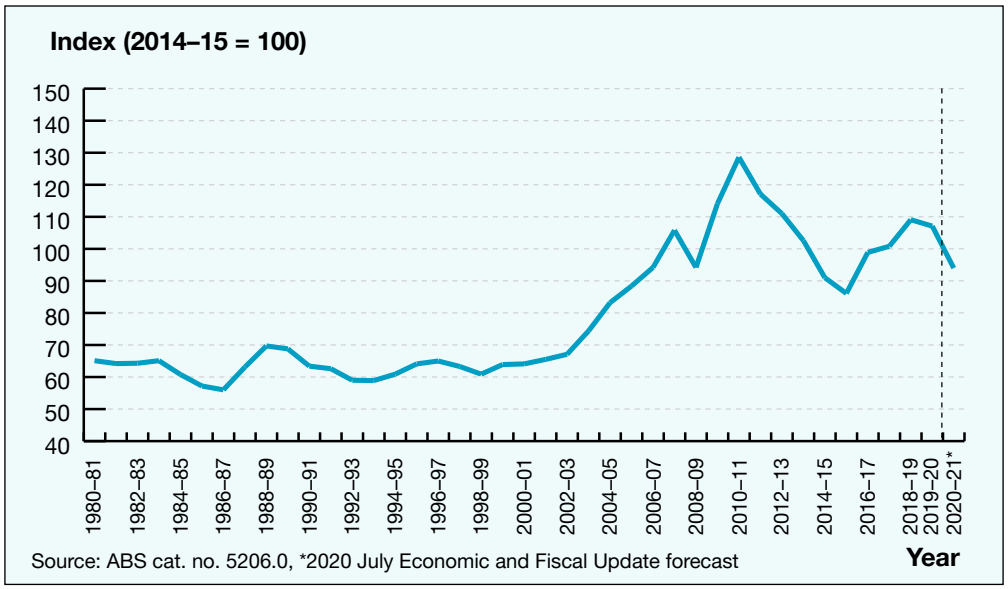


Figure 4.10 – Terms of trade

After the beginning of the boom in global commodity prices in 2003, Australia experienced a doubling of its terms of trade. Besides a temporary decline during the global recession in 2009, the trend increase in the terms of trade continued until the second half of 2011, where it peaked at a level 85 per cent above the average level of the entire twentieth century. The terms of trade reached a low point in March 2016 but then recovered due to rising prices for key commodity exports. During the initial onset of the global recession in 2020, despite some volatility Australia's terms of trade saw only a moderate fall. The price for iron ore, Australia's highest value export, stayed relatively high due to the recovery of the Chinese economy and supply problems in Brazil, one of Australia's major competitors.

The **terms of trade** affects both the BOGS and the exchange rate. Ordinarily, a higher terms of trade means that exports receive higher prices for the same output, which increases export revenue and improves the BOGS. However, because a higher terms of trade reflects an increase in demand for Australian exports, the demand for Australian dollars rises, causing an appreciation of the exchange rate. The higher Australian dollar weakened the international competitiveness of Australia's non-commodity exports. As a result, a lower level of non-commodity exports partially offset the benefits of the rising terms of trade.

Terms of trade measures the relative movements in the prices of an economy's imports and exports over a period of time. The terms of trade index is calculated as export price index divided by import price index multiplied by 100.

The level of **domestic economic growth** also influences the BOGS balance by affecting demand for imports. An upturn in the domestic business cycle results in increased business investment and higher disposable income, which leads to higher consumption. Higher levels of business investment and household consumption spill over into higher imports (especially since imports constitute a large proportion of both capital and consumer spending), worsening the BOGS. High growth in investment (especially in the resources sector) and household disposable income levels during the commodities boom both contributed to Australia's poor BOGS performance in the mid- to late-2000s despite a rising terms of trade. In recent years, expenditure on imports has been subdued due to weaker household consumption and lower levels of investment in capital.

TERMS OF TRADE

The **terms of trade** is expressed as a number known as the terms of trade index. It shows the ratio of the export price index to the import price index. The export price index shows the proportional change in the level of export prices, while the import price index shows the proportional change in the level of import prices. It should be noted that, as with all index numbers, the proportional change is relative to a base year, or starting point, which is given an index number of 100. (**Note:** You are not required to make calculations of the terms of trade index for the NSW Year 12 syllabus, but understanding the terms of trade is important for analysis of recent trends in Australia's balance of payments.)

$$\text{Terms of trade index} = \frac{\text{Export price index}}{\text{Import price index}} \times \frac{100}{1}$$

The following example, based on the information in figure 4.11, will be used to demonstrate how to calculate the terms of trade.

Year	Export price index	Import price index	Terms of trade index
1	100	100	100
2	115	105	109.5
3	120	130	92.3

Figure 4.11 – Hypothetical terms of trade index figures

In this example, the terms of trade have improved in Year 2 and deteriorated in Year 3 (shown by the falling index number), with import prices rising faster than export prices.

$$\text{Year 3 terms of trade index} = \frac{120}{130} \times \frac{100}{1} = 92.3$$

Changes in the **international business cycle** impact on the BOGS by affecting the demand for Australia's exports. A slowdown in global economic growth and weaker growth in Australia's key regional trading partners both reduce growth in demand for Australia's exports, worsening the BOGS. A key feature of Australia's economic successes in recent decades is that our economy has been more closely integrated to faster-growing economies than many other developed countries. A continuation of this success depends on strengthening trade linkages with the economies that are most likely to drive global economic growth in the 2020s, such as India and China.

Structural factors

The structure of Australia's export base has an important influence on the long-term behaviour of the BOGS. Australia has a **narrow export base**, in the sense that Australia's exports are heavily weighted towards bulk commodities. Australia's comparative advantage lies in products that do not involve a large value-added component, such as minerals and agriculture, which together account for around two-thirds of Australia's export earnings. By contrast, Australia lacks **international competitiveness** in manufacturing and tends to import more expensive high value-added products such as consumer goods and capital goods. As a result, in the long run the BOGS has tended to be in deficit rather than surplus because import payments very often outstrip export revenues. An additional difficulty with Australia's narrow export base is that global commodity prices are more volatile than the prices for manufactures and services, which contributes to large fluctuations in the BOGS from year to year.

Until the early 2000s, many economists thought that the long-term downward trend in commodity prices over the second half of the 20th century would continue to worsen

Australia's external position. However, the increased global demand for commodities has made commodity exports far more valuable since the beginning of the 21st century. Although there has been volatility in the terms of trade during the past decade, the index remained well above longer-term averages. This led to significant improvements in Australia's terms of trade and extraordinary growth in export revenues.

It took several years before the commodities boom of the 2000s led to a lasting change in Australia's trade accounts. This reflected Australia's need to import a vast amount of capital equipment to expand its mining capacity, resulting in a surge in imports. It also reflected the significant time lags between increases in commodity prices and increased export volumes. Increasing production capacity takes time because of the delays in investment decisions and the time required to construct new mines, railways and shipping facilities. For example, it took 15 years before the large LNG export contract signed in 2002 was reflected in the trade accounts, because of the long time lag associated with building natural gas pipelines and processing facilities. Imports continued growing at a faster rate than exports. Poor transport infrastructure, such as low capacity at the nation's ports and inefficient road and rail networks, physically prevented Australian exporters from taking advantage of favourable cyclical conditions by increasing export volumes. An influx of both government and private sector investment in infrastructure gradually eased these infrastructure constraints during the 2010s, and by the end of the decade Australia's goods and services exports were worth more than three times their total when the mining boom began in 2004. By the 2010s, however, a different concern had emerged: the need to diversify Australia's export base as other economies accelerate a shift away from carbon-intensive fossil fuels, Australia will need to address its structural dependence on carbon-intensive exports such as coal.

In recent years there has also been an upturn in the prices for many **agricultural** exports, although the increase has been much smaller than the soaring prices for the mining sector. For a long time, the agricultural sector had experienced a trend decline in prices as global trade has shifted to sophisticated manufactured goods and services. Agricultural goods were often oversupplied on world markets, due to farm subsidies and competition from developing economies. However since 2006, the trend for the Reserve Bank's index of rural commodity prices has shifted upwards. Agricultural prices (in Australian dollars) were on average 38 per cent higher in the 2010s decade than for the two previous decades of the 1990s and 2000s. The increase in agricultural prices reflects growing global food demand, rising incomes in the developing world, rising prices for agricultural inputs such as oil and fertilisers, and the impact of climate change in reducing agricultural productivity such as through natural disasters.

Many economists argue that Australia would benefit by diversifying its export base towards high-growth sectors of global trade, including high tech and **elaborately transformed manufactures** (ETMs) – that is, technologically advanced goods, as opposed to simply transformed manufactured goods or commodity exports. There is potentially an even greater role for growth in **services exports**, given Australia's close proximity to emerging economies in Asia and the increasing importance of services within Australia's export mix. Continued growth in services exports is essential to diversifying Australia's export base since Australia is chiefly a service-based economy. Australia exported $94 billion of services in 2019–20, compared to $56 billion a decade before, mostly a result of strong growth in the tourism and education sectors.

Australia also faces the difficult challenge of retaining an internationally competitive manufacturing sector. The increased value of the Australian dollar since the rise in global commodity prices in the 2000s has added to the pressure on Australian manufacturers from low-cost Asian economies. The closure of major industry sectors such as car manufacturing also puts Australian manufacturing at risk of losing the base level of skills and capacity required to compete in global supply chains.

The primary income account

The primary income account is the ongoing structural cause of Australia's CAD. It is composed mainly of payments of interest and dividends on Australia's net foreign debt and equity. The net primary income account tends to record a deficit of between 2 and 3 per cent of GDP. In 2019–20, the net primary income deficit was 2.0 per cent of GDP.

Cyclical factors

The net primary income deficit is a reflection of Australia's net servicing costs owed to overseas. These can take the form of interest repayments on foreign debt or dividend payments and profits on foreign equity.

The relative size of Australia's **interest repayments** to overseas are affected by two main cyclical factors. The first factor is changes in the value of the **exchange rate**. Movements in the exchange rate will alter the Australian dollar value of debt denominated in foreign currencies. This is known as the "valuation effect". An appreciation will decrease the Australian dollar value of debt denominated in foreign currencies, decreasing the value of Australia's debt service (in Australian dollar terms), reducing the value of net primary income outflows and improving the net primary income deficit. On the other hand, a depreciation will increase the Australian dollar value of debt denominated in foreign currencies, increasing the value of Australia's interest repayments and worsening the net primary income deficit. However, many economists argue that in practice, the valuation effect only has a small impact upon the net primary income account, at least in the short term. This is because a large amount of Australia's foreign debt will be "hedged" in some way (meaning that the lender and borrower will agree to fix the exchange rate over the course of the loan to reduce the risk of large exchange rate fluctuations). Also, a significant part of Australia's foreign debt is denominated in Australian dollars, making it immune from exchange rate movements.

The second factor affecting the size of Australia's interest repayments is changes in **domestic and global interest rates**. The servicing costs on foreign debt are set by an interest rate. Hence, changes to the interest rate will impact the cost of servicing debt. Australian borrowers might borrow under an overseas interest rate or under an Australian interest rate. The decline in Australian and global interest rates to record-low levels in recent years reduced the cost of debt servicing (which in net terms was $19.6 billion in 2019–20). Additionally, over the same period, there was an increase in the share of foreign liabilities owed by the government sector, which typically pays a lower rate of interest than the private sector due to lower default risk. These factors contributed to the narrowing of the net primary income deficit over this period.

While changes in the level of interest repayments on foreign debt have some impact, the most significant cyclical factor affecting the net primary income deficit is the performance of the **domestic business cycle** through its influence on **equity servicing costs**. Equity – the ownership of assets – entitles the owner to a share of profits from that asset. When the domestic economy experiences strong growth, **domestic company profits** rise, and these profits are redistributed to shareholders as dividends. In Australia, approximately 40 per cent of the Australian public share market is foreign-owned. Hence, a large proportion of dividends flow out of Australia as payments to overseas shareholders. In this way, higher domestic profits will tend to result in higher equity servicing costs in the form of dividend outflows, which will worsen the net primary income deficit. Since Australia's mining sector is mostly owned by foreign companies, a high level of profits in the mining sector results in a significant dividend outflow from Australia. This is a significant factor influencing the size of the net primary income deficit.

Structural Factors

The main reason for Australia's ongoing net primary income deficit is an underlying structural characteristic of the Australian economy: the **savings and investment gap**. The problem is that Australia is a relatively small economy with a historically low level of national savings. At the same time, it requires high levels of capital investment for its economic growth: in particular, Australia's major export industry, minerals and resources, requires high levels of investment in exploration, excavation, machinery, transport infrastructure and research.

In a closed economy, investment must be financed by domestic savings. However, since Australia is an open economy, firms are able to look to foreign sources of finance to fund their investment. This means that Australia tends to fund a large part of its investment through international borrowing (which increases foreign debt) or selling ownership in Australian assets (which increases foreign equity). This increases Australia's foreign liabilities and creates future servicing obligations in the form of interest repayments (on debt) and dividends (on equity). These servicing costs are recorded as outflows on the net primary income account, and are the major causes of Australia's persistent CAD.

On the other hand, the growth in Australian investment overseas (which has been led by Australia's large volume of superannuation funds) results in inflows of earnings on those investments, which improve the net primary income balance. Two factors that contributed to the trend towards a lower primary income deficit in the 2010s are increased returns on overseas equity held by Australian investors and a lower exchange rate.

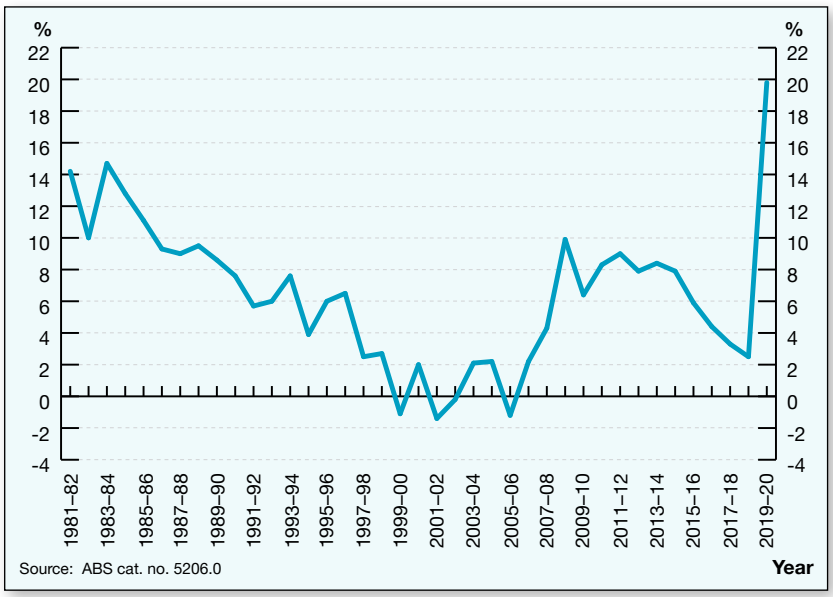


Figure 4.12 – Household savings ratio

Between the 1970s and the 2000s Australia experienced a decline in household savings and in public savings (because governments tended to run fiscal deficits, which meant that the government was borrowing money to fund government spending). A sustained upward trend in household borrowings has also given Australia one of the highest levels of household debt in the industrialised world. While there was a recovery in household savings after the global financial crisis, this began to reverse after 2015. Australian households are highly leveraged, with twice as much debt (as a proportion of their household income) as two decades ago. Falling house prices in some regions during recent years have left some borrowers with 'negative equity', where their mortgage is higher than the value of their property. With the onset of the COVID-19 recession in 2020, there was a temporary surge in household savings as opportunities for consumer spending were

curtailed, while the government's economic response packages also provided temporary support to household incomes. Economists predicted a decline in household savings during the early 2020s recession as households affected by reduced incomes are forced to draw on their savings to fund consumption.

Governments can address the savings problem by implementing policies to increase the level of personal savings (such as compulsory superannuation, removing incentives in the tax system that encourage increased debt and encouraging increased savings through tax incentives). Governments can also increase public savings by reducing the budget deficit and moving the public sector into surplus through **fiscal consolidation**. A budget deficit can be regarded as negative public savings, while a budget surplus makes a positive contribution to the level of national savings. While the immediate crisis of the COVID-19 pandemic required a very large government response in 2020, a key issue for economic debate over coming years will be the speed of reducing the deficit in order to reduce pressure on the pool of national savings.

reviewquestions

1. Discuss THREE trends in Australia's balance of payments performance in recent years.
2. Explain how changes in commodity prices have influenced Australia's terms of trade and the current account in recent years.
3. Analyse the relationship between the level of national savings and imbalances on the current account.
4. Evaluate recent influences on the current account.

4.6 The consequences of a high CAD

Economists differ over their level of concern about Australia's historic pattern of high deficits on the current account and foreign liabilities, with some arguing that if the government is not contributing to the CAD and foreign liabilities problems, any external imbalances are simply the result of normal market transactions in a global economy. Some also argue that the CAD and foreign debt can be beneficial because borrowing from overseas can increase investment and help the economy to grow faster. The International Monetary Fund generally considers a CAD to be too high if it averages over four per cent in the medium to long term or if it is above six per cent in the short term.

There are several risks associated with a sustained high CAD. These include:

- The growth of **foreign liabilities** – over a period of time, a high CAD will contribute to an increased level of foreign liabilities. A deficit on the current account presupposes financial inflow on the capital and financial account, either in the form of borrowings from overseas (foreign debt) or through selling equity in items such as property and companies (foreign equity). This will mean that lenders may become more reluctant to lend to Australia or to invest in Australia.
- Increased **servicing costs** associated with high levels of foreign liabilities lead to larger outflows on the net primary income account, worsening the CAD. Foreign debt must be serviced through interest payments that vary according to the level of interest rates in Australia and overseas, and profits must be returned on foreign equity investment. Higher levels of foreign debt can result in foreign lenders demanding a "risk premium" on loans, forcing up interest rates.

WHY HAS THE CURRENT ACCOUNT DEFICIT NARROWED?

In 2020, Australia achieved its first current account surplus in almost 50 years. After 1972–73, Australia had slid into deficit and in the decades of the 1980s and 2000s Australia's CAD was often among the highest in the industrialised world.

However, during the 2010s Australia's CAD showed a sustained improvement. The reasons for the improvement in the CAD were studied in a report released by the International Monetary Fund in February 2018, which highlighted four key contributing factors in addition to Australia's improved export revenues:

1. Import expenditure has decreased as domestic demand in Australia has contracted more sharply than in Australia's major trading partners.
2. There has been an increase in saving by households and businesses since the financial crisis, reducing the need to borrow from overseas to meet Australia's domestic investment needs.
3. Tighter regulatory requirements and a change in international lending conditions have meant that Australian banks have held more funds in reserves.
4. The servicing costs of Australia's overseas debt have been lower, due to sustained low global interest rates.

While some of these factors may change (for example, global interest rates are influenced by cyclical factors), the report concluded that for the foreseeable future, Australia's CAD is likely to remain below its pre-2008 levels. It calculated that if Australia can keep the CAD in an average range of 2.5 to 3 per cent of GDP, net foreign liabilities can be sustained at around 55 per cent of GDP, giving an external position that the IMF judged to be "broadly consistent with medium-term fundamentals and desirable policies".

- Increased volatility for **exchange rates** – high CADs may undermine the confidence of overseas investors in the Australian economy and, by reducing demand for Australia's currency, may result in a depreciation of the Australian dollar.
- Constraint on future **economic growth** – in the longer term, a high CAD may become a speed limit on economic growth. Higher levels of economic growth generally involve an increase in imports and a deterioration in the CAD. Economies with a CAD problem are therefore forced to limit growth to the level at which the CAD is sustainable. This is known as the **balance of payments constraint**.
- More **contractionary economic policy** – if they find it necessary to reduce a high CAD in the short term, governments may use tighter macroeconomic policies and accelerate the implementation of microeconomic reform. In the short run, tighter fiscal and monetary policies will reduce economic growth and contribute to a lower CAD.
- A sudden **loss of international investor confidence** – economic crises can sometimes be triggered by a sudden shift in the attitude of global markets towards a country whose external imbalance appears unsustainable. Argentina has experienced recurrent economic crises since 2018, reflecting a loss of investor confidence in response to its unsustainable debt levels. Investor confidence can change suddenly and countries with high CADs and foreign debt are more vulnerable to shifts in investor sentiment.

Although Australia's CAD has been high by comparison with other countries for several decades, concerns about its potential to disrupt the Australian economy have decreased in recent years. This is especially the case since the trend improvement in the past decade. In part, it is because in the era of globalisation, financial markets have become more willing to accept external imbalances, since over the past three decades those imbalances

have not stopped countries such as Australia from sustaining strong economic growth. Financial markets have also been confident that Australia's natural resource wealth will underpin continued strong export growth in the future, allowing Australia to service its foreign liabilities.

Some economists warn, nevertheless, that the high CAD may still re-emerge as a long-term risk for Australia. Changes in economic conditions such as a loss of Chinese export markets or a rise in global interest rates could see a return of much higher current account deficits. Sustained CADs make Australia dependent on continuing financial inflows in order to fund the servicing costs of its high foreign liabilities. They argue that while Australia's high CAD has not affected its growth in recent years, this is due to favourable external conditions that could change in the future – after all, until the sudden onset of the global financial crisis in 2008, investors were willing to lend freely to many economies that then experienced very deep economic crises. These concerns were most recently raised in the 2017 book *Credit Code Red*, by Australian economists Peter Brain and Ian Manning. The argument of economists such as Brain and Manning is that a country may be able to sustain external imbalance for many years before it suddenly finds that the external imbalance is a major economic problem. Potential vulnerabilities for Australia include adverse developments in the Chinese economy, a fall in commodity prices, rising global interest rates or other changes in global credit conditions.

reviewquestions

1. Describe THREE consequences of a persistently high CAD.
2. Explain how a high CAD might affect the exchange rate.
3. Discuss why Australia's high CAD has not caused significant problems for Australia in recent years. Explain whether you think this might change in the future.

chapter summary

1 The **direction** of Australia's exports has shifted considerably in recent years from the United States, Japan and Europe towards China, Hong Kong, South Korea, India and the ASEAN countries.

2 Historically, agricultural products such as wheat, wool and beef comprised a large share of the **composition** of Australia's exports. These have declined in relative importance while mineral and energy exports, and to a much lesser degree services, have increased in relative importance.

3 The **balance of payments** summarises all transactions between Australia and the rest of the world over a given period of time. The balance of payments consists of the current account and the capital and financial account.

4 The **current account** shows the money flowing from all of Australia's exports and imports of goods and services, income and transfer payments for a period of one year. The main feature of current account transactions is that they are not reversible.

5 The **capital account** consists of Australia's capital transfers, such as those from conditional foreign aid and the purchase and sale of intellectual property rights. The **financial account** shows Australia's transactions in financial assets and liabilities. The main feature of capital and financial account transactions is that they are reversible.

6 The current account and the capital and financial account are closely linked. A deficit on the current account corresponds to a surplus on the capital and financial account. These surpluses, which cause rising foreign debt or the sale of Australian assets, result in longer term outflows on the primary income component of the current account.

7 The long-term effect of running a CAD is the growth of **foreign liabilities**. This may occur in the form of foreign debt or foreign equity (the sale of Australians' assets such as land, companies and shares).

8 The **terms of trade** is an index showing changes in the prices of Australian exports relative to changes in the price of imports. Australia experienced the largest surge in its terms of trade in history between 2003 and 2011, with far-reaching consequences for the balance of payments and the economy.

9 The CAD is influenced by a combination of **cyclical and structural factors**. The BOGS is the major cyclical component and is influenced by the exchange rate, terms of trade and the international and domestic business cycles. The net primary income deficit is the main structural cause of Australia's CAD, and is the result of a savings-investment gap.

10 A persistently high current account deficit may lead to a higher level of foreign liabilities, increased debt servicing costs, greater exchange rate volatility, higher interest rates and slower economic growth. However, financial markets have tolerated Australia's persistently high CAD, and while Australia's current account remains in deficit, it has fallen during the past decade.

chapterreview

1 Outline recent changes in the direction and composition of Australia's trade flows.

2 Explain why foreign direct investment might be preferable to portfolio investment.

3 Briefly explain what is meant by the *balance of payments*. Outline the structure of the two main accounts of the balance of payments.

4 Explain the relationship between the current account and the capital and financial account.

5 Examine Australia's recent balance of payments performance, distinguishing between short-term and long-term factors influencing the CAD.

6 Discuss the impact of movements in the exchange rate on the current account.

7 Discuss the role of cyclical and structural factors in influencing the net primary income account.

8 Explain how movements in the terms of trade impact on the current account, with reference to recent Australian experience.

9 Examine the role of savings in Australia's balance of payments problems.

10 Discuss the possible problems associated with a high CAD.

Exchange Rates

5

5.1 Introduction

5.2 Australia's floating exchange rate system

5.3 Reserve Bank intervention in the foreign exchange market

5.4 Fixed exchange rate systems

5.5 Exchange rates and the balance of payments

5.1 Introduction

Exchange rates play a central role in the relationships between individual economies and the global economy. All trade and financial relationships between countries are mediated through the exchange of currencies. For this reason, exchange rate movements have a significant impact on international competitiveness, trade flows, investment decisions, inflation and many other factors in the economy. Chapter 2 examined how global foreign exchange markets operate. This chapter will examine more closely where Australia fits into global foreign exchange markets, and the influences on the value of the Australian dollar.

The exchange rate is the price of Australia's currency in terms of another country's currency. It is the price at which traders and investors can swap Australia's currency for another currency. Exchange rates are necessary because exporting firms want to be paid in their own currency, which means importers need a mechanism to convert their domestic currency into a foreign currency so they can make payments. For example, a South Korean firm exporting to Australia wants to be paid in South Korean won (the local currency). The Australian importer must convert Australian dollars into won in order to make the payment. To do so, they must know how many won they can buy with their dollars.

This currency conversion occurs in the **foreign exchange market** (also referred to as the forex market) where the forces of supply and demand, or in the case of a fixed exchange rate, the government or its representatives, determine the price of one country's currency in terms of another (that is, the exchange rate).

THE AUSTRALIAN DOLLAR IN THE GLOBAL ECONOMY

- The Australian dollar is the world's fifth-most traded currency after the US dollar, European euro, Japanese yen and British pound.
- The Australian dollar is used in 6.8 per cent of all daily currency trades in foreign exchange markets.
- 89 per cent of all Australian dollars sold in the Australian foreign exchange market are used to buy US dollars.
- Activity in Australia's forex market has softened since 2013 but the value of the currency can still go through large upswings and downswings in any given year.
- Turnover from foreign exchange transactions averaged US$121 billion per day in Australia in April 2019.

Source: Triennial Survey of Foreign Exchange and Derivative Markets, Bank for International Settlements, 2019 and the Reserve Bank of Australia, 2019

Countries can use different systems for determining the exchange rate of their currency. These include a floating system (clean or dirty float), a fixed rate system, and a flexible peg. Another option for countries with similar regional interests is a currency union with major trading partners, such as the euro, which is the currency of 19 European Union members, known as the eurozone, as well as 4 non-EU countries.

5.2 Australia's floating exchange rate system

Floating exchange rate is when the value of an economy's currency is determined by the forces of demand and supply in foreign exchange markets.

In December 1983 Australia switched from a managed flexible peg to a **floating exchange rate** system. This is regarded as one of the most important structural changes in Australia's economic history because it opened up the economy to global financial flows. Under a floating system, the exchange rate is determined by free market forces and not government intervention. Supply and demand establish an equilibrium price for the Australian dollar (A$) in terms of another country's currency. This is demonstrated in figure 5.1, which shows how the exchange rate for A$ in terms of US$ is determined.

Just as market forces establish the equilibrium price for a good, they can also determine the equilibrium price of the A$ in terms of another country's currency. Figure 5.1 reveals that market forces have determined the value of the A$ in terms of US$ at US$0.80 (that is, A$1 will buy US80 cents or alternatively US$1 buys A$1.25). This equilibrium will change regularly (hour by hour, or even minute by minute) as supply and demand in the foreign exchange market change.

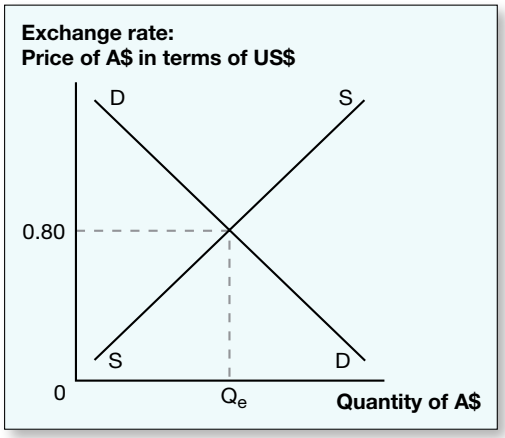


Figure 5.1 – Exchange rate determination under a floating exchange rate system

Demand for A$ is represented by all those people who wish to **buy** A$. Demand for A$ will be affected by:

- The size of **financial flows** into Australia from foreign investors who wish to invest in Australia and need to convert their currency into A$.
  - **The level of Australian interest rates relative to overseas interest rates** has a critical influence on the demand for A$. Relatively higher Australian interest rates make Australia a more attractive location for foreign savings and thus increase the demand for A$.
  - The availability of **investment opportunities** in Australia will also strongly influence the demand for A$. If there are more opportunities for investors overseas to start new businesses or buy into existing businesses via the share market, the demand for A$ will increase.
- **Expectations** of future movements of the A$. For instance, expectations of a future appreciation of the A$ will increase current demand for A$ by speculators, thus contributing to the expected appreciation.
- The demand for Australian **exports**, since the foreigners who buy Australia's exports need to convert their currency into A$ to pay Australian exporters.
  - Changes in **commodity prices** and in the **terms of trade** have tended to have an immediate effect on the dollar. A rise in commodity prices and an improvement in the terms of trade are generally associated with an increase in the value of Australian exports. Financial markets will often respond to these changes by increasing the value of the dollar with an expectation that the value of exports will increase over the short to medium term.

- The demand for Australian exports will be influenced by the degree of **international competitiveness** of domestic exporters and Australia's inflation rate relative to overseas countries. If domestic firms are competitive in world markets and Australia's inflation rate is relatively low, Australia's exports will generally be relatively cheaper and more attractive to foreign buyers.
- Changes in **global economic conditions** will also influence the overseas demand for exports. The demand for Australia's commodity exports is highly dependent on the growth rates of Australia's trading partners – when the world economy is on an upturn, demand and prices for Australia's exports rise and vice versa.
- **Tastes and preferences** of overseas consumers will also affect the demand for Australia's exports.

International competitiveness is a measure of the ability of Australian producers to compete with overseas producers in both local and world markets.

Supply of A$ is represented by all those people who wish to **sell** A$. The supply of A$ will be determined by a number of factors:

- The level of **financial flows** out of Australia by Australian investors who wish to invest overseas and who will need to sell A$ and purchase foreign currency.
  - The **level of Australian interest rates relative to overseas interest rates** will also be a critical factor influencing financial flows out of Australia and the supply of A$. Relatively lower Australian interest rates will make investing savings overseas more attractive and hence increase the supply of A$.
  - The availability of **investment opportunities** overseas will also influence financial flow out of Australia. Greater opportunities to start businesses overseas or to purchase shares in overseas companies will increase financial flows out of Australia and increase the supply of A$.
- **Speculators** in the foreign exchange market who expect the value of the A$ to go down will sell A$, increasing the supply of A$ and thus contributing to the anticipated depreciation.
- The exchange rate will be affected by the **domestic demand for imports** since Australian importers who buy from overseas need to sell A$ in order to obtain foreign currencies to make import payments.
  - Demand for imports will be determined by a range of factors within Australia. One of the most important is the **level of domestic income**. Strong economic growth and rising incomes and employment will result in the demand for imports also rising, increasing the supply of A$.
  - The domestic inflation rate and the **competitiveness** of domestic firms that compete with imports will also influence import levels. If Australia's domestic inflation rate is higher and its import-competing firms are relatively uncompetitive, imports will be relatively cheaper than domestic products and demand for imports will be higher.
  - **Tastes and preferences** of domestic consumers change over time, and an increasing preference for goods and services from overseas will raise the supply of Australian dollars on the foreign exchange market.

Figures 5.2 and 5.3 show how the exchange rate of the A$ against the US$ can **appreciate** (increase) or **depreciate** (decrease) due to changes in supply and demand.

Figure 5.2 reveals that any increase in the demand for A$ (shift in the demand curve to the right, from D_1 to D_2) will increase the price of A$ in terms of US$ (that is, cause an appreciation of the A$).

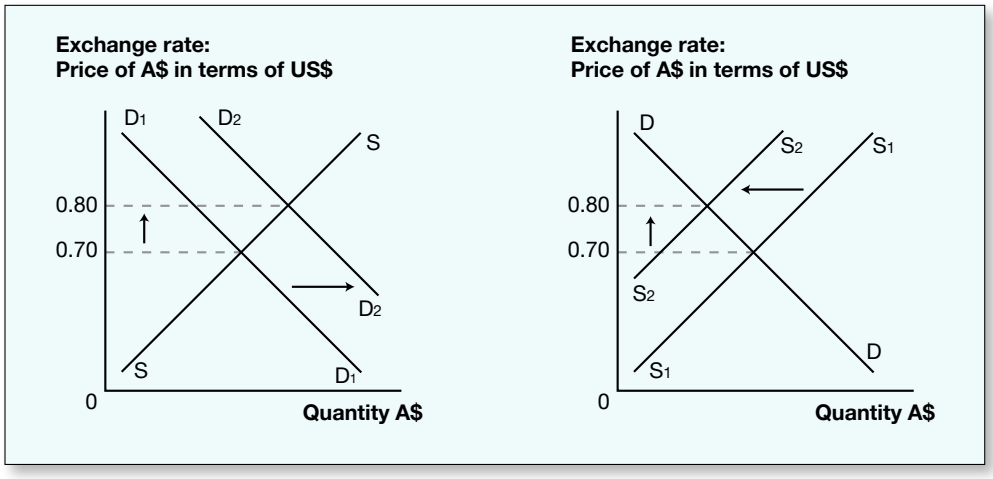


Figure 5.2 – An appreciation of the A$

Likewise, any decrease in supply of A$ (a shift in the supply curve to the left, from S_1 to S_2) would also cause an appreciation. The appreciation shown in both cases is an increase in the value of the A$ from US70 cents to US80 cents.

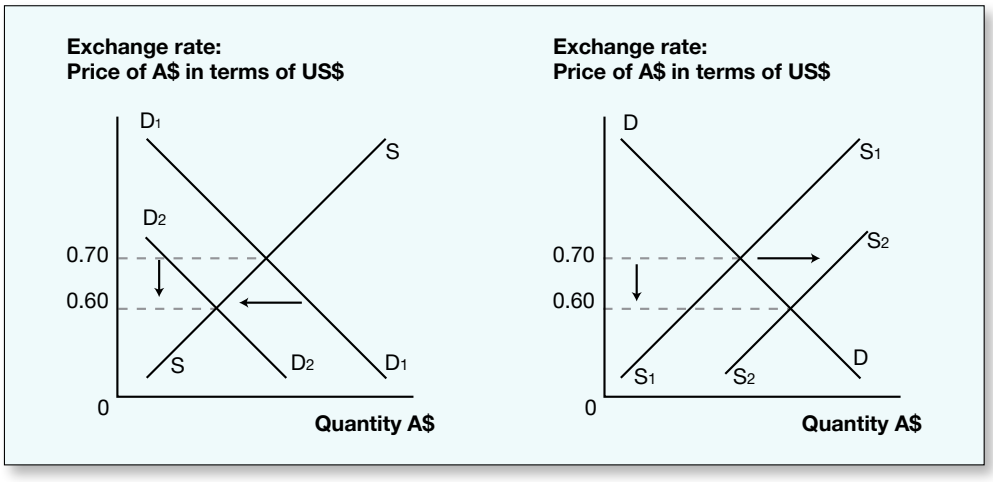


Figure 5.3 – A depreciation of the A$

Figure 5.3 reveals that any decrease in the demand for A$ (shift in the demand curve to the left, from D_1 to D_2) will decrease the price of A$ in terms of US$ (that is, cause a depreciation of the A$).

Likewise, any increase in supply of A$ (shift in the supply curve to the right, from S_1 to S_2) would also cause a depreciation. The depreciation shown in both cases is a decrease in the value of the A$ from US70 cents to US60 cents.

A floating exchange rate doesn't just let market forces determine the value of a currency. It also acts as an 'automatic stabiliser' to help protect the economy from external booms or busts. A prime example of this took place during the recent mining boom in Australia. The increase in demand for Australian resources pushed commodity prices up, which subsequently caused the A$ to appreciate. As a result, industries that did not directly benefit from the mining boom saw their costs increase and demand for output fall. The appreciation of the A$ helped the economy to re-allocate labour and capital to the booming mining sector, therefore reducing inflationary pressures and maintaining a stable employment level within the economy.

Australia has many exchange rates – one for each of the currencies of the countries for which foreign exchange transactions are required. Thus, it is possible that at any given time, Australia's exchange rate may be appreciating against some currencies, and depreciating against others. For example, during several weeks of May and June 2020,

APPRECIATION s	DEPRECIATION t
• an increase in Australian interest rates or decrease in overseas interest rates • improved investment opportunities in Australia or deterioration in foreign investment opportunities • a rise in commodity prices and an improvement in Australia's terms of trade • an improvement in Australia's international competitiveness • lower inflation in Australia • increased demand for Australia's exported goods and services • expectations of a currency appreciation based on forecasts of one of the above factors	• a decrease in Australian interest rates or increase in overseas interest rates • deterioration in investment opportunities in Australia or improvement in foreign investment opportunities • a fall in commodity prices and a deterioration in Australia's terms of trade • a deterioration in Australia's international competitiveness • higher inflation in Australia • increased demand for imported goods and services • expectations of a currency depreciation based on forecasts of one of the above factors

Figure 5.4 – Main factors causing an appreciation or depreciation of the Australian dollar

the Australian dollar experienced a depreciation against the Brazilian real but appreciated against the US dollar and most other currencies.

A comparison of the value of the dollar against a single currency, such as the United States dollar, can create a misleading impression of trends in the Australian dollar's value. This is because just as there are unique factors influencing the Australian dollar, there are also unique factors influencing the value of the US dollar. For example, the US$ depreciated significantly against most currencies during the 2000s. If we only examined the exchange rate between the US$ and A$, and did not make other comparisons, we would think that the Australian dollar had appreciated on its own by over 100 per cent of its value during the decade to 2011. In fact, the Australian dollar was rising while the US$ itself was falling, creating an exaggerated impression of the rise in the A$. The Australian dollar rose by a smaller amount against other currencies.

The **Trade Weighted Index** (TWI) gives an indication of how the value of the A$ is moving against all currencies in general. The TWI is calculated by measuring the value of the A$ against the currencies of Australia's major trading partners compared with a base year. The currencies of the countries that are more prominent in Australia's trade are given a higher weighting so that they have a greater influence on the TWI.

Trade Weighted Index (TWI) is a measure of the value of the Australian dollar against a basket of foreign currencies of major trading partners. These currencies are weighted according to their significance to Australia's trade flows.

Currency	Trade weights (%)		Currency	Trade weights (%)	
	2018–19	2019–20		2018–19	2019–20
Chinese renminbi	27.7	30.0	Indian rupee	4.1	3.9
Japanese yen	10.9	11.2	Singapore dollar	4.0	4.2
United States dollar	9.7	9.6	New Zealand dollar	4.0	3.9
European euro	9.7	9.4	United Kingdom pound sterling	3.9	3.9
South Korean won	6.5	5.2	Thai baht	3.5	3.2
Source: Reserve Bank of Australia, November 2019					

Figure 5.5 – Trade Weighted Index: the currency weightings of Australia's top 10 trading partners

Figure 5.5 indicates how the TWI is calculated. Each year, the Reserve Bank amends the measurement of the TWI based on the volumes of trade for the previous financial year. The total number of countries included in the TWI must cover at least 90 per cent of Australian trade (meaning that around 20–25 countries are included in the TWI calculations). During the last two decades, the relative significance of the exchange rates with the Japanese yen and the US dollar have declined, while the exchange rate with the Chinese renminbi has become more important.



For the latest statistics and analysis of exchange rate movements, visit the website of the Reserve Bank of Australia: **www.rba.gov.au**

AUSTRALIAN DOLLAR: RECENT MOVEMENTS

The Australian dollar experienced a sustained appreciation during the first decade of the 21st century, and then a trend depreciation in the second decade. After hitting a low in 2001 (of US47 cents), from 2003 it began appreciating strongly as commodity prices increased. The dollar fell sharply in 2009 as the global financial crisis destabilised international currency markets, losing one-third of its value against the US dollar. But it swiftly recovered, peaking at US$1.10 and 79 on the TWI in 2011. The dollar then began to depreciate, falling during the mid-2010s into a range between US70–80 cents. The COVID-19 pandemic saw the dollar briefly depreciate even further to just US55 cents in March 2020 (although it soon recovered to US70 cents).

Commodity prices have played a critical role in the volatility of the exchange rate. As a significant commodity exporter, with mineral and metal resources comprising half of all exports, Australia's terms of trade and long-term export performance are strongly influenced by the prices of those commodities. During the resources boom, commodity prices soared to over three times their pre-2003 value, fuelling demand from trade as well as speculative investment in the Australian dollar.

A Reserve Bank Research Paper by Daniel Rees and Mariano Kulish in 2015 estimated that the legacy of the 2000s resources boom would be a 40 per cent increase in commodity prices in the long run and a corresponding 31 per cent appreciation in the Australian dollar. This suggests that the Australian dollar will remain above its pre-2003 levels for the foreseeable future.

The Reserve Bank has identified other causes for the dollar's recent volatility. When Australia's cash rate is greater than that of other advanced economies, foreign investors (particularly from high-savings nations such as Japan) become more likely to invest their savings in Australia. This is known as "carry trade", and has provided strong support for the Australian dollar for the last two decades. Equally, when interest rates have been low, as since 2016, this reduces demand for the currency.

Long-term economic factors such as economic growth, commodity prices and returns on investment have significant impacts on the value of the exchange rate. But the past decade has shown that the main way those long-term factors have an effect is through their impact on global financial markets, in which speculators are generally more influenced by short-term factors rather than long-term economic trends.

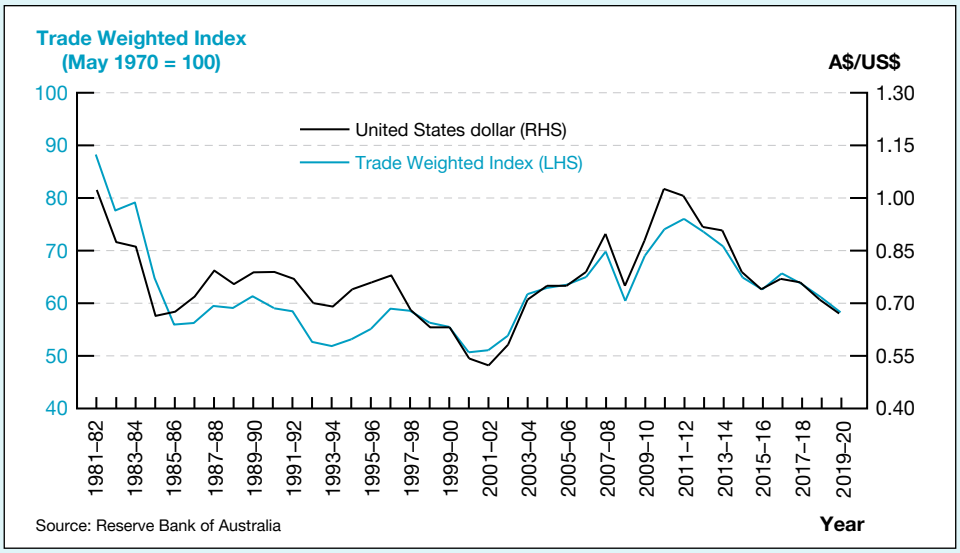


Figure 5.6 – Recent movements in the Australian dollar

A key limitation of the TWI exchange rate measurement is that the weighting is only based on volumes of trade regardless of the currency in which exports and imports are invoiced. As around two-thirds of Australia's exports and around half of imports are priced in US dollars, the A$/US$ exchange rate is far more important than the weight it receives in the TWI calculation. This is important when analysing the impact of movements in the A$ against the US$ and TWI on Australia's trade and financial flows.

Figure 5.7 shows exchange rate movements since 1990–91 for the currencies of some of Australia's major trading partners as well as the TWI. It shows that while there are often sustained trends (such as appreciation after 2002–03 and depreciation after 2011–12), there are also some years where there is a break in a sustained trend. For example, the dollar depreciated in 2008–09 and appreciated in 2016–17, in both instances breaking a longer term trend.

Year	US dollar	Euro	Japanese yen	Pound Sterling	Chinese yuan	TWI
1990–91	0.79	-	107.6	0.42	3.99	58.9
1991–92	0.77	-	101.0	0.44	4.18	58.2
1992–93	0.70	-	84.2	0.44	3.94	52.3
1993–94	0.69	-	73.5	0.46	5.04	51.5
1994–95	0.74	-	70.4	0.47	6.34	52.8
1995–96	0.76	-	77.7	0.49	6.30	54.8
1996–97	0.78	-	90.5	0.49	6.52	58.7
1997–98	0.68	-	86.0	0.41	5.61	58.3
1998–99	0.63	-	77.8	0.38	5.17	56.0
1999–00	0.63	0.63	67.9	0.39	5.17	55.2
2000–01	0.54	0.60	61.5	0.37	4.40	50.3
2001–02	0.52	0.59	66.1	0.36	4.27	50.7
2002–03	0.58	0.56	70.0	0.37	4.87	53.5
2003–04	0.71	0.60	78.9	0.41	5.91	61.5
2004–05	0.75	0.59	80.5	0.41	6.24	62.7
2005–06	0.75	0.61	85.9	0.42	6.01	63.3
2006–07	0.79	0.60	93.2	0.41	6.16	64.8
2007–08	0.90	0.61	98.6	0.45	6.54	69.7
2008–09	0.75	0.54	74.0	0.46	5.13	60.2
2009–10	0.88	0.64	80.8	0.56	6.05	68.9
2010–11	1.03	0.72	82.1	0.62	6.60	74.0
2011–12	1.01	0.80	81.9	0.65	6.58	76.0
2012–13	0.92	0.68	95.0	0.55	6.39	73.5
2013–14	0.91	0.69	94.2	0.56	5.62	70.7
2014–15	0.79	0.68	93.7	0.51	5.13	64.7
2015–16	0.74	0.67	82.2	0.54	4.70	62.4
2016–17	0.77	0.68	84.8	0.59	5.14	65.5
2017–18	0.76	0.64	84.0	0.57	5.03	63.5
2018–19	0.71	0.62	78.5	0.55	4.80	60.9
2019–20	0.67	0.61	73.5	0.53	4.73	58.0

Source: The Reserve Bank of Australia and ABS cat. no. 1350 and cat. no. 5302

Figure 5.7 – Exchange rate movements 1990–2020

The Chinese yuan is the basic unit of the Chinese currency, the renminbi. Its usage is similar to the way that economists refer to the British currency as Sterling and its unit as the British pound.

reviewquestions

1 Define the term *exchange rate*.
2 Describe how the Trade Weighted Index (TWI) is calculated and explain why it is a better measure of the value of the Australian dollar than the US$/A$ exchange rate.
3 Account for recent movements in the Australian dollar.
4 Outline the possible impact of the following scenarios on the Australian dollar:
   a) an increase in commodity prices and Australia's terms of trade
   b) overseas consumers switching to Australian exports
   c) speculators believing that the Australian dollar will soon appreciate
   d) an increase in Australia's economic growth rate
   e) an increase in interest rates overseas.

5.3 Reserve Bank intervention in the foreign exchange market

Although Australia relies primarily on market forces to determine the exchange rate, the Reserve Bank of Australia (RBA) sometimes plays a role in influencing the value of the currency. While the RBA cannot change the value of the Australian dollar in the long term, it is able to smooth out swings in the dollar relating to short-term factors. It can do so by **dirtying the float** and through monetary policy intervention.

Dirtying the float

When the Reserve Bank feels that a large short-term change in the exchange rate (possibly due to excessive speculation) will be harmful to the domestic economy, it may decide to step into the foreign exchange market, either as a buyer or a seller, in order to stabilise the A$.

In order to curb a rapid depreciation of the currency, the RBA will buy A$, putting upward pressure on the exchange rate. On the other hand, by selling A$ the RBA may prevent a rapid appreciation. For example, in the second half of 2008 when the A$ lost one-third of its value against the US$, the RBA purchased $3.3 billion of A$ to moderate its depreciation and provide support in the forex market. The RBA was able to sell $3.4 billion of A$ in 2009 as the currency recovered in value. In addition to stabilising the currency, the forex interventions also generated profits that contributed to the RBA's dividend payment to the government.

Nevertheless, the RBA's ability to intervene through buying A$ is limited by the size of its foreign currency holdings (that is, its reserves of foreign currency and gold that can be used to fund such purchases). In reality, the sum total of the RBA's foreign currency reserves is relatively small – it is not even equal to one day's total transactions in the currency.

Monetary policy decisions

Monetary policy initiatives are an indirect way of influencing the exchange rate and are rarely used for this purpose. If the RBA wants to curb a rapid depreciation, it may increase the demand for A$ by raising interest rates. Higher interest rates will attract more foreign savings, which must be converted into A$. This will increase the demand for A$ and put upward pressure on the exchange rate. However, this policy will generally only be effective for a limited time.

It is unusual for the RBA to change interest rates in response to currency movements as the primary focus of monetary policy is to influence the domestic economy – particularly the inflation rate. However, exchange rate movements can at times be so large that they may affect the stability of the economy or the level of inflation. A 2014 RBA research publication estimated that a 10 per cent depreciation leads to a ¼–½ per cent increase in inflation for two years, and a 10 per cent appreciation corresponds with a 0.3 per cent annual decline in inflation. Large currency movements are therefore a concern for the RBA.

reviewquestions

1. Explain how the Reserve Bank of Australia could directly intervene in the foreign exchange market to prevent a rapid depreciation of the Australian dollar. Discuss the limitations of this method of intervention.
2. Explain the impact of a decrease in Australian interest rates on the Australian dollar.
3. Explain what is meant by a *dirty float* of a currency.

GOVERNMENT PARTICIPANTS IN GLOBAL FOREIGN EXCHANGE MARKETS

In recent decades, governments and their central banks have played a much smaller role in global foreign exchange markets. The power of governments to influence the exchange rates of currencies has been reduced as private sector participants in forex markets, especially currency speculators with very large funds under management, have become more dominant. Governments, through countries' central banks, rarely play more than a residual role as a buyer or seller of a country's currency, mainly to stabilise its value.

Instead, exchange rate values are mostly determined by market forces – that is, the bargaining process between private sector buyers and sellers of different currencies. The values of currencies such as the Australian dollar, Japanese yen and British pound are all determined this way. Some countries, however, attempt to influence the value of their currency against another currency, and therefore play a much larger role in that foreign exchange market.

The value of the Chinese yuan, also known as the renminbi, is largely set by the People's Bank of China (PBC). Between 1994 and 2005, the PBC fixed the exchange rate at 8.27 RMB to the US dollar. After 2005, it adopted a crawling peg exchange rate system, intervening to prevent the value of the yuan from deviating more than 0.5 per cent (in either direction) against the US dollar on any given day. This daily trading band was gradually widened, reaching its current rate of 2 per cent in 2014. By mid-2020, the yuan was valued at around 7.1 to the US dollar. To maintain the exchange rate around this level, Chinese authorities must be willing to purchase a US dollar for 7.1 RMB, and be willing to purchase 7.1 RMB for a US dollar. If there is too much demand for renminbi at this "price" in US dollar terms, the Chinese central bank will accumulate increasingly more US dollar "reserves" as it sells more renminbi. In fact, the past decade has seen China's foreign exchange reserves soar from US$150 billion to over US$3 trillion – a twenty-fold increase.

While this makes China's central bank the world's most active public sector forex market participant, the Chinese Government is gradually moving towards the internationalisation of the renminbi. This gradual relaxation of government influence over the day-to-day currency value can be seen in the moderate fall of China's foreign reserves since 2014 (see figure 5.8). This move towards a more flexible exchange rate will contribute to the diminishing role of central banks in global foreign exchange markets.

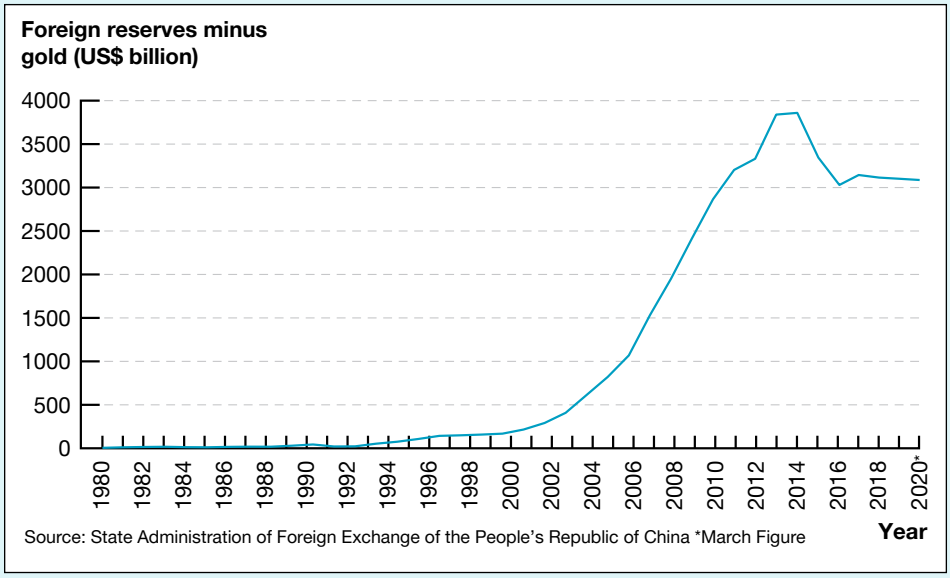


Figure 5.8 – China's foreign exchange reserves since 1980

5.4 Fixed exchange rate systems

Since December 1983, Australia has had a floating exchange rate system. In previous decades, however, it operated on a range of fixed exchange rate systems. Prior to November 1976, Australia had a fixed exchange rate system in which the A$ was pegged, at different times, to the UK pound sterling, US dollar and the Trade Weighted Index. From November 1976 to December 1983, Australia had a variation of the fixed exchange rate known as the **managed flexible peg**.

Fixed exchange rates

Under a fixed exchange rate system, the government, or the RBA, officially sets the exchange rate (that is, it would not be left up to the forces of supply and demand). A fixed exchange rate regime is depicted in figure 5.9. In this case, the official rate has been set at A$1=US80 cents (above the US70 cents rate that would apply if it was left up to market forces).

The government can attempt to maintain a fixed exchange rate by either buying or selling foreign currency in exchange for A$. In this case it would be buying the excess supply of A$ (that is, Q_1Q_2) at a price of US80 cents.

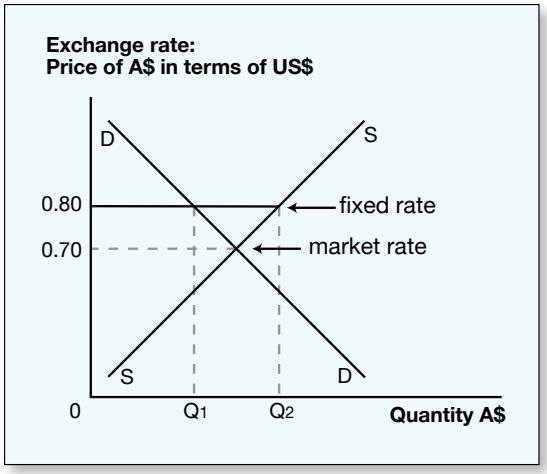


Figure 5.9 – A fixed exchange rate system

Thus, in order to intervene in the foreign exchange market under a fixed exchange rate system, the government would need **foreign reserves** of foreign currency and/or gold.

When Australia operated under a fixed exchange rate system, the RBA obtained the necessary foreign reserves by insisting that all foreign exchange holdings be lodged with them. Even so, the risk with this system is that in order to prop up the value of the A$, the RBA could exhaust its foreign reserves by continually exchanging them for the excess supply of A$, which could lead to a complete collapse of trade in the currency.

The other avenue open to the government would be to change the exchange rate "officially", so that it was closer to the real market value. It would **devalue** the A$ when it officially lowered the exchange rate and **revalue** the A$ when it increased the exchange rate.

The managed flexible peg

A variation of the fixed exchange rate is the managed flexible peg. This system operated in Australia from November 1976 to December 1983. Under this system, the Reserve Bank would "peg" the value of the A$ at 9am each day and that price would operate throughout that day. A flexible peg system provides more flexibility than the fully fixed rate, but it can still allow the official rate to drift away from that which would exist under pure market forces. For example, many economists have argued that Australia had an overvalued exchange rate under the managed flexible peg system in the early 1980s.

reviewquestions

1. Explain, using graphs, how the Reserve Bank of Australia can influence the exchange rate by buying and selling Australian dollars.
2. Outline the risks of operating a fixed exchange rate system.
3. Distinguish between a fixed exchange rate and a managed flexible peg.

5.5 Exchange rates and the balance of payments

In an open economy such as Australia's, the value of the exchange rate can change substantially in response to economic developments. One of the most important influences on the exchange rate is the performance of the balance of payments. But just as the balance of payments influences the value of the dollar, the value of the dollar can also influence the balance of payments – as well as several other areas of the economy.

How the balance of payments influences the exchange rate

Under a floating exchange rate, the quantity of A$ supplied must always equal the quantity of A$ demanded. In other words, the net outflow of funds on the current account (supply of A$) equals the net inflow of funds on the capital and financial account (demand for A$). (Note, however, that in reality, allowance has to be made for statistical mistakes through the net errors and omissions item on the balance of payments). If there is any disequilibrium on the balance of payments it is only temporary and is automatically corrected by a movement in the exchange rate.

The following example demonstrates how a change in the current account can influence the exchange rate and the capital and financial account. If the value of imports increased, while exports remained unchanged, this would result in a deterioration in the current account deficit (CAD). It would also cause an increase in the supply of A$ (importers will be selling more A$ in order to buy foreign currency), resulting in a depreciation of the currency. Also, because of the depreciation, a given level of financial inflows would be able to buy more A$. Therefore, the positive balance on the capital and financial account would increase in A$ terms to match the bigger deficit on the current account.

Likewise, any other increased outflow of funds on the current account (for example, payment of services, income payments or current transfers) would most likely lead to a depreciation of the A$ and an increase in the surplus on the capital and financial account. On the other hand, an improvement in the CAD would result in an appreciation of the A$ and a decrease in the surplus on the capital and financial account.

The effect of the balance of payments on the exchange rate also depends on the perceptions of financial markets. If financial markets are concerned that an increase in the CAD is not sustainable, they may be less willing to buy Australian assets, and so the value of the dollar is likely to fall further as capital inflow is reduced. On the other hand, the dollar may appreciate despite increases in the CAD if financial markets believe the CAD is sustainable and they have confidence in Australia's future economic prospects. For example, the Australian dollar appreciated to over US95 cents in mid-2008, a time when the CAD was large, but investors believed that Australia's current account problems did not pose a short-term risk to the economy, and they expected that high commodity prices would eventually reduce the CAD. Similarly, while the current account was moving into surplus in 2019 and 2020 for the first time in almost half a century, the exchange rate was depreciating, at one point even dipping below US60 cents.

Recent years indicate the most significant influence on exchange rate movements is how financial markets choose to react to developments in economic indicators (such as the balance of payments), and sometimes those reactions are difficult to predict. This results in greater instability in foreign exchange markets because market sentiment can change quickly.

The effects of a change in the exchange rate

Changes in the exchange rate can also bring about changes in the balance of payments. The effects of appreciations and depreciations can be both good and bad for the economy.

An appreciation

NEGATIVE EFFECTS	POSITIVE EFFECTS
• By increasing the value of the A$ in terms of other currencies, Australia's exports become more expensive on world markets and therefore more difficult to sell, leading to a decrease in export income and a deterioration in Australia's CAD in the medium term. • Imports will be less expensive, encouraging import spending and worsening Australia's CAD. Domestic production of import substitutes is likely to fall. • Higher import spending and reduced export revenue will reduce Australia's economic growth rate. • Foreign investors will find it more expensive to invest in Australia, generally leading to lower financial inflows. However, financial inflows may continue if foreign investors expect the currency to continue rising. • An appreciation reduces the A$ value of foreign income earned on Australia's investments abroad and would cause a deterioration in the net primary income component of the CAD. • An appreciation will also reduce the value of foreign assets in Australian dollar terms – a phenomenon known as the **valuation effect**.	• Australian consumers enjoy increased **purchasing power** – they can buy more overseas produced goods with the same quantity of A$. • An appreciation decreases the interest servicing cost on foreign debt because Australians can buy more foreign currency with Australian dollars. This would reduce outflow on the net primary income component of the current account in future years and help reduce Australia's CAD. • An appreciation will also reduce the A$ value of foreign debt that has been borrowed in foreign currency – a phenomenon known as the valuation effect. • Inflationary pressures in Australia will be reduced as imports become cheaper. This is likely to reduce pressure on the RBA to raise interest rates to defend its inflation target.

Valuation effect is where an appreciation (or depreciation) of the currency causes an immediate change in the Australian dollar value of foreign debt that is borrowed in foreign currencies or foreign assets held by Australians.

A depreciation

NEGATIVE EFFECTS	POSITIVE EFFECTS
• Australian consumers suffer reduced purchasing power – they can buy fewer overseas produced goods with the same quantity of A$. • A depreciation increases the interest servicing cost on Australia's foreign debt because Australia can buy less foreign currency with its domestic currency with which to pay interest. This increases income outflow on the net income component on the current account and thus increases Australia's CAD. • A depreciation will also raise the A$ level of foreign debt that has been borrowed in foreign currency as expressed in Australian dollar terms – a phenomenon known as the valuation effect. • Inflationary pressures in Australia will increase as imports would now be more expensive. This may increase pressure on the RBA to raise interest rates to defend its inflation target.	• By decreasing the value of the A$ in terms of other currencies, Australia's exports become cheaper on world markets and therefore easier to sell, leading to an increase in export income and an improvement in Australia's CAD in the medium term. A weaker A$ following the end of the commodities boom is largely credited with helping the Australian economy adjust to reduced income from mining by increasing the international competitiveness of other sectors. • Imports will be more expensive, discouraging import spending and potentially improving Australia's CAD. Domestic production of import substitutes should also rise. • Lower import spending and greater export revenue will increase Australia's growth rate, but this may not happen if Australia is unable to replace its imports with domestically produced goods. • A depreciation increases the A$ value of foreign income earned on Australia's investments abroad and would cause an improvement in the net primary income component of the CAD. • A depreciation will also increase the value of foreign assets in Australian dollar terms – a phenomenon known as the valuation effect. • Foreign investors will find it less expensive to invest in Australia, generally leading to greater financial inflows. However, financial inflows may dry up if foreign investors expect the currency to continue falling.

Given the positive and negative effects of both depreciations and appreciations, we might ask the question: do economists and policy makers favour a higher or lower exchange rate? The answer is that economists mostly favour an exchange rate values that reflects the true forces of supply and demand. These "true" supply and demand forces would result from the exchanges of goods, services and finance between Australia and the rest of the world, but would not include exchange rate changes due to speculation. Speculators who buy or sell A$ in anticipation of a change in the currency distort exchange rate movements, and they increase exchange rate volatility by exaggerating upwards and downwards cycles.

One of Australia's problems is that it is a small economy that relies on substantial financial inflows to deal with its large external imbalances. This has traditionally made the A$ a "hot money" currency, which makes it more vulnerable to speculators than many other advanced economies. Excessive speculation and volatile currencies have become major global economic issues during the globalisation era, with many countries experiencing large swings in their currencies.

reviewquestions

1 Critically evaluate whether the value of the A$ is likely to be higher or lower against the US$ by the end of this year. Justify your forecast. (Hint: check the currency forecasts on the websites of any of the major Australian banks.)

1 The **exchange rate** is the price of Australia's currency in terms of another country's currency.

2 Under Australia's floating exchange rate system, the value of the currency is determined by the interaction of the forces of demand and supply in the marketplace, which determine an equilibrium value for the currency. This equilibrium changes regularly (the levels of minute by minute) as supply and demand change.

3 **Demand** for the Australian dollar is determined by the perceptions of speculators about future movements in the dollar, changes in interest rates and the demand for Australian exports, which are in turn influenced by the level of economic growth in Australia's trading partners and commodity prices.

4 **Supply** of the Australian dollar is determined by the perceptions of speculators about future movements in the dollar, changes in interest rates and the demand for imports, which are in turn influenced by the level of economic growth and consumer spending within Australia.

5 The two main exchange rates are the Australian dollar against the **United States dollar**, the world's leading currency, and the **Trade Weighted Index**, which is a basket of currencies weighted according to their significance to Australia's trade patterns.

6 The Reserve Bank of Australia (RBA) can influence the value of the dollar by intervening directly in foreign exchange markets through buying or selling the dollar with the aim of influencing its value, which is known as **dirtying the float**.

7 The RBA can also influence the currency's value through **monetary policy** decisions. For example, an increase in the level of interest rates will tend to attract financial flows into Australia and raise the value of the currency.

8 Under a **fixed exchange rate system** the value of the currency is normally determined by the central bank, either for the longer term or on a day-to-day basis through a flexible peg system.

9 Changes in the **balance of payments** can influence the currency's value, although the extent to which the balance of payments impacts on the currency depends on the response of foreign investors. In general, a deterioration in the CAD is likely to result in a depreciation, and an improvement in the CAD is likely to result in an appreciation.

10 Movements in the value of the exchange rate can have an impact on the level of inflation, international competitiveness, the level of exports and imports, foreign debt servicing costs, the CAD and the rate of economic growth.

1. Describe what is meant by the *exchange rate*.
2. Outline the factors that affect the demand for Australian dollars.
3. Outline the factors that affect the supply of Australian dollars.
4. With the aid of a diagram, explain what is meant by a *fixed exchange rate system*. Outline the problems that the RBA could experience when maintaining a fixed exchange rate.
5. Explain what is meant by a *depreciation* of the dollar. With the aid of a diagram, describe how a depreciation may occur.
6. Outline what is meant by the *Trade Weighted Index*. Identify why it is useful for analysing movements in the value of the Australian dollar.
7. Explain how, under our present floating exchange rate system, the Reserve Bank can influence the exchange rate:

   a) by dirtying the float
   b) through changes in monetary policy.

8. Examine how the exchange rate will be influenced by a deterioration of the current account deficit.
9. Discuss the positive and negative impacts of an appreciation of the Australian dollar.
10. Discuss how speculation can influence the value of the Australian dollar.

6 Protection in Australia

6.1 Introduction
6.2 Government initiatives to reduce protection
6.3 Australia's free trade agreements
6.4 Implications of a reduction in protection levels for the Australian economy
6.5 The impact of international protection levels on Australia
6.6 The future of Australian industry in the global economy

6.1 Introduction

Trading relationships have long been important to the Australian economy. Australia's distance from the rest of the world, and the relatively high proportion of output that is traded, mean that barriers to trade have a significant effect on the economy, whether these barriers are within Australia or in overseas markets. Over the past fifty years, the Australian economy has benefited from the gradual removal of trade barriers. Although the momentum towards free trade has faltered in recent years, Australia remains a vocal advocate for free trade. Protectionist sentiments around the world have gathered strength in recent years, most recently bolstered by the COVID-19 pandemic in 2020. In addition to its immediate impacts on trade in goods and services, the pandemic sparked a broader debate about whether globalisation has left economies vulnerable to global supply chains that might fail in a time of crisis.

Historically, Australia was one of the most highly protectionist countries in the world. Governments felt it was necessary to protect Australian manufacturers, who for many years found it difficult to compete because of the relatively small population and low production levels in Australia. However, in the early 1970s Australia began to shift away from protectionism, and throughout the 1990s and 2000s Australia phased out almost all tariffs. For over three decades, Australia has been, in most respects, one of the most open economies in the world, and is one of its most vocal free trade advocates.

THE GOVERNMENT'S MAIN AIMS IN REDUCING PROTECTION

- Force domestic industries to become internationally competitive by exposing them to competition from imported goods.
- Encourage resources to move away from industries and firms that cannot improve their competitiveness to those that can become more competitive – in other words, to focus on areas of the economy where Australia has a comparative advantage.
- Allow Australia to benefit from greater integration with the global economy, by giving consumers and businesses access to goods and services available on global markets at the lowest possible price.
- Promote structural change in the economy, with the long-term aim of encouraging efficient firms to produce what the global economy demands.

6.2 Government initiatives to reduce protection

Australia's transition from a highly protected economy to an economy with relatively low trade barriers has occurred over a period of decades. As shown in figure 6.1, this is demonstrated by the **gradual decline in the average tariff level** in Australia since the late 1960s. Over the same time period, Australia has also seen the gradual phasing out of other "non-tariff barriers" to trade, such as quotas and subsidies.

1968–9	1977–8	1982–3	1986–7	1994–5	2002	2018
36%	23%	25%	19%	9%	3.7%	0.9%
Sources: Productivity Commission, World Development Indicators						

Figure 6.1 – Average tariff levels in Australia

Protectionist policies came under sustained attack from the early 1970s. Organisations such as the Productivity Commission (then called the Industries Assistance Commission), the Commonwealth Treasury and the National Farmers' Federation argued that protection fostered inefficiency, increased prices, misallocated resources, made Australia less internationally competitive, damaged our trading performance and reduced living standards in the long run.

The first significant initiative to reduce protection was made by the Whitlam Government, which in 1973 announced a 25 per cent across-the-board tariff cut. However, it was not until 1988 that Australia commenced a comprehensive program of trade liberalisation. Over the subsequent decade, Australia reduced its tariffs faster than any other advanced economy (other than New Zealand).

Today, around half of all imported goods are tariff free, with the remainder, mostly manufactured goods, subject to a general tariff rate of 5 per cent or less. Historically, some manufacturing industries such as motor vehicles and the clothing and textiles industry were protected by higher tariff levels. However, these arrangements were phased out in 2015. Most remaining tariffs do not apply to imports from countries with which Australia has a free trade agreement, such as Korea, Japan and China.

Australia's **average tariff level** (weighted according to what goods and services are traded the most) was most recently calculated as just 0.9 per cent. The Productivity Commission estimates that the dollar value of tariff assistance to domestic production was $2.0 billion in 2018–19. Australia's average tariff level is lower than other industrialised economies such as the United States (1.6 per cent) and the European Union (1.7 per cent).

When other protectionist methods, such as subsidies to domestic producers, are taken into account, Australia is **one of the least protectionist economies in the world**. Australia provides far fewer subsidies for domestic producers compared

WHAT DO 5G TELECOMMUNICATION NETWORKS AND SUBMARINES HAVE IN COMMON?

In 2016, after a 15-month "competitive evaluation process", the Turnbull Government announced French naval ship building company DCNS Group (now known as Naval Group) had won a 25-year, $50 billion contract to build 12 submarines for the Australian fleet. The key reason for DCNS winning the contract was its promise to do the "bulk of the [manufacturing] work" in South Australia.

Many economists criticised the decision as a blatant form of trade protection. Manufacturing the fleet in South Australia instead of overseas is expected to add between 30 and 40 per cent to the total cost of the project. As a result, the implied trade assistance given to the companies involved in the build (including the Australian companies providing domestic labour resources) is, according to the Productivity Commission, "higher than the peak historical levels recorded for the automotive and textiles clothing and footwear industries".

Proponents of the policy argue, however, that there are important strategic advantages in local construction including deepening the domestic skill base for using and maintaining the vessels. This touches on the larger question of the extent to which national security concerns justify the protection of local industries. This argument is more widely accepted than other justifications for protectionism, and Australia has relied on it in recent times for more than just building submarines.

In 2018, the Australian Government announced a telecommunications industry policy that had the effect of banning Chinese telecom giants Huawei and ZTE from involvement in the rollout of the new 5G mobile telecommunications network, because of their closeness to the Chinese government. The decision attracted widespread debate, because alternative 5G providers were seen as more expensive and less advanced.



For further information on Australian protection and trade agreements, visit the Department of Foreign Affairs and Trade website **www.dfat.gov.au**, the Productivity Commission **www.pc.gov.au** and the Bureau of Agricultural and Resource Economics and Sciences: **www.agriculture.gov.au/abares**

Using the DFAT website, identify current negotiations being undertaken by the Australian Government for future bilateral and regional trade agreements.

with North America, Western Europe and East Asia, where they play a significant role in boosting the competitiveness of these countries' agricultural sectors. In 2019, Australia had the second-lowest level of agricultural protection in the OECD, with subsidies accounting for less than 2 per cent of farm income (New Zealand was the only economy with a lower level of protection). By comparison, subsidies accounted for 12 per cent of farm income in the US, 19 per cent in the EU and 41 per cent in Japan.

While protection and direct assistance for producers has been substantially reduced during recent years, some export assistance programs still exist. These programs are administered through **Austrade** (the Australian Trade and Investment Commission). Austrade's assistance for exporters includes financial assistance, information on potential export markets and marketing advice. The main program that Austrade administers is the **Export Market Development Grants (EMDG)** scheme, which reimburses exporters for some of their costs in promoting their exports in new markets. Each year the EMDG scheme aims to provide around $140 million in grants to around 4000 Australian businesses to help them find export markets and enhance export promotion. A 2015 review found that the EMDG scheme was effective and that each dollar spent generates net economic benefits valued from $1.55 to $7.03. Consistent with this, the federal Government provided additional funding to the scheme in 2019–20 so that more Australian businesses could benefit. Another review is also currently underway to assess how the scheme could be improved.

WHY DID CHINA SLAP TARIFFS ON AUSTRALIAN BARLEY?

In 2020, the Chinese government imposed tariffs of more than 80 per cent on Australian exports of barley, a type of grain used to make beer and to feed livestock. Officially, they were introduced as 'anti-dumping' and 'anti-subsidy' penalties, following an eighteen-month investigation into whether Australia was unfairly relying on these practices. However, the Chinese government did not provide any evidence of how the alleged dumping activities took place, and even claimed that Australia's water management policies in the Murray-Darling basin constituted subsidies to barley farmers. One explanation for China's action was that the tariffs were retaliation for Australia's own anti-dumping measures on Chinese steel and aluminum products. Another was that it was retaliation for Australia's advocacy for an international inquiry into the origins of COVID-19, which originated in Wuhan, China. After the imposition of the tariffs, Australia barley exporters found themselves priced out of a market that previously took more than half of Australia's total barley exports, valued at around $2 billion. Prices for Australian barley fell sharply as a result. On the other side, China's beer brewers expressed frustration that their government's measures will add to their own input costs and make them less competitive in international markets.

Australia's reductions in protection levels have typically gone well beyond those required by **international trade agreements** such as the World Trade Organisation agreement. While some other countries have only reduced protection levels to the extent required by their trade agreements, Australia has pursued a general strategy of phasing out protection. A Trade Policy Review of Australia by the WTO in 2020 commended Australia's trade policies and highlighted only a few examples where policy changes could further liberalise trade. These included Australia's tax on luxury cars (which hurts exports from particular countries), certain foreign investment restrictions, and Australia's prolific use of anti-dumping measures (the WTO report implied that Australia may have been overzealous with these measures, implementing some when they may not have been justified). Australia's use of anti-dumping measures has also been criticised within Australia, with the Productivity Commission arguing in a 2016 report that often there is insufficient economic justification for these measures, and they generally have negative overall impacts. Nevertheless, changes to Australian laws in 2017 made it even easier for governments to keep enforcing anti-dumping measures after the related dumping activity has stopped. In addition, despite the shutdown of Australia's car manufacturing industry, it still imposes tariffs on new cars and complete bans on the importation of second-hand cars.

reviewquestions

1 Outline trends in Australia's protection levels over recent decades.
2 Explain the government's main objectives in reducing protection levels.

6.3 Australia's free trade agreements

In addition to reducing their own levels of protection, governments pursue free trade by accessing overseas markets through trade agreements. Over the last decade, Australia has been active in securing free trade agreements with China, Japan and South Korea, adding to existing agreements with the US, Chile and other regional economies (see figure 6.2). Australia's involvement in trade negotiations includes both multilateral agreements and bilateral agreements.

Bilateral trade agreements

Bilateral agreements involve just two nations. They are the easiest trade agreements to negotiate because they only need to factor in the interests of the two participants. The most comprehensive bilateral agreement for Australia is the 1983 Australia-New Zealand Closer Economic Relations Trade Agreement (known as ANZCERTA). This agreement has led to free trade between the two countries and increased standardisation of laws, business practices and commercial structures.

Bilateral trade deals are an important focus of trade policy in Australia. Since 2000, Australia has entered bilateral agreements with Peru, Chile, China, Japan, Korea, Malaysia, Singapore, Thailand, and the United States. Further bilateral agreements with Hong Kong and Indonesia respectively entered into force in 2020. The Australian Government has also entered into negotiations for separate agreements with the European Union (EU), Gulf Cooperation Council (covering the economies of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) and India. Negotiations for a bilateral deal with the United Kingdom have also recently been launched, following its exit from the EU.

Trade agreements

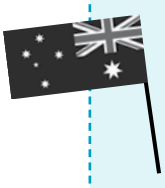
Bilateral agreements

ANZCERTA (New Zealand – Australia)
SAFTA (Singapore – Australia)
TAFTA (Thailand – Australia)
AUSFTA (Australia – United States)
ACI - FTA (Australia – Chile)
IA - CEPA (Indonesia – Australia)
A - HKFTA (Australia – Hong Kong)
MAFTA (Malaysia – Australia)
KAFTA (Korea – Australia)
JAEPA (Japan – Australia)
ChAFTA (China – Australia)
PAFTA (Peru – Australia)

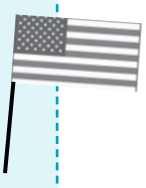
Multilateral agreements

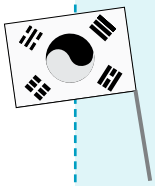
APEC forum
AANZFTA
(ASEAN-Australia-New Zealand)
CPTPP (Australia and 10 other regional countries)

Figure 6.2 – Trade agreements that affect the Australian economy

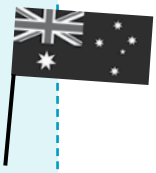


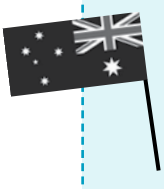
The **Australia – United States Free Trade Agreement (AUSFTA)**, in operation since 2005, provides significant tariff reductions on a number of goods, especially in agriculture and manufacturing. In particular, automotive tariffs were eliminated immediately and tariffs on all goods were eliminated from 2015. Since 2004, bilateral trade in goods and services with the United States has increased and the US is Australia's third-largest trading partner, with around 9 per cent of Australia's two-way trade.





The **Korea – Australia Free Trade Agreement (KAFTA)**, in operation since late 2014, improves access for Australian exporters to the US$1.5 trillion Korean economy, with tariff-free exports rising from 84 per cent to 99 per cent of exports over the next 20 years. The agreement also facilitates more services trade in legal, accounting, financial, engineering, telecommunications and education services. The agreement seeks to improve opportunities for Australian investors and investments in Korea, and will help attract direct investment from Korea into Australia. Two-way trade between the countries increased by over 40 per cent between 2015 and 2019.





The **China – Australia Free Trade Agreement (ChAFTA)**, in operation since 2015, was completed to further promote trade with Australia's largest trading partner, China. Currently, around 93 per cent of Australian exports to China are tariff free, and this rate will increase to around 95 per cent over the next 10 years, directly improving the competitiveness of key agricultural industries such as beef, dairy, wine, fruit and seafood. China has also granted Australia greater market access for certain services than most other nations with Chinese agreements – particularly for Australian financial, professional and educational service providers. The agreement also includes a number of controversial items. Most notably, investor-state dispute settlement (ISDS) provisions allow foreign investors to directly bring arbitration claims against governments for alleged breaches of FTAs, and according to the Productivity Commission, "potentially undermine the role of domestic courts and freedom of governments to regulate in the public interest". (So far, Australia has only ever faced one challenge under ISDS provisions and it was unsuccessful). The escalation of geopolitical tensions between Australia and China may harm bilateral trade over the coming years, despite the free trade agreement.



While bilateral trade agreements reduce overall protection for Australian industries, they do so on a country-by-country basis, depending on the origin of the imports. As a result, they generate fewer economy-wide benefits than broad trade liberalisation. Increasingly, bilateral deals operate less as a means of unlocking new trading opportunities and more as a means of shoring up existing rules around free trade in a time of rising protection. Nevertheless, they are widely used, with a 2018 study of Free Trade Agreement Utilisation by PricewaterhouseCoopers finding that 62 per cent of Australian businesses used at least one FTA in exporting products, and 78 per cent use them in importing.

One of the challenges of having so many bilateral trade agreements around the world is that they create a complex web of overlapping and inconsistent trade rules for exporters and importers. Because of this, the Productivity Commission has concluded that such preferential trade agreements add to the complexity and cost of international trade. Indeed, the Productivity Commission has found that some businesses find it easier just to pay the general tariff rate on imports than to use the tariff-free import provisions in Australia's bilateral agreements, which require efforts to prove compliance with rules of origin.

Multilateral trade agreements

Multilateral trade agreements are agreements that provide for free or preferential trade between many countries, usually on a regional basis. This category of agreements sometimes refers to agreements administered by the World Trade Organisation (WTO), by which we mean global agreements. At other times this category can refer to regional trade agreements, such as the European Union and North American Free Trade Agreement.

Australia's main multilateral trade agreement is the **ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA)** with New Zealand and the Association of South-East Asian Nations (ASEAN), which came into effect in 2010. This agreement covers around 20 per cent of Australia's trade in goods and services and effectively creates a free trade area of over 650 million people with a combined GDP over US$4.4 trillion. ASEAN economies are also growing rapidly; by 2050 the entire group is projected to be the fourth-largest economy in the world. Australia and the ASEAN economies are complementary economies. This means that the type of goods that Australia can export – namely commodities, particularly in resource-based industries – are in heavy demand in the industrialising nations of South-East Asia. Conversely, South-East Asia can export to Australia those goods that we cannot produce competitively, such as simply transformed manufactures produced in labour-intensive industries. Overall this agreement was forecast to boost the Australian economy by US$19 billion during the decade following its implementation in 2010.

Australia and New Zealand are just two of the six countries that have multilateral trade agreements with ASEAN (the others being China, India, South Korea and Japan). Since 2012, ASEAN and these countries (except India, which pulled out in 2019) have been negotiating an ambitious Regional Comprehensive Economic Partnership (RCEP) that would bring all of these countries into a single multilateral trade agreement. The RCEP would cover around 30 per cent of the global economy and world's population. China has played a key role in shaping the proposed RCEP (which excludes the United States).

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership, or CPTPP, is a multilateral agreement between 11 countries that came has come into force for Australia, Canada, Japan, Mexico, New Zealand, Singapore and Vietnam and will in the future for Brunei Darussalam, Chile, Malaysia and Peru. The agreement increases market access across borders for businesses by lowering tariff barriers, reducing rules of origin, reducing foreign investment restrictions and imposing rules around the conduct of state-owned enterprises. While a significant free trade area, the CPTPP is far more modest than the original plan for a Trans-Pacific Partnership Agreement (TPPA), which had also included the United States (before President Donald Trump withdrew the country's participation in 2017).

During the 1990s, Australia's regional trade negotiations focused on the **Asia-Pacific Economic Cooperation (APEC) forum**. In 1994, the APEC forum set a target of free trade by 2020 (by 2010 for developed countries). This goal was never formalised in a trade agreement, and for most of its history the meeting of APEC forum leaders has focused on other priorities such as terrorism and climate change. A 2017 analysis by the APEC Policy Support Unit nevertheless argued that even without binding commitments, the forum has indirectly supported trade liberalisation among members. Since 1994 average tariff levels have fallen from 17 per cent to under 6 per cent, the proportion of goods without tariffs has increased to 60 per cent, and 150 free trade agreements (including regional agreements) have been implemented involving APEC members.

reviewquestions

1. Distinguish between a bilateral trade agreement and a multilateral trade agreement.
2. Explain the key features of TWO of Australia's bilateral trade agreements.
3. Compare Australia's multilateral trade agreement with the Association of South-East Asian Nations and New Zealand and its membership in the Asia-Pacific Economic Cooperation forum.

6.4 Implications of a reduction in protection levels for the Australian economy

Australia's decision to largely abandon protectionism has been one of the most significant structural changes in the country's economic history. It has significantly increased Australia's integration with the global economy. It has also had far-reaching effects in its impact on the structure of the economy and the nature of Australia's trading relationships.

Effects on firms

While the long-run effect of reduced protection on businesses may be beneficial, as shown in figure 6.3, there is no doubt that reducing protection creates winners and losers, particularly in the short run. Individual firms that operate in marginal, import-competing industries will shrink unless they are able to improve their competitiveness. In some cases, production in some sectors of the economy cease altogether – for example, the manufacturing of consumer electronics products such as televisions, sound systems and microwave ovens in advanced economies such as Australia has almost entirely ceased (with

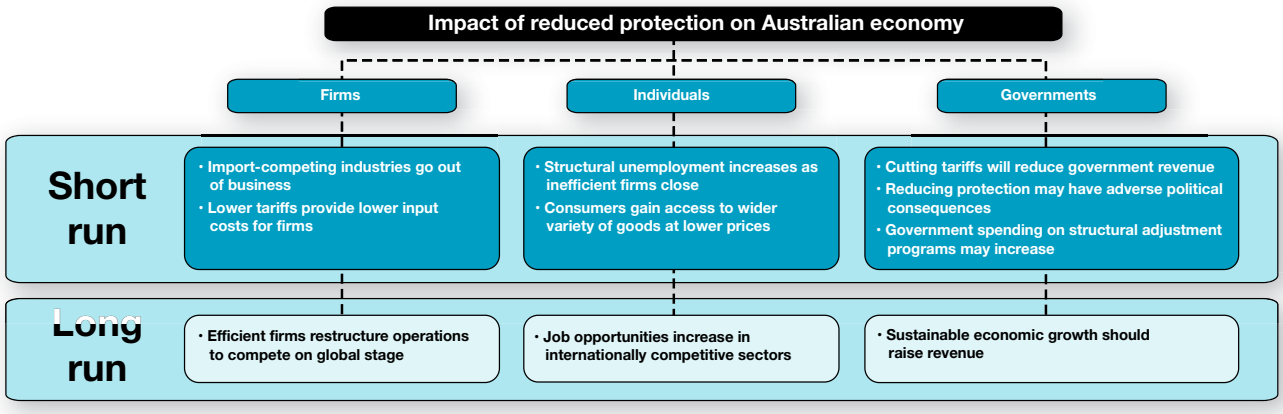


Figure 6.3 – The impact of reduced protection on the Australian economy

car manufacturing in Australia ceasing in 2017). This is because manufacturing of these products generally requires high production volumes and a large workforce, and advanced economies cannot compete with the lower-wage costs of industrialising economies such as China and Vietnam.

Some businesses will respond to a phasing out of protection by restructuring their operations with the aim of staying in business or perhaps putting their focus on specialising in one aspect of production. This restructuring may involve measures such as consolidating their manufacturing processes down to a single plant, eliminating less profitable product lines, finding opportunities for exporting in response to the decline in their share of the domestic market, adopting new production technologies in order to reduce production costs, or reducing staffing levels.

The aim of removing protection for local industries is to force them to develop the innovation and efficiency that is necessary to compete on a world stage. By operating in a competitive domestic market, Australian firms should be better able to compete in global markets. This should also result in higher levels of investment for those firms that survive, as Australian businesses invest in improving their technology or expanding their business. Productivity Commission research shows that reducing tariffs spurs innovation and productivity growth through increased competitive pressure.

Lower tariffs for one industry can generate benefits for firms in other industries. Lower tariffs mean **lower input costs** for many firms that import capital goods for their production processes – for example, machinery used by mining companies in the extraction of commodities such as coal and gas. The Productivity Commission in 2020 estimated that abolishing tariffs on intermediate production inputs would reduce input costs by around $2 billion per year. Reducing these input costs will also make exporting firms more internationally competitive. For example, the removal of tariffs on inputs such as farm machinery has improved the competitiveness of Australia's agricultural industries. For this reason, the agricultural industry's lobby group, the National Farmers' Federation, has for many years supported reducing levels of industry protection.

During the 1990s, the reduction in protection, along with other microeconomic policies, contributed to changes in Australia's export base, including a significant growth in manufacturing exports. However, the global resources boom of the 2000s saw Australia shift back to a heavily commodity-focused export base, as shown in figure 6.4. This pattern is expected to remain for at least the medium term, with gold and natural gas expected to be strong drivers of export growth in the coming years.

In addition to the changing composition of exports during this period, there has also been substantial overall **growth in export volumes**, suggesting that Australia is becoming more integrated with the world economy. A higher proportion of Australia's production is being exported, and equally, a higher proportion of the goods and services that Australians consume are imported.

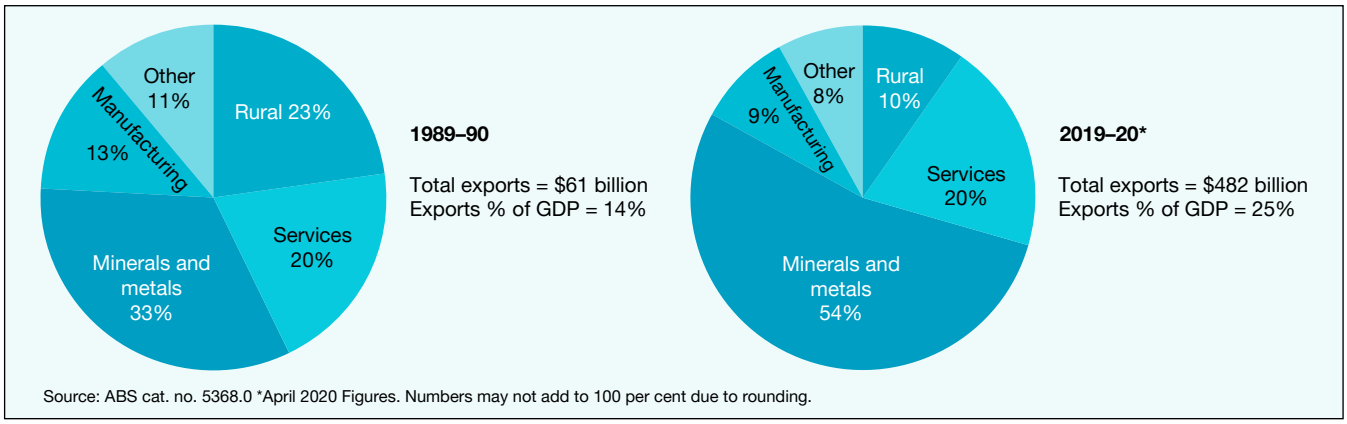


Figure 6.4 – Changes in Australia's export profile in the past decades

Effects on individuals

Individuals can experience substantial dislocation as a result of reduced protection levels, in particular through the **increase in unemployment** associated with the restructuring of industries and cuts in local production. The impact of these job losses can be particularly harsh on individuals who have worked in these industries for a long time and have limited alternative job opportunities.

- The import-competing industries that have been most affected by reductions in protection have been concentrated in particular regions, such as the manufacturing areas of Victoria and South Australia, where there are fewer alternative sources of employment. With reductions in protection, unemployment rates in these areas climbed dramatically and it was difficult for people who lost jobs in these areas to find alternative employment.
- Many of the jobs lost in the manufacturing sector because of lower protection are relatively low-skilled, production-line jobs. The limited skills that workers develop in these jobs are not easily transferred to other workplaces, especially at a time when the overall number of people employed in many of the manufacturing industries has been declining.

People who lose jobs as a result of tariff cuts often join the ranks of the **structurally unemployed**, because they often find that their skills do not match the job vacancies in the economy. It may then become necessary for these workers to retrain to develop work skills that are relevant to the current needs of the economy. The Australian Government has funded many retraining programs with the aim of helping workers made redundant through tariff cuts to adapt their skills to other industries and find work elsewhere. For example, the Government established a $155 million Growth Fund to support the transition away from the automotive industry after it was announced that domestic car production would end in 2017.

However, the effects of reduced protection on employment patterns are not entirely negative. While unemployment is likely to increase in the short term due to cuts in protection, in the longer-term employment levels may increase. Provided the process of structural change promotes internationally competitive firms in the future, the lost employment opportunities should be more than recouped by the growth experienced by those sectors in the economy that are efficient and internationally competitive. For example, while manufacturing industries declined in recent decades, service industries such as tourism and education have grown. In 2019, education represented over 40 per cent of Australia's service exports, compared to just 11 per cent in 1999. The problem with reducing protection in overall terms may not be that it raises the total level of unemployment, but that the gains and losses from protection cuts are distributed unevenly throughout the population, with some communities and individuals winning while others lose out.

One way in which all individuals should benefit from lower levels of protection is in their role as **consumers**. Lower trade barriers have resulted in consumers being able to buy many goods at lower prices. Additionally, a wider variety of goods and services are available. For example, according to the Australian Government's 2011 Trade Policy Statement, lower protection and other factors had resulted in real price falls of up to 54 per cent between 1985 and 2011 for a range of manufactures including footwear, electronics, furniture and motor vehicles. The increased level of competition has also contributed to

CLOTHING TARIFF CUTS



The reductions in tariffs on clothing goods from 17.5 per cent to 10 per cent in 2010 were strongly opposed by manufacturing industry employees. In the lead up to the cuts, some workers took their campaign to the Parliament House, arguing that the decision would create unemployment. A report by the Productivity Commission estimated that the lower clothing tariffs would indeed reduce industry employment by over 5 per cent – the equivalent of over 1500 jobs. However, the government decided to proceed with the cuts because there would be overall economic benefits, including lower prices for consumers, a view strongly supported by the Productivity Commission. A further reduction to 5 per cent was implemented in 2015.

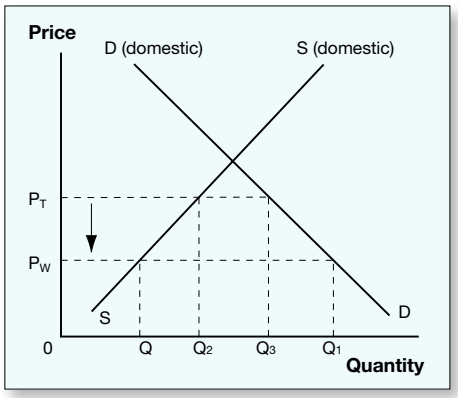


Figure 6.5 – The effect of tariff reductions

improved customer service from firms in some sectors. Figure 6.5 shows how the removal of tariff protection lowers the *domestic price* of products (from P_T to P_W), and increases the amount of foreign products available (from Q_2Q_3 to QQ_1).

The phasing out of trade barriers and the opening up of the Australian economy to global markets is intended to **improve living standards** for individuals. The quality of goods and services is higher because globally competitive businesses enter Australian domestic markets, forcing domestic firms to lift their game. Highly competitive markets also tend to encourage greater innovation as firms seek to differentiate themselves from competitors. The domestic presence of many firms that operate in global markets also ensures that innovations in other markets are brought into Australia more quickly.

Effects on governments

Cutting tariffs will lead to a reduction in **government revenue**, since tariffs provide indirect tax revenue to the government. In the early years of Australia's nationhood at the beginning of the twentieth century, tariffs provided the largest source of revenue to the Commonwealth Government. Indeed, the two largest political parties were the Protectionist and Free Trade parties. The importance of tariff revenue has declined over the past century, to the point where it is now only a minor source of revenue. The approximately $2.0 billion in tariff revenue collected by the government in 2019–20 accounts for less than 1 per cent of its total revenue.

A program of reducing protection levels may also have effects on the levels of **government spending**. Governments may be required to assist the structural adjustment process through increased expenditure on unemployment benefits and retraining programs to aid individuals who lose their job. In some instances, governments also provide financial support to certain industries to assist with the adjustment process. For example, motor vehicle industry policy includes specialised assistance for workers who lose their jobs because of restructuring, such as job search assistance, relocation assistance and industry-specific training.

Governments can also be affected by the **political consequences** of tariff reductions. Despite the general consensus amongst economists that cutting protection will benefit the economy, this policy is generally unpopular with the wider community. The costs of lower protection are highly visible – structural unemployment, the closure of factories and well-known businesses and the damage to the economy of regional Australia. The benefits are less visible, because they are spread out across the economy, and they may take a long time to arrive. In the meantime, governments can lose votes by pursuing policies to reduce protection. This explains why governments in many countries are reluctant to reduce protection levels, and why some have moved recently to increase them. The Productivity Commission has called for the Australian Government to better engage with the community and explain why increasing protectionism would be bad for Australia.

ECONOMIC BENEFITS OF TRADE

Australia's trade liberalisation policy between 1986 and 2016 increased GDP by 5.4 per cent and increased average family income by up to $2670, according to modelling by the Centre for International Economics. Overall benefits included:

Gross Domestic Product	+ 5.4 per cent
National Income	+ 5.1 per cent
Exports	+ 28.5 per cent
Imports	+ 28.6 per cent
Prices	– 3.4 per cent
Real wages	+ 7.4 per cent

Source: Centre for International Economics (2017), "Australian Trade Liberalisation", prepared for the Department of Foreign Affairs

Other economic effects

Phasing out protection also has an impact on Australia's economic growth and **standards of living**. In the short term, lower levels of protection may lead to increased levels of imports. Because imports are produced overseas and do not create jobs or income in Australia, reducing protection can be negative for living standards in the short term. In the long term, however, as resources such as labour and capital move to more productive areas of the economy – with higher rates of return – economic growth and living standards should improve. While many other factors have also been important, lower protection levels in recent decades have generally been seen by economists as being one of the critical factors causing Australia's stronger economic performance.

In the short term, the phasing out of protection can have significant effects on Australia's trade performance and **current account deficit** (CAD). The CAD is likely to worsen

as imports rise, because some imports will be cheaper due to lower tariffs and quotas, or of a higher quality than local products. However, lower protection should improve international competitiveness and reduce the CAD over the longer term as exports grow. In fact, government reports have argued that Australia's failure to reduce tariffs until the late 1980s contributed to a less competitive export sector and higher current account deficits.

The fact that the benefits of reduced protection grow over time influenced Australia's decision to adopt a process of phasing tariffs out over a 30-year period rather than with a small number of large cuts. This helps industries to adjust better to changing business conditions. Most economists would agree that the short-to-medium-term problems of reducing protection are far outweighed by the long-term benefits, but a gradual phasing out makes it easier to manage the structural changes that occur as a result.

reviewquestions

1. Outline the impacts of reduced protection on economic growth, unemployment, and external stability in the Australian economy.
2. Explain the effects of a reduction in protection on domestic firms and individuals. Outline how reducing protection creates winners and losers in the Australian economy.
3. Examine the short-term effect of reducing tariffs on government revenue and expenditure.

6.5 The impact of international protection levels on Australia

Just as domestic policies to protect Australian industries have an impact on the Australian economy, so do the policies of other nations to protect their industries. When other countries put tariffs on Australian goods and services, Australian exports become less competitive in those overseas markets. When other countries subsidise their exports, they raise the supply and reduce the price of those goods on global markets. The result is that countries like Australia that compete to sell similar products on global markets experience a reduction in their income. Overall, international protectionism reduces the output of the Australian economy. Equally, a reduction in global protection levels should increase Australia's national income. A 2018 report by the Centre for International Economics estimated that a global reduction in tariffs that reduces import prices by 10 per cent would increase Australia's real GDP by 0.6 per cent a year.

IS PROTECTIONISM CONTAGIOUS?

Productivity Commission research in 2017 found that if tariffs globally rose by 15 per cent, Australia's annual GDP would be reduced by 1 per cent, costing 100,000 jobs and reducing median household income by $1500 a year. Five per cent of the value of Australia's capital stock would also be lost. The estimates in *Rising protectionism: Challenges, threats and opportunities for Australia* were not a forecast but rather a warning of what could result if protectionist trends accelerated. According to the WTO, over 1000 new measures to restrict trade were implemented by member countries between 2012 and 2019. The global consequences of higher tariffs would be even more severe than that experienced in Australia: global trade would be a whopping 22 per cent lower and global output would be 3 per cent lower – an equivalent effect on trade to that of the global financial crisis.

Economic modelling released by the Australian Treasury in November 2019 estimated that a permanent increase in tariffs on trade between China and the United States would be negligible, because a small reduction in exports to China (as its economic growth slowed) would be offset by a small increase in investment in Australia from the US and Chinese economies. However, the Treasury cautioned that while the direct impacts of a 'trade war' would be relatively benign on Australia, its indirect impacts could be far greater if conflict between the world's two largest economies resulted in a wider impact on confidence levels globally.

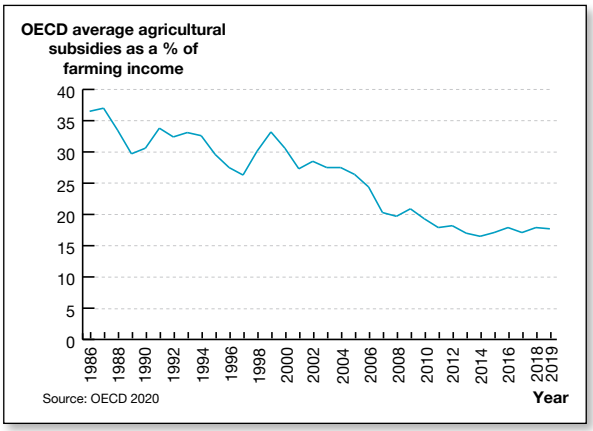


Figure 6.6 – Subsidies as a percentage of farm incomes for OECD countries

EXPORT QUOTAS FOR AUSSIE GAS?

Whereas most trade restrictions are imposed on imports, occasionally governments impose restrictions on exports where markets are deemed to not operate in the national interest. Natural gas is one commodity and market where this topic frequently arises. Most gas exporting countries apply some form of gas reservation policy or other policy mechanism to protect their national interest in supplying their domestic energy market. For many years, Australian manufacturers and energy retailers have criticised Australia's liquefied natural gas (LNG) industry for refusing to supply the domestic Australian energy market with gas at a fair price and for making long-term deals to sell all of their output to overseas buyers. LNG exports have grown rapidly since the commodity price boom started around 2004; so much so that Australia overtook Qatar in 2019 to become the world's largest supplier.

In 2017, the Turnbull Government announced a law to restrict exports of LNG in order to address concerns about gas supply shortages on the east coast of Australia (most gas reserves in Australia are on the west coast, and Australia has limited infrastructure to transport gas across the continent). The measures aimed to limit wholesale and retail prices for domestic industrial users and households, which had increased sharply in previous years. Despite industry concerns that the policy would jeopardise the commercial viability of future projects and dent investor confidence, the government said that the restrictions would only be used if it assesses that Australia has a gas shortage in a given year.

To date, the mechanism has not been activated. The Australian Energy Market Operator forecast in 2020 that it did not expect there to be a domestic shortage until at least 2024 under worst-case scenarios.

As a small economy with a high level of agricultural trade, Australia suffers particular disadvantages as a result of the protectionist policies of other nations and trading blocs. The European Union has for several decades heavily subsidised agricultural production through the Common Agricultural Policy, which absorbs over one-third of the European Union's budget and supplies around a fifth of European farmers' incomes. Farmers also receive significant subsidies in the United States, Japan, Korea and Switzerland. Australian farmers are therefore competing in global markets at a significant disadvantage to their counterparts in the rest of the industrialised world. Figure 6.6 shows that agricultural protection still makes a significant contribution to farm income in the countries of the OECD.

While Australia's agricultural sector is mostly affected by protection levels in developed countries, the policies of other major export markets such as China also have a significant domestic impact in Australia. For example, the abolition of Chinese tariffs on Australian wine helped lift Australia's wine exports to China to $1.1 billion by 2019–20. However, in August 2020 Chinese government officials threatened to impose a 200 per cent tariff on wine from Australia because of alleged dumping. This would have a major impact on the Australian wine industry, which relies on China for 40 per cent of its exports.

Global progress towards reducing **agricultural protection** has been slow in recent years. Partly this reflects a trend towards increased tariffs and other protectionist measures around the world. However, agricultural trade has remained more protected than other industries throughout several decades of trade liberalisation. Many of the most protectionist agricultural trading nations have taken advantage of complex loopholes in the World Trade Organisation regulations to avoid genuinely freeing up agricultural trade. If global trade liberalisation had been achieved by the WTO's Doha Round, it could have boosted Australia's agricultural exports by US$9 billion by 2020, according to the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES).

Australian firms exporting **non-agricultural goods** generally face fewer barriers to trade compared with the agricultural sector. The **mining and resources sector**, whose exports contribute the largest share of Australia's exports, faces very few barriers to trade. The products from this sector, such as coal, natural gas, oil and iron ore, are in high demand worldwide. As a result, mining companies may be more likely to face export restrictions from an Australian government trying to secure energy supplies for the domestic economy than from a foreign government trying to protect their minerals and resources industries. For example, the West Australian Government's domestic gas reservation policy requires that 15 per cent of the state's natural gas production be made available for domestic use. From another perspective, the countries importing Australian energy and mineral resources often simply do not have their own resources to produce domestic alternatives. If a foreign government was to impose tariffs on Australian resource exports, it would simply raise costs for its own consumers and businesses but would not encourage the discovery or exploration of energy resources that the foreign country does

not have. In other words, many countries simply do not have a domestic resource sector to protect from trade.

Likewise, Australia's **manufacturing industries** generally face few barriers to trade because of the substantial reduction in industrial tariffs in recent decades that have been negotiated through multilateral and bilateral trade agreements. Like Australia, most industrialised economies in the world have low manufacturing tariffs. Within the Asia-Pacific region, which includes many industrialising and developing countries, average manufacturing tariffs are also low although there are exceptions, such as for motor vehicles, which incur tariffs of around 15 per cent in China. Additionally, some Australian exporters argue that **non-tariff barriers** to trade, such as technical restrictions and licensing rules, play a greater role in creating barriers to trade. For example, inconsistent or varying health regulations for processed food products in different areas of a country can make it difficult for Australian exporters to penetrate foreign markets (at times, other countries have made the same claims about Australia's strict quarantine rules). For this reason, technical barriers to trade are now formally part of trade negotiations at the World Trade Organisation and in bilateral trade agreements.

Australia's **service industries**, which account for around 70 per cent of the Australian economy but less than a quarter of our exports, arguably face the most prohibitive barriers to international trade. In many situations, trade in services is simply not feasible. This is because of **natural barriers** caused by geography and transport costs, language and cultural differences, and local tastes and preferences, rather than the result of protectionist trade policies in other countries. For example, Australian restaurants might be producing some of the best food in the world, but the market for restaurant customers is limited to people either living in or visiting Australia. This makes it difficult for Australian restaurateurs to export their services (other than to tourists, who make up a very small proportion of the global consumer market for food).

However, protectionism also plays a role in reducing services trade in the global economy. Unlike goods, the main barriers to services trade are not tariffs, but a range of government regulations and practices that have the effect of restricting services trade. Many countries' banking sectors are protected from foreign competition by restrictions on granting licences for overseas-owned banks. This restricts the growth of Australia's financial services industry in overseas markets. Similarly, competitive Australian firms in the electricity, recycling and communications industries face many overseas markets that are dominated by monopoly government providers or procurement arrangements that favour local providers. Figure 6.7 lists some common barriers that Australian service businesses face in overseas markets. The impact of restrictions to trade in services is significant for service-based economies such as Australia. A Productivity Commission report in 2015 noted that international barriers to Australian services trade remain costly – particularly restrictions on establishing commercial operations in key Asian markets (especially for Australian financial services). One of the main goals of trade agreements with Japan and China is to reduce some of these trade barriers.

Service industry	Potential trade barriers
Financial services	Restrictions on foreign ownership of banks and other financial institutions
Transport services	Restrictions on the number of flight routes in another country
Professional services	Licensing laws that only recognise own country's educational qualifications
Construction services	Government procurement rules that mandate use of local suppliers
Utility services	Government monopoly provision of electricity, gas and water
Environmental services	Government preferences for local suppliers of waste or recycling services
Media and entertainment	Minimum local content requirements to preserve country's culture

Figure 6.7 – Trade barriers that often affect Australian services exporters

Government procurement refers to the policies and procedures for purchasing goods and services for the use of the government and public trading enterprises.

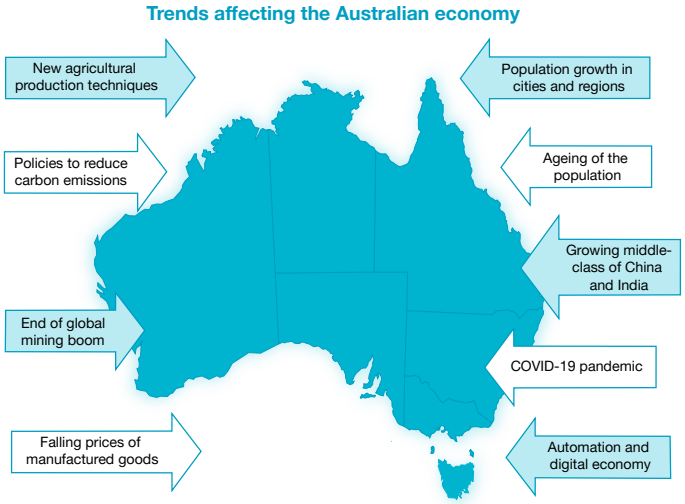
reviewquestions

1 Discuss the impact of subsidies in overseas economies on Australia's trade performance.

2 Compare and contrast recent trends in global protection levels across different industries in the global economy.

6.6 The future of Australian industry in the global economy

The outlook for the global trading environment in the 2020s is more uncertain than it has been for several decades. Increasing tension between the United States and China over trade has the potential to greatly destabilise the global trading system, with knock-on effects for small, open economies like Australia. The WTO's role in the global trading system has been weakened. The COVID-19 pandemic has sharply reduced trade in many sectors, as well as strengthened protectionist sentiment overseas and in Australia, the result of which could significantly impact Australia's trade patterns in coming years.



Predicting future trade patterns and their effects on the structure of industry is always difficult. During the 1980s and 1990s, there was an assumption that globalisation would result in a shift towards value-added manufacturing and services industries, and away from primary industries and basic manufacturing. With the rapid industrialisation of China and other emerging economies generating substantially higher prices for commodities, something very different happened. Globalisation has made resources even more central to the Australian economy. Likewise, the unprecedented imposition of international border restrictions following the COVID-19 pandemic in 2020 had a smaller than expected effect on most of Australia's goods exports (mainly agriculture and mining) and imports (mainly manufactured goods) despite some delays in processing by customs at the border.

Mining and energy industries will likely remain Australia's most important export industries for the foreseeable future. Since the early 2000s, the share of Australia's total export revenue earned by minerals and metals industries has risen from under one-third of exports to over 50 per cent. In 2019–20, earnings from mining and resources exports exceeded $200 billion. These industries, which two decades ago had been ridiculed as "old economy" industries during the "dotcom" boom in electronic commerce, experienced a dramatic resurgence during the resources boom of the 2000s, underpinned by the rapid industrialisation of East Asian economies. Australia's mining output and exports will continue to be our major export industry for the foreseeable future. Rising trade tensions with China pose some risk to mining exports, but there are few alternative reliable sources elsewhere in the world. Production capacity has continued to increase as large-scale mining construction projects have been completed in recent years. A pipeline of LNG projects is also expanding supply and has very quickly made this one of Australia's major export industries. LNG exports earned an estimated $51 billion in 2019–20, compared to less than $10 billion a decade before.

Australian **agricultural industries**, in contrast, face a more mixed outlook. Global food prices have increased significantly in recent years. This has lifted farm incomes. The return of the Australian dollar closer to its historic average has also made farming exports more

competitive. However, Australian agriculture faces many challenges: protectionist barriers, the impact of climate change on weather patterns and Australia's agricultural output, growing water shortages and increasing levels of agricultural efficiency in other countries. Processed food industries that add value to traditional agriculture (such as wine and dairy industries) are likely to play a larger role in exports, particularly as they have been afforded greater market access under Australia's more recent trade agreements than traditional areas of agriculture. The global market for high-quality processed foods is expected to continue growing strongly in coming years, fuelled by the growth of the middle-class in China and India, and Australia's high-quality food industries are well positioned for export growth.

Although Australia has seen a gradual reduction in its older, import-competing manufacturing sector, at the same time smaller, export-oriented manufacturing has continued to grow. Overall, manufactured exports grew from less than $10 billion to over $40 billion in the three decades to 2020. This growth is expected to continue at a slower pace, as specialised manufacturers expand their markets by producing high-quality goods aimed at specific market niches. Future trends in the exchange rate will also be important for the future competitiveness of Australian manufacturers. A stronger Australian dollar would make domestic manufacturers less competitive in global markets while a weaker dollar would help them perform in global markets.

Services exports will remain low until the COVID-19 restrictions on travel are eased. Prior to the COVID-19 pandemic, tourism had been Australia's largest service export, driven by increased travel across the world and the attractiveness of Australia as a safe location with excellent weather and exceptional flora and fauna. As tourism export earnings fell in 2020, the industry repositioned itself to serve Australian domestic tourists, who were largely prevented from travelling overseas. The other major services export (worth $30 billion a year before the pandemic) was international education, with Australian schools and universities rapidly expanding their intake of overseas students, especially from China. Its future is also contingent on the normalisation of travel, given that overseas students are unlikely to pay large fees for purely online courses. Other growing areas of services exports include:

- **Digital services**: information and communications technology (or digital goods and services) have become Australia's fourth-largest export at around $5 billion according to a 2018 report from the Export Council of Australia.
- **Environmental services**: these have longer-term growth potential, such as in the renewable energy sector, where historically Australia has been an innovator. According to the *Global Trends in Renewable Energy Investment Report 2018*, annual global investment in clean energy is now almost US$280 billion, taking total investment since 2004 to $2.9 trillion.

Other services sector exports for Australia that may grow in the future include professional services, financial services and services related to infrastructure.

reviewquestions

1 List THREE industries that you think will play a greater role in Australia's export mix in the future. Justify your answer.

2 Outline the likely future trends in the direction of Australia's exports.

1 The aim of **reductions in protection** over recent decades has been to make Australian industry more internationally competitive and to reallocate resources to the most efficient sectors of the economy.

2 In the past, the Australian economy had relatively high levels of protection. However, tariff reductions began in 1973, and during the 1990s and 2000s Australia phased out most of its tariffs barriers. **Tariff levels** in Australia are low like other industrialised economies and the average tariff rate is 0.9 per cent. Half of all imported goods and services are tariff free and the general tariff rate is 5 per cent or less. Non-tariff barriers in Australia are low compared with other industrialised countries.

3 Australia's free trade agreements include **bilateral agreements** with Chile, China, Japan, Malaysia, New Zealand, Singapore, Peru, South Korea, Thailand and the United States and **multilateral agreements** with ASEAN and New Zealand and the Asia-Pacific Economic Cooperation forum and the CP-TPP.

4 The effects of reducing protection levels on **firms** vary across different industries, with traditional import-competing manufacturers losing out due to cheaper imports, while export-oriented industries benefit from lower input costs.

5 The impact of lower protection levels on **individuals** varies. Most individuals benefit as consumers from goods and services becoming cheaper, and from a wider product choice and a higher quality of service. However, with the decline of older import-competing industries, some people experience long-term unemployment, in particular the less-skilled employees of traditional manufacturing firms.

6 While lower levels of protection may benefit the economy generally, in the short to medium term **governments** may lose out from reduced revenue, increased expenditure (such as for higher unemployment benefits and structural adjustment packages), and a loss of public support. The economy may also experience a higher current account deficit in the short to medium term.

7 The use of **protectionist policies in other countries** has resulted in significant costs for the Australian economy, in particular the loss of potential export revenue as a result of lower export prices and reduced access to overseas markets.

8 One of the greatest threats to Australia's trade outlook in the 2020s is growing trade tensions with China, both directly and because of a deterioration in the relationship between China and the US, the world's two largest economies.

9 Australia's approach of phasing out protection is likely to lead to an economy that is **more integrated with the global economy**, with a higher proportion of production and consumption going to exports and imports.

10 The resources boom of the 2000s resulted in a large expansion in Australia's mining and energy exports, underpinned also by higher commodity prices. Although resources are expected to remain Australia's largest source of exports, future export growth is also expected to come from services and a more diversified export base.

1. Describe the factors that have influenced government policies to reduce protection in Australia during recent decades.
2. Explain how the short-term problems associated with a reduction in protection might be outweighed by the long-term benefits.
3. Discuss recent changes in Australia's protection levels and the outlook for protection levels in the future.
4. Describe the main features of two of Australia's bilateral and two of Australia's multilateral free trade agreements.
5. Account for the varying impacts of lower levels of protection on different industry sectors.
6. Examine how changes to protection levels in Australia have impacted Australia's trade performance and economic growth.
7. Discuss the impact of reduced protection levels on individuals.
8. Outline the impacts of lower tariffs on the Australian Government.
9. Discuss the impacts of global protectionist policies on the Australian economy.
10. Outline possible future changes in the structure of industry within Australia as a result of current trends in the global economy.

TOPIC 3

ECONOMIC ISSUES

Issues

By the end of Topic 3, you will be able to examine the following economic issues:

- Examine the arguments for and against increasing economic growth rates
- Investigate the economic and social problems created by unemployment
- Analyse the effects of inflation on an economy
- Discuss the effect of a continued current account deficit on an economy
- Investigate recent trends in the distribution of income in Australia and identify the impact of specific economic policies on this distribution
- Analyse the economic and social costs of inequality in the distribution of income
- Examine the economic issues associated with the goal of ecologically sustainable development

Focus

This topic focuses on the nature, causes and consequences of the economic issues and problems that can confront contemporary economies.

Skills

Topic 3 skills questions can ask you to:

- Identify and analyse problems facing contemporary and hypothetical economies
- Calculate an equilibrium position for an economy using leakages and injections
- Determine the impact of the (simple) multiplier effect on national income
- Explain the implications of the multiplier for fluctuations in the level of economic activity in an economy
- Calculate the unemployment rate and the participation rate using labour force statistics
- Interpret a Lorenz curve and a Gini coefficient for the distribution of income in an economy
- Use economic concepts to analyse a contemporary environmental issue
- Assess the key problems and issues facing the Australian economy

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Topic 3

Introduction

This section (chapters 7 to 12) covers Year 12 Topic 3, *Economic Issues*, and focuses on the nature, causes and consequences of the economic issues and problems that confront contemporary economies such as Australia.

Chapter 7 examines the issue of economic growth in the Australian economy. It provides a foundation of economic theory with which to examine Australia's recent growth performance. Concepts examined include aggregate demand and supply, injections and withdrawals, the simple multiplier and the measurement of growth through changes in real Gross Domestic Product. The chapter looks at the sources and effects of economic growth in Australia, recent trends in the business cycle and the impacts of economic growth.

Chapter 8 examines the issue of unemployment in the Australian economy. The chapter covers measurement of unemployment, trends in unemployment, types and causes of unemployment, the concept of a non-accelerating inflation rate of unemployment and examines which groups in the community are most affected by high unemployment levels. The chapter finishes with a review of the economic and social consequences of unemployment.

Chapter 9 examines the issue of inflation in the Australian economy. Australia has been successful in achieving low inflation outcomes since the early 1990s. The chapter looks at the measurement of inflation and its trends in recent years. It then examines the main causes of inflation and the effects of inflation on the Australian economy.

Chapter 10 examines the issue of external stability in the Australian economy. Many dimensions of Australia's relationship with the global economy are reflected in our external accounts. The chapter addresses how we measure external stability in terms of the relative size of the current account deficit, net foreign debt and net foreign liabilities. The trends in Australia's external accounts are briefly reviewed, with reference to Topic 2. Chapter 10 also examines the causes and effects of external imbalance in Australia.

Chapter 11 examines the issue of distribution of income and wealth in the Australian economy. The chapter looks at how we measure inequality, and we examine some of the factors that influence inequality by looking at the sources of income and wealth. It examines the relationship between inequality and a range of social dimensions, such as gender, age, occupation, ethnic background and family structure. It also examines the economic and social costs and benefits of inequality in the context of the Australian economy.

Chapter 12 examines the issue of environmental sustainability in the Australian economy. This is becoming a more important priority because of the long-term economic impacts of climate change and water shortages. The chapter covers the issues of ecologically sustainable development, private and social costs and benefits of growth, and public and private goods. A number of issues, such as preservation of natural environments, pollution control, climate change and depletion of renewable and non-renewable resources, are also examined in the context of the Australian economy.

7 Economic Growth

7.1 Introduction
7.2 Economic growth and aggregate demand and supply
7.3 The components of aggregate demand
7.4 Changing levels of growth: The multiplier process
7.5 The role of aggregate supply
7.6 The effects of economic growth
7.7 Recent economic growth trends
7.8 Policies to sustain economic growth

7.1 Introduction

Economic growth creates jobs, allows individuals to increase their consumption, and raises living standards. Accordingly, economic growth is generally considered to be the most important single measure of an economy's performance. For this reason, the pursuit of economic growth has long been a major objective of government policy.

Economic growth can be defined as an increase in the volume of goods and services that an economy produces over a period of time. It is measured by the **annual rate of change in real Gross Domestic Product (GDP)**, that is, the percentage increase in the value of goods and services produced in an economy over a period of time, usually one year, adjusted for the rate of inflation.

$$\textbf{Economic growth (\%)} = \frac{\text{real GDP (current year)} - \text{real GDP (previous year)}}{\text{real GDP (previous year}} \times \frac{100}{1}$$

The Australian Bureau of Statistics (ABS) estimates the level of GDP in Australia every three months (that is, for every quarter of the year) in the publication called *Australian National Accounts: National Income, Expenditure and Product*. To measure GDP, the ABS uses information about household and business incomes, expenditure on goods and services, and production by firms. You might recall from the Preliminary Economics Course, when we looked at the Circular Flow model, that income, expenditure and production are all the same in an economy because all production generates an income, and all expenditure is in return for produced goods and services. To add to the confusion of three separate sources of data to calculate GDP (income, expenditure and production), there are also three different time periods used to measure Australia's rate of economic growth:

- Every three months the ABS calculates the quarterly rate of **economic growth**. For example, quarterly growth in the "March quarter" of 2021 is the percentage increase in GDP since the previous December quarter (that is, the final three months of 2020). So if quarterly GDP was $475 billion in the December quarter of 2020 and $480 billion in the subsequent March quarter of 2021, the quarterly rate of economic growth would be around 1 per cent.

- Quarterly national accounts figures can also be used to calculate a less volatile measure of economic growth called year-on-year growth, which measures the percentage change in GDP between one quarter and the corresponding quarter of the previous year. For example, if quarterly GDP was $460 billion in the June quarter of 2020 and was $485 billion in the June quarter of 2021, the year-on-year rate of growth would be 5.5 per cent.
- Australia's **annual economic growth rate** is calculated each year using GDP statistics for the financial year, which runs from 1 July to 30 June. When the June quarter national accounts are released, usually in early September, annual growth is calculated as the percentage increase in GDP since the last financial year. For example, if GDP grew from $1900 billion in 2019–20 to $1948 billion in 2020–21, the annual rate of economic growth would be 2.5 per cent.

There are a variety of measures of economic growth because economic policymakers use growth statistics for a wide range of purposes, and each measure of economic growth is useful for different purposes. The Reserve Bank, for example, needs to know what the level of economic activity will be in the coming 12 to 18 months in order to forecast inflation trends and determine appropriate changes in the cash rate, and therefore must look at the most up-to-date indicators of economic growth. The Productivity Commission, by contrast, is more interested in how structural policies affect economic growth in the long term, perhaps over periods of decades. It is more interested in long-term growth trends, and has little interest in volatile quarterly growth statistics that are heavily influenced by short-term factors.

7.2 Economic growth and aggregate demand and supply



To access articles and statistics about Australia's GDP growth rate, visit the website of the Australian Bureau of Statistics: **www.abs.gov.au**. The *Australian National Accounts* publication is catalogue 5206.0.

To understand more about economic growth we must first look at the factors that influence the level of economic activity. An understanding of how growth occurs can guide governments in deciding how to achieve higher rates of economic growth. This has been an issue of long-running debate amongst economists.

Traditionally, most economists believed that the most important factor determining economic growth was the ability of firms to produce goods and services – that is, the level of total output, or **supply**. According to this theory, market economies would naturally achieve their best levels of economic growth if they were left to operate without any intervention by the government. The classical and neoclassical economists of the eighteenth and nineteenth centuries argued this view as they laid the foundations for economic theory. However, opinions changed after the Great Depression of the 1930s. Many economists then concluded that sometimes an economy could grow at very slow rates for very long time periods, leaving large numbers of people out of work. As a result, economists began looking for alternative ways of achieving faster economic growth.

At this time, a British economist, **John Maynard Keynes**, developed a theory stating that the most important influence on economic growth was the total level of expenditure in the economy – that is, the level of **aggregate demand**. Keynes' ideas were to become the most important of any economist in the second half of the twentieth century, under the title of Keynesian economics (or Keynesianism), which shaped the economic policies of the industrialised world after World War II until the 1970s.

Keynesian economic theory suggested that people would not necessarily spend their income just because goods were produced and businesses paid their workers for production. If households and businesses were generally pessimistic about the future economic outlook,

households would tend to spend less on consumer goods and save more, and firms would be reluctant to invest in capital goods. This would result in an overall decline in aggregate demand, with falling production and rising unemployment.

Aggregate demand refers to the total demand for goods and services within the economy. Components of aggregate demand are: consumption (C); investment (I); government spending (G); and net exports (X – M).

Aggregate demand – represented by the symbol AD – is the total level of expenditure in an economy over a given period of time. It includes consumption; investment; government spending; and net export spending (export spending minus import spending).

Aggregate supply refers to the total productive capacity of an economy, that is, the potential output when all factors of production are fully utilised.

Aggregate supply – represented by the symbol Y – is the total level of income in an economy over a given period of time. Part of national income is collected by the government through taxation, and the rest is either spent on consumption or is saved.

$AD = C + I + G + (X - M)$	$Y = C + S + T$
WHERE: **AD** = aggregate demand **C** = consumer spending by households **I** = investment spending by businesses **G** = government spending **X** = export revenue **M** = spending on imports	**WHERE:** **Y** = aggregate supply or national income **C** = consumer spending by households **S** = saving by households **T** = taxation by the government

Equilibrium occurs when:

Aggregate supply = Aggregate demand
Y = AD

Substituting for aggregate demand gives:

Y = C + I + G + (X – M)

Substituting for aggregate supply gives:

C + S + T = C + I + G + (X – M)

By rearranging the equation:

S + T + M = I + G + X
Leakages = Injections

The economy is in **equilibrium**, that is, will tend to be stable, when the level of aggregate demand and aggregate supply (national income) are equal. By substituting the components of aggregate demand and supply into the equilibrium equation, we find an alternative condition for equilibrium in the economy – that the leakages of savings, taxation and imports will be equal to the injections of investment, government spending and exports. (This is the way we looked at economic growth in the Preliminary Course, with the Circular Flow of Income model). Changes in leakages and injections are what influence the level of economic activity. If injections are greater than leakages, the economy will grow, but if leakages are greater than injections, economic growth will decrease and the economy may contract.

reviewquestions

1. Identify the main way in which Keynesian economics changed governments' approach to economic management in the twentieth century.
2. Explain how aggregate supply is calculated.
3. Assuming an economy is in equilibrium, determine the level of taxation if savings is 30, imports is 10, investment is 40, government spending is 25 and exports is 20.

7.3 The components of aggregate demand

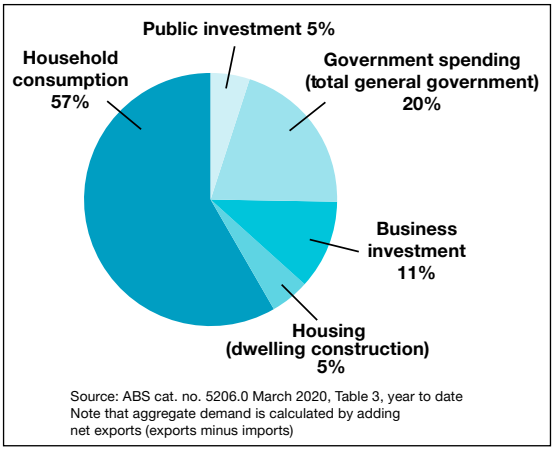
Changes in the level of economic growth in the short to medium term are driven largely by changes in the level of aggregate demand. To better understand what drives economic growth, we need to examine the individual components of aggregate demand. By analysing the factors that influence these individual components, we can see what factors will cause the economy to expand and contract over time – and therefore better understand what policies may be used to increase the level of economic growth.

Influences on consumption

Examining the influences on leakages and injections allows us to see what factors influence the level of economic growth.

Influences on consumption and saving

Consumption is an important determinant of the level of economic growth because consumption by households typically makes up around 55–60 per cent of expenditure (or aggregate demand) in the economy (see figure 7.1). Anything that boosts consumption is also likely to boost expenditure (demand) and hence economic activity (that is, income or supply).



Source: ABS cat. no. 5206.0 March 2020, Table 3, year to date
Note that aggregate demand is calculated by adding net exports (exports minus imports)

Figure 7.1 – The components of domestic demand

Obviously, the most important factor influencing the level of consumption is income itself. People with higher incomes tend to consume more. Economies with higher incomes tend to consume more. If a person's income rises over time, their consumption tends to rise too. However, because we want to know how consumption can influence economic activity (including income), we must look at the factors that influence consumption *for a given level of income* – that is, all the factors other than income. Put another way, our concern is with the proportion of total income that is spent on consumption, called the **average propensity to consume (APC)**, and the proportion of total income that is saved, called the **average propensity to save (APS)**. The three greatest influences on the APC are consumer expectations, the level of interest rates and the distribution of income.

Average propensity to consume (APC) is the proportion of total income that is spent on consumption.

Average propensity to save (APS) is the proportion of total income that is not spent, but is saved for future consumption.

Consumer expectations

Expectations about future price rises and the general availability of goods will influence consumers' decisions to spend or save their income. If consumers expect a rise in their incomes or in inflation, or if they anticipate future shortages of goods, then they tend to spend more and save less in the short term. On the other hand, if consumers expect that their incomes might fall, that prices might fall or that goods and services might become more available in the future, then they are inclined to spend less and save more.

The level of interest rates

An increase in the general level of interest rates would discourage individuals from spending their money (as the cost of borrowing money is now higher) and therefore encourage them to save, while a decrease in interest rates would encourage spending and discourage saving.

The distribution of income

Generally speaking, the more equitable (even) the distribution of income, the higher the rate of overall spending, and vice versa for a more inequitable (uneven) distribution of income. This is because people on lower incomes tend to spend proportionately more of their income than those on higher incomes. This reflects a key insight of the Keynesian consumption function: the more income that an individual receives, the higher proportion they save and the lower proportion they spend. For example, a person with a net income of $400 per week might have to spend it all on basic costs of living, whereas someone receiving a net income of $4000 per week might comfortably save half of that level of income. Policy changes that increase the disposable income of lower and middle income earners are therefore likely to accelerate economic growth more than policy changes that increase the disposable income of higher income earners. Put another way, policies that redistribute income from higher to lower income earners should, in principle, lead to a higher level of growth because lower income earners have a higher marginal propensity to consume.

Influences on investment

Business investment is one of the most volatile component of demand or aggregate expenditure, usually contributing between 10 and 15 per cent. The main factors influencing business investment are the cost of capital equipment and business expectations.

The cost of capital equipment

The cost, or relative cost, of capital equipment is influenced by the following factors:

- **Changes in interest rates**. A fall in interest rates would make it cheaper to borrow funds for the purchase of capital equipment, and a rise in interest rates would raise borrowing costs. Interest rates also represent an opportunity cost for firms who own their capital. Firms with available cash reserves will compare the returns from either saving money (for example, lending it to others, such as by buying bonds) or using it to fund the acquisition of capital or other businesses (alternatively, they may simply return cash to investors through increased dividends or a share 'buy-back'). If interest rate increases make the returns from saving greater than the returns from investing in capital, businesses will save rather than invest. Similarly, higher interest rates make it less attractive for firms to borrow funds for capital investment. Global credit conditions can also impact domestic interest rates and therefore the level of business investment in Australia.
- A change in **government policies** relating to investment allowances and tax concessions on capital goods. For example, if the government allowed businesses to claim the full cost of capital equipment immediately, instead of claiming depreciation over several years, this would reduce their tax liability and make capital cheaper than it otherwise would have been. In March 2020, in order to stimulate business investment, the Australian Government increased the threshold for the instant write-off for asset purchases from $30,000 to $150,000, giving small businesses stronger incentives to buy capital goods.
- Any change in the **price or productivity of labour** (labour being a substitute for capital in the production process) or technological innovations will affect the relative cost of capital compared with labour. For example, if either the cost of labour increased or more advanced labour-saving technologies became available at the same cost, then the relative cost of capital compared with labour would have decreased, making its use more attractive.

Business expectations

Business expectations about future prospects, a factor sometimes described as entrepreneurial or as "animal spirits", influence the level of investment. The factors that affect expectations are:

- Any change in **expected demand for their products**. If entrepreneurs expected a future increase in demand, they would be more inclined to purchase new capital equipment to boost production and satisfy that demand.
- Any change in the **general economic outlook**. If economic growth is expected to increase, entrepreneurs will be more inclined to invest in capital equipment because a higher level of economic activity should improve the returns on investment.
- **Inflation** leads to uncertainty about future prices and future costs of production, and this is likely to lead to reduced investment in productive capital equipment.

Influences on government spending and taxation

Levels of government spending and taxation can also have a significant influence on the level of economic activity. Federal government spending usually makes up around 20 to 25 per cent of aggregate demand or expenditure, while taxation is around 20–25 per cent of aggregate supply or income.

As we will discuss in chapter 14, when we look at fiscal policy, one of the main goals of government spending and taxation policies is to **maintain a sustainable rate of economic growth**, and help achieve the goals of low unemployment and inflation. This means that governments may increase their level of spending and/or reduce the level of taxation to increase aggregate demand and boost growth. Alternatively, governments may reduce their level of spending and/or increase the level of taxation to reduce aggregate demand and growth. These decisions on spending and taxation will also be influenced by policy objectives for external stability and the sustainability of government debt.

Influences on exports and imports

Changes in export sales and demand for imports can have an impact on the level of aggregate demand and economic activity. Exports and imports are each equal to between one-fifth and one-quarter of aggregate demand. If export revenue is equal to import spending, net exports (export revenue minus import spending, that is, the trade balance) neither adds nor subtracts from aggregate demand. During the late 2010s, Australia sustained trade surpluses, so that net exports made a small positive contribution to aggregate demand.

Australia's volumes of exports and imports are influenced by the levels of overseas and domestic income. When overseas income levels rise, Australia's exports tend to rise as well. When Australian income levels rise, Australia's imports tend to rise as well. Apart from income levels, Australia's net exports are also influenced by exchange rate inflation, levels of international competitiveness, protectionist policies of other countries, and consumer tastes and preferences:

- When Australia has a weaker exchange rate, domestic industries are more competitive as the relative cost to foreign purchasers decreases, often resulting in increased sales. This means that net exports will be higher, adding to aggregate demand and boosting economic activity.
- When Australia has a stronger exchange rate, domestic industries are less competitive and their products become more expensive for foreign consumers. As a result, net exports will be lower, detracting from aggregate demand and reducing economic growth.

As discussed in more detail in chapter 6, improving Australia's trade performance is important to government policy because of its impact on Australia's level of aggregate demand and economic growth.

reviewquestions

1 Summarise the factors influencing the components of aggregate demand.
2 Describe how business expectations can influence the level of investment.
3 Discuss the influence of net exports on the level of aggregate demand.

7.4 Changing levels of growth: the multiplier process

We now turn to the question of how changes in the level of aggregate demand influence the level of economic activity. In the analysis that follows, we simplify the economy to the three-sector Circular Flow model – that is, including individuals, firms and financial institutions, but not including the government or international sectors.

As we saw in the previous section, income (Y) that is not spent on consumption (C) must be saved (S). Likewise, expenditure in the economy (AD) is made up of consumption (C) and investment (I).

The consumption that comes from income is obviously equal to the consumption part of expenditure. However, there is no reason why savings (S) and investment (I) have to be equal all the time (see the factors influencing savings versus the factors that influence investment in the previous section as evidence of this).

Whenever S is not equal to I, the economy will be disrupted from its state of equilibrium. The Circular Flow model suggests that the economy will move towards a state of equilibrium – at a higher level of economic activity when the injection of I is greater than the leakage of S, and at a lower level of economic activity when the injection of I is less than the leakage of S.

How does this adjustment take place? By the **multiplier process**, an economic concept developed by John Maynard Keynes.

When there is a shock to the economy, such as a change in consumer or business expectations, a change in interest rates, or a change in government policies, there will be a change in injections or leakages. For example, lower interest rates will increase business investment and expenditure (demand). This expenditure will provide increased income for individuals, who then consume more, which will further increase expenditure and income and so on. Therefore, the initial increase in investment will have a **multiplied impact on national income**.

The **multiplier** is the greater-than-proportional increase in national income resulting from an increase in aggregate demand.

However, the increase in investment will not continue to increase income forever. Each time the injection moves around the economy, its impact on expenditure gets smaller because some of the income is not consumed but saved. This savings component is a leakage that reduces the effect of the higher investment on national income. The number of times the final increase in national income exceeds the initial increase in expenditure that caused it is **the multiplier**. The mechanism by which changes in aggregate demand result in changes in GDP is known as the **multiplier effect**.

To calculate how a change in injections or leakages has a multiplied impact on income we need to consider two more concepts:

- the **marginal propensity to consume** (MPC), that is, the proportion of each extra dollar of income that is spent on consumer products
- the **marginal propensity to save** (MPS), that is, the proportion of each extra dollar of income that is saved.

$$MPC = \frac{\Delta \text{ in consumption}}{\Delta \text{ in income}}$$

$$MPS = \frac{\Delta \text{ in savings}}{\Delta \text{ in income}}$$

In any economy, the sum MPC + MPS = 1 always holds, since each extra dollar of income must be either consumed (spent) or saved.

This can be explained using the following example: Assume that for each extra dollar of income, consumers spend 70 per cent (70 cents) and save 30 per cent (30 cents).

In this case MPC = 0.7 and MPS = 0.3

Assume also that investment in the economy has increased by $10,000. This represents an injection into the circular flow of $10,000, or put another way, an initial increase in aggregate demand of $10,000. If the economy was previously at equilibrium, this means that aggregate demand will now exceed output in the economy. This excess in aggregate demand will manifest itself in an unplanned rundown of stocks. Producers will respond by increasing output and national income will initially increase by $10,000 (since the initial increase in aggregate demand was $10,000).

However, the multiplier process ensures that national income will ultimately rise by much more than $10,000. It works like this:

- National income will increase by the initial $10,000.
- Of that $10,000, $7000 will be spent (since the MPC = 0.7) while $3000 will be saved (MPS = 0.3).
- The $7000 that is spent will be income to those who receive it as payment for goods and services.
- Of that $7000, $4900 will be spent (0.7 × $7000), while $2100 will be saved.

- The $4900 that is spent will be income to those who receive it. They in turn spend 70 per cent of it and save 30 per cent – and so on.

This process will continue, but the amount of additional consumption spending each time will decline until it eventually becomes insignificant.

The following points should be noted before the total increase in income generated by this multiplier process is calculated. First, it is the MPS that causes the amount of income generated by each successive wave of spending to decrease. Second, the sum of each successive wave of income generated will add up to the total amount by which national income increases. The final increase in national income is equal to the initial increase in aggregate demand multiplied by "**the multiplier**".

The size of the multiplier is determined by the MPS and can be expressed as:

$$k = \frac{1}{MPS} \quad \text{(k being the symbol for the multiplier)}$$

or

$$k = \frac{1}{1 - MPC} \quad \text{(since MPC + MPS = 1)}$$

Under the assumptions in our example (that is, MPS = 0.3):

$$k = \frac{1}{MPS} = \frac{1}{0.3} = 3.3333$$

The total increase in income generated by the $10,000 increase in aggregate demand is:

$$\triangle Y = k \times \triangle AD = 3.3333 \times \$10{,}000 = \$33{,}333$$

In other words, three and a third times the initial increase in aggregate demand.

Clearly, the larger the MPS, the smaller will be the value of the multiplier. If individuals save proportionately more of their extra income, they will spend less and therefore generate less additional income. It follows that the factor by which we must multiply our initial increase in aggregate demand must also be less. The reverse will also be true – the smaller the MPS, the larger the value of the multiplier. The multiplier process occurs because an initial injection causes new waves of spending, as all sectors of the economy are interconnected. If the government increases spending to build new roads, firms receive payments to purchase factors of production, and workers receive wages which they can either consume or save.

The multiplier process also works for decreases in aggregate demand. For example, if we had a decrease in investment spending of $10,000, the multiplier effect would work in reverse, leading to a decrease in national income of $33,333.

Thus, we can see that any change in the level of planned expenditure (whether due to changes in investment, government spending, consumer spending or net export spending) will have a multiplied effect on the level of national income. Governments use the multiplier process because an initial increase in government spending can result in a much larger increase in economic activity as money circulates through the circular flow of income.

Note that in the analysis above we have only used what is called the "**simple multiplier**", as required by the Year 12 Economics Syllabus. The simple multiplier is calculated by only considering savings as a leakage from the circular flow. If we were to also include the government and international sectors of the circular flow, we would also need to know what proportion of income is "leaked" into taxation and import spending. For example, if in addition to 30 per cent of income being saved, a further 10 per cent of income was paid in tax and a further 10 per cent was spent on imports, total leakages would be 50 per cent of income, and the value of the multiplier would fall to 1 divided by 0.5, that is, 2. However, the Year 12 Economics Syllabus only requires you to calculate the multiplied impacts of changes in leakages and injections on national income using the simple multiplier.

Appendix B: Advanced Economic Analysis at the back of this textbook looks at the income-expenditure diagram – an extension of the economic growth theory covered in this chapter.

reviewquestions

1 The following numbers apply to a hypothetical economy:

($m) S = 55 G = 15 X = 10 M = 30 C = 70 I = 20 MPC = 0.6

(a) Calculate the level of aggregate demand in the above economy.

(b) Calculate the value of the multiplier.

(c) If the government wanted to increase national income by $50m, by how much would it have to increase its own spending levels?

2 Suppose that in an economy, a $40m increase in consumption leads to a $250m increase in national income. Calculate the value of this economy's marginal propensity to save.

7.5 The role of aggregate supply

While shifts in aggregate demand play the main role in determining the level of economic growth in the shorter term, aggregate supply also plays an important long-term role in influencing levels of economic growth. An economy's aggregate supply is determined by the quantity and quality of the factors of production – natural resources, labour, capital, and the ability of entrepreneurs to combine them efficiently to produce goods and services. Economies with more or better-quality factors of production will be able to produce more goods and services.

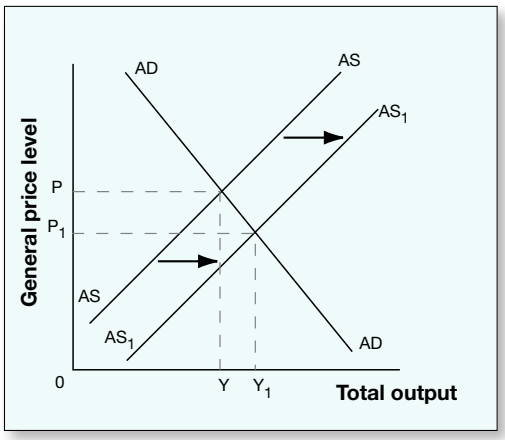


Figure 7.2 – The impact of increased aggregate supply on economic growth

Economists sometimes refer to aggregate supply as an economy's "potential". This means that when aggregate supply increases, an economy can grow faster. As figure 7.2 shows, an increase in aggregate supply can lead to an increase in total output (economic growth) and a reduction in the general price level (inflation). An economy can grow faster and more sustainably when aggregate supply is increased. An increase in aggregate supply will result in GDP growth and price stability through lower inflation.

Aggregate supply can be increased when a higher level of output can be produced for the same cost. Aggregate supply is increased when there is an increase in quantity or improvement in the quality of the factors of production. This can be achieved through changes such as:

- **Population growth** – labour is the main input into the production process, so if there is an increase in the population (either through increased immigration or birth rates) and there are more workers available, the economy will be able to produce more goods and services. For several decades, Australia's relatively high population growth (through immigration) has been a major contributor to growth rates that are ahead of most advanced economies.
- **Discovery of new resources** – for example, new mineral and metal deposits discovered in Australia can be exploited to increase exports and increase economic growth.
- **Workers acquiring new skills** – for example, more highly trained doctors and health professionals may be able to diagnose illnesses more quickly and treat them more effectively.
- **Increased capital** – for example, investment in capital equipment that efficiently replaces labour will in the long term increase the capacity of the business to produce goods.
- **The adoption of new technology** – for example, businesses providing their customers with a mobile phone app to place orders and receive customer service online, saving the cost of sales agents needing to visit customers or speak to them on the phone, thus reducing labour costs.

- **Measures to improve efficiency** – for example, when international standards for the size of shipping containers were adopted by the transport industry, there was an enormous improvement in the efficiency of freight transport, because this made it easy to transfer containers across every form of transport – rail, road and ships – without needing to move freight into different-size containers at each stage of its journey.
- **Government policies** – for example, reforms to rules and regulations in an industry may increase competitive pressures, encouraging firms to be more efficient, and may therefore lead to an increase in production of goods and services.

If macroeconomic management is successful in managing aggregate demand, over time an economy will begin to run out of spare capacity and reach capacity constraints. If aggregate demand continues to rise without a corresponding increase in aggregate supply, the only result is higher inflation – this is why microeconomic policy is important, as it focuses on the supply side of the economy, bolstering long-term growth. This occurred in Australia during the mining boom in the mid-2000s, with widespread shortages of skilled workers and bottlenecks in transport infrastructure, especially at ports. Policymakers responded with measures to increase aggregate supply. To address skill shortages, Australia brought in more skilled workers from overseas and expanded apprenticeships.

The focus of microeconomic policy is to increase aggregate supply. Microeconomic policies can increase aggregate supply through improving human capital, since a more skilled workforce should have greater labour productivity and higher levels of workforce participation. Likewise, microeconomic policies that enhance economic infrastructure can increase aggregate supply, such as through faster broadband networks and increasing investment in road, rail and port infrastructure. An increase in aggregate supply will shift the economy's production possibility curve to the right.

reviewquestions

1 Explain the role of increases in aggregate supply in contributing to economic growth.

2 Discuss TWO changes in production which may result in increases of aggregate supply.

3 Outline TWO examples of policies that might increase aggregate supply in an economy.

7.6 The effects of economic growth

Traditionally, economic growth has been regarded as the most important objective for economic management. This is because economic growth makes it possible to achieve other aims. However, while economic growth is essential to achieve many economic and social objectives, economic growth can also sometimes create problems.

Living standards

Faster economic growth results in an increase in real GDP per capita. Real wages can rise and households can enjoy a higher disposable income and therefore higher material living standards. This is the main reason that countries pursue higher levels of economic growth. Australia's record of sustaining economic growth for almost three decades (until the COVID-19 recession in 2020) saw an average annual growth in real GDP per capita of 1.6 per cent over three decades (falling from 2.1 per cent in the 1990s to 1.8 per cent in the 2000s and 1.0 per cent in the 2010s). Australia's slower rate of economic growth and wages growth in the 2010s meant that living standards improved at a slower rate than in past decades.

A key factor in the slower growth in Australian living standards in recent years (with real disposable income falling in some years) is the long period of below-average wages growth.

This suggests that the link between economic growth and improved living standards has weakened in the past decade.

Employment

Economic growth creates jobs, and in an economy that sustains strong economic growth, everyone who is willing and able to work should be able to find employment. Over the longer term, higher rates of economic growth are usually associated with the development of new and more advanced industries. Countries with higher levels of economic growth therefore tend to create more highly paid and highly skilled jobs.

Inflation

Higher levels of economic growth can result in price increases and larger wage claims, contributing to a rise in the level of inflation. This is particularly the case if spending is growing at times when the economy is close to its full capacity and the growth in aggregate supply cannot keep pace with the growth in aggregate demand. Inflation is therefore often a side effect of economic growth. A major aim of macroeconomic policy is to keep growth at a level that is not so high that it prompts a surge in inflation – this is known as the "sustainable rate of economic growth".

External stability

Economic growth is often accompanied by higher disposable incomes, leading to increased consumer and business spending, resulting in a higher level of imports. When an economy is growing faster than its trading partners, unless exports keep pace with growth in imports, the balance of goods and services can worsen and the current account deficit can increase. An excessive current account deficit, in turn, can undermine confidence in an economy. For that reason the balance of payments can sometimes become a "speed limit" on growth, reflected in the concept of a "balance of payments constraint". When a country faces a balance of payments constraint, policymakers may deliberately reduce the level of economic growth in order to improve external stability.

Income distribution

Economists generally assume that economic growth contributes to higher living standards and therefore to better outcomes for everyone. However, this is not necessarily so. Sometimes, the benefits of economic growth flow disproportionately to higher-income earners or owners of capital, rather than flowing more broadly throughout the economy through wage increases or lower prices. In this respect, rapid economic growth can lead to increased inequality in income distribution, if the benefits of growth are not widely shared. Absolute poverty should fall as the economy grows, but relative poverty is likely to rise as income distribution tends to be more unequal during periods of strong growth. The benefits of strong growth are often skewed towards skilled workers rather than unskilled workers, so the gap between the rich and poor widens.

Environmental impacts

Economic growth can potentially have a negative impact on the environment. If growth is pursued with little regard to its impact on the environment, it can result in pollution, depletion of non-renewable energy sources and damage to the local environment. The impacts of climate change now require economies to break the link between higher rates of economic growth and increased greenhouse gas emissions if the world is going to avoid catastrophic climate impacts. Environmental economists urge governments to pursue growth strategies that avoid irreparable damage to the environment – known as "ecologically sustainable development". Economic growth is not necessarily incompatible with environmental preservation, since in the long term the consequences of pursuing growth without protecting the environment become very costly (such as through the depletion of resources, the impacts of pollution on health outcomes and the economic disruption caused by climate change). The shift to environmentally sustainable economic growth strategies can also create new industries and jobs, such as through renewable energies and new low-carbon technologies.

reviewquestions

1 Contrast TWO positive and TWO negative impacts of economic growth for an economy.

2 Explain how higher rates of economic growth can affect the employment and inflation in an economy.

7.7 Recent economic growth trends

The level of economic activity is never entirely stable. A market economy such as Australia's is subject to the ups and downs of the **business cycle** (that is, the general level of economic activity) caused by changes in the level of aggregate supply and demand. Figure 7.3 represents a typical pattern of growth in real GDP for a market economy. Although the overall pattern shows an upward trend in real GDP, the pattern of growth is uneven and there are periods where stronger economic growth is often followed by recession (decreased levels of economic activity, generally associated with rising unemployment).

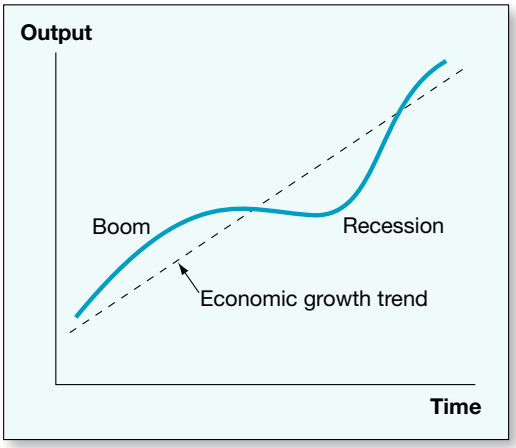


Figure 7.3 – The business cycle

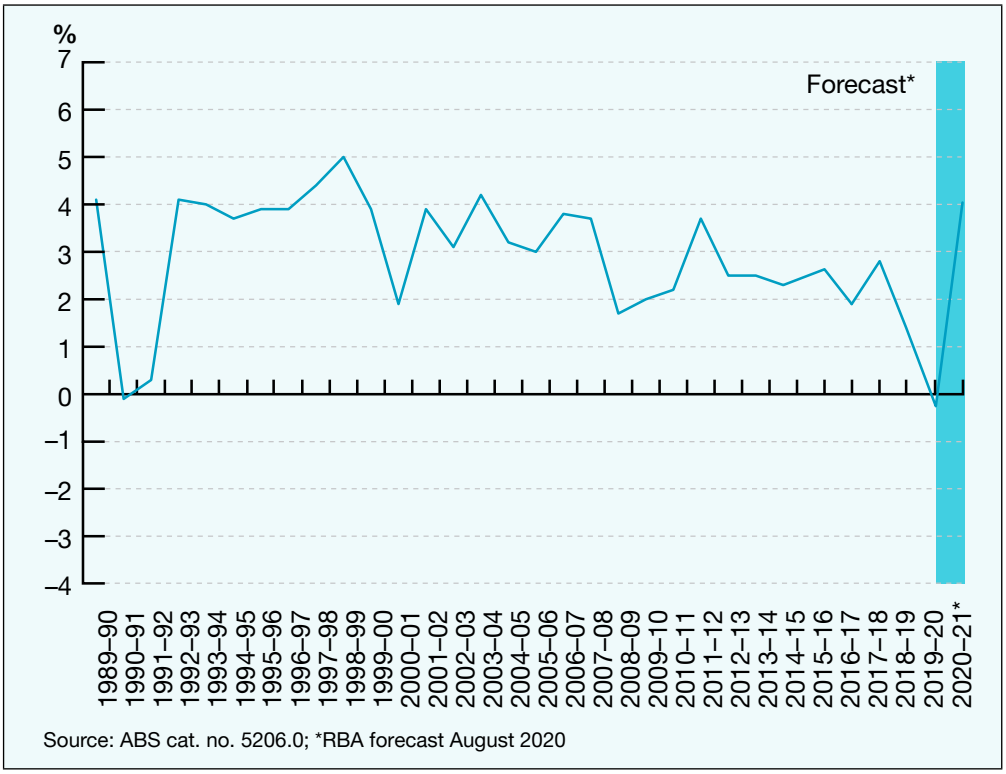
The pattern of economic growth in Australia during recent decades has been relatively stable – both compared with previous cycles and compared with other economies. Australia enjoyed a record-breaking period of 28 years of economic growth from 1991–92 to 2018–19. Australia went into recession in 2019–20 due to the impact of the COVID-19 pandemic. A **recession** is when the economy contracts, that is, has a negative rate of economic growth, for two consecutive quarters. Australia's GDP fell 7.0 per cent in the June-2020 quarter, the largest quarterly fall recorded by the Australian Bureau of Statistics. This followed a decline of 0.3 per cent in the March-2020 quarter. Australia's economic growth rate averaged 2.9 per cent between 1991 and 2020, significantly stronger than the average 2.1 per cent growth among OECD economies during the same period. However in the later stages of the growth cycle, Australia's growth rate dwindled. It fell to just 2.4 per cent in the 2010s (and 2 per cent in the second half of that decade).

Below are eight factors that influenced the long growth cycle that was ended by the COVID-19 recession, reflecting a mix of factors affected by global and domestic influences and policy decisions. Australia has mostly benefited from global economic trends, but has also gained from its successful management of the economic cycle:

- **Global economic conditions** have been mostly favourable for Australia in recent decades. As China increasingly became a key engine of global economic growth during the 2000s, Australia was a major beneficiary because of the rapid growth in global demand for resources such as iron ore and coal. Strong demand for Australia's resource exports underpinned a boom in mining and construction investment, as well as a surge in export revenues that helped Australia avoid the prolonged downturn in Europe and the United States following the global financial crisis in 2008.
- More specifically, the Australian economy went through a period of major structural improvement in its **terms of trade** – the ratio of the price we receive for our exports relative to the price we pay for imports. This meant that Australia enjoyed the double benefit of rising export prices and volumes for several years. This lifted Australia's national income and the rate of economic growth, and triggered a mining investment boom that significantly increased Australia's output capacity. The terms of trade reached their highest level for 140 years in September 2011, adding an estimated 15 per cent to Australia's national income. Australia's terms of trade then went into

decline, but recovered in the second half of the decade, finishing the 2010s well above their historical averages.

- Macroeconomic management in Australia was reasonably successful in maintaining a **sustainable rate of economic growth** – a level that does not push inflation above its target range of an average 2–3 per cent, generates employment growth and maintains external balance. The Australian Treasury estimates that Australia's long-term sustainable rate of economic growth is around 2.75 per cent of GDP. In the three decades to 2020, growth was within the range of 2 to 4 per cent for 22 out of 30 years (on three occasions it was more than 4 per cent, and on five other occasions it was below 2 per cent).
- The Reserve Bank of Australia's pre-emptive use of **monetary policy** and its focus on maintaining low inflation was important in sustaining economic activity. The RBA has taken quick action to ward off inflationary pressures when the economy is experiencing high levels of growth. This helped to keep the economy growing within a sustainable range and to avoid the need for larger interest rate increases that might have caused more prolonged contractions in economic growth. Conversely, during an expected downturn, the RBA responded quickly by reducing interest rates to support aggregate demand before the actual downturn sets in. For example, in response to weakening economic growth in 2019 (before the COVID-19 pandemic), the RBA made three reductions in the cash rate, bringing it down to 0.75 per cent in October 2019. Immediately in response to the pandemic in March 2020, the RBA made two further reductions in the cash rate to a record low 0.25 per cent.
- During periods of economic downturn, the Government has successfully used active **fiscal policy** to increase economic growth. The Australian Treasury has concluded that Australia avoided a recession after the global financial crisis in 2009 because the Government responded quickly with a large-scale fiscal stimulus that had an immediate impact on household consumption and government spending. Similarly, in response to COVID-19 in 2020, the Government initiated the largest fiscal policy intervention in Australian economic history, to prevent an even deeper and more prolonged recession.



Source: ABS cat. no. 5206.0; *RBA forecast August 2020

Figure 7.4 – Australia's economic growth performance

BEYOND THE MINING BOOM

The most significant economic development during Australia's recent long growth cycle was the mining boom. At the time, the Reserve Bank Governor, Glenn Stevens, described it as the greatest expansionary shock to the Australian economy in more than 50 years. Strong growth in China and other emerging economies resulted in soaring demand for natural resources such as coal, gas, oil and iron ore, leading to a sharp increase in prices and the largest increase in Australia's terms of trade for 150 years. The spike in global resource prices in the 2000s was especially large because of a long period of low investment in mining operations around the world, meaning that global supply was price inelastic: mining companies were unable to increase output quickly in response to the increased demand, and so prices soared. This meant that average prices for Australia's commodity exports tripled between 2003 and the peak of the cycle – as shown in figure 7.5.

This increase in commodity prices sparked the largest sustained improvement in Australia's terms of trade on record. Although the terms of trade slipped back briefly during the downturn that followed the global financial crisis in 2009, the terms of trade soon recovered and by 2011 were the highest in 140 years – and 65 per cent above their average level during the twentieth century. This provided a very large stimulus to the economy. The Reserve Bank noted in 2011 that the terms of trade boom had added 15 per cent to Australia's nominal GDP, equivalent to over $190 billion per year. This meant that the resources boom had a larger positive impact on national income in Australia than all of Australia's economic reforms of the 1980s and 1990s and the revolution in information and communication technologies. Although foreign-owned mining companies sent a share of their increased profits overseas, the boom did not only benefit those working in the construction, mining and transport sectors. Australian taxpayers also benefited as higher company tax receipts allowed the Government to reduce personal income taxes.

A decade and a half after the beginning of the terms of trade boom, income per person in Australia was around 20 per cent higher than it was in the mid-2000s and average real wealth per person had risen by 40 per cent. The prices for Australia's commodity exports also remained resilient throughout the 2010s. The RBA's Index of Commodity Prices shows that from 2017–2019, commodity prices in Australian dollar terms rose by one-third. This reflected an unusual combination of rising commodity prices and a falling Australian dollar, as well as shorter-term factors such as an unexpected surge in iron ore prices due to supply problems overseas. Yet it also showed that the rise in commodity prices since the early 2000s proved enduring, even if prices have been volatile.

Global recessions result in a downturn in commodity prices, but during the initial phase of the COVID-19 recession, the fall in prices for Australian commodity exports was relatively mild (11 per cent on the RBA commodity price index). Changes in commodity prices will continue to have a major impact on the Australian economy, given its heavy reliance on earnings from commodity exports. Two issues of particular concern are developments in Australia's relationship with the Chinese government, given Australia's reliance on exports to China, and the prospect of declining earnings from coal exports. Global demand for coal is also in long-term decline as economies around the world transition to lower carbon energy sources.

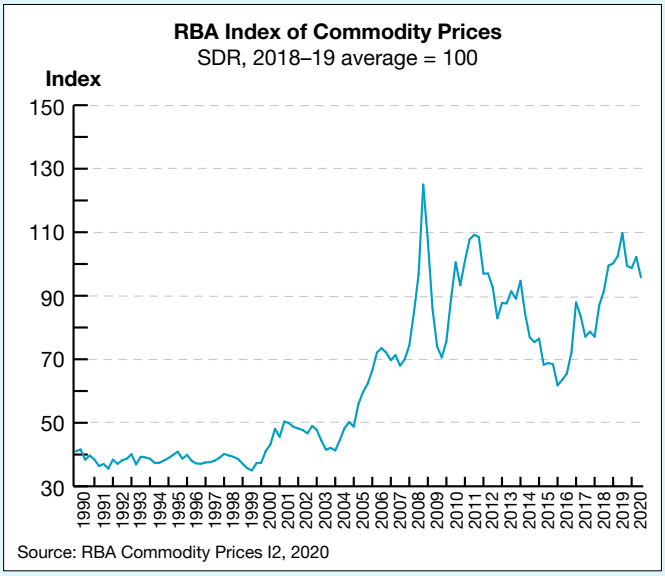


Figure 7.5 – Reserve Bank of Australia Index of Commodity Prices

Australia's future economic growth is likely to be underpinned by terms of trade that remain above their historic averages and growth in some commodity exports. But to recover from the economic impacts of COVID-19 and sustain economic growth in the decade ahead, Australia needs to diversify its sources of growth. Public investment in infrastructure, housing and health care have played important roles in driving economic growth more recently, reflecting Australia's high immigration rate and ageing population. Some of Australia's strongest growth opportunities are in markets that tap into the rising household incomes of large populations in Asia, including education, tourism and consumer goods such as processed foods.

- Australia has a higher level of population growth than most other advanced economies, mainly due to its immigration intake. For example, net migration in 2019 was 210,700 or just below 1 per cent of the population, and contributed 60.2 per cent to Australia's annual population growth. High population growth rates are one reason why Australia averages faster rates of economic growth than many similar countries, although we need to look at per capita economic growth to compare trends in living standards for individuals and households (as opposed to overall rates of growth in the economy). When we compare per capita economic growth (the growth in the economy per head of population), we find that Australia averaged per capita economic growth of 1.6 per cent per year between 1991 and 2020, only a little higher than the OECD average of 1.4 per cent. However in the 2010s, Australia's per capita economic growth was just 1 per cent per year, which was below the OECD average of 1.4 per cent for the same period. In other words, Australians experienced a lower rate of improvement in living standards during the 2010s compared to most high-income economies.
- Large increases in asset prices such as real estate and shares during the early 2000s and again in the 2010s increased the wealth of households, encouraging greater borrowing and consumption. This is known as the "wealth effect". Of course higher housing prices also constrain the spending power of homebuyers, and the late 2010s saw some falls in house values. Nevertheless, the wealth effect of higher asset prices tends to increase economic growth.
- A slowdown in **productivity growth** has contributed to the lower rates of growth in recent years, following a period of record growth in the 1990s. Analysis for the Treasury's 2015 Intergenerational Report noted that labour productivity growth had increased from an average of 1.3 per cent per year in the 1980s to 2.1 per cent per year in the 1990s, reflecting the beneficial impact of extensive microeconomic reforms. Micro-reform helped to overhaul many sectors of the economy and to introduce competitive pressures, as well as encourage the take-up of new technologies. However, labour productivity averaged just 1.2 per cent in the 2000s, and just 1.0 per cent in the 2010s. Given that the terms of trade is unlikely to underpin further growth in national income in the 2020s, lifting Australia's productivity growth will be critical to sustaining economic growth in the decade ahead.

Year	Growth (%)	GDP ($bn)
1989–1990	3.6	798
1990–1991	–0.4	795
June 1992	0.4	798
June 1993	4.0	830
June 1994	4.0	863
June 1995	3.8	896
June 1996	3.9	931
June 1997	4.0	968
June 1998	4.6	1012
June 1999	5.1	1064
June 2000	3.9	1106
June 2001	1.9	1127
June 2002	4.0	1172
June 2003	3.0	1207
June 2004	4.1	1256
June 2005	3.2	1296
June 2006	2.8	1333
June 2007	3.8	1384
June 2008	3.7	1434
June 2009	1.9	1462
June 2010	2.1	1492
June 2011	2.5	1529
June 2012	3.9	1589
June 2013	2.6	1630
June 2014	2.5	1672
June 2015	2.2	1708
June 2016	2.8	1755
June 2017	2.4	1797
June 2018	2.9	1850
June 2019	2.0	1887
June 2020	–0.2	1882

Source: ABS cat. no. 5206.0, Table 34, GDP chain volume (real)

Figure 7.6 – Australia's GDP

Up until COVID-19 struck in 2020, Australia had been been relatively successful in navigating the events of the long economic growth cycle – from the Asian financial crisis of 1997–98, to the worldwide downturn that followed the collapse of the "dotcom" boom of 2001, to the deeper global recession that followed the global financial crisis in 2008, and to the slowdown in the Chinese economy in the 2010s. In part this reflected good luck – the specific impacts of each of those events on Australia was far milder than for most advanced economies, and the global resources boom was a once-in-a-century event. Yet with less skilful macroeconomic policy, and without the economic flexibility created by a succession of microeconomic reforms, Australia would have had much less success in responding to those events.

In the decade ahead as the economy recovers from the COVID-19 recession, Australia's longer-term economic challenges have been described by the Australian Treasury as "the three Ps" – productivity, participation and population. Sustaining long-term productivity growth, high levels of workforce participation and continued population growth from natural growth and immigration will help Australia to achieve the highest possible rate of economic growth.

The participation rate is expected to fall during the coming decades because of the ageing of the population. As the economy is forced to allocate more resources to health and aged care, it will be harder for living standards to keep improving. The Treasury's 2015 Intergenerational Report estimated that improvements in living standards, measured by average annual growth in real GDP per capita, will fall from 1.7 per cent in the past four decades to 1.5 per cent in the next four decades. Average growth in real GDP is

expected to fall from 3.1 per cent in the past four decades to 2.8 per cent in the next four decades. This outlook underscores the significance of policy measures to lift productivity growth and participation in the longer term. The Treasury calculated in 2010 that for every additional 0.1 percentage point increase in average annual productivity growth over the next 40 years, Australians will enjoy an average increase in living standards of $4500 per year.

reviewquestions

1 Outline the recent economic growth performance of the Australian economy.

2 Discuss the effect of the mining boom on Australia's past and future economic growth.

3 Compare the growth performance of the Australian economy to other high-income economies during the recent growth cycle.

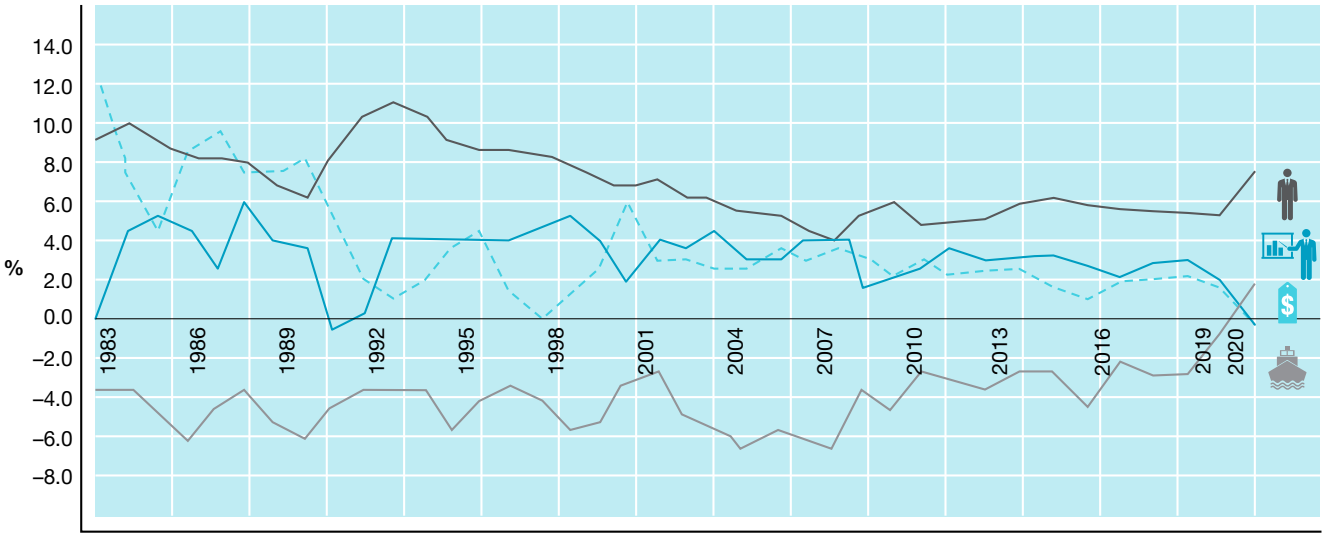
7.8 Policies to sustain economic growth

A major aim of economic management is to sustain a high rate of economic growth to allow national wealth to grow and individuals to experience a higher standard of living. The government is able to use **macroeconomic policies** to influence the rate of economic growth. The main role of macroeconomic policy is to influence economic growth in the short term with the primary aim of smoothing volatile fluctuations in the business cycle. These policies will have only a limited impact on the level of long-run growth rate.

Fiscal policy involves the use of the Commonwealth Government's Budget in order to achieve economic objectives. Government expenditure in the Budget represents an injection into the economy, whereas government revenue (taxation) is a leakage from the economy. By adjusting its expenditure and revenue, the Government is able to influence the level of aggregate demand and therefore the level of economic growth. If the Government wants to increase the level of economic growth, it can reduce taxation, increase expenditure or

For further information on the recent economic growth performance of the Australian economy, visit the recent speeches and publications sections of: **www.treasury.gov.au** and **www.rba.gov.au**, the Australian Bureau of Statistics site: **www.abs.gov.au**, or the economics section of any of the major Australian banks such as **www.anz.com**.

Australia's growth and economic outcomes since 1983



Sources: ABS cat. nos. 5206, 6401, 6202, 5306, 5302

ECONOMIC GROWTH
Australia experienced the longest unbroken run of growth in the world from 1991–2019. Economic growth averaged 2.9 per cent a year, boosting employment and living standards. But the rate of economic growth slowed in the 2010s prior to the COVID-19 recession.

INFLATION
Inflation averaged around the mid-point of the 2–3 per cent inflation target since its introduction in the early 1990s. Monetary policy has been focused on containing price pressures because of the economic instability that can result during periods of high inflation. The low level of wages growth in the past decade has contributed to sustained low inflation.

UNEMPLOYMENT
After unemployment spiked in the early 1980s and early 1990s, Australia achieved a sustained reduction in unemployment over time. Unemployment edged up after the global financial crisis in 2008 and gradually fell during the 2010s, but underemployment rose, with around one in four part-time workers wanting more work. Following the surge in unemployment during the COVID-19 recession, Australia now faces a major challenge in reducing joblessness to pre-COVID-19 levels.

CURRENT ACCOUNT
Australia has experienced a trend improvement in its current account after several decades of persistently high deficits. While the balance on goods and services has varied with the economic cycle, increased mining export volumes have resulted in trade surpluses, while low global interest rates have constrained growth in debt servicing costs.

do both. This would increase the level of injections relative to leakages and therefore cause an upturn in the level of economic growth. Alternatively, economic growth would be constrained if taxation receipts were increased or government expenditure was reduced. Fiscal policy is more effective in stimulating growth during a downturn than slowing down an economy that is growing fast, and it played the central role in the Australian Government's policy response to the COVID-19 recession in 2020.

The Government is also able to use **monetary policy** to influence economic growth. Monetary policy involves the Reserve Bank of Australia influencing the level of interest rates in the economy, which in turn influences the level of aggregate demand and the rate of economic growth. If the Government and the Reserve Bank want to stimulate growth, interest rates can be reduced, which would encourage consumer and business spending. Conversely, to decrease growth, interest rates can be raised. Monetary policy has been the main macroeconomic policy tool for influencing the level of economic growth in recent years, although the effectiveness of further easing in monetary policy has declined in recent years as interest rates have reached record lows. After two emergency reductions took the cash rate to 0.25 per cent in March 2020, the Reserve Bank indicated that little more could be done through the cash rate to support growth as the economy entered recession.

The main role that macroeconomic policies play in influencing economic growth is to affect the growth rate in the short term through influencing aggregate demand, with the aim of smoothing fluctuations in the business cycle and achieving the highest level of growth that the economy can sustain in the short to medium term. Macroeconomic policies will only have a limited impact on the level of long-run growth that an economy can achieve. Macroeconomic policies are discussed in detail in chapters 14 and 15.

Microeconomic policies aim to increase the economy's sustainable growth rate by increasing aggregate supply, and reducing the extent to which higher growth causes inflationary and current account problems, the factors that may constrain higher growth. In effect, microeconomic policies increase aggregate supply in order to keep pace with rising aggregate demand. The Productivity Commission has argued that Australia's strong rates of growth in the 1990s came about because of the far-reaching microeconomic policies that were undertaken during that period. Increased investment in workforce skills and physical infrastructure in recent budgets have aimed to increase the economy's aggregate supply, alongside reforms to increase competitive pressures and reduce unnecessary regulation. Microeconomic policy is discussed in detail in chapter 16.

reviewquestions

1. Explain the main role of government policies in sustaining economic growth.
2. Discuss the policies a government might use to accelerate economic growth.
3. Analyse the role of government policies in increasing aggregate supply.

chapter summary

1 Economic growth is measured as the percentage increase in the value of goods and services produced in an economy over a period of time, usually one year.

2 The economy is in equilibrium when the level of aggregate demand (total demand for goods and services within the economy) is equal to the level of aggregate supply (total productive capacity of the economy).

3 The Circular Flow of Income model shows that certain economic factors can be identified as either injections or leakages in the overall level of economic activity. Investment, government spending and exports are injections because they add to the circular flow of income. Savings, taxation and spending on imports are leakages because they take money out of the circular flow of income.

4 Consumption is influenced by consumer expectations of future economic developments, the level of interest rates, income distribution and consumer preferences between consumption and savings.

5 Investment is influenced by the level of interest rates, government policies, labour costs, productivity levels and business expectations.

6 Net exports are influenced by income levels in Australia and overseas, movements in the exchange rate and the international competitiveness of Australia's industries.

7 The multiplier process explains how an increase in aggregate demand will increase the overall level of national income by much more than the initial increase. This amount is known as the multiplier. The size of the multiplier is determined by the marginal propensity to save and can be expressed as:

$$k = \frac{1}{MPS} \quad \text{OR} \quad k = \frac{1}{1 - MPC} \quad \text{where MPS} = \frac{\Delta \text{ in savings}}{\Delta \text{ in income}}$$

8 Aggregate supply resulting from improvements in efficiency and technology can lift productivity and can accelerate economic growth.

9 Economic growth results in higher living standards and increased employment, but can also contribute to increased inflation, external instability, greater income inequality and damage to the natural environment.

10 Australia's most recent economic growth cycle began in the September 1991 quarter and ended in the March 2020 quarter. Although economic growth slowed in the 2010s, Australia still achieved stronger growth than most advanced economies. The long sustained growth cycle reflected a combination of influences, including the benefit of a major terms of trade boom, demand for Australian resource exports from China, the success of macroeconomic policies in sustaining low inflation, and the legacy of a period of substantial microeconomic reform in past decades. The COVID-19 pandemic in 2020 brought about the first recession in three decades.

chapterreview

1 Explain why economic growth is important to an economy.

2 Consider an economy where: S = 40, T = 20, M = 10, G = 35, X = 5, C = 25, MPC = 0.6.

a) Determine the level of investment; and

b) Calculate the level of aggregate demand.

3 Outline the main factors that influence the levels of consumption and investment in an economy.

4 State the leakages and injections equation for an economy to be in equilibrium and explain the effect on the level of economic activity when:

a) total leakages exceed total injections; and

b) total injections exceed total leakages.

5 Define the *multiplier*. Explain how the concept of the multiplier is related to an understanding of economic growth.

6 Consider why economist John Maynard Keynes advocated an active role for the government in influencing the level of economic activity. Discuss how the government might influence the level of aggregate demand.

7 Contrast the positive and negative impacts of a higher level of economic growth for an economy.

8 Explain the importance of *aggregate supply* and how a government may be able to achieve sustainable economic growth in the long term.

9 Examine the factors that have contributed to the recent growth performance of the Australian economy.

10 Evaluate the policies available to governments to achieve economic recovery after a recession.

COVID-19 The impacts on the Australian economy

COVID-19 represents one of the most powerful external shocks in Australian economic history. It ended Australia's record-breaking 28 economic growth cycle in ways that nobody could have imagined: a shutdown of state and national borders, enforced lockdowns across Australia that confined people to their houses, and a temporary prohibition on whole sectors of economic activity. The economic impact was far-reaching. Consumer spending shifted dramatically, with travel, leisure and entertainment spending curtailed, while spending increased in other areas as households stockpiled emergency supplies from supermarkets and spent more on home entertainment. Within a month the share market had fallen by 37 per cent, and the dollar was down to US55 cents, its lowest level in almost two decades – although both the dollar and the equity markets recovered in the months that followed.

Overall, the **Australian economy** shrank by 7 per cent in the first half of 2020. Although this decline was less severe than the impact in most other OECD economies, it far exceeded contractions in the economy during previous recessions, of 3.7 per cent in the early 1980s and 1.4 per cent in the early 1990s. In the months after the onset of the pandemic in March 2020, economists struggled to forecast the depth and duration of the COVID-19 recession – little surprise, given that the world had not seen a truly global pandemic since the Spanish influenza in 1918. The Reserve Bank forecast that a 6 per cent fall in GDP over the calendar year 2020 would be followed by 5 per cent growth in 2021 and 4 per cent growth in 2022. But these forecasts were issued merely as a 'baseline scenario' because of uncertainties about the arrival of a vaccine, the prospects for reopening borders and the likelihood of further waves of the pandemic (as Victoria experienced in the second half of 2020). The economic growth impacts of COVID-19 are discussed in chapter 7.

COVID-19 prompted the **largest-scale macroeconomic policy intervention in Australian economic history**, costing the budget $289 billion in measures announced by mid-2020 and leading to the largest-ever budget deficit in 2020–21. Its centrepiece was JobKeeper, initially a $70 billion program that subsidised wages to the tune of $1500 per fortnight per employee for businesses whose turnover had fallen by 30 per cent or more due to COVID-19. The program in a more limited form was extended for a further six months from September 2020. The Government also increased unemployment benefits, temporarily doubling fortnightly payments, as well as providing free childcare and tax-free cash payments of between $20,000 and $100,000 to eligible small and medium businesses. These measures are discussed in chapter 14.

While the policy intervention was costly, there was a consensus among economists that the longer-term costs would have been even greater without intervention. The economic damage would have been larger and more permanent, as bankruptcies and unemployment would have risen more sharply, and household consumption and business investment would have fallen much further. The figure on the next page shows the Treasury's estimate that the impact of its fiscal policy intervention was an additional 0.75 percentage points on economic output in 2019–20, and 4 per cent in 2020–21.

The Government's fiscal policy measures were also supported by immediate monetary policy action from the Reserve Bank. The RBA cut its cash rate twice in March 2020, to a record low of 0.25 per cent. The RBA also supported the supply of credit to keep the economy afloat, and undertook asset purchases, involving the outright purchase of assets by the Reserve Bank from the private sector. These measures are discussed in chapter 15.

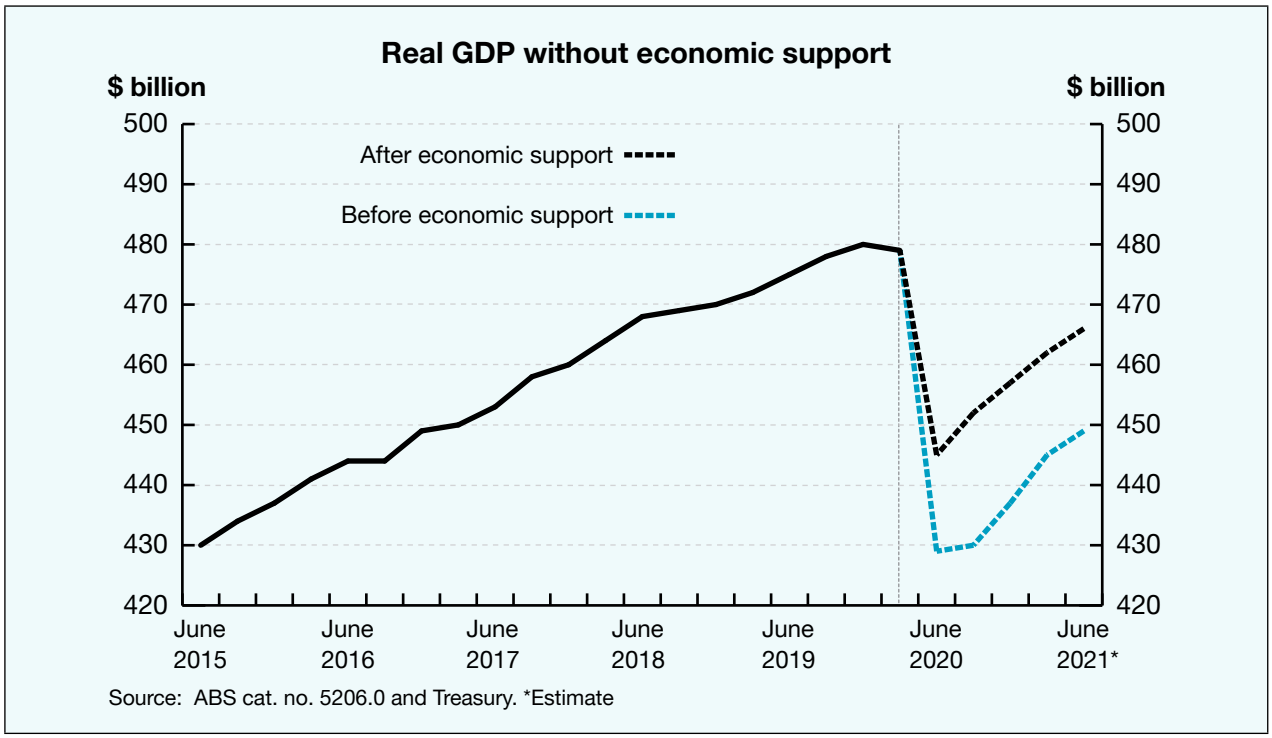
The effects of the COVID-19 recession were fast and far-reaching:

- Forecasts throughout 2020 pointed towards official **unemployment** peaking at around 10 per cent, which while severe was still 5 per cent below what it would have been without fiscal measures such as the JobKeeper wage subsidy program. The impacts of COVID-19 on unemployment are discussed in chapter 8.
- Some unusually large price movements (in particular because of the Government's decision to make childcare free for several months) resulted in the first decline in year-ended CPI **inflation** since the early 1960s and the largest quarterly decline since 1931. Underlying inflation is expected to remain below the inflation target range for some time. The impacts of COVID-19 are discussed in chapter 9.

- The objectives for economic policy were reordered to focus on economic recovery, as discussed in chapter 13. Initial promises that the economy could 'snap back' from the coronavirus were replaced by government warnings that it would be at least two years until the economy returned to its pre-COVID-19 condition and that the path to recovery from a health pandemic is especially unpredictable.

"Globally, an uneven economic recovery is underway after a very severe contraction in the first half of 2020. The future path of that recovery is highly dependent on containment of the virus. … In Australia, the economy is going through a very difficult period and is experiencing the biggest contraction since the 1930s. As difficult as this is, the downturn is not as severe as earlier expected and a recovery is now underway in most of Australia. This recovery is, however, likely to be both uneven and bumpy. … The economy is being supported by the substantial, coordinated and unprecedented policy easing over the past six months. ... Indeed, fiscal and monetary support will be required for some time given the outlook for the economy and the prospect of high unemployment."

Philip Lowe, Reserve Bank Governor, statement
September 1, 2020



Source: ABS cat. no. 5206.0 and Treasury. *Estimate

Unemployment

8

8.1 Introduction
8.2 Measuring the level of unemployment
8.3 Recent unemployment trends
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8.7 The impacts of unemployment
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8.1 Introduction

One of the most important measures of an economy's health is the state of the labour market, and in particular the proportion of people engaged in productive work. High levels of unemployment suggest economic failure, because the opportunity cost of higher unemployment includes less production, slower economic growth, lower taxation revenue and higher social welfare payments. In addition, unemployment leads to major long-term social costs, including increased inequality, poverty, family problems, crime and social division.

In recent decades, the labour market has changed in many significant ways. Some of the most significant changes have been in the age and gender profile of the workforce; the expansion of highly skilled and decline of unskilled jobs; and the move away from secure, full-time employment. We still tend to focus on the level of unemployment as our key indicator of the state of the labour market, but economists are paying more attention to other measures as well, such as underemployment and the under-utilisation of labour. In assessing Australia's progress on reducing unemployment after the COVID-19 recession, these other indicators will also provide valuable insights into labour market conditions.

8.2 Measuring the level of unemployment

While economists generally agree on what unemployment is, there are differences in views about how to calculate the level of unemployment. A considerable amount of economic debate about labour market conditions is related to the different ways in which we measure unemployment.

The labour force

The **labour force** (or workforce) can be defined as that section of the population 15 years of age and above who are either working or actively seeking work. Therefore, the labour force consists of:

Labour force consists of all the employed and unemployed persons in the country at any given time.

- Persons aged 15 and over who are currently employed for at least **one hour per week** of paid work. It also includes those on paid leave, as well as those on leave or stood

down without pay for less than four weeks, on strike, on workers' compensation, or receiving payment whilst undertaking full-time study.

- Self-employed persons working for at least one hour per week in their own business or a family business.
- Unemployed persons aged 15 and over, who are currently available for work and are actively seeking work.

Those persons not included in the labour force are:

- Children under 15 years of age.
- Full-time, non-working students above 15 years of age.
- People who perform full-time domestic duties.
- Unemployed persons who are not willing to actively apply for jobs and attend job interviews or who are not available to start work.
- People who have retired from the labour force.

The size of the labour force in Australia was 13.3 million in mid-2020

The labour force participation rate

Labour force participation rate refers to the percentage of the population, aged 15 and over, in the labour force, that is either employed or unemployed.

In Australia, anyone over the age of 15 can participate in the labour force and is therefore considered to be a member of the **working-age population**. Determining the actual size of the labour force requires taking into account people's willingness and preparedness to participate in the labour force, either by working, or for those without a job, by looking for work. People may decide not to participate in the labour force for many reasons, such as wanting to do further study, taking care of family, devoting their life to leisure activities, if they think they are unlikely to find a job, or if they have other forms of income.

The **labour force participation rate** can be defined as the percentage of the working-age population – those aged 15 years and over – who are in the labour force, that is, either working or actively seeking work.

$$\text{Labour force participation rate (\%)} = \frac{\text{Labour force}}{\text{Working-age population (15+)}} \times \frac{100}{1}$$

The participation rate in Australia was 64 per cent in June 2020, a fall of 2 per cent over the year, as people stopped looking for work during the COVID-19 pandemic.

Unemployment

Unemployment refers to a situation where individuals want to work but are unable to find a job, and as a result labour resources in an economy are not utilised.

Unemployment statistics reflect the number of people who are out of work, but are actively seeking work. To be classified as actively seeking work, a person without a job must satisfy any one of a number of criteria, such as:

- regularly checking advertisements from different sources for available jobs
- being willing to respond to job advertisements, apply for jobs with employers and attend interviews
- registering with an employment agency linked to Job Services Australia.

To determine the rate of unemployment, the Australian Bureau of Statistics (ABS) undertakes a monthly survey of the labour force. Through this survey of around 52,000 individuals, the ABS calculates both the total number of unemployed people and the rate of unemployment.

$$\text{Unemployment rate (\%)} = \frac{\text{Number of persons unemployed}}{\text{Total labour force}} \times \frac{100}{1}$$

Australia's unemployment rate in was 7.4 per cent in June 2020, an increase from 5.2 per cent a year before.

PROBLEMS WITH THE METHOD USED TO MEASURE UNEMPLOYMENT

There is some debate amongst economists about the accuracy of the calculations that are currently used in the official measure of **unemployment**. As a result of structural changes that have occurred in Australia's labour market in recent years, the classification of all people into three categories of employed, unemployed and not in the labour force does not provide a complete picture of the actual utilisation of labour (or spare capacity), and may disguise the extent of Australia's labour market problems. There are two main problems associated with current labour force statistics:

1. By classifying people as either employed or unemployed, official statistics do not take into account the number of hours people work. Some employed people with a limited amount of work want to work more hours – known as **underemployed** people. If a 40-hour per week job were converted into four 10-hour per week jobs, this would create three new jobs and reduce the official unemployment rate, without increasing real economic activity or the demand for labour.
2. By classifying people as either in the labour force or not in the labour force, official unemployment statistics do not include people who have not been able to find work and have left the labour force – known as "hidden unemployed". Also known as "discouraged jobseekers", this group may include family members undertaking home duties, students that would rather work, and people with disabilities who would take up suitable employment if it were available.

These shortcomings were highlighted in the labour market statistics at the beginning of the COVID-19 pandemic, when the official number of unemployed people initially increased by just 105,000, even though 1.3 million people had lost their jobs. Around 500,000 left the labour force, because they saw no point in seeking work with so many businesses were closed. Another 750,000 were "employed", but did not work a single hour. The average hours worked per head of population per month decreased by 8 hours in April 2020 to 78 hours per employee, the lowest level on record.

Taking into account the combination of unemployment and underemployment, the ABS publishes additional measures of the underutilisation of labour. The first of these is the **labour force underutilisation rate**, which measures the number of people unemployed plus the number who want to work more hours. In June 2020 the labour force underutilisation rate was 19.1 per cent, up 5.5 per cent from the 2018–19 average of 13.6 per cent. In comparison, over the same time period, the unemployment rate rose from 5.1 per cent in 2018–19 to 7.4 per cent in June 2020.

The ABS also publishes an extended labour force underutilisation rate, which adds to the underutilisation rate two additional groups of people who are marginally attached to the labour market (persons actively looking for work and able to start within four weeks but not within one week and discouraged jobseekers). Prior to the sharp increase in unemployment in 2020, the extended labour force underutilisation rate was 19.2 per cent. It shows that official unemployment statistics measure less than half of the number of people who are short of work.

The problem with merely adding the percentage of unemployed and underemployed workers together is that it does not give us an accurate view of the spare capacity in the labour market, because unemployed people typically want to work three times as many additional hours as underemployed people. In order to better measure the amount of spare capacity in the labour market, the Reserve Bank calculates an Hours-based Labour Underutilisation rate. This measure adds to the unemployment rate the extra hours that underemployed part-time workers are seeking, effectively converting those hours to the equivalent of full-time jobs. These extra hours amounted to 3.3 per cent of the labour force in 2019, contributing to an overall Hours-based Labour Underutilisation rate of 8.1 per cent.

reviewquestions

1. Outline how the participation rate is calculated and explain what it measures.
2. Explain why the official unemployment rate may not be the best measure of the number of Australians out of work.
3. Discuss whether an increase in the participation rate is likely to increase or reduce unemployment.
4. Analyse the impact of a higher labour force participation rate on the economy.

8.3 Recent unemployment trends

The surge in unemployment that took place in 2020 brought unemployment back to levels that had not been experienced since the early 1990s. As shown in figure 8.1, Australia began experiencing higher unemployment rates in the mid-1970s, after recording very low

unemployment rates in the 1960s and early 1970s. The level of unemployment peaked in the early 1990s – the 10.7 per cent unemployment rate recorded in 1992–93 was its highest level since the Great Depression of the 1930s. The main reason for this increase was a severe **recession** in Australia and the global economy. Falling aggregate demand saw cutbacks in production and the closure of many firms, which led to the shedding of labour and an increase in unemployment.

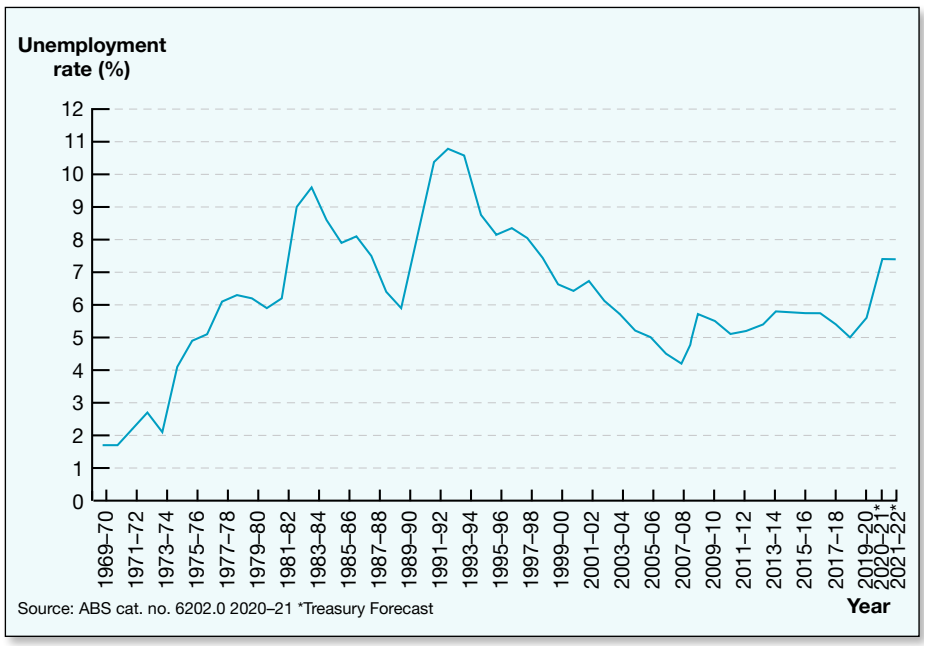


Figure 8.1 – Unemployment in Australia

The unemployment problem during this period was worsened by extensive **structural change and microeconomic reform**. Many people who had lost their jobs in declining industries during the recession were unable to obtain new jobs created in growing industries because the job vacancies often required higher or different skills. As new technologies and production techniques changed the structure of businesses, Australia's unemployment problem became one of the major structural issues facing the Australian economy.

There was a gradual downward trend in unemployment for the 15 years from 1993 to 2008, when it fell to 4 per cent, its lowest level since 1974. Conditions changed suddenly in 2008 as the global financial crisis triggered a worldwide recession, but in Australia the increase in unemployment was much milder than in most advanced economies. Unemployment rose by almost 2 per cent during 2008–09, but a recovery in growth the following year meant that unemployment was again down to 5 per cent by 2010.

During the 2010s, Australia's unemployment rate stayed mostly in the range of 5 to 6 per cent (rising marginally higher in 2015), which was just below the average for advanced economies. The rate of economic growth was generally high enough to create jobs for people entering or returning to the labour market. However, economic growth was not enough for the labour market – at the end of 2019, for example, there were eight people unemployed or underemployed for every job vacancy. After the onset of recession in 2020, initial forecasts from the Treasury predicted that unemployment would rise to 10 per cent in 2020–21, remaining above 7 per cent until the end of 2021.

Australia's labour market has also seen a sustained trend of faster growth in part-time than full-time jobs during recent decades. The official unemployment statistics do not fully capture the problem of underemployment, where individuals are in employment but they want to work more than their current hours. A comparison of underemployment rates in 2019 ranked Australia as having the third-highest level of underemployment in the OECD. In 2019, just over 30 per cent of Australian workers had part-time jobs, on average working 17 hours per week. Around one in four of those part-time workers wanted to work more hours, and on average they wanted an additional 14 hours per week. Underemployment rose more rapidly than the unemployment rate in the early phases of the recession in 2020, with underemployment up from 8.7 per cent to 12.6 per cent in the year to June 2020.

After declining from 12.2 people per vacancy in November 2014 to 7.4 in November 2018, competition for jobs has increased again. For entry-level jobs, competition is tougher, with around a third more unemployed or underemployed applicants for every job. In 2020, the Department of Education, Skills and Employment estimated there were

an average of 19 applicants in total for every advertised job. Following strong growth in employment from 2017 up to June 2019, there has been no substantial growth in jobs, with 12,281,000 people employed in that month compared with 12,289,000 in January 2020. With COVID-19 expected to detract from growth in the economy, it is likely that underemployment will rise substantially. In 2020, the underemployment rate increased by 4.9 per cent to 13.7 per cent, the highest on record, and was 5.2 per cent higher than in 2019. The number of underemployed people increased by 50 per cent to 1.8 million in April 2020, an increase of 666,000 people since April 2019.

Australia needs economic growth rates above 3 per cent in order to make progress on reducing unemployment. The relationship between economic growth and unemployment is explained by **Okun's Law**, which says that to reduce unemployment, the annual rate of economic growth must exceed the sum of percentage growth in productivity *plus* increase in the size of the labour force in any one year. Analysis by the Reserve Bank in 2015 ("Okun's Law and Potential Output") concluded that the rate of GDP growth consistent with stable unemployment had fallen from around 5 per cent in the 1970s to 2.9 per cent by 2015. One implication of Okun's Law is that in the short term, higher rates of productivity growth actually make it more difficult to reduce the rate of unemployment (as Australia experienced in the 1990s when it was enjoying higher productivity growth rates). Conversely, one of the short-term impacts of lower productivity growth will often be a lower rate of unemployment (as Australia experienced in the 2000s). However this trade-off between faster productivity growth and faster employment growth only applies in the short term. In the long run, a higher level of productivity growth should lead to stronger economic growth and more job creation, but in the shorter term more jobs are likely to be created during a period of lower productivity growth because employers will be forced to hire more workers if they want to increase production.

Okun's Law explains the relationship between unemployment and economic growth, showing that to reduce unemployment, the annual rate of economic growth must exceed the sum of percentage growth in productivity *plus* increase in the size of the labour force in any one year.

Australia's labour force participation rate is expected to decline gradually over coming decades, falling from its peak in early 2020 of 66 to 62.4 by 2054–55 (according to the Treasury's 2015 Intergenerational Report). Structurally, Australia's population is ageing because of longer life expectancy and lower fertility rates. Over the 20 years between 1998 and 2018, the proportion of Australia's population aged over 65 years rose from 12.2 per cent to 15.7 per cent. This proportion of individuals aged over 65 is expected to continue rising, with Australia projected to have four million people in the 65–84 years age group by 2022. At the same time, the expected fall in the participation rate caused by the growth in the over 65 population will be partially offset by an increase in the proportion of over 65s who stay within the labour market, including as a result of the retirement age being lifted to 67 years of age. Cyclical factors also influence the participation rate from one month to the next. For example, weaker demand for labour and below average wage growth may contribute to a cyclical "discouraged jobseeker" effect, as was seen in the first two months of the 2020 recession when the participation rate fell between March and May from 65.9 to 62.7 per cent.

reviewquestions

1 Outline the recent trends in Australia's unemployment rate.
2 Explain the relationship between productivity and unemployment.

8.4 The main types of unemployment

In order to understand how the government's economic strategies can reduce unemployment, it is helpful to distinguish between the different types of unemployment.

Structural unemployment

Structural unemployment occurs because of structural changes within the economy caused by changes in technology or the pattern of demand for goods and services. Workers find that the skills previously useful in declining industries do not match the job opportunities opening up in newly emerging industries. Most of Australia's persistent, long-term unemployment problem is attributed to structural unemployment.

Cyclical unemployment

Cyclical unemployment occurs because of a downturn in the level of economic activity, and falls during times of strong economic growth. Falling demand means fewer employment opportunities. Cyclical unemployment was the major contributor to a rise in unemployment in 2020, as Australia entered recession.

Frictional unemployment

Frictional unemployment represents the people who are temporarily unemployed as they change jobs – they have finished one job, but have not started a new one. It generally takes time to move from one job to another as workers invest time and effort into finding a suitable job, and as employers invest time and effort in the search for suitable candidates. Frictional unemployment is inevitable, although it is increased by delays in matching unemployed people to available jobs. Improving the efficiency of job matching services through job and skills databases can help to reduce frictional unemployment. Each year in Australia, around 1 in 12 workers (or one million people) change jobs.

Seasonal unemployment

Seasonal unemployment occurs at predictable and regular times throughout the year because of the seasonal nature of some kinds of work (for example, selling gelato on the beach in summer or being a shopping centre Santa Claus). It also accounts for the influx of students finishing school, university and TAFE courses between December and March each year. Official unemployment figures are usually seasonally adjusted to take these fluctuations into account.

Hidden unemployment

Hidden unemployment refers to those people who can be considered unemployed but do not fit the official definition of unemployment and are thus not reflected in the unemployment statistics.

Hidden unemployment includes those people who can be considered unemployed but do not fit the Australian Bureau of Statistics definition of unemployment and are thus not reflected in the unemployment statistics. This includes those individuals who have been discouraged from seeking employment and are no longer actively looking for a job. Because they are not actively seeking work, such people are not officially classified as unemployed; they simply are not participating in the labour force. These people are known as the hidden unemployed or discouraged jobseekers. Examples would include a middle-aged male who had been retrenched, then suffered severe depression and did not return to work.

The presence of hidden unemployment shows up in the statistics as a decline in the labour force participation rate when these individuals give up looking for work, but they are not shown in the unemployment statistics. While it is difficult to measure this figure, the Australian Council of Social Service has estimated that there are as many as 1.3 million hidden unemployed people in Australia. The Australian Bureau of Statistics has reported a sharp increase in recent years in the number of people who want to work and are able to work, but are not actively seeking work for reasons such as family responsibilities, short-term illness and study. The ABS calculated in 2019 that 1.1 million Australians were in the category of wanting to work and being able to start work within four weeks, but not actively seeking work (and not officially in the labour market).

Underemployment

Underemployment refers to people who work for less than full-time (35 hours per week), but would like to work longer hours. These people are not classified as unemployed but they represent a significant growing part of Australia's unemployment problem. The

increased importance of understanding trends in the level of underemployment is reflected in the Australian Bureau of Statistics' decision to begin measuring underemployment on a monthly basis since 2014.

In June 2020, the Australian Bureau of Statistics estimated that 1,555,600 Australians were underemployed, a rate of 12.6 per cent of the workforce. This means that Australia has a larger number of people who are underemployed than who are unemployed. The long-term trend of rising underemployment reflects the shift away from full-time to part-time and casual work. A higher proportion of women work part-time or casual jobs, so that while there is only a slight difference in the rate of unemployment between males and females (female unemployment was 7.3 per cent in June 2020, 0.3 per cent below the male unemployment rate of 7.6 per cent), the difference in the rate of underemployment was larger at 1.9 per cent (13.6 per cent for females compared to 11.7 per cent for males). At the same time, underemployment is a larger issue for younger workers, with a rate of 19.6 per cent underemployment for people aged between 15 and 24.

Long-term unemployment

Another important measure of unemployment is the number of long-term unemployed – referring to those people who have been out of work for 12 months or longer, usually as a result of structural unemployment.

Once a large pool of long-term unemployed people exists, it can be very difficult to reduce it. High economic growth can help because it stops the pool growing, but on its own it is not enough to solve the problem. Long-term unemployment often turns into permanent unemployment. This is because people who are out of work for long periods of time find it much harder to find a job, even when the economy picks up. Some reasons for this include:

- New arrivals into the unemployment pool are re-absorbed into the workforce more quickly, especially if they have skills that are more up to date and attractive for employers, compared to the longer-term unemployed.
- The long-term unemployed usually suffer from structural unemployment and do not possess the skills demanded in the labour market.
- Unemployed people lose their enthusiasm to find work when they are persistently unsuccessful in applying for jobs.
- Unemployed people also lose contact with the world of paid work and do not learn about the new skills and developments in the labour market, which further reduces their employment opportunities.
- Potential employers tend to look less favourably towards people who have been out of work for a long period of time.

Year	Average (weeks)	Median (weeks)	Long-term unemployed (%)
1970	7.3	n/a	n/a
1975	12.7	n/a	n/a
1980	32.0	n/a	n/a
1985	49.5	n/a	n/a
1990–91	39.4	14	21.0
1995–96	50.5	19	28.1
2000–01	47.5	16	22.5
2005–06	39.6	13	18.2
2010–11	36.7	14	19.3
2015–16	45.4	16	22.9
2016–17	45.7	17	23.9
2017–18	47.4	17	23.6
2018–19	48.8	16	24.1
2019–20	48.9	15	24.1
2020–21	49.0	17	25.1

Source: Adapted from ABS cat. no. 6291.0.55.001 Table UM2

Figure 8.2 – Duration of unemployment

Figure 8.2 shows that a sharp increase in the proportion of the jobless who are classified as long-term unemployed occurred during the recession of the early 1990s. Although there was a significant decline in long-term unemployment as a proportion of total unemployment until 2008–09, since then there has been an increase in the proportion of long-term unemployed. This is in addition to the discouraged jobseekers (not actively seeking work) who are not counted in the pool of long-term unemployed persons. In a 2020 report, the Australian Council of Social Services found that the prospect of finding work within the next year was 44 per cent lower for someone who has been unemployed for one to two years, compared to someone who has been unemployed for less than three months. For the very long unemployed (more than two years), prospects are even lower.

Hard-core unemployment

Economists sometimes also speak of **hard-core unemployment**, which refers to people who are out of work for so long that employers consider them unemployable because of their personal circumstances. Circumstances that might result in a person not being employable include mental or physical disability, drug abuse or anti-social behaviour.

Where someone is assessed as being unable to undertake work, even on a part-time basis, they are placed on a disability support pension. People on the disability support pension are not counted in the official unemployment statistics.

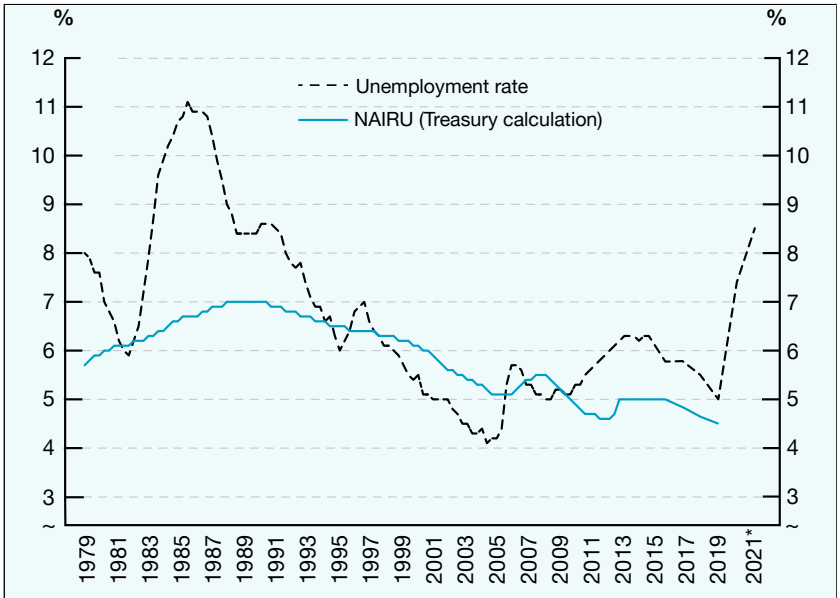
reviewquestions

1 Outline the main types of unemployment.
2 Explain the difference between underemployment and hidden unemployment.
3 Discuss why it may be more difficult for a long-term unemployed person to find work compared to other unemployed persons.

8.5 The non-accelerating inflation rate of unemployment

The **non-accelerating inflation rate of unemployment (NAIRU)** refers to the level of unemployment at which there is no cyclical unemployment, that is, where the economy is at full employment.

The **non-accelerating inflation rate of unemployment (NAIRU)** is another important concept in understanding unemployment. The theory behind the NAIRU is that some level of unemployment is inevitable in an economy, and efforts to reduce unemployment below this "natural" level will be counterproductive. This natural rate of unemployment, commonly called the NAIRU, is comprised of frictional, seasonal, structural and hard-core unemployment. When unemployment is above the NAIRU, there is spare capacity in the labour market, which suggests that policymakers should stimulate economic growth with the aim of reducing unemployment. When unemployment is already at or below the NAIRU, an increase in economic growth will increase inflationary pressures, because employers will be forced to raise wages to compete for workers who are already in employment, because there are insufficient numbers of unemployed people to fill those job vacancies (given that they need to have the right skills and be available to work). In other words, efforts to reduce unemployment below the NAIRU will result in higher inflation. The conflict between inflation and unemployment can be shown on the Phillips Curve diagram, which is discussed further in chapter 13.



Sources: Commonwealth of Australia, ABS cat. no. 6202.0, RBA Bulletin (2017), '*Estimating the NAIRU and Unemployment Gap*', and RBA (2019) Assistant Governor Luci Ellis speech *Forecasts

Figure 8.3 – Unemployment and the NAIRU since 1969

The concept of the NAIRU has important implications for economic policy. It suggests that policies to encourage economic growth and reduce unemployment will be worthwhile up to a point, but beyond that, these policies will only create inflation. A lower NAIRU increases the economy's capacity to grow without increasing inflation, and can be achieved over the long term through policies that reduce structural, seasonal and frictional unemployment. For instance, the NAIRU might be reduced through increasing retraining and re-skilling programs to aid the structurally unemployed, or by making it easier for workers to change jobs or move interstate, or by removing hurdles for people with a disability to access a workplace.

Estimating the NAIRU is very complex because it attempts to remove cyclical influences, even though the levels of

unemployment and inflation are highly influenced by cyclical factors. It is further difficult to pinpoint as it can shift up and down with changes in the structure of the labour market. Figure 8.3 shows an Australian Treasury calculation of the long-term trends in the NAIRU since 1979. A 2017 Reserve Bank of Australia research paper concluded that the NAIRU had peaked at just above 7 per cent in 1995 and had declined gradually since then. These findings are supported by the fact that inflation increased when unemployment fell below 5 per cent (prior to the global financial crisis in 2008), and that with unemployment above the NAIRU in more recent years, wage and inflation pressures have been below their long-term averages. The Treasury's economic modelling has also concluded that the NAIRU fell from 7 per cent to 5 per cent in the two decades to 2015. In a June 2019 speech, RBA Assistant Governor Luci Ellis noted that RBA research suggested that the NAIRU had declined to around 4.5 per cent by 2019, reflecting the slower than expected wages growth in previous years.

reviewquestions

1. Explain what is meant by the non-accelerating inflation rate of unemployment.
2. Outline how an economy might reach its non-accelerating inflation rate of unemployment.
3. Discuss the implications of an economy's unemployment rate falling below its non-accelerating inflation rate of unemployment.

8.6 The causes of unemployment

Economists disagree over the causes of unemployment and what policies should be used by the government to address Australia's unemployment problem. There are many explanations for unemployment offered by economists, including that:

- Economic growth has been too low to generate adequate employment growth.
- People do not have the right skills to fill job vacancies.
- People do not have adequate opportunities for education and training.
- Rapid structural change in our economy is creating a larger pool of workers whose skills are no longer in demand.
- Wage rates are too high, especially for low-skilled workers.
- There are too many regulations surrounding employment, discouraging employers from hiring new employees.
- Some people choose to remain unemployed, because they can receive government welfare benefits instead.
- Workers in high-income economies whose jobs can be performed overseas cannot compete with workers who are paid low wages in developing economies.
- Not enough is done to help people with mental illness or with a disability to find suitable work.

The factors that contribute to unemployment are considered in detail on the following pages.

The level of economic growth

The demand for labour is a **derived demand** – it is derived from the demand for the goods and services that labour helps to produce. If there is a downturn in the level of aggregate demand in the economy, this may be reflected in a downturn in the demand for labour and an increase in the level of unemployment. The decline in aggregate demand could be due to:

- an economic downturn with lower domestic consumption and investment spending
- government policies (such as contractionary monetary or fiscal policy) designed to dampen demand

- a decrease in the demand for Australia's exports due to a global recession, slower growth in the economies of our major trading partners, or because of less competitive Australian goods and services in world markets.

Unemployment is correlated with the overall level of economic growth. It is generally felt that unemployment is likely to start rising when growth falls below around 2 per cent. On the other hand, when growth is above 3 per cent, the level of unemployment is likely to fall. Generally there is a time lag of around six months between a change in the level of economic growth and a change in employment levels. Changes in the level of economic growth mainly affect cyclical unemployment.

1992–1994	Expansionary fiscal policy, with large deficits and low interest rates, saw unemployment fall from 11 per cent to 8.5 per cent.
1996–1997	A shift towards tighter monetary policy and fiscal consolidation contributed to slower growth and a slight increase in unemployment to 9 per cent.
1997–1999	Interest rate reductions helped accelerate growth, encouraging spending, business investment and job creation.
1999–2001	The cycle of interest rate increases slowed down growth in 2000 and 2001 and resulted in an increase in unemployment levels.
2003–2008	The mildly expansionary stance of monetary policy supported growth and led to a fall in unemployment levels. Mildly expansionary fiscal policy alongside a major resources boom helped sustain further reductions in unemployment to around 4 per cent.
2008–2009	Unemployment levels increased to around 6 per cent as the global recession impacted on the Australian economy, prompting highly expansionary macroeconomic policies that aimed to minimise the downturn.
2009–2010	As Australia recovered from the global downturn, unemployment fell as expansionary fiscal and monetary policies promoted economic growth. From late 2009 the Reserve Bank began returning interest rates to more normal levels.
2010–2011	As the Australian economy recovered and unemployment fell, the fiscal stimulus was wound back while monetary policy remained relatively neutral.
2011–2020	With economic growth below its long-term average, and inflation low, monetary policy became increasingly expansionary, in part to offset contractionary fiscal policy, which was focused on gradually reducing the budget deficit.
2020	The economy received a major external shock from the COVID-19 pandemic, which required a shutdown of many parts of the economy. Fiscal policy became hugely expansionary, to cushion the economy and prevent job losses until the pandemic subsided. The Reserve Bank reduced the cash rate to its lowest level ever.

The trends in the measures of unemployment and underutilisation in recent years confirm their correlation with the rate of economic growth. The sharp contraction in economic activity that began in the March quarter of 2020 resulted in an immediate surge in unemployment. Prior to then, economic growth in the 2–3 per cent range had seen unemployment stay mostly in the 5–6 per cent range for several years, while there was a small trend increase in the underutilisation of labour. Similarly, in the previous decade during a period of faster growth from 2003 to 2008 unemployment fell (from 7 to 4 per cent) and during the economic slowdown in 2009 it rose (from 4 to a peak of 5.9 per cent).

The stance of macroeconomic policies

Macroeconomic policy settings can influence the level of cyclical unemployment in the short to medium term, through their influence on the business cycle.

Fiscal and monetary policy both influence the level of aggregate demand through their influence on the business cycle, and this in turn influences the level of unemployment in the short to medium term. An expansionary stance aims to increase economic growth and job creation. This was recently highlighted in the RBA's commentary when it moved to cut the cash rate on two occasions in 2020, reducing it to a record low of 0.25 per cent in order to support economic activity in the face of the COVID-19 pandemic. The cuts in interest rates took place alongside large-scale fiscal policy measures to support the economy.

Constraints on economic growth

Over the longer term, unemployment is influenced by the level of sustained economic growth achieved in an economy. If there are significant constraints on economic growth, the economy will struggle to create enough jobs to reduce unemployment. During the 1980s, Australia's inflationary concerns and current account deficit problems were significant constraints on economic growth and therefore contributed to the unemployment problem. Although inflation proved to be less of a constraint on growth in the 1990s, the economy approached full employment in 2008 in the period before the global financial crisis, and inflationary pressures re-emerged as a constraint on growth.

Rising participation rates

An increase in the labour force participation rate will tend to cause an increase in the rate of unemployment in the short term. This is because more people who previously were not looking for work (and were not classified as unemployed) start actively seeking employment. This situation usually occurs in times of economic recovery when many discouraged jobseekers, observing that employment opportunities are improving, start looking for work. For this reason, they re-enter the labour market, and unless they obtain a job immediately, they join the ranks of the unemployed. This means that the level of unemployment may only be reduced slowly during an economic recovery, even when economic growth and employment growth are strong, because more people are looking for jobs.

Structural change

The process of structural change in the economy often involves significant short-term costs. One of the most significant costs in the short term is a loss of jobs in less efficient industries and in areas undergoing major structural change. Globalisation has contributed to changes in labour markets around the world, with domestic businesses becoming more integrated into global supply chains leading to the offshoring of some jobs. Nevertheless, an analysis of job losses in OECD countries during recent decades found that trade and globalisation accounted for only half as many job losses as automation. One part of the longer-term economic fallout from the COVID-19 pandemic is likely to be an increase in remote working and a reduction in jobs involving face-to-face contact.

Technological change

Rapid technological change can cause unemployment, at least in the short term. The pace of change in the labour market is expected to accelerate in the 2020s as automation driven by artificial intelligence applications continues to transform jobs. The OECD's 2019 *Employment Outlook* estimated that 36 per cent of Australian jobs are at a high risk of automation, compared to 46 per cent of jobs overall in the OECD. This does not mean that these jobs will disappear, but rather that workers will need to improve their skills to retain jobs in these sectors. New and improved products and methods of production lead to a change in the work skills required, requiring workers to retrain while also causing some workers to become redundant. Unemployment caused by automation and the changing patterns of demand is usually structural unemployment. However, there can still be an overall economic benefit as new technologies increase productivity, increase demand and create different types of jobs. Displaced workers may be re-employed in other industries, provided that they have suitable opportunities to be retrained.

Productivity

The productivity of labour is a significant factor affecting the decision of employers to increase or reduce employment. Low productivity growth has different short- and long-term impacts. Higher productivity growth will tend to slow employment growth (or increase unemployment) in the short term, because fewer employees are required per unit of output. However, in the long term, higher productivity growth contributes to higher economic growth and therefore lower rates of unemployment. Conversely, a slowdown in productivity growth will tend to result in lower unemployment in the short term but higher unemployment in the longer term, since an economy with lower productivity growth will be less competitive and slower growing (and employers may substitute greater use of capital for a reduced use of labour).

Inadequate levels of training and investment

Structural unemployment is related to the mismatch between the skills of the unemployed and the skills demanded by employers for job vacancies. During the 2000s, significant skills shortages emerged in many areas of the economy for occupational groups such as tradespeople, health professionals and construction workers. By 2020, 26 occupations were included on Australia's skill shortage list (whereas at the peak of the economic boom before the global financial crisis in 2007–08, 85 per cent of all occupations were experiencing skill

shortages). Two occupations have experienced skill shortages in every year for more than a decade: arborists and panelbeaters. Persistent skill shortages continue to be experienced for a wide range of technicians and trade workers, including aircraft maintenance engineers, butchers, air-conditioning mechanics, roof tilers, stonemasons, sheetmetal trades workers, motor mechanics, panelbeaters and tilers. The existence of skill shortages at a time when there have still been significant numbers of people unemployed suggests that there are gaps in Australia's education and training system. Inadequate levels of training make Australia more reliant on skilled migration to fill job vacancies.

Increased labour costs

Unemployment may rise because of a sustained increase in labour costs (wages), although it is worth noting that in more recent years economists have been concerned by the low level of wage growth rather than the excessive wage growth that contributed to inflation in the 1970s and early 1980s. While none of these conditions have existed in recent years, in general the circumstances where increased labour costs could contribute to higher unemployment include:

- A shortage of skilled labour may result in employers competing with each other for a limited pool of labour, thus forcing up labour costs more generally and possibly creating wage inflation and overheating the economy.
- A wages breakout caused by excessive wage demands. When nominal wages are rising too fast, outstripping inflation and productivity increases, they can reduce business profits. Businesses may choose to substitute capital for labour, or reduce output, to improve profits. In these circumstances labour would be effectively pricing itself out of a job.

SHIFTING INDUSTRIES AND SHIFTING JOBS

Globalisation has accelerated the process of economic change, resulting in changes to the structure of Australian industries and to the labour market. A study of structural change in Australia published by the Reserve Bank in 2018 highlighted two of the largest changes to the labour market in the past 50 years:

- the growth of more highly skilled, non-routine jobs in the business services sector (such as financial services, consulting, technology, communications, recruitment, design and legal jobs), which has doubled from around 10 per cent to 20 per cent of total employment.
- the decline of lower skilled, routine jobs in the goods production sector (manufacturing, mining, construction, utilities and agriculture).

A similar but more detailed industry-specific analysis from the Australian Department of Jobs and Small Business, "Australian Jobs 2019", highlighted the profound changes of the past three decades:

- Manufacturing went from being the largest employing industry in Australia in the three decades between 1988 and 2018 to being the sixth-largest industry. By 2018 it employed just 8 per cent of Australian workers, compared to 15 per cent three decades before.
- Employment in Agriculture, Forestry and Fishing halved from 6 per cent to 3 per cent of total employment in the same time period.
- The services sector now employs three in every four Australian workers. The services sector is generally defined as all industries other than manufacturing; construction; agriculture, forestry and fishing; mining; and electricity, gas, water and waste services (although there are services jobs even within these industries). Much of the growth in the services sector has been driven by Health Care and Social Assistance. This industry has had strong employment growth, and with Australia's aging population requiring more care, and the roll–out of the National Disability Insurance Scheme, this is likely to continue. Professional, Scientific and Technical Services has also recorded strong employment growth, doubling its share of employment over the past 30 years.

The report noted that job growth in recent years has been driven by five key industries: Health Care (which now employs 1.7 million Australians) and four others – Professional Services, Construction, Education and Hospitality, which employ around 1 million each.

This process of change in the structure of the labour market is expected to continue in the decades ahead. Artificial intelligence and automation are expected to make a substantial number of jobs obsolete. The displacement of jobs resulting from new technologies that have affected jobs in retail stores, banks and offices will be accelerated by technologies such as robotics in manufacturing; driverless cars and trucks in the transport sector, and chatbots that replace customer service and helpdesk jobs. A study by PricewaterhouseCoopers in 2018 predicted that 20 per cent of all jobs will be displaced by new technologies in the next two decades. A 2019 Deloitte Access Economics report found that the typical Australian worker now lacks on average two critical skills for their job, almost twice as many as in 2010. The report predicted a further widening of the gap between workforce skills and skills in demand.

- A decision by the **Fair Work Commission** to increase award wages substantially in its National Minimum Wage Order (to improve the living standards of lower paid workers) could make it too expensive for some employers to keep all of their workers employed.
- A substantial rise in labour on-costs. These are the additional costs of employing labour, and include payroll tax, superannuation, sick leave, holiday pay and workers' compensation. These are affected mainly by government policy decisions. If these on-costs are too high, they can cause a decline in the demand for labour.

Fair Work Commission is the government agency that regulates Australian workplaces, with functions that include the setting of minimum wages, the approval of workplace agreements and in some instances, the resolution of industrial disputes.

Inflexibility in the labour market

One of the reasons for higher labour costs may be inflexibility in the labour market. Some economists argue that Australia's relatively high minimum wages rates make it less attractive for employers to hire less-skilled workers, contributing to a higher level of unemployment, and that deregulation of the labour market might lead to lower minimum wages and a lower level of unemployment. For example, a study released in 2019 by the Institute of Public Affairs titled "Expanding Economic Opportunity: An International Comparison of Australia's Labour Market Regulation" attributed Australia's high level of underemployment to regulation of the labour market. The IPA's analysis ranked Australia 105th out of 140 nations in the world for inflexibility in wage determination, and 110th for the flexibility of hiring and firing rules. However, OECD studies of the Australian labour market usually point to the relative flexibility of the Australian labour market, and highlight the need for improvement in skills and training to reduce underemployment rather than focusing on labour market rules. (These issues are further discussed in chapter 17).

reviewquestions

1 Examine how the stance of macroeconomic policies can influence the level of unemployment.
2 Discuss the positive and negative impacts of technological and structural change on the labour market.
3 Discuss how inflexibility in the labour market affects employment in the Australian economy.

8.7 The impacts of unemployment

A high level of unemployment has serious negative effects on the economy, on individuals and on society. For this reason, lowering unemployment is an important goal of economic management.

Economic costs

Opportunity cost

Unemployment means that the economy's resources are not being used to their full capacity – the economy is thus operating below its production possibility frontier. Therefore, total output is below what it could potentially be, since unemployed people are not contributing to the production process. Lower total output also means lower household incomes and expenditure, which may lower sales and profits. Higher unemployment levels may therefore lead to reduced business investment, production and economic growth.

Lower living standards

Those who are out of work will have lower incomes (relying on welfare payments) and therefore lower living standards. In addition, those who are in employment will need to contribute higher taxes to cover the cost of income support to the unemployed. With high rates of unemployment, the production of both consumer goods and capital goods is lower, resulting in lower living standards.

Decline in labour market skills for the long-term unemployed

Unemployment leads to a loss of skills among existing workers who find themselves without work for extended periods of time. Persistently high unemployment will mean that those who are unemployed will lose their labour market skills, confidence and experience, and will become less employable or even unemployable. In this way cyclical or short-term unemployment can turn into long-term structural unemployment, a process known as **hysteresis**. In addition, new members of the labour force (such as young school leavers and new university graduates) will find it more difficult to develop skills if they are unable to obtain jobs soon after finishing their education.

Hysteresis is the process whereby unemployment in the current period results in the persistence of unemployment in future periods as unemployed people can lose their skills, job contacts and motivation to work.

Costs to the government

High levels of unemployment can have a significant influence on the government's revenue and expenditure (and therefore on the Federal Budget). Falling incomes associated with unemployment will generate less tax revenue, and at the same time, the government will be burdened with increased transfer payments (unemployment benefits) to the unemployed, as well as the cost of training and labour market programs. This decrease in revenue and increase in expenditure will cause a deterioration in the government's budget balance.

Lower wage growth

High levels of unemployment mean that there is an excess of labour supply in the economy, which should lead to a fall in the equilibrium level of wages. However there is a "downward stickiness" for wages – that is, wages do not often get reduced (because, for example, they are set through formal enterprise agreements or industrial awards). Instead, higher unemployment is more likely to lead to slower wage growth over time rather than actual reductions in wages. Lower wage growth has been particularly evident in recent years, with wage growth remaining below 3 per cent since 2013, although several factors in addition to unemployment help explain the shift towards lower wage increases.

Social costs

Increased inequality

Unemployment tends to occur more frequently among lower-income earners in the economy, such as the young and unskilled. Because unemployment means a loss of income for these people, they become relatively worse off compared to higher-income earners, contributing to poverty and overall inequality in income distribution. One in eight Australian children grow up in a household where nobody is working – a "jobless family". Recent research by the Smith Family (see chapter 11) has highlighted the "intergenerational" dimension of inequality and poverty, where disadvantage is passed from one generation to the next, often described as the "poverty trap".

Other social costs

Unemployment is associated with many of the most serious personal and social problems in Australia. Among families and individuals, especially those who suffer from long-term unemployment, there is an increased incidence of social problems, including:

- severe financial hardship and poverty
- increased levels of debt
- homelessness and housing problems
- family tensions and breakdown
- loss of work skills
- increased social isolation
- increased levels of crime
- erosion of confidence and self-esteem
- poor health, mental health conditions and a higher risk of suicide.

These social problems have an economic cost for the community as a whole since more resources must be directed towards dealing with them. For example, more public funds must be spent on health, welfare services, social workers, the police service and correctional centres, rather than being used to satisfy other community wants. In addition, increased unemployment and inequality can create social tensions and a backlash against globalisation more generally, as was seen in many countries after the global financial crisis of 2008.

Unemployment for particular groups

The problem of unemployment is far more severe for some groups in society compared to others. One such group is the youngest group in the workforce – aged 15 to 19 – who experience levels of unemployment up to three times the rate of the general population, as shown in figure 8.4. The OECD estimated in 2020 an increase in unemployment rates of 6 per cent on average among member economies following the COVID-19 outbreak. Unemployment rates among younger people across its membership rose even faster, reflecting their increased exposure to the recession because of above-average levels of casual and part-time employment, and a heavier concentration of young workers in sectors such as hospitality and accommodation, which were among the hardest-hit industries. The higher levels of unemployment in advanced economies in the decade since the global financial crisis have had the greatest impact on younger people, creating fears of a "jobless generation" in many countries. An OECD Skills Outlook report in 2015 estimated that more than 35 million people aged between 16 and 29 were neither employed nor in education or training. A longer-term cause of high unemployment rates among groups such as younger people is failures in education systems. For example, an OECD report in 2017 found that more than 200 million adults across OECD countries, about 1 in 4, have low literacy or numeracy skills, and 60 per cent of them lack both types of skills needed to succeed in today's economy. It called for changes to the curriculum and new training to prepare the younger generation for more technological focused jobs in the future.

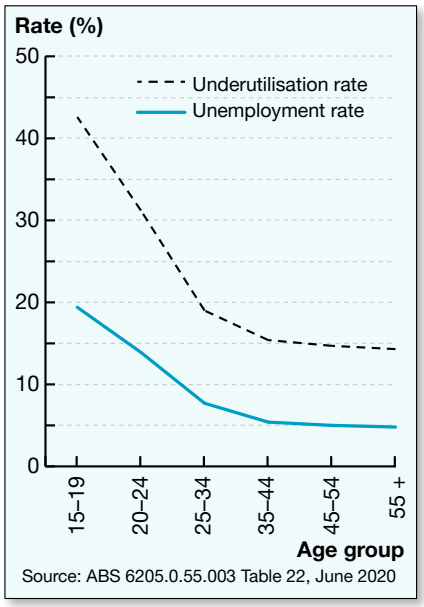


Figure 8.4 – Unemployment and underutilisation among different age groups, 2020

High **youth unemployment** rates come about because employers are seeking workers with greater skills and experience, which young unskilled workers lack. This helps to explain Australia's increasing school retention rate (more secondary students staying on to complete Year 12) and the long-term rise in participation in tertiary education. At the start of the 1980s, just over a third of students completed secondary school. This figure increased sharply over the past three decades, and since 2013 has exceeded 80 per cent. However, with most jobs now requiring post-secondary school skills, the challenge for Australia's education and training system is to better manage the transition from school into further education, training or apprenticeships.

Other particularly disadvantaged groups who face significantly higher levels of unemployment include:

- **Indigenous Australians** have relatively high unemployment rates, especially in sparsely settled regional areas. The Australian Government's annual "Closing the Gap" report in 2020 noted that employment among Aboriginal and Torres Strait Islanders is approximately two-thirds the level of non-Indigenous Australians, with 49.1 per cent of Indigenous Australians employed compared to around 75 per cent for the rest of the community. However, there is almost no difference in employment rates among Indigenous Australians with higher levels of education, suggesting that education and skills are critical to closing the gap.
- **Age-related unemployment**. Unemployment rates are highest among young Australians. Among 15–19-year-olds who are in the labour force, the rate of unemployment was 19.4 per cent in mid-2020, more than twice the national average. The labour force underutilisation rate for 15–19-year-olds was 42.9 per cent in 2020, more than double the rate for all age groups over 25. A 2017 Report published by the Brotherhood of St Laurence, *Reality Bites: Australia's Youth Unemployment in a Millennial Era*, found that key reasons for the higher level of unemployment among younger people are the insufficient number of entry levels jobs, poor secondary education outcomes and in some instances, personal circumstances contributing to a lack of motivation. Of the 267,000 Australians in the age range of 15 to 24 who were unemployed, 50,500 had spent more than a year looking for work without success. Older workers also have greater difficulty in finding work once they have lost a job.

For example, a 2017 University of South Australia study showed that the average length of time jobseeking for those unemployed over 55 was 68 weeks. In contrast, employment seekers aged 25 to 54 spent an average of 49 weeks looking for work, while on average 15 to 24-year-olds spent just 30 weeks finding a job. The report also found 27 per cent of people over 50 had experienced age discrimination.

- **Specific regions** suffer from higher unemployment rates than others. For example, in May 2020 the unemployment rate in Greater Sydney (with a labour force of 2.8 million) averaged 6.2 per cent while it was 6.6 per cent for the rest of the state (with a labour force of 1.3 million). In specific regions unemployment was much higher, with the Newcastle and Lake Macquarie region recording the highest rate of 13.0 per cent, followed by the Coffs Harbour and Grafton region with 10.7 per cent and Murray region with 10 per cent. In contrast, the lowest unemployment rate in NSW was recorded in New England and the North West at 3.2 per cent, followed by the Central West with 4.1 per cent, and the North Sydney and Hornsby region of Sydney with an unemployment rate of 4.2 per cent.
- **People born outside of Australia.** Unemployment rates can differ for people born outside of Australia, with a higher rate during their first years in the country as they adjust to language and cultural differences. For example, in May 2020 the unemployment rate for people who had migrated to Australia in the past five years was higher than the average of 6.5 per cent for those born in Australia among people from all nine regions of the world except for migrants from Sub-Saharan Africa, whose unemployment rate averaged 6.4 per cent. However, by the time they have been in Australia for a decade, migrants from six out of the nine regions of the world average lower unemployment and higher participation rates than those born in Australia. A 2019 Bankwest Curtin Economics Centre Report "Finding A Place To Call Home", found 35 per cent of migrants from non-English-speaking backgrounds were considered overqualified for their jobs, compared to 10 per cent of people born in Australia. However, newer arrivals face the challenges of having fewer people in their networks, difficulties in having their skills recognised and in some instances, discrimination. The report found improved skills matching for migrants could add $6 billion to Australia's economy.

In addition to these factors, higher unemployment rates for some groups in society may indicate the persistence of discrimination and unequal employment opportunities in the labour market. For example, prejudicial attitudes to Indigenous Australians in parts of regional Australia are often cited as a factor in their higher unemployment rates.

reviewquestions

1. Outline TWO economic and TWO social costs of unemployment.
2. Explain why youth unemployment is higher than the level of unemployment for the general population.
3. Identify one part of the Australian labour force that experiences above-average levels of unemployment and account for this higher level of unemployment.
4. Australia is currently experiencing an ageing of its population, with the proportion of Australians aged over 65 expected to grow from 16 per cent of the population in 2019 to 23 per cent by 2055. Discuss the possible impacts of this longer-term trend on Australia's labour market.

8.8 Policies to reduce unemployment

Reducing unemployment is one of the most difficult tasks of economic management. Lasting reductions in unemployment take time to achieve and are dependent upon sustaining economic growth over a long time period. In periods of rising unemployment,

the challenge for governments is to minimise the short-term increase in joblessness in order to achieve the fastest possible return to low unemployment. The broader challenge for governments is to reduce long-term structural unemployment through a combination of labour market policies, investment in training and other wider economic reforms.

Governments choose policies to reduce unemployment based on what they see as the main causes of unemployment. If, for example, a government believes that the main cause of unemployment is structural unemployment, where the skills of jobseekers are not suitable for the jobs that are available, it would implement policies that aim to train workers with new skills. On the other hand, if the government believes that cyclical unemployment is a main reason for people being out of work (due to an economic downturn), it might implement policies to encourage stronger economic growth. The changing priorities of government policies to reduce unemployment often reflect changing views on the causes of unemployment.

Macroeconomic policies are the main instruments used to reduce **cyclical unemployment**, sustain economic growth and minimise sharp downturns in the business cycle. Economists describe employment as a derived demand of production, meaning that reductions in unemployment require increases in output. Expansionary fiscal policy, involving either lower taxes or increased government spending, can stimulate economic activity and cause an increase in output through the multiplier effect. For example, as governments increase expenditure on infrastructure, businesses will increase investment and employ more people. Expansionary monetary policy, involving lower interest rates, can stimulate consumer spending and business investment and similarly cause an increase in output. In Topic Four, we examine in detail the role of fiscal, monetary and other policies in influencing the level of output and therefore job growth.

Australia's economic history over the past half century has shown that unemployment rises quickly during a recession, but it can take many years of economic recovery for unemployment to return to its pre-recession levels. Avoiding sharp downturns in the economy can therefore minimise any increase in cyclical unemployment. The goals of achieving an economic growth rate of 3 per cent or more, and keeping inflation within the 2 to 3 per cent target band, have been central to macroeconomic policy since the 1990s. The main reason why Australia succeeded in sustaining lower rates of unemployment since the 1990s is that it sustained growth and avoided recession (a feat which has broken world records) for 29 years up until COVID-19 in 2020.

The severity of the COVID-19 recession prompted the largest-scale government economic support program in Australian economic history. Its centrepiece was the JobKeeper wage subsidy program, which aimed to prevent employers laying off staff. The subsidy program provided a $1500 per fortnight payment to an estimated 3.5 million workers. Other measures included support for businesses, free child care and increased unemployment benefits. The policy strategy was similar to that adopted in 2008, when a major fiscal stimulus was introduced to prevent the global financial crisis tipping Australia into recession. Figure 8.5 shows the Treasury's estimate of the impact of the fiscal stimulus on unemployment at the time the stimulus was introduced. The Treasury estimated that the stimulus resulted in unemployment being 1.5 per cent lower than it would otherwise have been. In 2020, with the even larger measures taken in the COVID-19 recession, the Treasury estimated that in the absence of the $70 billion JobKeeper payment, the unemployment rate would have peaked at around 15 per cent.

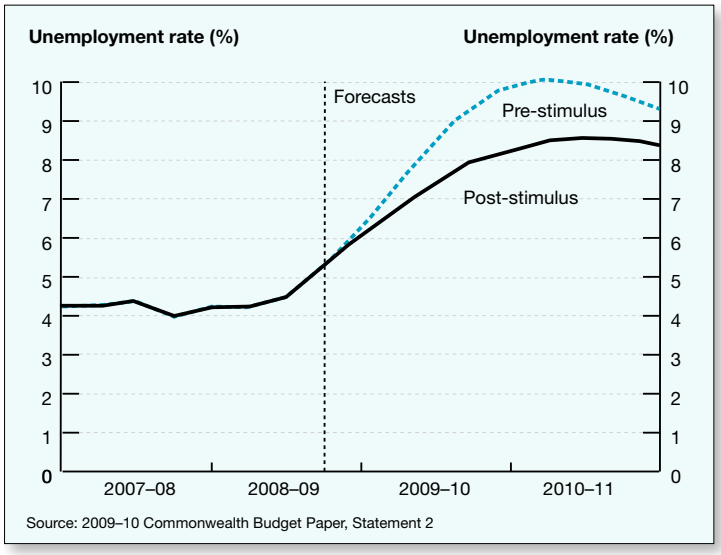


Figure 8.5 – Impact of fiscal stimulus on unemployment

In addition to addressing cyclical unemployment through macroeconomic policies, governments also use a range of measures to address structural unemployment.

By lifting the economy's efficiency, competitiveness and productivity, **microeconomic reform** aims to increase economic growth and job creation over the long term. Australia's microeconomic reform policies have included tariff reduction, deregulation, national competition policy, privatisation and tax reform. In particular, policies relating to the labour market – such as industrial relations, education and training and welfare to work initiatives – are intended to foster a higher level of employment growth over time.

Labour market policies play an important role in reducing many types of unemployment. The range of labour market policies available to governments extends from education and training programs for people who are out of work or at risk of unemployment, measures to improve the matching of unemployed people to job vacancies, and policies to increase demand for labour by making it more attractive for employers to hire workers, such as through wage subsidies. OECD research suggests that active labour market policies (involving direct government funding or subsidies) are among the most effective ways to reduce cyclical unemployment. However, to be effective, labour market programs must be targeted. The OECD's 2019 Employment Outlook found that on average across OECD countries, workers with lower skills are around 40 per cent less likely to participate in training than those with higher skills. This is despite the fact that they need training most, because they are at greater risk of having their job replaced by automation.

Policies for the general regulation of the labour market have an influence on how the forces of demand and supply interact in the labour market. Since the 1990s, changes to labour market regulations such as enterprise bargaining have given employers more flexibility in determining employment conditions. These changes have aimed to increase productivity and give employers greater incentives to hire workers. There is an ongoing debate over how Australia can best strike a balance between policies that give flexibility to employers and policies that provide fair pay and conditions to employees, with the Morrison Government announcing in 2020 its intention to review the Fair Work Act (discussed in more detail in Chapter 17).

Successive governments have implemented labour market policies aimed at moving individuals off welfare and into paid employment. These measures include making it harder to access welfare payments such as through longer waiting periods, tougher eligibility rules, requirements to keep applying for jobs and requirements to undertake training. By making it more difficult for people who are out of work to access income support payments, these changes have been designed to encourage unemployed individuals to actively seek work or additional education and training. In 2016 the Turnbull Government announced a $752 million investment in the new Youth Jobs "PaTH" program (Prepare, Trial and Hire), which combines training obligations with incentives for employers in three stages:

1. Jobseekers under the age of 25 are required to undertake six weeks of employability skills training within five months of registering for unemployment benefits.
2. Young jobseekers have the option of a voluntary 4–12 week internship placement, working 15–25 hours per week and receiving an additional $100 per week in benefits (while employers receive a $1000 upfront payment for taking on each intern).
3. Employers are given a wage subsidy of between $6500 and $10,000 if they employ an unemployed person under the age of 25 who has been out of work for more than six months.

State governments can also play a role in tackling unemployment, such as the NSW Government's changes to the vocational education system, on which it spent $2.3 billion in its 2019-20 Budget. The NSW Government re-branded its vocational education programs under the "Smart and Skilled" system, reducing fees with the goal of improving access to training. In 2020 vocational traineeships, such as school-based traineeships, became fee-free. Another element of the NSW Government's labour market policies is a Youth Employment Innovation Challenge, which awarded $10 million to fund 12 innovative solutions that help young people find employment in NSW. The solutions for youth

unemployment hotspots aim to help young people overcome barriers to employment and gain skills and experience that will improve their long-term job prospects.

Governments can influence the labour market through their immigration policies, especially in Australia, which has had high levels of immigration throughout its history. Economists generally agree that immigration does not increase the level of unemployment in Australia, because the immigration program is strongly focused on skilled workers. In 2017 the Turnbull Government introduced additional requirements for Temporary Skill Shortage visas and some permanent visas, including a requirement that employers who bring skilled migrants into Australia must contribute to a new Skilling Australians Fund. The Fund helped to pay for the $525 million Skills Package announced in the 2019–20 Budget, which provides incentives of up to $8000 for businesses to hire apprentices in areas of skill shortages, combined with an incentive payment of $2000 for individuals to take up an apprenticeship. Other policies, such as the Seasonal Worker Programme, aim to fill gaps in the labour market that are not met by the Australian workforce, by bringing in workers on a temporary basis to assist with harvesting and picking agricultural crops.

Another area of policy changes aimed at the supply side of the labour market involves lifting workforce participation by reforming the way that the tax and welfare systems interact. Often, unemployed persons and low-income earners face very high "effective marginal tax rates", meaning that for every extra dollar they earn from work, they have to pay tax as well as lose a portion of their welfare benefit. Reducing effective marginal tax rates can therefore provide incentives to lift workforce participation and increase employment.

Changes to parental leave programs have also aimed to increase supply in the labour market by making it easier for parents to stay in paid employment over the longer term. Paid parental leave, combined with policies to make child care accessible and affordable, makes it easier for both parents in a family to maintain paid employment and take care of their children. In 2018, the Coalition Government introduced an integrated child care subsidy that pays for 85 per cent of child care costs for families earning up to $65,000. During the COVID-19 lockdown in 2020, when many schools and childcare centres were otherwise closed, the Government provided free child care to make it possible for essential workers to continue working.

Government policies can help to reduce frictional unemployment by helping to match jobseekers with job vacancies. Historically, the Australian government operated a national job search agency (the Commonwealth Employment Service), but in the 1990s this was closed down. It was replaced by a network of job search agencies, some run by the private sector and some by charities, who are funded by the government on the basis of how many jobseekers they train and place into jobs. This network of 62 employment service providers, known as jobactive, had a $1.3 billion budget in 2019–20. Service providers are paid according to how long an employee stays in a job, and they also receive additional incentives for success in finding permanent work for individuals who have been out of work for an extended period of time. By mid-2020, jobactive had achieved 1.6 million job placements during its first five years of operation. Nevertheless, from 2022 jobactive will be replaced by a new system focused on engaging jobseekers through a digital platform and saving costs on the jobactive network, with the goal of shifting resources towards support for disadvantaged jobseekers and long-term unemployed. One of the criticisms of Australia's job placement policies is an under-investment in helping those most in need, reflected in the fact that Australia spends less than half the OECD average on employment services, which may contribute to people who need more intensive assistance dropping out of the labour market altogether.

reviewquestions

1 Outline the role of macroeconomic policy in reducing unemployment.

2 Identify TWO recent labour market policies and discuss how they assist in reducing unemployment in the economy.

chapter summary

1 The labour force is the number of people 15 years of age and above who are either working or actively seeking work.

2 The labour force participation rate is the percentage of the working-age population who are either working or actively seeking work.

3 Unemployment refers to the proportion of people in the labour force actively seeking work but unable to find it. It is measured by the unemployment rate. The unemployment rate is calculated by:

$$\text{Unemployment rate (\%)} = \frac{\text{Number of persons unemployed}}{\text{Total labour force}} \times \frac{100}{1}$$

4 Underemployment refers to people who work for less than full time hours per week but would like to work longer hours. Although not officially unemployed, they represent a significant part of Australia's unemployment problem.

5 Australia experienced a trend increase in unemployment from the mid-1970s. After falling slowly from the early 1990s to 2008, it then stabilised in the range of 5–6 per cent during the 2010s, before rising sharply after the onset of the COVID-19 recession in 2020.

6 The main types of unemployment include:

- cyclical unemployment, which occurs because of a downturn in the level of economic activity
- structural unemployment, which occurs because of a mismatch between the skills of the unemployed and the skills required by job vacancies
- frictional unemployment, which occurs when people are temporarily unemployed as they change jobs
- seasonal unemployment, which occurs at predictable and regular times throughout the year because of the seasonal nature of some kinds of work.

7 The main causes of unemployment include low levels of economic growth, contractionary macroeconomic policies, rising participation rates, structural and technological change, changes in productivity, inadequate training and investment, rapid increases in labour costs and inflexibility in the labour market.

8 The non-accelerating rate of unemployment (NAIRU) is a concept used by economists to refer to the minimum rate of unemployment that can be sustained without inflationary pressure – thought to be around 5 per cent in Australia.

9 Unemployment has many economic and social costs. Economic costs include the opportunity cost of lost production, a decline in workforce skills, and the cost of income support for the unemployed. Social costs include increased inequality, poverty, family breakdown and crime.

10 In recent years, Australia has seen a greater emphasis on policies to improve vocational training and workforce participation in order to address structural unemployment.

chapter review

1 Define *unemployment* and explain how it is measured.

2 Discuss recent trends in the level of unemployment in Australia.

3 Explain the difference between unemployment, underemployment and the underutilisation rate.

4 Identify the main types of unemployment that might exist in an economy.

5 Explain the role of technological change in influencing the level of unemployment.

6 Explain what is meant by the non-accelerating inflation rate of unemployment.

7 Explain the effect of an increase in economic growth on the participation rate and the level of unemployment.

8 Outline the economic and social costs for Australia of a sustained high rate of unemployment.

9 Identify which groups in Australian society tend to experience higher levels of unemployment.

10 Outline three recent policies to reduce unemployment in Australia.

9 Inflation

9.1 Introduction
9.2 Measuring the rate of inflation
9.3 Recent trends in inflation
9.4 The main causes of inflation
9.5 The effects of inflation
9.6 Policies to sustain low inflation

9.1 Introduction

Inflation is an economic problem that can have negative impacts on many economic outcomes including economic growth, international competitiveness, exports and income inequality. Maintaining low inflation is a major objective of economic policy because of the benefits that lower inflation provides to the economy in the long run. Australia has sustained relatively low levels of inflation since the early 1990s.

9.2 Measuring the rate of inflation

Consumer Price Index (CPI) summarises the movement in the prices of a basket of goods and services weighted according to their significance for the average Australian household. It is used to measure inflation in Australia.

Inflation is a sustained increase in the general level of prices in an economy. The best-known and most widely used measure of inflation in Australia is the percentage change in the **Consumer Price Index (CPI)**. The CPI summarises the movement in the prices of a basket of goods and services, weighted according to their significance for the average Australian household. The annual inflation rate is calculated by the percentage change in the CPI over the year.

$$\text{Inflation rate (\%)} = \frac{CPI_{CY} - CPI_{PY}}{CPI_{PY}} \times \frac{100}{1}$$

Where CPI_{CY} = the value of the CPI in the current year
Where CPI_{PY} = the value of the CPI in the previous year

The basket of goods and services used to calculate the CPI does not include all goods and services available in the economy, but covers a wide selection that reflects average household spending patterns. As such, the CPI gives a good indication of the overall movement in the prices of consumer goods and reflects general changes in the cost of living (how much consumers have to pay for the goods and services they buy). The CPI is compiled by the Australian Bureau of Statistics (ABS) and is published every three months.

The weights given to the expenditure groups in the basket are based on the ABS Household Expenditure Survey and are shown in figure 9.1. The ABS regularly updates the weighting for each expenditure group to more accurately reflect average consumer purchasing patterns. The CPI excludes some items of household spending such as changes in mortgage interest rates and consumer credit charges. In addition, the CPI does not include property prices, so the changes in residential property prices in recent years have not been reflected directly in the CPI.

Expenditure group	Weighting factor %
Food	16
Alcohol and tobacco	7
Clothing and footwear	3
Housing	23
Household contents and services	9
Health	6
Transportation	11
Communication	2
Recreation	13
Education	4
Financial and insurance services	6
All groups	100

Source: ABS cat. no. 6470.0.55.002, 2019

Figure 9.1 – Weighting of main expenditure groups in the CPI basket

The official or "headline" rate of inflation, calculated using the CPI, can be a misleading indicator of ongoing price pressures in the economy because it includes some goods and services whose prices may be highly volatile or affected by one-off factors. Economists, including those at the RBA, therefore prefer to look at the level of **underlying inflation** (also known as "core" inflation). Underlying inflation removes the effects of one-off or volatile price movements (see the box below on how underlying inflation is calculated). As a result, measures of underlying inflation tend to be less variable than headline inflation.

MEASURES OF UNDERLYING INFLATION

There is no single measure of underlying inflation in Australia and both the Treasury and the Reserve Bank (RBA) have their own calculation of the underlying inflation rate. Most economists focus on two measures of the underlying inflation rate – the trimmed mean and the weighted median – which were originally developed by the RBA but are now published quarterly by the ABS. These measures adjust the official CPI figures to give less weight to goods and services that experienced very large rises or falls in price. Although the calculation of these measures is a highly technical exercise, the logic behind each measure is quite straightforward.

- **Trimmed mean** inflation is determined by calculating the average inflation rate after excluding the 15 per cent of items with the largest price increases and the 15 per cent of items with the smallest price increases (or largest price falls) from the CPI.
- **Weighted median** inflation is calculated by comparing the inflation rate of every item in the CPI and identifying the middle observation. The inflation rate of half of the items in the CPI will be greater than the weighted median inflation rate, and the inflation rate of the other half will be less than it.

When the RBA refers to its own estimate of underlying inflation, it is referring to the average of its two measures – that is, the trimmed mean and weighted median added together and then divided by two.

The ABS in 2011 also introduced seasonally adjusted and underlying measures of inflation to help make CPI adjustments more comprehensive and reliable, which in turn enhances the accuracy of the trimmed mean and weighted median measurements.

In recent years, both headline and underlying inflation have been low. But during certain periods they can move in the opposite direction, such as in the late 2010s. Headline inflation jumped from 1.0 per cent to 2.1 per cent, then down to 1.3 per cent and then back up to 2.2 per cent; underlying inflation, by contrast, moved steadily in the narrower 1.4 to 1.9 per cent range. Headline inflation alone can give the impression that inflation is volatile, but the underlying inflation points to the real ongoing trends.

It is important to note that underlying inflation can be either below or above the headline inflation rate. For example, one-off dramatic falls in prices of certain goods, such as in 2020 when child-care costs went to zero as a result of a government subsidy during the COVID-19 pandemic, will reduce the headline inflation rate but have a much smaller impact on the underlying rate.

reviewquestions

1 Define the term *inflation*.
2 Distinguish between headline and underlying inflation.
3 Analyse the limitations of the CPI as a measure of inflation in the economy.

9.3 Recent trends in inflation

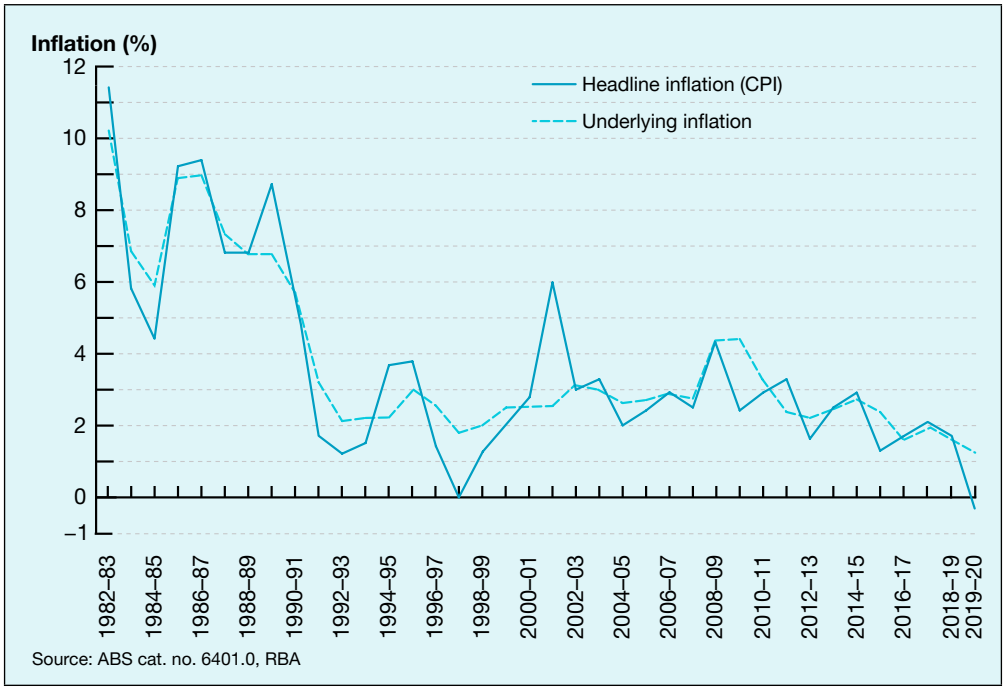


Figure 9.2 – Inflation in Australia 1982–2020

One of the most significant macroeconomic achievements of the past generation is that since the early 1990s Australia has sustained low inflation after experiencing relatively high inflation in the 1970s and 1980s (see figure 9.2). Between 1996 and 2020, headline and underlying inflation averaged 2.4 and 2.6 per cent respectively. A key factor behind this success was the introduction of **inflation targeting**. In 1993, the RBA began to target an inflation rate averaging 2–3 per cent over the course of the economic cycle as a guide in determining interest rate decisions. The inflation target was formalised in 1996 by an agreement between the Treasurer and the RBA Governor. Inflation has generally stayed around the inflation target band since then, although there have been temporary periods where inflation has notably deviated from the target.

The main development that brought the high-inflation era of the 1970s and 1980s to an end was the recession of the early 1990s. Australia emerged from this recession with low inflation levels. The RBA's inflation target then locked in this lower inflation rate. This has meant that whenever inflationary pressures have emerged – such as in 1994, 1999, 2007 and 2010 – the RBA has increased interest rates to slow down the growth in demand and curb inflation rate rises. Likewise, the headline inflation rate has been below the RBA's inflation target for much of the past several years, which has played a role in the RBA's decision-making process to decrease interest rates to their lowest ever levels. Global factors, such as lower inflation worldwide and increased competition from imported goods, have also assisted in containing inflationary pressures in Australia.

Structural change refers to the process by which the pattern of production in an economy is altered over time, and certain products, processes of production, and even industries disappear, while others emerge.

During Australia's unbroken run of economic growth between 1991 and 2020, inflation pressures remained constrained. Monetary policy was relatively successful in addressing inflation pressures when they emerged. Many economists attributed these lower inflation rates to the impact of **structural changes** during the 1980s and 1990s. Microeconomic reform increased the intensity of competition within Australia and from overseas, while **productivity growth** also improved in the 1990s, all contributing to sustained low inflation. This made it possible for Australia to achieve low inflation whilst simultaneously enjoying strong economic growth and falling cyclical unemployment.

Productivity refers to the quantity of goods and services the economy can produce with a given amount of inputs such as capital and labour.

The most recent period when inflationary pressures were strong was between 2005 and 2008. Underlying inflation peaked at 5.1 per cent in September 2008 as a result of higher global prices (for food, energy and other commodities) and the strength of economic activity. With the Australian economy at close to full capacity, production costs such as labour, materials and transport were rising across the economy and feeding through to higher consumer prices. This period of strong inflationary pressures ended with the global downturn in 2008, which reduced consumer confidence, investment spending, demand for labour and wage growth. Australia's inflation rate has remained at or below the RBA's target band in recent years, reflecting a combination of low wage growth, low inflation globally and an economic growth rate below its long-run average.

Inflation is expected to stay low during the early 2020s. The COVID-19 recession began with the largest quarterly fall in the Consumer Price Index since 1931, and the first annual decline in inflation since the 1960s. With excess capacity in the economy, high unemployment and weak consumer spending, inflationary pressures are likely to remain weak. Forecasts for 2021 and 2022 issued by the Reserve Bank in August 2020 pointed towards CPI and underlying inflation remaining below the target range until at least the end of 2022 (with headline inflation of 1 per cent in 2021 and 1.5 per cent in 2022).

reviewquestions

1 Outline TWO factors that have affected Australia's inflation rate in the past year.
2 Explain the factors behind Australia's success in achieving low inflation levels since the early 1990s.
3 Discuss the impact of globalisation on Australia's level of inflation.

9.4 The main causes of inflation

Economists generally recognise four main causes of inflation: demand-pull, cost-push, inflationary expectations and imported inflation. We consider these causes below, along with two other possible causes of inflation – government policies and excessive increases in the money supply.

Demand-pull inflation

In a market economy, prices are determined by the interaction of demand and supply in the marketplace. When aggregate demand (or spending) exceeds the productive capacity of the economy, prices rise as output cannot expand any further in the short term. Consumers force prices up by bidding against each other for the limited goods and services available. This is reflected in figure 9.3, as aggregate demand increases from AD_1 to AD_2. Consumers are willing to pay a higher price for any given level of supply. Prices will therefore increase from P_1 to P_2 (causing an expansion in supply). The price increase that results from higher aggregate demand is known as demand-pull inflation.

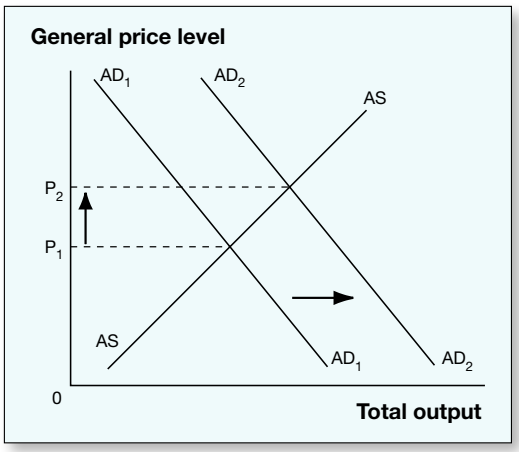


Figure 9.3 – Demand-pull inflation

Demand-pull inflation occurs when aggregate demand or spending is growing while the economy is nearing its supply capacity, so that higher demand leads to higher prices rather than more output.

Cost-push inflation

Cost-push inflation occurs when there is an increase in production costs (such as oil price increases or wage increases) that producers pass on in the form of higher prices, thus raising the rate of inflation.

Cost-push inflation is caused by an increase in the costs of the factors of production. When production costs rise, firms attempt to pass them on to consumers by raising the prices of their products. This is reflected in figure 9.4, as aggregate supply shifts from AS_1 to AS_2. Producers face higher costs so they now supply less quantity for any given price level. Prices therefore increase from P_1 to P_2 (causing a contraction in demand).

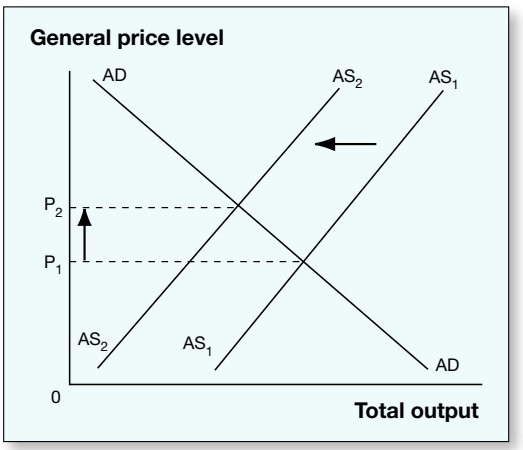


Figure 9.4 – Cost-push inflation

Major sources of cost-push inflationary pressures in the Australian economy include wages and the prices of raw materials such as fuel. When wages increase faster than productivity growth, the cost of labour for each unit of output increases. Since wages typically make up around 60 per cent of a firm's costs, firms will attempt to pass on the wage increase to consumers in order to maintain their profitability. Similarly, an increase in the price of oil or other raw materials will generally lead to an increase in the price of the final product as firms pass on the increase in prices in order to maintain their profit margins.

Inflationary expectations

If individuals in the economy expect higher inflation in the future, they may act in a way that causes an increase in inflation. There are two ways in which high inflationary expectations can bring about higher inflation:

1. If the prices of goods and services are expected to increase in the economy, consumers will attempt to purchase products before prices increase. As consumers bring forward their planned purchases, this will cause an increase in consumption, resulting in higher demand-pull inflation. Similarly, if a firm expects that demand for their product will increase, the firm may raise prices in order to maximise profits, causing an increase in inflation.
2. If employees expect inflation to increase, they will take this into account when negotiating their wage increases. Workplace contracts are typically negotiated in advance for the next two or three years, so an employee who expects higher inflationary pressures over the next few years will ask for a higher wage rise to preserve the purchasing power of their wage. Higher wage increases may be passed on by firms, leading to cost-push inflation.

Managing inflationary expectations is a major challenge for policymakers. Once individuals in the economy expect higher inflation, they will act in a way which accelerates higher inflation – in effect, they fulfil their own prophecy. Strong inflationary expectations can entrench high levels of inflation in the economy, and it may take a significant economic contraction (such as the recession of the early 1990s) to bring expectations down.

Imported inflation

This type of inflation is transferred to Australia through international transactions. The most obvious cause of imported inflation is rising import prices. An increase in the price of imported goods will increase the inflation rate in exactly the same way as an increase in the price of domestically produced goods. A depreciation of the Australian dollar will also increase the domestic price of imports and will lead to inflation. The extent to which an increase in import prices or a fall in the Australian dollar will lead to consumers paying higher prices for imports depends on market conditions. If imports face competition from locally made products, importers may reduce their profit margins and not pass on to consumers the full effect of the overseas price rise

or depreciation. An RBA research paper in 2015 noted that imported inflation now accounts for a much larger share of the variability in the headline inflation rate than in the past, reflecting the extent of Australia's integration with the global economy.

On the other hand, international factors can also be a significant factor reducing inflation in Australia. A sharp fall in fuel prices in the June quarter of 2020 contributed to the lowest headline inflation since 1931. Low fuel prices directly reduce inflation because they are a significant item in the basket of goods and services used to measure the CPI, but also indirectly because they lower production costs for Australian businesses.

Other causes

The four types of inflation listed above are the most common causes of inflation within the Australian economy. However, there are two other possible causes of inflation:

- **Government policies** may directly influence the level of inflation in several ways. By increasing indirect taxes, the government can have an impact on the general level of prices. For example, in a 2018 address, the Deputy Governor of the RBA noted that tobacco excise increases of 12.5 per cent per year from 2013 to 2020 made tobacco the largest single contributor to headline inflation in this period. In 2020, the government's decision to make child care free for parents during the COVID-19 lockdown was a factor in reducing the headline rate of inflation to below zero. Other measures that may influence prices include deregulating an industry, changing tariff rates, imposing price controls or price monitoring and increasing charges for goods or services provided by the Australian Government.
- **Excessive increases in the money supply** can also lead to an increase in inflation. When the increase in the money supply outstrips the growth rate of the economy, an increased volume of money chases the same amount of goods and services and prices are likely to rise. Therefore, increasing the money supply without an increase in real production effectively leads to an increase in aggregate demand relative to supply that causes inflation (sometimes called "monetary inflation").

It is possible to have all of the above types or causes of inflation operating at the same time. However, often one or two types of inflation are more prominent at a particular point in time. For example, during the mid-1970s and early 1980s, inflationary expectations and cost-push inflation tended to be more prominent; whereas the late 1980s saw demand-pull inflation as the predominant contributor to inflationary pressure. The introduction of the GST in 2000 exhibited the influence of federal government policy on inflation, leading to the highest headline rate of inflation (6.1 per cent in June 2001) since the adoption of the 2–3 per cent target. The commodities boom in the 2000s significantly increased business investment and consumer confidence, increasing aggregate demand, and thus demand-pull inflation. More recently, inflationary expectations have been subdued due to persistently low wage growth. Slower economic growth in the late 2010s weakened demand-pull pressures. On the other hand, the depreciation of the Australian dollar between 2015 and 2019 increased imported inflationary pressures, particularly in the retail industry.

The impact of COVID-19 and the recession meant that Australia entered the 2020s amidst its most sustained low-inflation environment for at least half a century. In 2020 the interest rate on 10-year government bonds fell below one per cent, an indication that markets expect inflation to remain low throughout the 2020s.

reviewquestions

1 Outline recent trends in TWO types of inflation over the past decade.
2 Distinguish between demand-pull and cost-push inflation.
3 Explain why a depreciation of the Australian dollar causes higher inflation.

9.5 The effects of inflation

Inflation has significant impacts on the economy in both the short and long term. In general, the higher the level of inflation the more negative the consequences. As a result, governments around the world give priority to sustaining low inflation in order to avoid the negative consequences which high inflation brings.

> "Both the Reserve Bank and the Government agree on the importance of low inflation. Low inflation assists business and households in making sound investment decisions. Moreover, low inflation underpins the creation of jobs, protects the savings of Australians and preserves the value of the currency."
>
> *– RBA Statement on the Conduct of Monetary Policy, October 2013.*

Economic growth and uncertainty

In ordinary economic circumstances, inflation is regarded as one of the major constraints on economic growth. Excessive economic growth tends to raise inflationary pressures through increased wage demands and through strong consumer demand bidding up price levels. On the other hand, a sustained lower inflation rate allows moderate economic growth to be maintained without it becoming necessary to curtail growth through higher interest rates. Sustained low inflation since the early 1990s allowed for a long period of relatively high economic growth.

In overall terms, higher inflation distorts economic decision making since producers and consumers change their spending and investment decisions in order to minimise the effect of inflation on themselves, such as through buying assets rather than investing in income-producing activities.

Low inflation has a beneficial effect on the level of economic growth because it removes the distortion to **investment** and **savings** decisions that is caused by higher inflation. High inflation discourages business investment because it makes producers uncertain about future prices and costs, and therefore future profit levels. Low inflation has a positive impact on business investment, restoring the incentive to invest in long-term productive assets rather than short-term speculative investments, which a high inflation environment encourages.

Higher inflation will also distort consumers' decisions to spend or save disposable income. Consumers are more likely to spend and not to save during periods of high inflation, because the purchasing power of their money is reduced over time. Sustained low inflation is likely to encourage consumers to save a higher proportion of their disposable income. However, Australia's recent experiences suggest that other factors such as house prices, superannuation and the broader economic outlook can be more important in influencing the overall level of savings in the economy. When the economy is performing strongly and people's assets are rising in value, consumption rises and the savings rate falls, even when inflation rates are low.

Wages

Nominal wage is the pay received by employees in dollar terms for their contribution to the production process, not adjusted for inflation.

The level of inflation is a major influence on **nominal wage** demands. During periods of higher inflation, employees will seek larger wage increases in order to be compensated for the erosion in the purchasing power of their nominal wages. This can lead to the emergence of a **wage-price inflationary spiral** that becomes difficult to break, where wage increases lead to higher prices, which lead to higher wage demands and so on. Australia has not experienced a wage-price spiral since the 1980s, and in more recent years the opposite has occurred as lower inflation rates have helped to reduce annual wage growth to only just over 2 per cent.

Income distribution

High inflation rates tend to have a negative impact on the distribution of income because lower-income earners often find that their incomes do not rise as quickly as prices. In addition, lower-income earners may face higher interest rates on their borrowings if inflation rises. In general, high rates of inflation hurt those individuals who are on fixed incomes or whose incomes are not indexed to (or rise as fast as) the rate of inflation. Higher inflation rates can also erode the value of existing savings so that individuals who do not have a means of protecting their savings from the impact of inflation will see their net wealth decline.

Unemployment

The levels of unemployment and inflation are often closely related, especially in the short term. Higher levels of inflation will usually result in more contractionary fiscal and monetary policies, resulting in slower economic growth and higher unemployment in the short to medium term. More generally, periods characterised by high levels of unemployment often also have low inflation rates, while low levels of unemployment are often associated with rising inflation – a relationship demonstrated by the **Phillips curve**. Previously, governments generally chose between the priority of low inflation (and slower growth) or lower unemployment (at the risk of rising inflation). However, over the long term this inverse relationship breaks down. For example, in the mid-1970s Australia experienced simultaneous increases in inflation and unemployment (a problem known as **stagflation**). For most of the 1990s and 2000s, Australia experienced the opposite – a combination of low inflation and falling unemployment.

Stagflation occurs when the rate of inflation and the rate of unemployment rise simultaneously.

HOW INFLATION CAUSES AN EXCHANGE RATE DEPRECIATION

The economic theory of **purchasing power parity** says that exchange rates in the long run will change to reflect the real purchasing power of currencies. This means that goods that are traded globally (such as processed food, clothes and electronic goods) should cost roughly similar amounts in different countries once money is converted into the local currency. The theory suggests that there is a strong link between inflation and exchange rate movements. Economies with high inflation should experience a depreciation relative to those economies with lower inflation rates.

The theory relies on an assumption of free trade and floating exchange rates. Suppose that the price of an electric bike is the same in Australia and New Zealand, and the exchange rate is equal. If NZ experiences higher inflation, the price of its bikes will rise. Australian bikes will become more internationally competitive and there will be an increase in exports to NZ. NZ consumers will prefer to switch to the cheaper Australian substitutes. The increased demand for Australian bikes will increase demand for the Australian dollar, causing an appreciation. As a result, the Australian bikes will become less competitive, restoring the purchasing power parity between the two economies.

Of course, this theory does not work perfectly because of a range of local factors like transport costs, taxes and the shorter-term influences of global financial flows on currencies. Purchasing power parity is nevertheless a long-term anchor for the exchange rate between different countries.

International competitiveness

High inflation results in increased prices for Australia's exports, reducing **international competitiveness**, leading to a lower quantity of exports. As the price of domestic goods increases, consumers will likely switch to import substitutes, worsening the trade deficit. By contrast, low inflation should improve Australia's international competitiveness, making the price of Australian goods and services more attractive to other countries and making local products more competitive with imports. This should lead to an expansion of exports and the replacement of imports by domestic substitutes, thus improving the trade deficit.

International competitiveness refers to the ability of an economy's exports to compete on global markets. An economy may be competitive by selling products of a higher quality or a lower price than its competitors.

Exchange rate impacts

In the short term, higher inflation may result in an appreciation of the exchange rate, as speculators anticipate the RBA raising interest rates in response, attracting greater financial flows. However, high inflation generally causes the currency to depreciate over time. Australian experience offers some evidence of the relationship between inflation and a depreciation (although the stronger relationship is where a depreciation causes higher inflation). Over the long term, sustained low inflation may foster greater international confidence in the Australian economy, strengthening the value of the dollar.

Interest rates

Lower inflation normally brings about reductions in nominal interest rates, since nominal interest rates are based on a real rate of return (or real interest rate) plus inflation. The reduction in inflation in advanced economies following the COVID-19 recession in 2020 contributed to record low interest rates. Higher inflation, on the other hand, usually results in higher interest rates, as central banks try to reduce demand pressures in the economy and avoid the negative consequences of high inflation.

Benefits of inflation

The benefits of inflation are generally considered to be limited. A small amount of inflation can be beneficial because it allows for adjustments in relative prices in an economy without requiring reductions in normal prices, which can often be "sticky" (especially for wages). The greater benefit of a low positive level of inflation is that it reduces the likelihood of the economy experiencing falling prices, or **deflation**, which can also have negative consequences. Deflation gives consumers an incentive to delay purchases, which can cause a fall in consumer spending and an economic downturn. Deflation can also make borrowing money less attractive because the amount to be repaid is rising in real terms, not falling. In addition, deflation can make hiring more workers less attractive if nominal wage rates stay the same and real wages rise.

For these reasons, central banks like the RBA tend to target low inflation levels that avoid the negative consequences of inflation. They also do not strive for zero inflation, which can increase the risk of deflation and other economic problems.

review questions

1. Describe THREE consequences of high inflation.
2. Explain the relationship between the level of inflation and economic growth.
3. Discuss the impact of high inflation on international competitiveness and the exchange rate.

9.6 Policies to sustain low inflation

Since the large fall in inflation during the recession of the early 1990s, the Government and the RBA have sought to maintain a low level of inflation in the Australian economy. Monetary policy has been the main tool used to achieve low inflation, but occasionally other parts of the policy mix have also been used to address price pressures in the economy.

Monetary policy has played the primary role in Australia's low inflation record since the early 1990s. In the short to medium term, monetary policy is the major tool used to reduce inflation. Monetary policy attempts to sustain economic growth at a level that does not create inflationary pressures, trying to hold inflation between the RBA's 2–3 per cent target. If inflation starts rising, the RBA is able to increase interest rates throughout

the economy by tightening monetary policy. This has the effect of dampening consumer and investment spending, resulting in a lower level of economic activity and therefore lower inflation.

The RBA has used **pre-emptive monetary policy** by taking action against inflation before it emerges as a problem. For example, the RBA increased interest rates seven times in 2009 and 2010 to address concerns about inflation after the economy emerged from the downturn caused by the global financial crisis. The RBA generally aims to increase interest rates before inflation reaches the top of the target band to account for the time lag between policy implementation and effect.

The RBA has attempted to make its use of monetary policy predictable by emphasising consistently its intention to use monetary policy primarily to ensure that inflation remains within its target band. This has had the effect of lowering inflationary expectations and thus further reducing inflation as a problem in the economy.

Fiscal policy can also play a support role in maintaining low inflation. In a period of rising inflationary pressures, the Government might increase revenue and reduce spending in order to minimise demand pressures in the economy and therefore reduce demand-pull inflation. Fiscal policy settings that support the low-inflation objective may also reduce the need for higher interest rates to combat an inflation challenge. However, with low inflation in recent years, fiscal policy has not been influenced by concerns about inflationary pressures.

The Government's use of **microeconomic policies** has contributed to Australia's long-term low-inflation environment. Reduced protection has lowered the prices of imports and increased the competition faced by domestic producers from both overseas competitors and from new entrants to domestic markets. This makes it more difficult for domestic producers to raise their prices. In addition, reforms to the labour market attempt to ensure that wage increases are linked to productivity improvements. If productivity rises, the economy will be able to afford real wage increases without inflationary pressures. During the mining boom in the 2000s and 2010s, Australia's deregulated labour market allowed for wage increases for workers whose skills were in high demand, without leading to large wage rises in other sectors of the economy. This helped to restrain inflationary pressures. Finally, greater investment in economic infrastructure such as roads, railways and ports can help avoid transport and other bottlenecks that can increase production costs and add to inflationary pressures.

The RBA's commitment to maintaining low inflation and the heightened level of competition in the economy make it unlikely that the high levels of inflation experienced in the 1970s and 1980s will return without a different kind of economic shock. In the long term, inflation is to be more influenced by global factors than by uniquely domestic factors. The rise of China as a producer of low-cost manufactured goods has played a major role in reducing global inflationary pressures since the early 2000s. The record low levels of long-term interest rates in 2020 pointed towards the likelihood of the 2020s being another decade of low inflation.

Microeconomic policies are policies that are aimed at individual industries, seeking to improve the efficiency and productivity of producers – also referred to as supply-side policies.

Labour market policies are microeconomic policies that are aimed at influencing the operation and outcomes in the labour market, including industrial relations policies that regulate the process of wage determination as well as training, education and job-placement programs to assist the unemployed.

reviewquestions

1 Identify the types of inflation directly influenced by monetary policy.
2 Explain why the RBA implements monetary policy pre-emptively.

chapter summary

1 Inflation is a sustained increase in the general level of prices in an economy.

2 The inflation rate measures the percentage change in prices of consumer goods (as measured by the Consumer Price Index) and therefore reflects any change in the cost of living. The CPI is compiled from calculations of the change in the prices of a basket of goods and services, weighted according to the purchasing patterns of Australian households.

3 Measures of underlying inflation exclude one-off and volatile changes in prices and provide a measure of ongoing price pressures in the economy.

4 Since the early 1990s, the Reserve Bank has targeted an inflation rate of 2–3 per cent on average over the course of the economic cycle. This is known as inflation targeting.

5 Australia's inflation rate has generally stayed within the 2–3 per cent target range since the early 1990s. Recent low inflation results reflect the impact of COVID-19, as well as in preceding years a combination of low wages growth, weak economic growth and low global inflation.

6 The two main causes of inflation are demand-pull inflation and cost-push inflation. Demand-pull inflation occurs when excessive aggregate demand results in upward pressure on the prices of a limited supply of goods and services. Cost-push inflation occurs when rising costs of production are passed on to consumers. Wage rises are the main source of cost-push inflation.

7 The other main causes of inflation are inflationary expectations, imported inflation, specific government policy decisions and excessive increases in the money supply.

8 Inflationary expectations can lead to inflation if individuals and businesses within the economy expect an increase in the rate of inflation and attempt to protect themselves from it by raising prices and wages.

9 Inflation is a major constraint on the rate of economic growth, since high levels of inflation tend to discourage investment and may also prompt the RBA to increase nominal interest rates, both of which will lower growth. Lower rates of inflation are often associated with higher levels of unemployment, lower nominal wage growth, a more equitable distribution of income, and increased international competitiveness.

10 The main policies to sustain low inflation are monetary policy, which can respond quickly to rising inflation, and microeconomic policies, which can increase competitive pressures, making it harder for firms to raise prices.

chapter review

1 Define the term *inflation*.

2 Explain how the inflation rate is calculated.

3 Distinguish between headline and underlying inflation.

4 Outline recent trends in Australia's inflation performance.

5 Describe the main causes of inflation.

6 Explain how an increase in inflationary expectations can cause an increase in inflation.

7 Discuss the benefits of low inflation.

8 Explain TWO consequences of high inflation.

9 Examine the relationship between the levels of inflation and unemployment in an economy.

10 Explain how changes in economic policy have influenced Australia's inflation performance in recent years.

10 External Stability

10.1 Introduction
10.2 Australia's current account deficit
10.3 Australia's foreign liabilities
10.4 Australia's exchange rate
10.5 Policies to achieve external stability

10.1 Introduction

External stability is an aim of government policy that seeks to promote sustainability on the external accounts so that Australia can service its foreign liabilities in the medium to long run and avoid currency volatility.

Achieving **external stability** is an important objective of economic policy. External stability ensures that imbalances in Australia's relationship with the global economy do not hinder achieving domestic economic policy goals such as higher growth, lower unemployment or lower inflation. Achieving these goals can be affected by external imbalances, such as an unsustainable increase in the current account deficit (CAD) or foreign liabilities, or by large movements of the exchange rate. If overseas investors decide that Australia's external position is not sustainable, this can have serious effects on the Australian economy, including a depreciation of the currency, a withdrawal of investment funds, difficulties for firms in accessing overseas financial markets, higher interest rates and slower economic growth.

The key concern behind the issues of external stability is that, for Australia to sustain economic prosperity, it must manage its relationship to the global economy. Australia needs to "pay its way" in the world and avoid imbalances that could threaten long-term prosperity. The main external stability issues for the Australian economy in recent decades have been:

- **A persistent CAD**: Australia has run relatively high deficits on its current account since the early 1980s, driven by a deficit on the net primary income account. While Australia had historically sustained a deficit on the current account that averaged under 3 per cent of GDP, after the mid-1980s the CAD grew, and during the 2000s decade it averaged 4.9 per cent of GDP. Concern about the current account has lessened as it has fallen in recent years, with the CAD averaging 2.9 per cent of GDP during the 2010s (and achieving a surplus in 2019–20).
- **Volatile terms of trade**: In recent years Australia's terms of trade have fluctuated wildly as a result of the largest commodity price boom in Australian history, which began in 2003 and ended in 2011. The terms of trade peaked in 2011 at their highest level in 140 years, a level 85 per cent above their average throughout the twentieth century. After falling by 35 per cent between their 2011 peak and March 2016, the terms of trade again increased in the late 2010s. By mid-2020 the terms of trade index was only 18 per cent lower than the 2011 peak. The global commodities boom was underpinned by rapid industrialisation in emerging economies such as China and India. Although this boosted Australian exports and national income, the higher terms of trade had negative effects for other sectors of the economy, which became less competitive because of the high Australian dollar.

- **Australia's lack of international competitiveness**: Throughout its economic history, Australia has struggled with its remoteness from the centres of the global economy and its small population base, which have made it harder to be competitive in many markets for tradeable goods and services, such as manufactured goods and the technology sector. Factors that contribute to our lack of international competitiveness in these markets include the cost of transporting goods to overseas markets, the lack of economies of scale in domestic production, the high cost base for labour, and a lack of financial backing for innovative business start-ups.
- **The growth of foreign debt**: The size of Australia's net foreign debt grew rapidly from 6 per cent to 35 per cent of GDP during the 1980s. Its growth has been much slower since then, although it has more recently been around 55 per cent of GDP. Although it has continued to grow, the era of low interest rates since the turn of the century has meant that foreign debt servicing costs are still lower than in the 1990s.
- **Rising foreign ownership in Australia**: High levels of foreign ownership result in a large share of profits going offshore. Those outflows on the net primary income account are offset by inflows of profits from Australian investments overseas. Many sectors of the Australian economy have high levels of foreign ownership, with a total of $4.0 trillion of foreign investment in Australia in 2019–20.
- **The volatility of the Australian dollar**: Because commodities make up a large share of Australia's exports, the value of the Australian dollar often reflects fluctuations in commodity prices. Australia's exchange rate saw a strong rise in the decade from 2001 to 2011 (more than 60 per cent on the Trade Weighted Index, and more than 130 per cent against the US dollar). During the 2010s the Australian dollar lost 39 per cent of its value between its peak against the US dollar in April 2011 (a monthly average of US$1.10) and its low in August 2019 of US67 cents. On the Trade Weighted Index, it lost 25 per cent of its value between its peak of 79 in March 2013 and its low of 59 in August 2019. Further volatility occurred at the onset of the COVID-19 pandemic in 2020 – following an initial fall in March to US56 cents, the dollar rose by 32 per cent to US74 cents in September.

Although economists have expressed concern about Australia's external imbalances from time to time, these concerns have receded in recent years because the CAD has been lower and external imbalances have not had major impacts on Australia's economic performance. In fact, Australia has generally recorded sustainable economic growth, low inflation, and low unemployment, and it has maintained the confidence of foreign investors even while experiencing larger external imbalances than most advanced economies. Increased commodity export revenues have played an especially important role in strengthening confidence in the sustainability of Australia's external imbalances.

Many of the general issues relating to Australia's balance of payments were previously addressed in chapter 4. This chapter focuses specifically on the sustainability of Australia's external imbalances and the relationship between external outcomes and other economic issues in Australia.

10.2 Australia's current account deficit

A key measure of an economy's external stability is the **current account deficit as a percentage of GDP**. Australia has a long history of large CADs since the 1980s. Australia has paid out considerably more for goods, services and income than it has received from overseas. The CAD as a percentage of GDP is the best measure of trends in the current account over time, rather than the size of the CAD in dollar terms. Using this measure allows an accurate comparison across time and between countries.

In chapter 4 we saw that until recently, the CAD had generally remained in a range of around 3 to 6 per cent of GDP (see figure 4.8). As a percentage of GDP, the CAD averaged 1.1 per cent in the 1970s, then 4.1 per cent in both the 1980s and 1990s, 4.9 per cent in the 2000s decade and then fell to 2.5 per cent in the 2010s. The large increase in the CAD in the 1980s caused alarm and prompted a range of major structural reforms to restore the competitiveness of the Australian economy.

Over time there have been different explanations for Australia's persistent CAD. Section 4.5 discussed the cyclical and structural causes affecting the components of Australia's CAD. The extent to which the CAD is perceived as a problem, as well as the policy response required, depends on what factors are seen to be the causes of Australia's CAD. A related question is whether or not the CAD is **sustainable**. Whereas the high CAD was at first regarded as largely a trade problem related to Australia's balance on goods and services, most economists now explain it as a structural issue related to the primary income account. In other words, the CAD is explained as the result of a **savings and investment gap rather than a trade gap**. For this reason, many economists have suggested that Australia's CAD is sustainable since it is the result of high levels of direct investment in Australia that have helped generate higher economic growth and exports in the longer term. However, other economists argue that a high CAD puts Australia at risk of not being able to finance its external liabilities. In this section we examine three explanations of Australia's persistent CAD.

The CAD as a trade deficit

When the CAD first emerged as a major problem in the 1980s, economists mainly explained it as a product of Australia's trade problems. In other words, the CAD was blamed on persistent deficits on the balance on goods and services, caused by a combination of slow export growth and expanding demand for imports. While the balance on goods and services is not the main contributor to Australia's CAD, it is still a critical part of Australia's balance of payments performance. There are two key dimensions to the argument that the CAD is the result of a trade gap.

Firstly, Australia lacks **international competitiveness** in many of the higher value-added areas of global trade, such as elaborately transformed manufactures (ETMs). Many of Australia's traditional manufacturing industries have lost their markets at home and overseas, because they have not been able to compete with overseas competitors who specialise in large-scale, low-cost manufacturing, such as China. For example, many areas of manufacturing have largely moved offshore, such as footwear, clothes, textiles, electronics, whitegoods, motor vehicles, tyres, machinery, oil refining and even some areas of food processing. Australia's manufacturing sector has declined as a share of total output, reducing Australia's exports of finished goods and increasing our reliance on imports. Since the 2000s, a sustained period of high commodity prices has led to higher values for the Australian dollar, making Australia's non-commodity resources less competitive. Economists use the term "Dutch disease" to describe how demand for one type of exports may drive up the value of the exchange rate, making other exports less competitive (leading to a contraction in production of those exports).

Australia's lack of international competitiveness can be seen as the result of both cost factors (being able to sell goods and services at attractive prices on global markets, influenced by exchange rates, labour costs and productivity levels) and non-cost factors (such as the quality of production, reliability of supply, marketing efforts and customer services). In the 2019 *Global Competitiveness Report*, the World Economic Forum found that Australia lags behind other advanced economies in innovation capability (where Australia is ranked 18th in the world), important drivers of competitiveness.

Australia has nevertheless also developed new export markets in business and financial services to growing Asian markets, and these markets have the potential for significant growth. Australia's proximity to faster-growing Asian economies has boosted its competitiveness, and the 2019 *Global Competitiveness Report* ranked Australia as the 16th most competitive economy in the world.

Secondly, Australia's **terms of trade** (discussed in chapter 4) have a major effect on changes in the CAD. In the final quarter of the twentieth century, global commodity prices went into long-term decline, contributing to slower growth in Australia's export revenue and a higher CAD. This trend changed in 2003, after which the terms of trade increased dramatically, so that by their peak in 2011 the terms of trade were more than double their average for the 1980s and 1990s. However, instead of reducing the deficit, the high terms of trade contributed to an increase in the CAD for several years, as a boom in mining investment created a surge in capital imports for mining construction and operations, while consumer imports also surged in response to the strong dollar and rising household incomes. In 2007, the CAD reached a historic record of 6.7 per cent of GDP. The CAD then began falling as the investment in the mining sector led to increased output and exports.

The relationship between movements in the terms of trade and Australia's trade balance (and therefore CAD) has strengthened in recent years. A 24 per cent increase in the terms of trade during the four years to 2019–20 helped exports to rise from $320 billion to $477 billion, delivering Australia's largest trade surplus on record. Overall, the trade balance improved from an average deficit of 1.5 per cent of GDP in the 2000s to an average surplus of 0.2 per cent in the 2010s. While Australia has profited from a period of high commodity prices, the risk of its heavy reliance on minerals and energy exports is that a sharp fall in prices for those commodities could trigger a large increase in the CAD. The narrowness of Australia's export base is reflected in the fact that more than a quarter of export revenue in 2019–20 was earned from metal ores and minerals.

The CAD as a savings-investment gap

Another explanation of the CAD is that it is the result of an excess of domestic investment over domestic savings – the **savings-investment gap**. If domestic spending exceeds domestic output, resulting in a deficit on the current account, we are forced to make up for this by bringing in financial inflow from overseas – in other words, Australia borrows from overseas or sells domestic assets to overseas residents. As such, foreign savings instead of domestic savings are used to finance domestic investment. Similarly, if the government runs a budget deficit, as it has in recent years, this will reduce the level of national savings and widen the savings-investment gap. The relationship between business investment, net saving and the CAD can be seen in figure 10.1. Recently a fall in investment has helped to narrow the savings-investments gap and contribute to a lower CAD.

From the perspective of the savings-investment gap, Australia's persistent CAD and need for capital inflow is partly explained as a natural consequence of specific features of the economy. As a country with a small population, a large land mass and extensive natural resources, to develop its economy Australia has historically relied on overseas capital to fill the gap between domestic savings and investment. Foreign investment and borrowings have made it possible for Australia to develop more rapidly than if we had relied only on domestic sources of capital. In this context, so long as foreign investors and foreign loans are increasing Australia's productive capacity (and not just funding the purchase of existing assets such as housing), they will add to Australia's capacity to service its foreign liabilities – and the CAD will therefore be sustainable in the longer term.

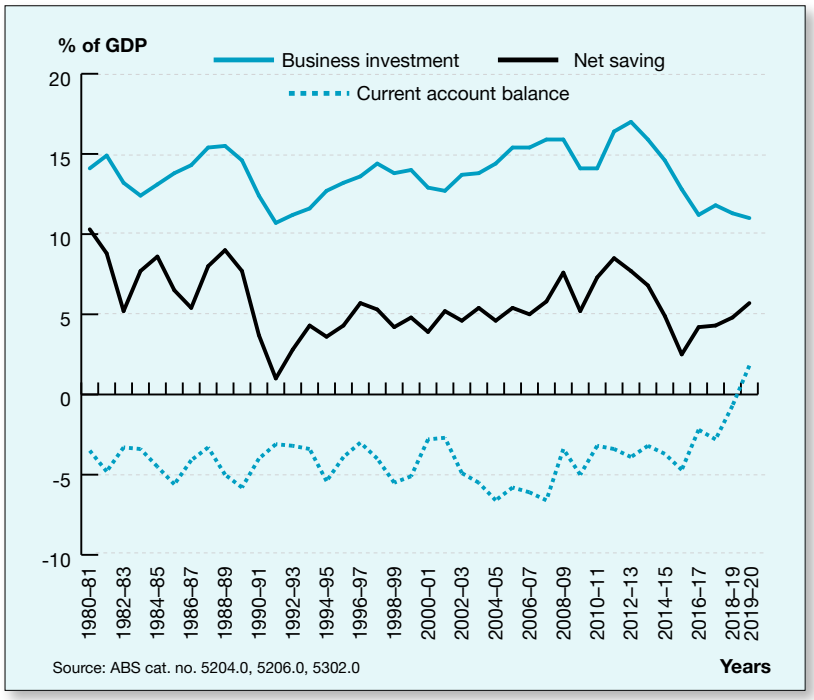


Figure 10.1 – Australia's savings investment gap

The "consenting adults" thesis (the Pitchford thesis)

The **Pitchford thesis** states that as long as a current account deficit is the result of savings and investment decisions by the private sector that are not the result of distortions to normal market mechanisms, then there is no cause for concern about an economy's external stability.

The argument that the CAD and foreign liabilities are not a major concern was popularised by Australian National University Professor John Pitchford in the 1990s and was known as the **Pitchford thesis**. It is now commonly known as the "**consenting adults**" thesis. Pitchford noted that Australia's CAD and foreign liabilities were almost entirely generated by the private sector (despite the government running large budget deficits in recent years, the private sector still accounted for around 80 per cent of Australia's net foreign debt in the late 2010s). He argued that Australia's current account problem was different from that of other countries with large external imbalances who had experienced financial crises arising from large foreign debt burdens, because their foreign debt was the result of government borrowings. In Australia's case, Pitchford's argument was that foreign liabilities helped to fund private investment projects, or were direct investments in firms and ventures by foreign residents. So long as private-sector decision making is not distorted by other factors (such as government policy), individuals and firms make proper calculations of the risks and costs of borrowing from overseas, and borrowers and lenders are responsible for their own decisions – in other words, they are "consenting adults".

Provided that Australia's foreign liabilities are largely accumulated by the private sector, the argument goes that there is no need for the Australian Government to be too concerned about the level of foreign liabilities any more than with the level of domestic liabilities. However, the "consenting adults" view has attracted some criticism since the global financial crisis. The major point of debate has been whether one of the assumptions underpinning the Pitchford thesis – that private-sector decision making involves a proper calculation of risks – always holds true. Critics point to the role of the collapse of the subprime mortgage market in the United States in 2008. In this instance, large financial institutions were not able to accurately calculate the risks of borrowing and lending associated with complex financial products called mortgage-backed securities. The Pitchford thesis also assumes that private-sector debt is entirely separate from public-sector debt. However, the global financial crisis demonstrated that national governments are often forced to assume the liabilities of their country's private-sector banks in order to avert a more serious financial collapse. Nevertheless, while the Pitchford thesis remains a matter of debate, Australia's relatively better economic performance during the early stages of the global recession in 2020 supported the view that at least in an environment of strong commodity prices, Australia's external imbalances are sustainable.

reviewquestions

1 Give TWO economic reasons why Australia's current account has been in deficit throughout most of Australia's economic history.

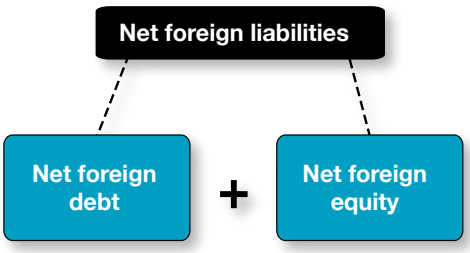
2 Discuss the arguments in favour of and against the view that Australia's CAD and foreign liabilities should not concern the government.

10.3 Australia's foreign liabilities

One of the long-term impacts of a high CAD is the growth of **net foreign liabilities** (or net external liabilities). Net foreign liabilities reflect Australia's total financial obligations to foreigners, minus the total financial obligations of foreigners to Australia. There are two components of net foreign liabilities:

- **Net foreign debt** (or net external debt), which is the total stock of loans owed by Australians to foreigners, minus the total stock of loans owed by foreigners to Australians.
- **Net foreign equity**, which is the total value of assets in Australia, such as land, shares and companies in foreign ownership, minus the total value of assets overseas that are owned by Australians.

Net foreign liabilities are equal to Australia's financial obligations (foreign debt plus foreign equity) to the rest of the world minus the rest of the world's financial obligations to Australia.



Overseas borrowing adds directly to Australia's foreign debt. The initial borrowed sum eventually has to be repaid and the debt must be serviced with regular interest payments. The servicing of Australia's debt constitutes an outflow of funds on the current account, and thus increases our CAD. By contrast, selling assets to foreigners does not add directly to Australia's foreign debt. Australia does not have to repay the price of purchasing equity unless the company or assets are sold back to Australians. However, Australia does have to send overseas returns on equity investment, such as company profits, rent on land and dividends on shares. In recent years, equity servicing costs on the primary income account have exceeded interest repayments on debt. The returns on equity that Australia pays to overseas investors are partly offset by returns received by Australians from investments overseas.

Figures 10.2 and 10.3 show the growth in Australia's **net foreign liabilities as a percentage of GDP**. This reflects the growth in net foreign debt and changes in net foreign equity. The figures reveal a trend of ongoing growth in Australia's **net foreign debt to GDP ratio** since the beginning of the globalisation era in the 1980s. Fluctuations can occur in the shorter term, in response to movements in the Australian dollar and trends in foreign investment inflows and outflows (for example, exchange rate movements contributed to an increase in net foreign debt in 2018–19, and a fall in 2019–20). Australia's net foreign debt was around $1.1 trillion in 2019–20, or 55.2 per cent of GDP. This is lower than the peak of 61.8 per cent of GDP recorded in 2015–16.

In the long term, excessive growth in Australia's foreign debt could lead to a debt sustainability problem. If the size of the debt is rising faster than the increase in GDP, as it has done in most years, the interest payments on the debt will progressively take up a greater proportion of our GDP. This reduces both Australia's overall standard of living and its economic growth potential. High foreign debt can also create a vicious cycle, sometimes known as the **debt trap scenario**. This starts with a high CAD, which requires an inflow of foreign funds that may come in the form of either foreign debt or selling Australian assets to foreigners. With a larger foreign debt, Australia's interest payments on that debt increase, which are recorded as primary income debits that flow out on the current account.

Year	Net foreign debt ($bn)	% of GDP	Net foreign equity ($bn)	% of GDP	Net foreign liabilities ($bn)	% of GDP
1980–81	9.4	6.3	24.0	16.0	33.4	22.3
1985–86	78.4	30.7	21.1	8.3	99.5	39.0
1990–91	142.8	34.5	50.9	12.3	193.7	46.7
1995–96	191.0	36.2	87.7	16.6	278.7	52.8
2000–01	295.9	42.0	76.5	10.9	372.4	52.8
2005–06	489.4	49.1	47.8	4.8	537.1	53.9
2006–07	535.8	49.3	82.8	7.6	618.7	56.9
2007–08	601.1	51.1	58.7	5.0	659.8	56.0
2008–09	622.6	49.4	69.7	5.5	692.3	54.9
2009–10	681.5	52.4	77.6	6.0	759.1	58.3
2010–11	674.9	47.6	100.1	7.1	775.0	54.7
2011–12	745.1	49.7	64.4	4.3	809.6	54.0
2012–13	809.2	52.7	-5.4	–0.4	803.8	52.3
2013–14	880.2	55.1	–25.0	–1.6	855.3	53.5
2014–15	957.3	58.9	–95.9	–5.9	861.4	53.0
2015–16	1027.5	61.9	–33.3	–2.0	994.2	59.9
2016–17	984.7	55.8	–38.4	–2.2	946.2	53.7
2017–18	1064.1	57.5	–80.0	–4.3	984.1	53.2
2018–19	1155.3	59.3	–138.6	–7.1	1016.7	52.2
2019–20	1093.5	55.2	–182.9	–9.2	910.6	46.0

Source: ABS cat. no. 5206.0, 5302.0

Figure 10.2 – Australia's net foreign liabilities

Thus, today's foreign debt adds to future deficits on the current account. If international financial markets suspect that Australia's debt may become unsustainable, they may reduce Australia's international credit rating (which reflects the confidence that financial markets have in Australia). A downgrading in Australia's credit rating would make it more difficult to borrow funds internationally and would increase the interest rate on borrowing. However, Australia has avoided a debt sustainability problem. A sustained long period of low global interest rates since the 1990s, and rising export revenue as a result of the resources boom after 2003, have ensured that Australia has been able to service its foreign liabilities.

One of the most reliable economic measures of a country's capacity to service its foreign debt is the **debt servicing ratio**. This figure indicates the proportion of export revenue that must be spent on interest payments on foreign debt. A country is better able to service its foreign debt when it has a high volume of exports and is therefore earning a substantial amount of foreign currency. The debt servicing ratio in Australia peaked at just over 20 per cent in 1990. By 2019–20, the debt servicing ratio had fallen to just 2.0 per cent, reflecting the fact that despite the increase in foreign debt levels, the very low levels of global interest rates and the rapid growth in the value of exports have meant that the servicing cost of that debt is manageable.

Historically, most foreign investment flows into Australia (both debt and equity) have been into the private sector. Part of this represented an inflow from the offshore funding of the banking sector. In other words, Australian banks borrowed on overseas financial markets in order to make loans to Australian households and businesses. However, in the years following the global financial crisis, banks reduced their reliance on offshore funding because of increased domestic savings. Meanwhile, a larger share of capital flows into Australia has gone into government securities, as foreign investors purchase Australian Government debt. The Australian Government is one of a small number of national governments that still holds a AAA credit rating, which is attractive to overseas lenders because it represents a very low risk level. Foreign investors held 56 per cent of the stock of Commonwealth Government Securities on issue in 2020.

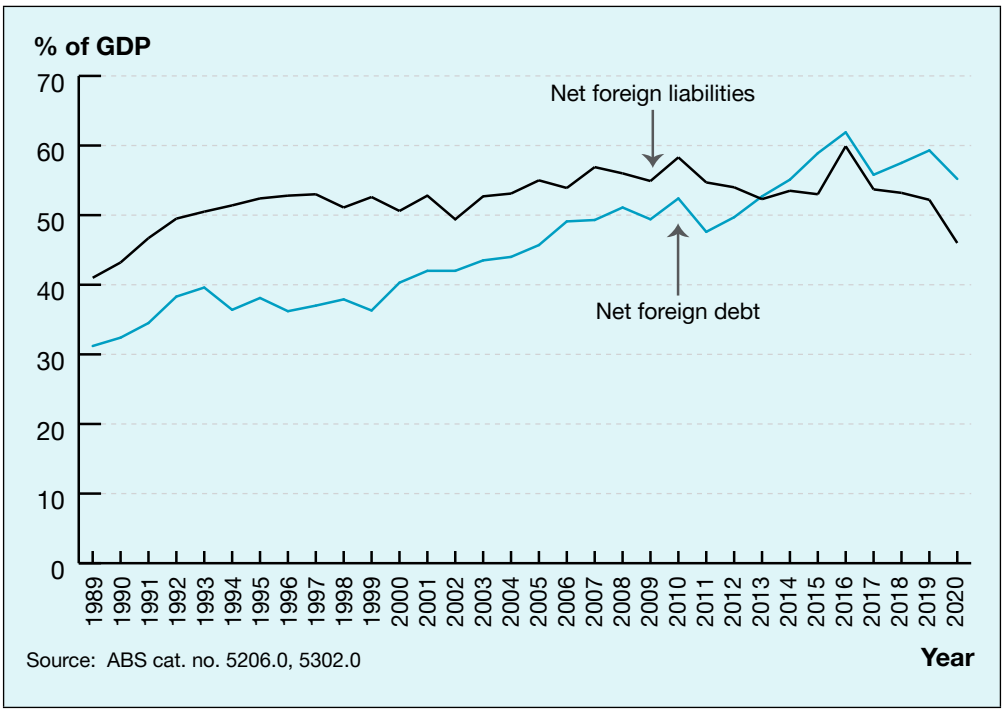


Figure 10.3 – Net foreign liabilities and net foreign debt in Australia (% of GDP)

Net foreign equity is the smaller component of Australia's foreign liabilities. When foreign investors buy assets in Australia, this is recorded as an increase in foreign equity. When Australians buy overseas assets, this is recorded as a decrease in net foreign equity. Since 2013, the value of Australia's foreign assets has been greater than the value of foreign ownership of Australian assets (so that net foreign equity became negative), reflecting a trend increase in Australian ownership of foreign assets. Net foreign equity as a percentage of GDP peaked in the 1990s, as foreign investment in Australia increasingly involved asset sales rather than foreign borrowing. Net foreign equity tends to be more volatile than net foreign debt, reflecting exchange rate movements and shifts in the market valuation of companies and assets, which in turn are affected by changes in investor sentiment.

Foreign equity attracts servicing costs in the form of profits and dividends that are returned to overseas investors. This can create an ongoing strain on Australia's external accounts by worsening the net primary income account (although it is offset by earnings from Australia's overseas investments). Equity servicing costs account for around half of total primary income outflows. While there are some disadvantages with high levels of foreign ownership, the sustainability of the servicing costs for foreign equity is of less concern than for foreign debt because dividends are only sent overseas when an Australian asset or business is generating a profitable return – while interest payments on debt must be paid regardless of whether there is a profit.

While there has been a rise in Australia's net foreign liabilities, this masks the large rise in the value of Australian investments overseas, as well as the overall growth of other countries' liabilities to Australia. This is reflected in figure 10.4. Between 2000–01 and 2019–20, Australian ownership of equity overseas rose from $306 billion to $1574 billion, while Australian loans overseas grew from $211 billion to $1496 billion. However, Australia's gross foreign liabilities are still much larger: over the same period, foreign-owned equity in Australia increased from $382 billion to $1391 billion, while gross foreign debt increased from $506 billion to $2589 billion. While Australia's gross foreign debt is around two-thirds more than the level of Australian lending to overseas, as noted above, the gap between foreign equity inflows and outflows is much smaller. In overall terms, as Australia has become increasingly integrated into the global economy, foreigners have been lending and investing in Australia more than Australia has been lending or investing overseas.

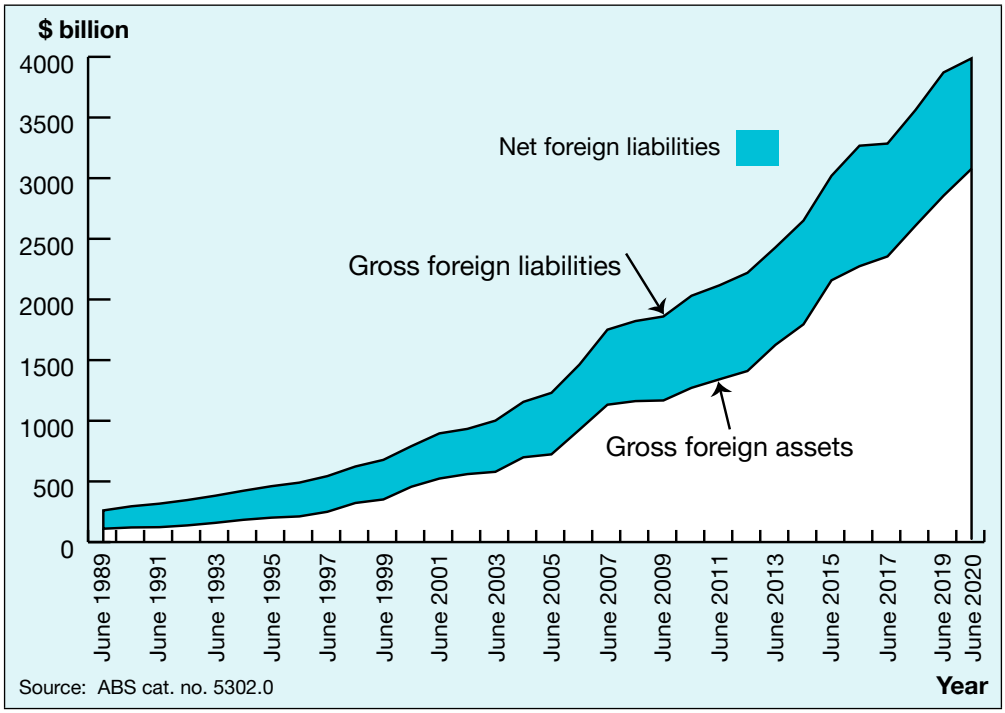


Figure 10.4 – Australia's international investment position

Australia's external imbalance has the potential to cause serious problems for Australia, although it has not been a major concern in recent decades. Among advanced economies, Australia has relatively high foreign liabilities, and Australia has often been included in the list of economies globally whose CADs appear to be unsustainable in the longer term. If global economic conditions became less favourable to Australia than they have been in the past two decades, this could make Australia vulnerable. For example, the reliance of the Australian financial system on an ongoing inflow of foreign capital was a major reason why the government considered it necessary to provide a temporary guarantee for all overseas loans of banks and financial institutions after the global financial crisis in 2008. The government argued that without the government guarantee, banks would not have been able to obtain overseas loans and the financial system would have faced a major crisis. This demonstrates the extent to which a consistently high level of external imbalance increases the vulnerability of the economy to adverse economic developments overseas.

reviewquestions

1. Explain the link between the current account deficit and foreign debt in Australia.
2. Explain how a high level of foreign debt might affect an economy.
3. Discuss whether Australia's foreign liabilities pose a threat to Australia's economy.

10.4 Australia's exchange rate

The exchange rate provides a direct link between Australia and the rest of the world. All trade and financial relationships between Australia and other countries are mediated through the exchange rate. Therefore, the exchange rate has a significant impact on Australia's international competitiveness and external stability.

THE BENEFIT OF LOW GLOBAL INTEREST RATES FOR AUSTRALIA

The global economy has been through an extended period of historically low interest rates on global financial markets that came about after the global financial crisis of 2008. Central banks were faced with very low rates of economic growth, very low inflation and uncertainties about the stability of parts of the financial sector. In an attempt to address these issues and prevent deflationary pressures, central banks aggressively loosened monetary policy, with interest rates being pushed towards zero. Monetary policy became so stretched in some countries that negative interest rates were introduced. In the case of Japan and some European economies, banks began charging a premium to hold money with the central bank – a concept that, up until recently, would have been unimaginable.

The consequence of such actions had indirect flow-on effects on the Australian economy and contributed to pushing down the so called "equilibrium interest rate" (the interest rate consistent with a neutral stance) for Australia. As other countries loosen monetary policy, their currencies weaken, and in relative terms the Australian dollar strengthens. This has the effect of curbing export competitiveness and places downward pressure on inflation in the short to medium term. As a result, the RBA, in defending its inflation target, was forced to lower its monetary policy settings accordingly.

Between 2011 and 2020, domestic interest rates were cut 17 times, falling from 4.75 per cent to just 0.25 per cent in March 2020. One benefit for Australia's external accounts was that this helped to stabilise the level of foreign liabilities. Given that Australia's net foreign debt exceeds $1 trillion, every percentage point decrease in benchmark interest rates significantly reduces the servicing cost of foreign liabilities.

With the onset of the global recession in 2020, interest rates fell further, in many instances to record lows in different parts of the world. Australia was able to benefit fully from these lower rates as it has maintained a AAA credit rating from all three major global ratings agencies. Nevertheless, two of the ratings agencies have Australia on a negative outlook since 2016 because of concern about the slow path towards fiscal consolidation during the 2010s and Australia's heavy reliance on overseas borrowing. Should Australia lose its AAA credit rating, it is possible that foreign investors will demand higher "risk premiums" – higher interest rates to compensate for a perceived increase in risk. This would increase the cost of interest payments, underscoring longer-term concerns about the sustainability of Australia's large foreign liabilities.

The high level of volatility in the Australian dollar was noted in chapter 5, where we stated that this volatility is the result of Australia's heavy reliance on commodity exports. The larger fluctuations in commodity-based currencies can often attract speculators, and despite making up just 1 per cent of global trade, the Australian dollar is the world's fifth-most traded currency (after the US dollar, the euro, the yen and the pound sterling). The past two decades have seen very large movements in the dollar, from its low of US47 cents in 2001 to a peak of US$1.10 in 2011, and back to a low of US56 cents in March 2020.

The volatility in the Australian dollar that can be seen in figure 10.5 is more the result of increased global economic instability than domestic economic instability. At the turn of the century, commodity prices were very low and the dawn of the internet era resulted in countries with "low tech" economies, such as Australia, being shunned by global markets. This changed after 2003, when Australia began the largest terms-of-trade boom in its economic history, as commodity prices started rising sharply on the back of the surging Chinese demand for natural resources. The trend increase in the Australian dollar continued until 2011, underpinned by rising exports, sustained economic growth and the interest rate differential between Australia and other economies. The falling terms of trade brought about a sharp fall in the dollar in the early 2010s. Another depreciation occurred in the late 2010s. This reflected weakness in the Australian economy, stronger growth in other economies, and in March 2020, concerns about the impact of a global recession on commodity exporters such as Australia. The unusual aspect of the period from 2017 to 2019 was that the dollar depreciated despite a rise in the price of key commodities, reflecting the importance of underlying economic conditions in determining the exchange rate.

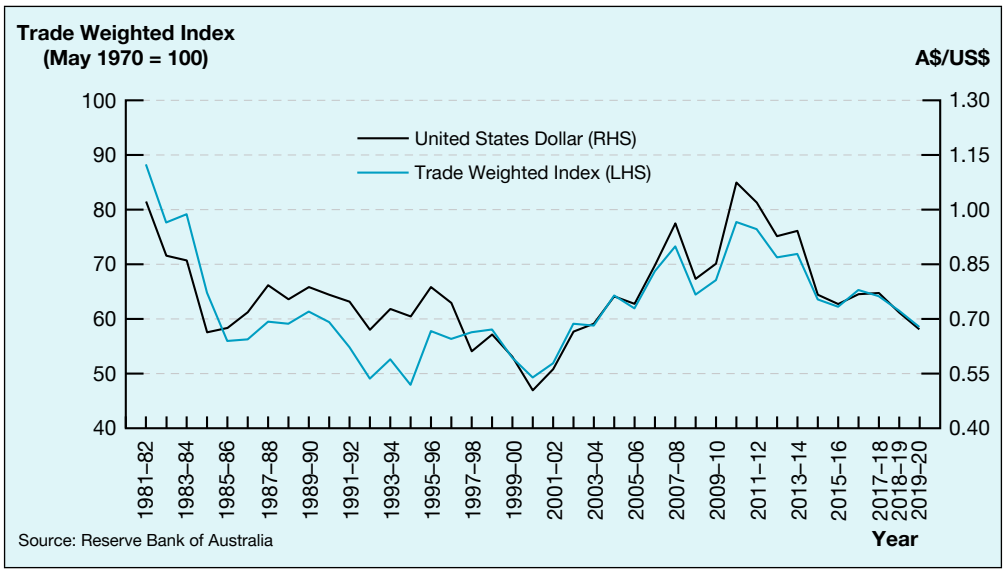


Figure 10.5 – Changes in the value of the Australian dollar

Although the exchange rate itself has experienced periods of volatility, it has operated as a powerful stabilising mechanism that has helped the Australian economy adjust to changing conditions in the global economy. During periods of weaker growth in Australia or in the global economy, exchange rate depreciations have helped make Australia more internationally competitive and helped stimulate export growth. The depreciation of the Australian dollar that followed the fall in the terms of trade after 2011 made exporters and import-competing sectors more competitive. Many non-mining firms in those sectors were adversely affected by the high value of the dollar during the mining boom. In recent years, the lower dollar has helped support international competitiveness in export industries.

Although the floating exchange rate is one of the most important mechanisms that helps Australia adjust to changing global economic conditions, it can have a significant impact upon Australia's external stability. A change in the exchange rate influences the balance of payments by affecting Australia's international competitiveness and the size and servicing costs of our foreign debt (that is borrowed in foreign currency). Therefore, if the value of the dollar is continually subject to change, two of the major indicators of Australia's external stability will also be volatile. Large swings in the value of the dollar can create policy challenges and economic instability.

In particular, a sudden or large depreciation in the Australian dollar due to a fall in the confidence of foreign investors can create a vicious cycle. Investors may fear further volatility in the dollar, and investment decisions can be discouraged if the dollar is falling sharply, often because it has become a target of financial speculators (who make money from short-term financial market changes) as happened in 2020. Once a downward trend sets in, it can continue until enough investors begin to think that the currency is undervalued and start buying it again. Recent history has shown that foreign exchange markets can often overshoot when major currency movements occur.

reviewquestions

1 Explain how external imbalances may affect the value of the exchange rate.
2 Discuss the impacts of exchange rate volatility on the Australian economy.

10.5 Policies to achieve external stability

Achieving external stability has at times been one of the most important objectives of economic policy in Australia. However, **in more recent years, external stability has not been a major objective of macroeconomic policy**. While both the Australian Government Treasury and the Reserve Bank continue to monitor the current account, foreign liabilities, and the exchange rate, the aim of improving external stability is not a major influence on fiscal or monetary policy settings. In part, this change reflects a widespread acceptance of the "consenting adults" view of the current account among economists and policymakers, that CADs and foreign debt reflect the decisions of the private sector and do not require policy change by government. The reduced concern around external stability is also related to Australia's improved medium-term export prospects (with higher volumes of resources exports, even if commodity prices are below their peaks) and increased household savings.

This change does not mean that external stability is unimportant or of no interest to economic policymakers. What it has meant is that achieving sustainable outcomes on the current account and foreign liabilities and a stable value of the currency are now treated more as long-term objectives of economic policy. External stability issues are now addressed through Australia's longer-term policy settings, which aim to reduce the risk of external shocks that could adversely affect Australia's access to global financial markets:

- Monetary policy is not being used to address Australia's external imbalances. In the past, contractionary **monetary policy** was used to reduce consumer spending on imports in order to create a short-term improvement in the balance on goods and services. However, this approach is now considered ineffective, since its impact is only temporary, and it results in a slowdown across the whole economy. In addition, higher interest rates can also increase capital inflows, generating higher net primary income outflows and worsening the current account. Monetary policy is also unable to target the long-term structural causes of Australia's external imbalances.
- **Fiscal policy** has had some role in addressing Australia's historically low level of **national savings**. By adopting the policy of fiscal consolidation (running balanced or surplus budgets over the course of the economic cycle), governments since the late 1990s have sought to reduce their call on private savings over the medium term. In March 2020, after announcing a record increase in the budget deficit to fund policy responses to the COVID-19 pandemic, Treasurer Josh Frydenburg also committed to reducing the budget deficit once the economy had recovered. This would lessen any upward pressure on interest rates and the "crowding out" of private borrowers.
- The introduction of **compulsory superannuation**, which requires employers to set aside 9.5 per cent of an employee's wages in a superannuation fund, has lifted the level of national savings since the early 1990s. It is also a major contribution to the increased Australia's overseas investments, which help to create financial inflows on the net primary income account. The government's policy to permit access to superannuation for those financially distressed from COVID-19 has raised concerns about the sustainability of the system and its impact on domestic funds available for investment.
- **Microeconomic reform** can be used to address the structural problems causing Australia's external imbalances. The international competitiveness of Australian goods and services should be improved by measures that lift the efficiency and productivity of Australian producers. These policies have included measures to reduce capacity constraints in the economy by improving infrastructure and alleviating skills shortages, removing protectionist barriers that shielded inefficient producers from foreign competition, and labour market reforms to increase productivity and workforce participation.

In practical terms, the best measure of external stability is the extent to which Australia maintains the confidence of international investors. Governments aim to sustain international confidence in Australia's economy with consistent, medium-term policy settings such as Australia's inflation targeting regime, the goal of budget surpluses and a continued commitment to microeconomic reform. This approach has been largely successful in maintaining international confidence in Australia's economy in recent decades. Economists (and international investors) have mostly accepted the "consenting adults" view of Australia's CAD and foreign debt.

Nevertheless, the global financial crisis also provided an important lesson about the connection between private and public sector borrowings. Even if a high level of foreign debt is the result of private sector borrowings, governments can be forced to take responsibility for those borrowings, in order to prevent a meltdown of their entire financial system and a potential economic depression. Even in Australia, the government felt it necessary to provide a guarantee for all of the private borrowings of Australian banks in 2008. In effect, the Australian Government guaranteed the nation's private sector foreign debt. This, to some extent, undermines the argument that private sector borrowings from overseas do not matter because it shows that in times of extreme financial instability, an external imbalance – whatever its origins – can make an economy more vulnerable to external shocks.

"Australia's balance of payments and external accounts have undergone a significant transformation ... The trade surplus is around its largest, and the current account its narrowest, as a share of GDP in many decades ... there has been a significant change in both the composition of the capital flows and, as a result, the stock of foreign liabilities and assets ...

The structure of Australia's external accounts now resembles that of the United States ... the external accounts do not constitute a source of vulnerability and have become increasingly resilient over the past 30 years.

All of these developments have taken place under the rules-based global trading system ... Australia has clearly been a major beneficiary of that system. The current threats to the system are a significant risk to both Australia and the world."

– Guy Debelle, Deputy Governor, Reserve Bank of Australia,
Address to the Economic Society of Australia, 27 August 2019

reviewquestions

1. Account for the declining importance of external stability as a specific objective of economic policy.
2. Discuss how policy approaches can be used to address the current account deficit in Australia, with specific reference to the different accounts on the balance of payments.

chapter summary

1 External stability is a broad term that describes a situation where external indicators such as the current account deficit, foreign liabilities and the exchange rate are at a sustainable level, that is, a level where they can remain in the longer term without negative economic consequences.

2 The main factor that influences a country's external stability is its current account deficit (CAD). The CAD is generally regarded as being at a sustainable level in the long term if it averages less than 3 per cent of GDP and in the short term if it is less than 6 per cent of GDP.

3 Australia sustained relatively high CADs until the 2010s. Some economists argue that Australia's external imbalances make the economy more reliant on overseas borrowing and therefore more vulnerable to adverse developments in the global economy.

4 Some economists argue that Australia's CAD and foreign liabilities do not constitute a major economic problem because foreign capital adds to investment and productive capacity in Australia and because Australia's external imbalances are chiefly due to decisions of private investors for which the government is not responsible.

5 The CAD can be viewed as a consequence of an imbalance between savings and investment – that is, a consequence of a shortfall in domestic savings. Historically, Australia's relatively low level of household savings has contributed significantly to the CAD. The CAD is also influenced by Australia's international competitiveness and the terms of trade.

6 Another indicator of sustainability is the level of net foreign liabilities as a percentage of GDP. This includes net foreign debt and net foreign equity. A high level of net foreign liabilities poses risks for external stability because it involves large servicing costs in the long term.

7 Australia has a relatively high level of net foreign liabilities because of the consistent growth in net foreign debt since the 1980s. Rapid growth in foreign liabilities is regarded as an indicator that a country's external position is not sustainable, but the growth in Australia's liabilities has proved sustainable during recent decades.

8 Another indicator of the sustainability of foreign debt is the debt servicing ratio, which measures the percentage of export revenues spent in servicing the foreign debt. Despite Australia's rising foreign debt levels, the debt servicing ratio has fallen during recent years because of lower global interest rates.

9 Movements in the value of the exchange rate are an indicator of the degree of international confidence in the economy, among other factors. If international investors form the view that the economy's external position is not sustainable, the value of the dollar is likely to fall.

10 Governments have few policy instruments available to address problems of external imbalance. Governments mainly rely on market mechanisms (such as an exchange rate depreciation) and long-term policy settings to address external imbalances.

chapterreview

1 Define what is meant by *external stability*.

2 Describe a situation of external instability.

3 Briefly discuss what factors determine whether a current account deficit is sustainable.

4 Examine the recent trends in the size of the current account deficit.

5 Explain the relationship between net foreign liabilities and the current account deficit.

6 Discuss the difference in the economic effects of a rising level of foreign debt compared with rising foreign equity.

7 Explain why exchange rate movements are an important indicator of external stability in Australia.

8 Critically evaluate the argument that the current account and foreign liabilities are not significant economic problems in Australia.

9 Discuss the extent to which the history of current account deficits in Australia reflects a shortfall of savings, and to what extent it reflects a poor trade performance.

10 Outline what policies may be used to address the issues of external stability.

Distribution of Income and Wealth

11

11.1 Introduction
11.2 Measuring the distribution of income and wealth
11.3 Sources of income and wealth
11.4 Trends in the distribution of income and wealth
11.5 The costs and benefits of inequality
11.6 Government policies and inequality

11.1 Introduction

A major challenge of government policy is to ensure fairness in the spread of wealth and economic opportunity throughout society. While all societies have some higher income and some lower income groups, research has shown that economies with a smaller gap in incomes between high and low income earners tend to have greater happiness, better health outcomes and higher levels of social mobility. In recent years there has been a growing consensus among economists that globalisation has increased inequality in many countries and lowered rates of economic growth. As economies like Australia adjust to a changing global economy, one of the greatest challenges for governments is to ensure that one part of society does not shoulder an unfair share of the burden of structural change, and that the benefits of Australia's economic successes do not just flow to those who are already financially well off.

Australia has traditionally considered itself to be a country offering people a "fair go", with relatively low levels of inequality. Economic evidence suggests however that on most measures, Australia is around the OECD average. Even if inequality is worse in countries to which Australia often compares itself, such as the United Kingdom, there are a number of countries from which Australia could model improvement. Australia's income inequality increased during the 1990s and 2000s but sustained economic growth, universal access to public education and health care, and a well-targeted social security safety net prevented a greater widening of inequality.

Many of the factors that contribute to an increase in inequality are side effects of the policies that encourage market forces and improve competitiveness. While some level of inequality is present in all economies, levels of inequality can increase when nations implement economic policies such as reducing marginal income tax rates, reducing welfare, reducing spending on public services and deregulating labour markets. In the past decade, the OECD and IMF have emphasised the importance of economic reforms that lessen inequality.

To understand the nature of inequality we first need to understand how wealth and income are distributed. As we look at factors such as occupation, age, gender, ethnic background and geography, we can piece together the influences on the distribution of income and wealth in Australia. This can then help us understand the role that government policies can play in redistributing income and wealth and reducing inequality.

11.2 Measuring the distribution of income and wealth

Income distribution

Personal **income** is the amount of money, or other benefits measured in money terms, that flow to individuals or households from the sale of factors of production over a period of time. Forms of income include wages from labour, rent from land, interest from capital and profit from enterprise. Income can be regarded as the benefit that flows to the owners of the factors of production for owning, maintaining and managing productive resources. Individuals can also receive income such as pensions and benefits from the government.

Income inequality refers to the degree to which income is unevenly distributed among people in the economy. The degree of unevenness can range from a high level of equality, where people receive a similar share of income, to a high level of inequality where there is a large gap between high and low income earners.

Income inequality can be measured by the share of total income received by different groups. For example, figure 11.1 looks at what proportion of disposable income (after tax) is received by each quintile, with a quintile being a 20 per cent grouping ranked from lowest to highest income earners. The figure shows that in 2017–18, the lowest 20 per cent of Australians received just 7.5 per cent of income, while the highest 20 per cent received 40.4 per cent of income. In the past two decades, the share of income has fallen for every quintile except the highest income quintile, whose share is now roughly 3 per cent higher than two decades ago. However the trend towards rising inequality appears to have stabilised since the global financial crisis.

Quintile	Share of disposable income (%)								
	1995–96	2000–01	2005–06	2007–08	2009–10	2011–12	2013–14	2015–16	2017–18
Lowest quintile	8.1	7.7	7.8	7.3	7.4	7.5	7.5	7.7	7.5
Second quintile	13.0	12.6	12.7	12.3	12.4	12.6	12.3	12.5	12.5
Third quintile	17.7	17.6	17.4	16.9	17.0	17.3	16.9	17.0	17.0
Fourth quintile	23.9	23.6	23.0	22.6	23.0	23.0	22.4	23.0	22.7
Highest quintile	37.3	38.5	39.2	41.0	40.2	39.5	40.8	39.8	40.4
Gini coefficient	0.296	0.311	0.314	0.336	0.329	0.320	0.333	0.323	0.328

Source: ABS cat. no. 6523.0 Household Income and Income Distribution. Note that statistics are not released for every financial year and statistical changes mean that statistics since 2007–08 are not directly comparable to previous statistics.

Figure 11.1 – Share of disposable income by households

Figure 11.2 illustrates the difference in average incomes (before tax) among different groups in the Australian economy in 2017–18. The average annual pre-tax income for households in the highest quintile is $280,956, more than eleven times the average for the lowest quintile of $24,336.

	Lowest quintile	Second quintile	Third quintile	Fourth quintile	Highest quintile	Average all households
Mean income per week	$468	$1024	$1707	$2614	$5403	$2242
Annual	$24,336	$53,248	$88,764	$135,928	$280,956	$116,584

Source: ABS cat. no. 6523.0 Household Income and Income Distribution 2017–18

Figure 11.2 – Average gross household incomes in Australia, 2017–18

The following concepts will also be useful when we are interpreting statistics relating to the distribution of income and wealth later in the chapter:

- **Mean income** – the average level of income. It is calculated by dividing the total income of a group by the number of income recipients in that group.
- **Median income** – that level of income that divides the income recipients in a group into two halves, one half having incomes above the median and the other half having incomes below the median (it is the "middle" income).

The share of income data in figure 11.1 can be used to produce two other measures of income inequality used by economists – the Lorenz curve and the Gini coefficient.

Measuring income inequality – the Lorenz curve

We construct the **Lorenz curve** by plotting the cumulative percentage of total income received (vertical axis) against the cumulative percentage of income recipients (horizontal axis). Using the information provided in figure 11.1, a Lorenz curve can be constructed for Australian households.

If income were distributed evenly across the whole population, the Lorenz curve would be the diagonal line through the origin of the graph – **the line of equality**. The further the Lorenz curve is away from this line, the greater the degree of income inequality in society.

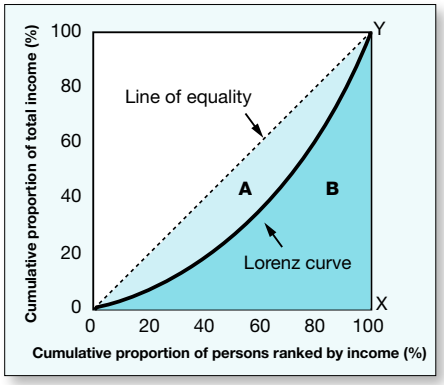


Figure 11.3 – Lorenz curve for Australian households

Lorenz curve is a graphical representation of income distribution, plotting the cumulative increase in population against the cumulative increase in income.

Measuring income inequality – the Gini coefficient

The **Gini coefficient** is a single statistic that summarises the distribution of income across the population. It is calculated as the ratio of the area between the actual Lorenz curve and the line of equality (area A in figure 11.3) and the total area under the line of equality (A+B).

$$\text{Gini coefficient} = \frac{A}{A + B}$$

The Gini coefficient ranges between zero, when all incomes are equal, and one, when a single household receives all the income. Therefore, the smaller the Gini coefficient, the more even the distribution of income. Figure 11.1 shows that the degree of income inequality in Australia has increased since the mid-1990s. The OECD's most recent ranking of its 37 member countries ranked Australia 23rd for its Gini coefficient of 0.325, which meant that Australia has a more unequal distribution of income than many OECD economies (and notably above the median OECD Gini coefficient of 0.319). According to the latest survey conducted by the Australian Bureau of Statistics in 2017–18, Australia's current Gini coefficient of 0.328 is significantly above the Australian average since 1994 of 0.314, but notably below its peak of 0.336 in 2007–08.

Gini coefficient is a number between zero and one that measures the extent of income inequality in an economy. It is calculated by measuring the degree to which the Lorenz curve deviates from the line of equality.

Measuring the distribution of wealth in Australia

The process of measuring household wealth is more complex than measuring income levels, and prior to the first release of comprehensive figures by the ABS in 2006, it relied on occasional surveys by other researchers. Both sets of data show that the distribution of wealth is more unequal than the distribution of income and that this level of inequality has existed for a long time.

Quintile	Share of aggregate wealth (%)							
	1986–87	1998–99	2005–06	2009–10	2011–12	2013–14	2015–16	2017–18
Lowest quintile	0	0	1.3	1.0	1.1	1.1	1.0	0.8
Second quintile	2	3	6.2	5.5	5.4	5.0	5.2	4.6
Third quintile	12	10	12.0	11.5	11.7	11.1	11.4	11.0
Fourth quintile	23	22	20.2	19.8	20.7	20.2	20.7	20.1
Highest quintile	63	65	60.3	62.2	61.1	62.6	61.7	63.5
Gini coefficient	0.64	0.64	0.581	0.603	0.591	0.606	0.601	0.619

Sources: ABS cat. no. 6554.0 and 6523.0

Figure 11.4 – Distribution of wealth in Australia, selected years

Figure 11.4 depicts Australia's level of inequality in the distribution of wealth. Figure 11.1 showed that the top quintile earns 40.4 per cent of total income, while figure 11.4 shows that the top quintile owns 63.5 per cent of total wealth. Similarly, while those in the bottom quintile earn 7.5 per cent of total income, they own less than 1 per cent of total wealth. Around 70 per cent of households have less than the average level of household wealth (or net worth), which was $1,022,200 in 2018.

Although wealth inequality has remained relatively stable over time, the Australian Bureau of Statistics' most recent Gini coefficient calculation shows an increase since 2012. This reflects how wealth can accrue to the owners of capital during periods of sustained growth. Although Australia experienced only modest rates of economic growth during the 2010s, house prices and share market values increased dramatically, thus increasing the wealth of asset owners. Low interest rates contributed to the rise in house prices and increased the wealth of households with large real-estate assets, while also increasing the cost of housing for low and middle-income households looking to purchase assets.

A 2020 RBA Research Discussion Paper on *The Distributional Effects of Monetary Policy* found that real-estate prices in more expensive areas are more responsive to interest rate changes, so that a period of extended low interest rates is likely to widen inequality further. Superannuation has played the opposite role for people in lower income quintiles who are in employment. Superannuation has given many of these individuals a financial asset for the first time in their lives (given that many do not own any real estate), and this help explain why the lowest two quintiles now have a larger share of wealth than in the 1980s, before compulsory superannuation was introduced.

Another dimension to wealth inequality is a widening in inequality between older and younger generations. A 2019 Grattan Institute report on the *Generation Gap* found that older households are now on average four times as wealthy as younger households. An analysis of data from the Melbourne Institute's Household, Income and Labour Dynamics in Australia survey in 2017 concluded that the wealthiest households in Australia were couples over 65. They had experienced a real increase in median net wealth of almost 70 per cent since 2002, compared to an increase of just 3.2 per cent during the same period among people in the 25 to 34 age range.

reviewquestions

1. Outline the TWO methods used to measure income inequality.
2. Explain the difference in Australia's income inequality and wealth inequality.
3. Analyse how the share of income received by the highest income earners in Australia has changed in recent years.

RISING INEQUALITY? THE VERDICT

One of the greatest challenges in understanding the extent of inequality in Australia is the complexity of measuring it. A major study of trends in inequality during Australia's record-breaking run of economic growth since 1991 has concluded that while in overall terms Australia has become more unequal, there is far more to the story. The Productivity Commission study, *Rising Inequality? A Stocktake of the Evidence*, examines changes in income and wealth with a focus on how each decile of the population has fared (deciles being 10 equal groups into which the population is divided, in order to show how people have fared in the top, middle and lower deciles). The study was released in 2018 with these key conclusions:

1 Overall, there has been an increase in income inequality over the past three decades, but there is no strong trend and there has been some improvement since 2010.

2 Australia's sustained economic growth has resulted in significant improvements in living standards for Australians in every income decile, but it is growth in households' *sources of income* that affects inequality more than the rate of economic growth.

3 During periods of more rapid economic growth, wealthy individuals who own capital tend to benefit more because of a rapid increase in income from capital. Since the global financial crisis, income inequality has fallen because of lower returns on capital and continued growth in income from labour.

4 Australia's progressive income tax and its system of targeted transfer payments are effective in reducing income inequality, lowering the Gini coefficient by 30 per cent (in other words, reducing inequality by around one-third). This highlights the value of comparing household incomes before and after transfer payments (private income versus equivalised disposable income).

5 One of the shortcomings of looking only at the distribution of income is that these figures do not capture in-kind transfers from government, such as health, education, childcare subsidies and government housing. It is also useful to compare the distribution of *final consumption* in the economy, since a household's consumption contributes more directly to their wellbeing than income. Measures of the distribution of final consumption tend to show a further decrease in the Gini coefficient of around 30 per cent (although these measures also show a greater increase in inequality during recent decades).

6 In overall terms, Australia's income inequality is around average for the OECD. Despite growing inequality in wealth distribution, in particular with the very wealthy securing an increasing share of revenue, a comparison of OECD figures shows that Australia ranks 8th most equal in wealth distribution among the OECD's 28 members.

7 Inter-generational mobility in Australia is also similar to other OECD economies. An Australian male is around four times as likely to be in the top decile for lifetime earnings if his father was in the 95th percentile than in the 5th percentile.

8 Although the distribution of income itself is stable over time, most Australians move across the income distribution over time due to changing life circumstances such as study, changes in employment, family responsibilities, divorce and retirement. It is important to take into account the fact that incomes vary throughout a person's life stages. This means that a much smaller number of people remain stuck in a specific income decile. The average Australian moves across five income deciles during a 15-year period, and income mobility in Australia ranks 10th in the OECD, just above average.

9 Experience of significant economic disadvantage is temporary for most Australians, with 79 per cent of poverty spells lasting less than three years, and just 6 per cent lasting more than six years.

10 Persistent and recurrent poverty is concentrated among the 3 per cent of households, or around 700,000 people, who have remained stuck in the bottom two deciles over the past three decades. This level has not declined. Those most prone to multiple deprivation are single-parent or Indigenous families, unemployed, or people with disabilities.

"No single metric is sufficient to give a definitive answer to the seemingly straightforward question: have inequality, poverty and disadvantage in Australia risen, fallen or remained steady in recent years? …

Our bottom line conclusion [is] that inequality has risen slightly over recent decades … This is most evident with respect to the distribution of wealth and consumption. The trend in income distribution is more contested territory …

The inequality story is nuanced … One way of summing it up is that many Australians experience economic disadvantage at some stage in their lives, but for most of us, it is temporary … But another group of Australians experience entrenched economic disadvantage: they are stuck at the bottom end of the mobility ladder and less able to embrace new opportunities."

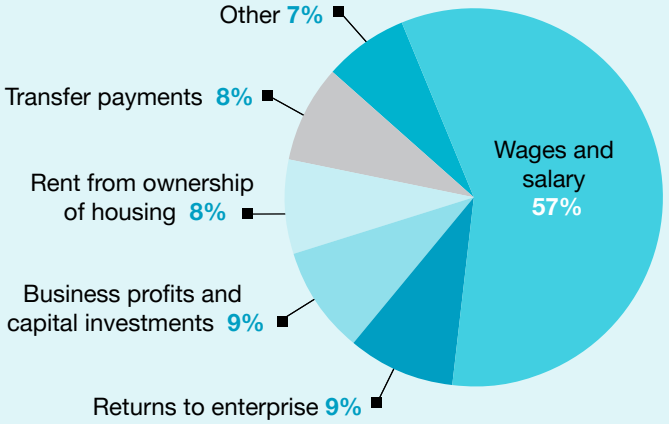
– Jonathan Coppel, Commissioner (Productivity Commission), Trends in Economic Inequality over 27 Years of Economic Growth, Economic and Social Outlook conference, 12 October 2018.

11.3 Sources of income and wealth

We can gain a better insight into the factors influencing the distribution of income and wealth by looking at their sources and how each factor of production contributes to income or wealth levels. For household income, these are:

- **Wages from the sale of labour**: This is the main source of income for consumers. It comes in the form of wage or salary payments for labour when consumers participate in the labour market. It also includes non-wage income such as bonuses, fringe benefits and employer contributions to superannuation. The Australian Bureau of Statistics categorises this as "Compensation of employees", and it is also sometimes described as "Returns to labour".
- **Rent from land**: Many consumers own land that becomes a source of income when it is rented. For example, consumers may own an investment property that generates rental income.
- **Earnings from capital**: Returns from the ownership of capital are a significant source of household income. These returns might include earnings from financial assets such as investment funds, superannuation accounts and bank deposits, or the ownership of shares (or whole companies). Because ownership of capital is highly concentrated among the most wealthy households in Australia, a large share of this type of earnings goes to the wealthiest households. This is the main way in which inequality in the distribution of wealth contributes to inequality in the distribution of income.
- **Profit from entrepreneurship**: A substantial number of Australians are involved in operating businesses, especially small businesses. If the business makes a profit this income is considered a return for their use of entrepreneurial skill. The calculation for returns to enterprise is especially complicated, but the best estimate comes from the Australian Bureau of Statistics' calculation of mixed income from unincorporated enterprises, which is used in figure 11.5.
- **Transfer payments**: A significant proportion of household income in Australia is received by way of social security or social welfare, also known as transfer payments or government benefits, as figure 11.5 indicates. Australian statistics measure two types of social benefits: social assistance benefits (welfare payments) and social insurance benefits (such as workers compensation). This is income collected through taxation and then transferred from governments to households. Over a third of the total income

Transfer payments are payments from the government to assist people with basic costs of living. A number of terms are commonly used for transfer payments including: social welfare payments, government benefits, social security, income support and Centrelink payments.



Source: ABS cat. no. 5206, March 2020. Note that the ABS uses complicated technical categories to measure income sources that do not align directly to the factors of production, so the above chart involves simplifications.

Figure 11.5 – Sources of household income

tax that is collected is used to pay unemployment and sickness benefits, age and disability pensions, family allowances and similar social security payments. The effects of taxation, transfer payments and other assistance on the distribution of income are examined in more detail in Section 11.6.

Sources of wealth in Australia

Household net worth is used by the Australian Bureau of Statistics to measure private sector wealth in Australia. Net worth is the extent to which the value of household assets such as houses and savings (that is, the things they own) exceeds the value of their liabilities such as loans (that is, the things they owe).

In 2017–18, the average value of household assets was $1.2 million, while the average level of household liabilities (debts) was $183,900. This gives an average net worth for Australian households of $1.02 million. Figure 11.6 shows the composition of household assets.

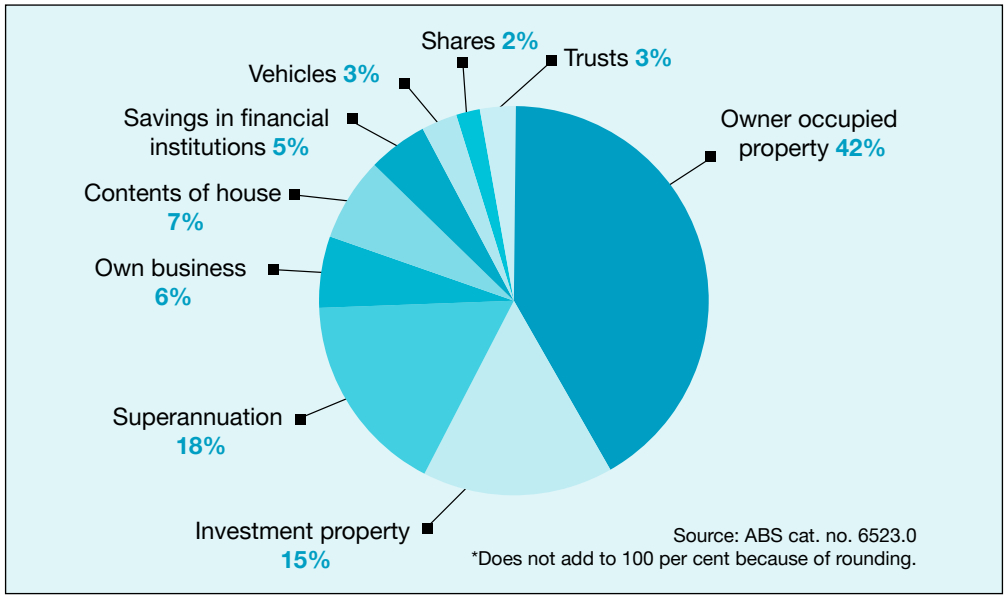


Figure 11.6 – The composition of household wealth, 2017–18

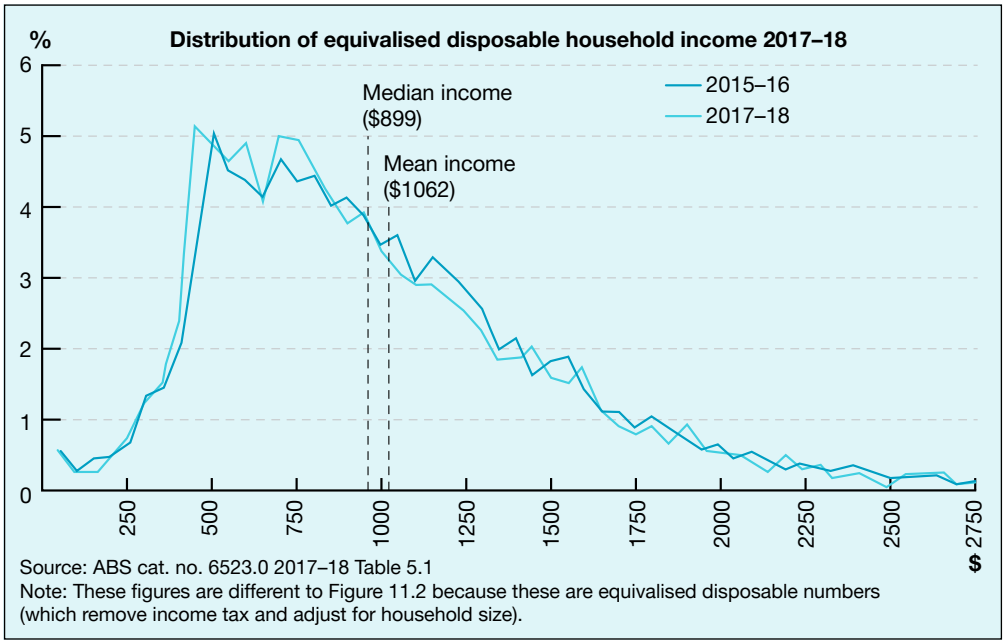
The relative importance of the two largest components of household wealth, housing and superannuation, have increased in recent years while savings and ownership of business assets have declined. Figure 11.6 highlights how more value is held in owner-occupied properties than any other asset, accounting for 42 per cent of total assets with an average value of $500,600. Combined with investment properties, real estate assets comprise 57 per cent of household wealth in Australia. Around two-thirds of Australian households own their primary place of residence, and 24 per cent own other property. Superannuation funds are the second largest household asset and the largest financial asset, averaging $213,700 per household across all households. Superannuation funds accounted for 18 per cent of household assets.

reviewquestions

1 Explain how households derive income from the ownership of capital.
2 Discuss the importance of transfer payments.
3 Outline the THREE main sources of household income in Australia.

11.4 Trends in the distribution of income and wealth

In recent decades, Australia has experienced an increase in overall levels of inequality. In this section we find that some groups in society are more affected by inequality than others, depending on their age, qualifications, gender, occupation, ethnic background, family type and where they live in Australia.



11.7 – Distribution of household income 2017–18

Figure 11.7 highlights the extent of income inequality in Australia, with weekly disposable incomes below $900 for the majority of households. Over half of the population earn less than the mean income of $1062 per week, indicating that income distribution is asymmetric – a relatively small number of households have relatively high incomes, and a large number of households have relatively low incomes.

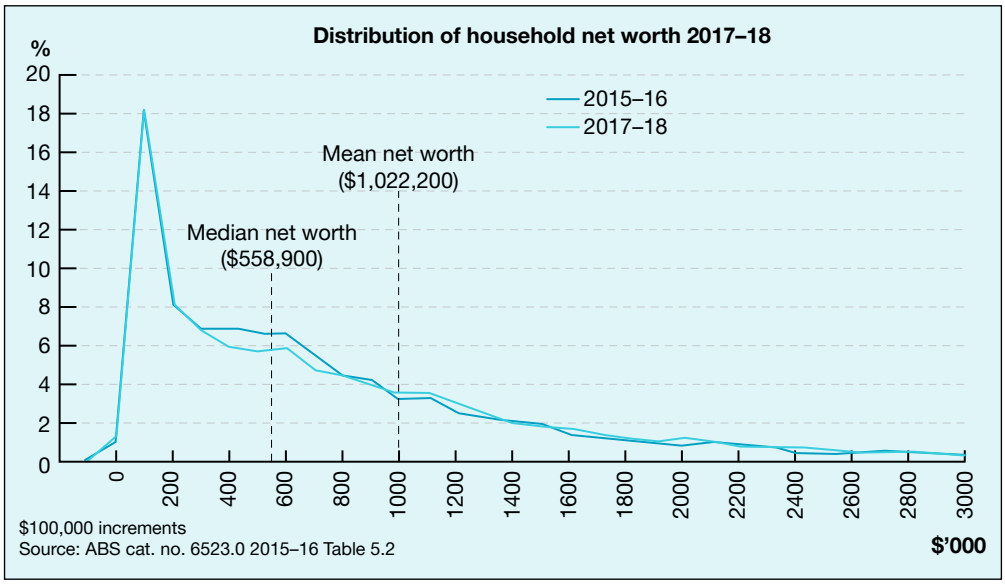


Figure 11.8 – Distribution of household net worth, 2017–18

Figure 11.8 highlights the extent of wealth inequality in Australia, and that wealth is more unequally distributed than income. More than 80 per cent of households have a net worth

that is below the average because wealth is so highly concentrated. The lowest 20 per cent of households have a mean net worth of $25,200. In comparison, the mean net worth of the wealthiest 20 per cent of households is more than 93 times that of the lowest 20 per cent of households, at $3.2 million. This indicates a highly unequal distribution of wealth and an even greater concentration of wealth at the "top end" compared with the distribution of income. To be in the wealthiest 1 per cent, a household must have net assets exceeding $6 million.

Age and education

	Age groups						
	20 and under	**21–34**	**35–44**	**45–54**	**55–65**	**65 and over**	**Average all ages**
All persons ($)	996	1360	1813	1823	1711	1539	1666
Source: ABS cat. no. 6306 Table 1							

Figure 11.9 – Mean weekly income by age for full-time workers, May 2018

Income varies over the course of a person's life, although it tends to remain highest between the ages of 35 and 54 – the main years of a person's working life. Figure 11.9 indicates that the 45–54 age bracket earns the highest mean weekly earnings ($1823) while those aged 20 and under earn the lowest ($966), followed by those aged 21–34 ($1360). The table suggests that income levels are lower in the earlier years of working life (since people have less education and experience and hold lower-paying jobs). While figure 11.9 focuses on full-time work, workers in younger age brackets may also be employed in casual or part-time jobs which are typically lower-paying, even when number of hours is taken into account.

The distribution of wealth follows a similar pattern according to a person's age – rising for most of their lifetime, and falling away as people get older and move into retirement. Figure 11.10 highlights the influence of educational qualifications on a person's income. Not surprisingly, those with higher qualifications such as tertiary degrees and diplomas enjoy income levels much higher than those with vocational training or no qualifications beyond high school. Average weekly earnings are highest for those with a postgraduate degree ($1600), and lowest for those without a post-school qualification ($820). Employees who had a post-school qualification had median weekly earnings $430 higher than employees without a post-school qualification.

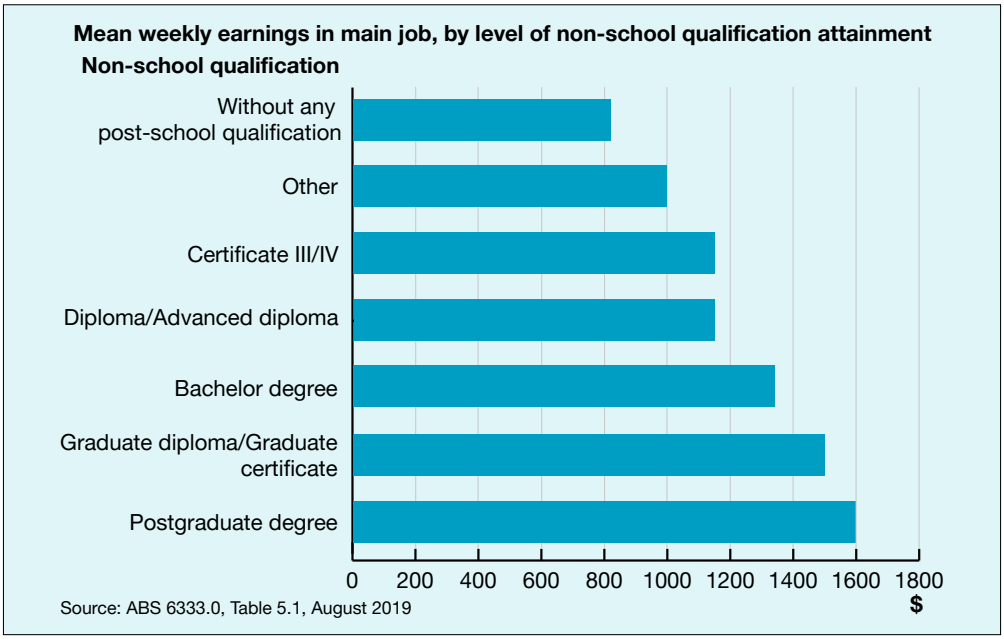


Figure 11.10 – Average earnings by level of educational attainment

Gender and occupation

Year	Males ($)	Females ($)
1985	400	328
1990	567	470
1995	689	576
2000	829	695
2005	1050	892
2010	1334	1105
2015	1592	1307
2016	1614	1352
2017	1637	1387
2018	1677	1433
2019	1728	1486
2020	1750	1508

Source: ABS cat. no. 6302, Table 10A, 10D

Figure 11.11 – Average weekly ordinary time earnings

Gender is another important influence on income distribution. Figure 11.11 shows that full-time female workers earn less than males. Furthermore, there seems to be little change in wage relativities since the ABS began publishing wages data for women more than three decades ago. In 1985, women in full-time jobs were earning 82 per cent of male earnings and in 2020 this had risen only modestly to 86 per cent. Part of this difference in the earnings of males and females can be explained by historic human capital factors – due to past attitudes concerning the role of women in society, females had fewer opportunities to acquire education, skills and qualifications. However, even after taking into account differences in jobs and working hours, the average weekly earnings of females are still lower than those of males. The gender pay gap is influenced by a variety of factors including that occupations with a high proportion of female employees are still generally paid lower wages; women still have greater home caring responsibilities than men in many families, and there are fewer senior roles for employees who choose to work part-time (as a higher proportion of women do). In addition to these economic factors, women still experience different forms of direct and indirect discrimination.

This presence of discrimination is confirmed by an observation of the average earnings of males and females working full-time in the same occupation group, presented in figure 11.12. Even after we have taken occupational categories into account, on average, female employees earn less than their male counterparts, regardless of whether they have the same qualifications and experience as men. Women earn on average around $240 per week less than men.

Figure 11.12 shows that jobs requiring higher levels of education, training and experience, such as engineers and school teachers, offer higher income levels. It also shows significant variations in the gender pay gap between occupations.

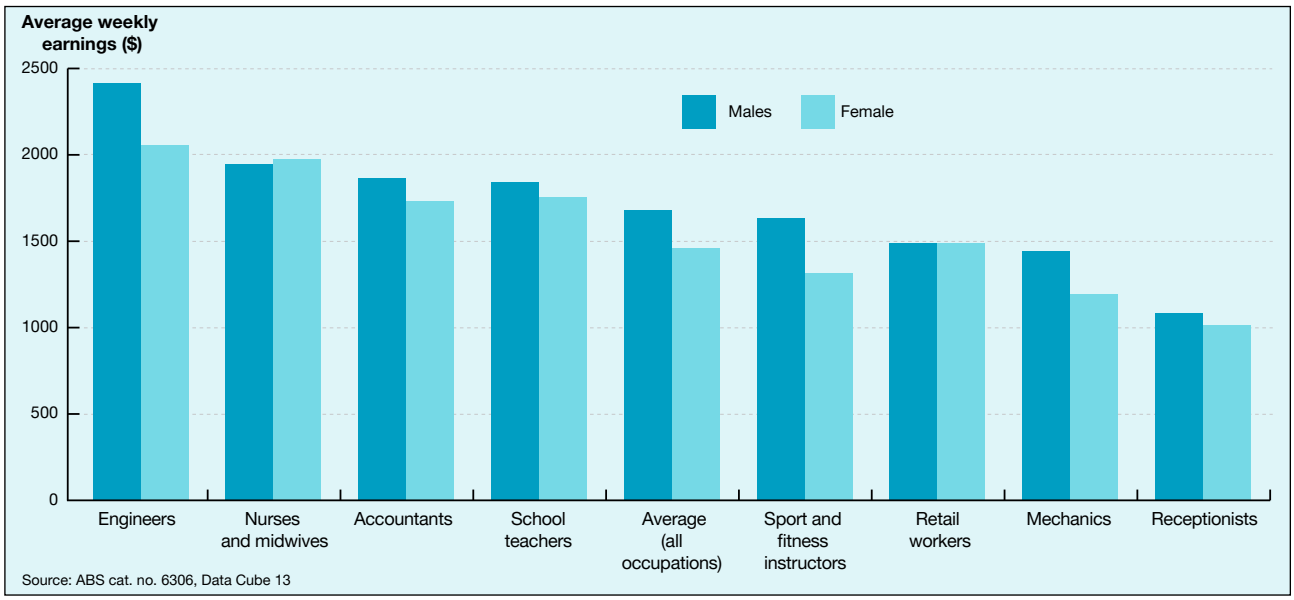


Figure 11.12 – Average weekly earnings by gender for a range of occupations, 2018

Ethnic and cultural background

Ethnic and cultural background also has an influence on the distribution of income. In 2020, 30 per cent of Australians were born overseas, a higher number than the United States (15 per cent), the United Kingdom (14 per cent) or New Zealand (25 per cent). Almost half – 49 per cent – of Australians were either born overseas (making them a first generation Australian) or have at least one parent who was born overseas (making them a second generation Australian). Around 55 per cent of migrants come from countries that are not mainly English-speaking nations.

An analysis of the economic data dispels many popular assumptions relating to recent migrants. For example, unemployment rates for migrants are around the same as those for people born in Australia, although when migrants first arrive in Australia they are more likely to be unemployed. Migrants who have been in Australia for under five years had an unemployment rate of over 9 per cent, according to the 2019 Labour Market Update from the Australian Department of Jobs and Small Business, but for migrants who came to Australia more than ten years ago, the rate of unemployment is on par with Australian-born persons. Migrants who have become Australian citizens have a higher labour force participation rate than the general working age population, of 79 per cent compared to 68 per cent for workers born in Australia. A larger difference exists between those who have come to Australia under the skilled migration program, with a participation rate of 85 per cent, compared to a participation rate of 64 per cent for those coming under the family migration program (partly due to the younger age of skilled compared to family reunion migrants).

Given that 30 per cent of Australia's population was born overseas, there is surprisingly little data on the relationship between migrant status and household income and wealth. The data in figure 11.13 is consistent with other research in suggesting that compared with native-born people, Australians with a migrant background tend to have higher incomes if they come from English speaking countries, and lower incomes if they come from non-English speaking backgrounds. On average, English speaking migrants earned between $1193 and $3979 more (for males and females respectively), while those from non-English speaking backgrounds generally earned around $8000 less per year, and also had significantly less wealth.

Migrant background	Males ($)	Females ($)
NESB* migrants from Europe, annual income	- $8535	- $4989
NESB* migrants from other regions, annual income	- $7822	- $8594
ESB* migrants	+ $1193	+ $3979
NESB* migrants from Europe, household wealth	- $382,512	- $327,661

Source: Melbourne Institute (2015), *Household Income and Labour Dynamics Survey: Selected Findings*. Data is for persons aged 35–54
*Non-English Speaking Background and English-Speaking Background

Figure 11.13 – Impact of migrant status on income and wealth (compared to native-born Australians)

The pattern of higher incomes for recent migrants from **English speaking countries** – (the United Kingdom, New Zealand, the United States, Canada, Ireland and South Africa) reflects the larger proportion of highly skilled and professionally qualified migrants among this group. Migrants from mainly English speaking countries who have been in Australia for a long time have similar income trends to Australian born people – that is, their income levels are lower and more evenly spread compared with recent migrants.

The picture for migrants from **non-English speaking countries** is different. Incomes are significantly lower for migrants from non-English speaking backgrounds. Similarly, underemployment is 17 per cent for migrants from non-English speaking backgrounds, compared to 11 per cent for migrants from English speaking backgrounds. This may reflect the fact that even if non-English speaking background migrants have the equivalent skills and experience of their Australian-born counterparts, they may not be able to obtain better paid jobs if they do not have a good command of the English language. Longstanding migrants from non-English speaking countries nevertheless have a very similar income distribution to Australian born people. This is one of the reasons why compared to other economies, Australia ranks well for its integration of migrants (for example, ranking 8th in a group of 38 economies in the Migrant Integration Policy Index).

Several factors can influence how quickly and successfully new migrants integrate into the labour market in Australia, including education level, age and English speaking proficiency. Another significant factor is whether migrants can access networks of former migrants in Australia who share their background. As evidence of this, in 2015 economists at the University of Auckland published research showing that migrants to Australia find work and integrate into the economy more quickly when they move to suburbs with a high concentration of people from the same backgrounds as them.

INDIGENOUS AUSTRALIANS

Indigenous Australians (Aboriginal and Torres Strait Islanders) comprise around 3.5 per cent of the Australian population, or around 798,400 people, according to the ABS in 2018. Compared to the rest of the population, Indigenous Australians are much more likely to live in remote parts of Australia, more likely to have low levels of income and wealth and are a much younger population with an average age of 23 compared to 38 for the general population. This reflects higher fertility rates and higher mortality rates for the Aboriginal population than for non-indigenous Australians. According to the Census publication *Characteristics of Aboriginal and Torres Strait Islander Australians 2016*, median weekly disposable income for Indigenous households was $1203 compared to $1438 for the general population.

The Australian Government's *Closing the Gap: Report 2020* highlighted that:

- Nationally, the employment rate for indigenous Australians saw a small increase to 49 per cent in 2019, from 48 per cent in 2006. Over the same period, the non-indigenous employment rate was broadly stable, at around 75 per cent. Further, the employment rate gap (that is, the difference between the Indigenous employment rate and the non-Indigenous employment rate) in regions classed as 'outer regional' and 'remote' is around 35 per cent.
- Although life expectancy for Aboriginal people has improved 10 per cent since 2006, the life expectancy of non-Indigenous Australians has improved at a similar rate. This means the gap between Indigenous and non-Indigenous life expectancy has not narrowed and remains large. The life expectancy for Indigenous males is 71.6 years and 75.6 for females, both of which are around 8 years less than non-Indigenous Australians. The target to close the gap in life expectancy by 2031 is not on track. While mortality rates from circulatory diseases have decreased over the last decade, mortality rates from cancer have increased disproportionately. A higher than average rate of smoking (with 41 per cent of Indigenous Australians smoking daily) in particular has contributed to an increased cancer mortality rate.
- Attendance rates for Indigenous students, at 82 per cent in 2019, showed no improvement during the previous five years, and remains below the rate for non-Indigenous students (around 92 per cent).

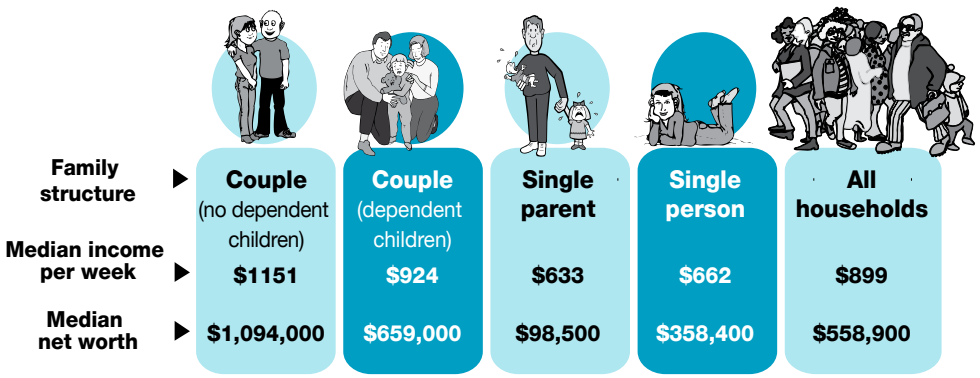
The policy solutions to address Indigenous disadvantage are complex, and many policy approaches have struggled to achieve their aims. Nonetheless, the *Closing the Gap* report noted progress in reducing Indigenous child mortality by 35 per cent, achieving a 95 per cent enrolment rate for Indigenous four-year-olds in early childhood education by 2025 is on track, as is halving the gap between Indigenous and non-Indigenous Year 12 attainment which has fallen 13 per cent since 2016. Although there is a persistent gap in opportunities between Indigenous and non-Indigenous Australians, an increasing number of Indigenous Australians are progressing to higher educational qualifications.



For more information on the economic characteristics of Indigenous Australians, see ABS catalogue 4715 and 3238 at **www.abs.gov.au**

Family structure

Family structure is another important factor influencing trends in income inequality, particularly because of recent demographic changes in Australia, such as the growth of female participation in the workforce, decreasing family sizes as couples raise fewer children on average, and the increasing proportion of people living alone.



Source: ABS cat. no. 6523. Table 9.1 and 9.2, 2017–18. Median equivalised disposable income.

Figure 11.14 – Median income and net worth by family type, 2017–18

Figure 11.14 reveals a large disparity in family income and wealth levels. One-person households and single-parent households received weekly income levels significantly below the median of $899 per week. Single-parent households, who have a weekly income around one-third below the average for all family structures, were the worst off. This is partly explained by the fact that only 14 per cent of single parents of children aged less than 4 years are employed full-time. Although single parents work longer hours as their children grow older, they still work fewer hours than couples and therefore have lower incomes. Forty per cent of single-person households are in the bottom income quintile. This is likely to reflect lower rates of full-time employment, driven by caring responsibilities. Couples without dependent children were the highest income family structure and received $1151 per person per week.

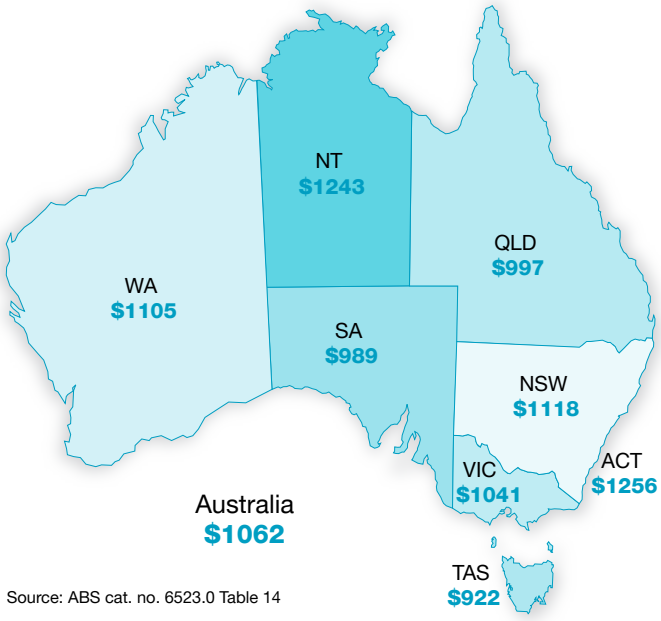
It is important to note the influence of age in interpreting the above findings because of the relationship between an individual's age and the family structure to which an individual belongs. Couples with dependent children have a much lower proportion of household members in paid work and we might expect them to have lower average incomes than couples without dependents. A study in 2020 by the Australian Institute of Health and Welfare titled *Australia's Children* found that one in four low-income households in Australia had children under 14 years of age. However, couples with children are also more likely to be older, so the adults in the household are more likely to have higher individual incomes, even if they do have to share it among more household members. Additionally, the major reason for the low income levels of single-person households is because of the large number of aged people who are no longer in the paid workforce and who may rely on government benefits as their primary source of income.

The distribution of wealth by family type shows a similar pattern to income distribution, with couple-households enjoying significantly higher wealth levels compared with single-parent and single-person households. The main difference is that single-person households have much more wealth than single-parent households despite their similar weekly incomes. This primarily reflects the influence of "income-poor and asset-rich" elderly people in the single-person category who have paid off their mortgages and now live off modest government pensions or other retirement incomes.

Geography

In recent years, inequality between different regions has become an issue of significant economic and social debate in Australia. Regional factors are not only influencing demographic change – as people in disadvantaged areas take flight to more prosperous areas – but they have also been a major issue driving the direction of government policies relating to income inequality. At one level, inequality exists between different states in Australia, but perhaps more significant is the inequality between people in major cities and regional areas, and between better-off and less-well-off suburbs in major cities.

Figure 11.15 highlights the inequality in household income distribution between Australia's states and territories, with the Australian Capital Territory and Northern Territory enjoying the highest household incomes of $1256 and $1243 and Tasmania suffering the lowest income of $922 per week. Western Australia and the Northern Territory – the regions with the largest shares of economic activity in mining – have experienced a lasting benefit from the mining boom and now have incomes above the majority of the eastern states. Age also plays a role in interstate inequality, with areas with younger populations such as the Australian Capital Territory and New South Wales having higher incomes than states with older populations like Tasmania. An important limitation of this data is that it does not take into account differences in the cost of living. For example, Sydneysiders are paying the highest weekly rents in the country, with the average price of renting a property in Sydney in 2019 at $582 per week. In contrast, the weekly median rent for a Perth property is just $385. So although incomes might be similar in both cities, actual living costs might be lower in a smaller city such as Perth, resulting in higher living standards.



Source: ABS cat. no. 6523.0 Table 14

Figure 11.15 – Mean disposable income per week, Australian states 2017–18

Inequality also exists **within states**, in particular between the major cities and the rest of the state. A study released by the Committee for Economic Development of Australia in 2018, called *How Unequal? Insights on Inequality*, found that half of NSW's most disadvantaged regions were concentrated in just 6 per cent of the state (or 37 postcodes), and that this geographical inequality had barely changed since 2007. Figure 11.16 shows that in New South Wales, the population living in the capital city area earned 32 per cent more than those in rural areas. Even larger differences can exist for net wealth, reflecting the big differences between property values in cities compared to regional areas. The 54 per cent higher net worth for Sydney households is explained by their property assets, averaging $806,000 for their home, are worth more than double the $369,000 in average home values for households in the rest of NSW. In interpreting these statistics, however, it is important to remember that as with interstate comparisons, cost-of-living differences mean that raw income levels can exaggerate the true extent of income inequality between geographic areas.

	NSW	Vic	Qld	SA	WA	Tas	Australia
Mean weekly disposable income capital city area	1218	1095	1040	1035	1142	1002	**1130**
Mean weekly income outside capital city	925	864	956	822	946	858	**918**
Average net worth capital city area	1,512,000	1,121,000	774,200	818,900	962,600	782,100	**1,144,200**
Average net worth	1,261,000	1,046,200	741,600	786,200	955,200	708,800	**1,022,200**
Source: ABS cat. no. 6523.0 Table 13.1, 13.2, 13.8, 13.11, 13.12							

Figure 11.16 – Income and wealth by state and region, 2017–18

AUSTRALIA: THE LAND OF UNEQUAL OPPORTUNITIES?

Australians like to think of our country as a land of opportunity, but economic analysis suggests that there is much less social mobility than we like to think. One of the most important factors determining your future qualifications, job and income is what your parents do. This means that just as richer families pass down wealth from one generation to the next, it is also true that education levels and income levels tend to be handed down the generations as well.

Two studies of inequality in Australia in recent years highlight the nature of the debate about inequality and its causes.

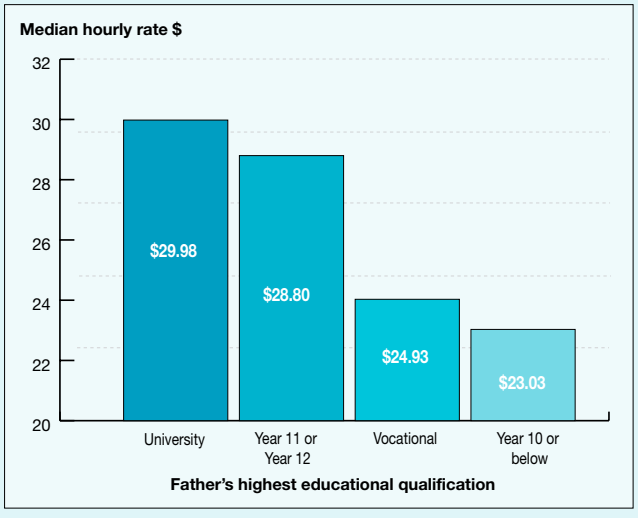
A report, *Understanding Inequality in Australia*, published by the Institute of Public Affairs in 2017, argued that problems with rising inequality in Australia were often exaggerated, and that different data sources reach different conclusions. It argued that Australia is around average for its levels of inequality if not better than average, that if anything inequality is in decline, and that there was greater inequality in the pre-1950 period than today.

The IPA report also placed emphasis on the role of family and local community in influencing the values of individuals around work and study, which in turn have significant impacts upon educational outcomes. It argued that to understand inequality we need to look beyond measures of income and take account of the fact that some individuals are happier with a lower income but greater leisure time, or the opportunity to do work that they most enjoy. The report made the case that two children who might have otherwise equal ability and inclination can have very different trajectories depending on the stability of their home conditions, the quality of their education, and whether the community in which they grow up values and celebrates hard work and success.

The IPA report noted the importance of housing prices to inequality, noting that while 98 per cent of Australians want to own their own home, housing has never been more unaffordable than it is today. The average house price is 6.2 times greater than the average annual income, a record level. The report also noted concerns that student results at Australia's schools have been in structural decline since Australia began to measure its student PISA scores (the Programme for International Student Assessment being an internationally accepted measure of school student skills). This decline has taken place across all three categories of mathematics, science and reading literacy.

In 2018 the Australia Institute published a report on similar issues, *Gini out of the bottle*, and came to different conclusions to the IPA, finding that "the clear long-term trend has been towards worsening inequality". Its analysis identified a trend towards increasing concentration of wealth among not just the highest income earning decile in Australia (whose share of income has risen from 26 to 31 per cent in the past two decades), but among an even smaller elite group within this decile. On this basis it warned against the Government's plan to abolish the 37c marginal rate for personal income tax, since this would disproportionately benefit higher income earners and increase inequality.

The IPA and the Australia Institute reports agree that it is more meaningful to look at comparisons based on equivalised disposable income rather than gross income, since this reflects the real circumstances of households after redistribution of income through taxation and social security payments. The Australia Institute noted that the Gini coefficient falls from 0.434 with gross income to 0.323 with equivalised disposable income. Nevertheless, it also noted that this places Australia 22nd out of 34 OECD countries, in other words having a less equal distribution of income than 21 countries in the OECD. In 2004, Australia had ranked 17th, suggesting that relative to other countries Australia is becoming more unequal – reflecting an argument that is likely to continue for a long time to come.



THE RELATIONSHIP BETWEEN INCOME AND WEALTH

Although the distribution of wealth in Australia is far more unequal than the distribution of income, wealth and income are closely related. Individuals with high incomes tend to also enjoy greater levels of wealth compared to low income earners.

Household income can be used to purchase goods and services, service debts and acquire assets. The more income a household has left after covering living expenses, the greater its capacity to build wealth. Also, the more wealth a household has, the greater its capacity to generate income. A household can generate higher income in the form of rent from a property investment, or dividends from a share portfolio. But these assets may not be affordable until income levels reach a certain threshold. In this way, an increase in income inequality can result in a widening of wealth inequality, and an increase in wealth inequality can result in an increase in income inequality. This helps explain why the gap between the incomes of Australia's youngest and oldest age groups has grown since 2008.

A Productivity Commission research paper in July 2020 found a trend towards above-average income growth among over 65s in the years that followed the global financial crisis, and below-average income growth among under 35s. The largest contributing factor was that over 65s enjoyed their fastest income growth not from work or government transfers, but from their wealth assets (such as rent and dividends).

reviewquestions

1. Describe the recent trends of income inequality within Australia, with reference to specific demographic groups.
2. Outline the effect that geographic location may have on income and wealth inequality in Australia.
3. Analyse possible reasons behind the disparity in average earnings between men and women.
4. Discuss the accuracy of using the average weekly income measurement as a measure of income distribution in Australia.

11.5 The costs and benefits of inequality

There are advantages and disadvantages associated with an inequality in the distribution of income. In general, inequality has some limited economic benefits but significant social costs.

At one end of the spectrum, some economists argue that inequality is a natural consequence of the free market functioning effectively since each individual receives a share of income according to their marginal productivity. In addition, they contend that inequality has the advantage of creating and strengthening individuals' incentives and increasing their share of output. In other words, people will be encouraged to work harder to gain a larger share in the distribution of income.

At the other end of the spectrum, some economists emphasise the social costs associated with inequality. They argue that the system of free market capitalism divides society into different classes (for example, working class, middle class and upper class) and that the system tends to entrench high levels of inequality and poverty.

Economic costs of inequality

Inequality reduces overall utility

Inequality in the distribution of income reduces the total utility, or satisfaction, in society. This is because people on higher incomes gain less utility from an increase in income than people on lower incomes. This is explained by the principle of diminishing marginal utility: as more of a good is consumed it will provide progressively less utility to the consumer. This means that an extra $1 of income is worth more to a lower income earner than to a higher income earner. A more equitable distribution of income would therefore increase total utility (in other words, create a greater overall level of satisfaction in society). However, although the concept of utility (similar to the concept of happiness) is important, it is difficult to measure accurately and consistently.

Inequality can reduce economic growth

Low income earners spend a higher proportion of their income than higher income earners, since the cost of basic essentials such as housing and food take a higher proportion of their income. In economic terms, lower income earners have a higher marginal propensity to consume (MPC) because they spend more of each additional dollar they earn than higher income earners. That means that in an economy with a high level of income inequality, there will be a relatively lower level of consumption and higher level of savings. This in turn would lead to lower economic activity, employment, investment and living standards.

Research into the consequences of rising inequality in recent decades is providing evidence that higher levels of inequality tend to lead to lower levels of economic growth. One study by the OECD estimated that the rise in income inequality in OECD economies between 1985 and 2005 reduced cumulative growth by 4.7 per cent during the two decades from 1990 to 2010. One of the main reasons for this negative economic impact is that as inequality increases, lower income households are less able to access educational opportunities, an issue highlighted in a 2019 IMF research paper. Over time, with lower educational attainment individuals are less likely to stay in employment and the economy will experience the costs of higher unemployment and lower participation rates.

> "An increase in income inequality tends to become entrenched across generations due to various market failures connected with social stratification. This retards growth, for example by holding back human capital development or causing talent misallocation …
>
> Unequal access to education, unequal access to labor markets and unequal access to finance, separately or in various combinations, could amplify the negative impact that a worsening of the income distribution has on growth."
>
> *– International Monetary Fund (2019), IMF Working Paper: Inequality of Opportunity, Inequality of Income and Economic Growth*

Inequality creates conspicuous consumption

Some economists argue that inequality in the distribution of income creates a "leisure class" consisting of the higher income earners in society. The leisure class puts a large proportion of their money towards "conspicuous consumption", which is the consumption of expensive goods and services, such as yachts, private jets and expensive jewellery. This can contribute towards a culture where individuals' sense of their own worth depends on their access to a particular lifestyle.

Inequality creates poverty and social problems

Inequality in income distribution causes relative poverty. Poverty contributes to the development of an underclass of low income earners, which has limited access to educational opportunities and can suffer health and other disadvantages that may reduce labour force participation and create a self-perpetuating cycle of disadvantage.

For more details on research into the economic and social costs of inequality visit the website of the Equality Trust, which collects the leading research on these issues: **www.equalitytrust.co.uk**

Inequality increases the cost of welfare support

Governments provide safety net income support for people out of work, the aged and people with disabilities. Higher levels of inequality place increased demands on government revenue as a larger number of people on low incomes may require government assistance. In addition, economic research suggests that entrenched disadvantage imposes proportionately greater costs on governments as individuals cease to participate in the workforce and rely more heavily on government services.

Social costs of inequality

The two major social costs of inequality are those associated with social-class divisions and poverty.

Social class divisions

The distribution of income and wealth creates class distinctions in modern economies, such as between groups broadly described as upper class, middle class and working class. Class divisions can result in tensions between people and between different regions, as well as higher levels of crime and social disorder. Wage disputes between workers and employers,

ENTRENCHED DIGITAL DISADVANTAGE IN AUSTRALIA

Simple measures of income inequality give us a limited understanding of how many people in Australia live with entrenched disadvantage. The COVID-19 pandemic highlighted an increasingly important dimension of inequality in Australia: the 'digital divide'. When stringent lockdown restrictions were imposed in March 2020, many students and employees were able to shift to work or study remotely, because they had the training, experience, equipment, reliable internet connections and a quiet place to work at home without interruptions. For those who did not have these things, the lockdown was far harder and its negative impacts potentially more long-lasting.

This issue was highlighted by the Committee for Economic Development in Australia in its 2020 publication, "How COVID-19 is worsening digital inequality". It noted that one reason for the uneven way in which the pandemic was affecting Australians was that the rapid shift to digital communication had left some people behind. Further, Australia's COVID-19 strategy did little to address the digital divide. This made it harder to cope with the pandemic for those with accessibility and affordability constraints – including rural Australians, the elderly population, low-income households and Australians with disabilities.

The digital divide is another illustration of how inequality can become self-reproducing. Learning remotely is harder for students from lower income backgrounds, who often do not have access to newer technology, fast internet connections or a place at home to study without interruptions. The result can be lower educational outcomes for people in those groups, contributing to greater inequality.

> "For the digitally excluded – people lacking effective and affordable internet access and digital skills – the transition is deepening social inequality. Given the loss of income suffered by those who have lost work and businesses as a result of the crisis, the number of digitally excluded may rise, widening the divide itself.
>
> Without an immediate and coordinated response from governments and telcos, a widening and deepening digital divide will generate serious social and economic harm. It is also likely to persist once the pandemic is over since many of the systems and practices transferred online are likely to remain digitally mediated."
>
> *– CEDA (2020),*
> *"How COVID-19 is worsening digital inequality"*

in which workers try to improve their income level, are a common cause of dispute. These divisions can sometimes lead to social and economic instability, especially in developing economies where the gains of rising prosperity are often unequally distributed.

Poverty

Australia does not suffer from a high level of absolute poverty, but it does experience significant levels of relative poverty. The 2019 Household Income and Labour Dynamics in Australia (HILDA) survey concluded, based on data collected from 2000 to 2018, that around 10.4 per cent of Australians are living in poverty at any one time, but that over half of the Australians who experience poverty over a 10-year period are only in poverty for one or two years. However, around 3 per cent of the Australian population is persistently in poverty. Poverty tends to trap families into a vicious cycle of low incomes and limited economic opportunities. High poverty levels also tend to be associated with increased levels of crime, suicide, disease and reduced life expectancy.

Economic benefits of inequality

Income inequality can lead to an increase in the productive capacity of resources and thus an increase in real GDP per capita. Economic benefits are mainly derived from the **incentive effects** of inequality.

Inequality encourages the labour force to increase education and skill levels

If those with higher qualifications and skills reap higher income rewards, new entrants and existing participants in the labour force will be encouraged to improve their education and skill levels. This assumes that children growing up in poor households still have the opportunity to access a good education, perform well at school and afford higher education. If children in low income groups do not have the opportunity of gaining good educational standards, an economy is likely to suffer in the longer term from lower levels of productivity growth. Income inequality may then encourage an increase in the quality of the labour force.

Inequality encourages the labour force to work longer and harder

The potential to earn higher incomes produces an incentive for workers to work longer hours or to work overtime, which may enhance economic growth. However, workers will only be willing to give up leisure in order to work longer hours when they feel the extra income is more valuable than their leisure time.

In addition, if increased output is rewarded through higher pay, this encourages improved labour productivity.

Inequality makes the labour force more mobile

Higher incomes can act as an incentive to encourage labour to move to where it is most needed. A more mobile labour force will lead to a more efficient allocation of resources and a higher rate of economic growth. This has been an important factor in the past decade as high earnings in mining jobs attracted workers to remote parts of Australia, such as the Northern Territory and the north-west of the country.

Inequality encourages entrepreneurs to accept risks more readily

The prospect of considerable income rewards accruing to entrepreneurs may be necessary to encourage them to take the risks associated with new investment and innovation. If entrepreneurs received no extra reward for risk-taking, there would be fewer entrepreneurs and businesses, a lower rate of economic growth, weaker investment, less innovation, fewer jobs and a reduced productive capacity in the economy.

Inequality creates the potential for higher savings and capital formation

There is a strong relationship between income and saving levels. The higher the income an individual earns, the greater the proportion of income that will be saved; and likewise, the

lower the income, the lower the proportion of savings. In theory, greater income inequality should encourage increased savings in the economy because of the greater number of higher income earners. Increased savings should reduce Australia's reliance upon foreign capital by providing domestic funds for investment.

Social benefits of inequality

It is difficult to identify significant social benefits of inequality. The potential economic benefits of inequality – such as higher levels of saving or productivity – could produce a "larger pie" from which all members of society could benefit. Additionally, one might argue that there are social benefits from an economic system that encourages hard work, risk-taking and social mobility. However, income inequality has few overall social benefits, since the economic system that determines the distribution of income and wealth does not give everyone the same level of opportunity to pursue their income and wealth goals.

Inequality of opportunity exists in Australia due to several factors:

- Existing inequality in the distribution of income and wealth tends to perpetuate inequality of opportunity. For instance, higher income earners have better access to educational opportunities, making it more likely that they will gain admission to university courses, allowing them to take up higher paid occupations.
- Not everyone has the same mental and physical attributes and the same potential with regard to the acquisition of income and wealth. For example, some people are more talented at manual work, which tends to lead to lower paying jobs than jobs that require analytical skills.
- People who acquire wealth through inheritance have a much greater opportunity to build up their wealth through investments, as opposed to those that start with no wealth.
- People may not have access to the same networks of people that may lead to new opportunities. For example, new migrants are likely to find it difficult to access social and business networks. Often this inequality makes it difficult to overcome because many of the barriers to opportunities are informal barriers (for example, business people may prefer to do business with people who went to their school or have a similar social background because they feel more comfortable with such people – this will informally exclude other people).

Given the problem of inequality of opportunity, it is generally felt that the social benefits associated with inequality are very limited.

reviewquestions

1 Explain how reducing inequality might increase economic growth. Use a numerical example to support your answer. (*Hint: consider how people on different incomes spend their income and what their marginal propensities to consume would be.*)

2 Outline the major social and economic costs and benefits of inequality.

11.6 Government policies and inequality

Government policies can influence inequality in society in direct and indirect ways. Fiscal and labour market policies generally have the most direct impact through changing the levels of government benefits, taxation, and wages and salaries. However, the side effects of policies pursued for other purposes, such as microeconomic policy, can also affect inequality. In recent decades governments have adopted a strategy of reducing government intervention in markets generally, but also taking additional targeted policy steps to reduce economic and social disadvantage such as through personalised assistance with training and finding work.

Macroeconomic management and job growth

Since employment is the main source of income for households, unemployment is the main reason for low incomes and poverty. Periods of **unemployment** (and underemployment) in Australia in the past have contributed significantly to an increased gap between high and low income earners. Unemployed people must rely on government benefits, which are significantly below the average incomes earned by people in employment. Thus, lower unemployment rates tend to reduce the gap between the rich and the poor. Although lower rates of unemployment have helped to sustain the income of lower income households and helped reduce the level of income inequality, those lower rates of unemployment have been partly offset by more people being under-employed.

Inequality in the distribution of income and wealth in Australia is made higher when people of working-age drop out of the labour force, or remain unemployed for a long time. Those people who have been out of work for extended periods of time find it very difficult to find employment again. The fall in the proportion of the unemployed that are **long-term unemployed** after the 1990s helped to reduce the level of income inequality between households. One of the main purposes of the Australian Government's Job Keeper package introduced during the COVID-19 recession in 2020 was to maintain a connection between employees and employers, to minimise the number of people who lost work during the period when business activity was most disrupted by the coronavirus. By reducing job losses during the worst period of the recession, the Government hoped to limit 'labour market scarring' in the form of long-term unemployment and the long-lasting rise in inequality that has historically followed recessions.

Changes in the labour market

Changes in the pattern of employment have meant that many of the jobs that have been created in recent years have been casual or part-time rather than full-time jobs. This has created the problem of **underemployment** – people in part-time or casual jobs wanting to work longer hours but being unable to find more work. Underemployed people often hold casual or temporary jobs that are low paid in the so-called 'gig economy', with work hours changing from week to week. Thus, they tend to have lower incomes and suffer greater fluctuations in their income levels because when an economy goes into a downturn the first measure businesses often take is to reduce casual and overtime hours.

Underemployment refers to those persons who are working less than full time (and therefore not unemployed) but would like to work more hours.

The **decentralisation of the labour market** has widened inequality between wage earners. Under enterprise agreements, workers with greater skills and bargaining power have achieved higher average wage increases than less skilled workers who rely on industrial awards for wage rises. In addition, as jobs have become more highly skilled and highly specialised, the gap between pay for high skilled and unskilled work has widened. The problem of increased wage dispersion was recognised in the *Fair Work Act 2009,* which includes special provisions to help low paid workers engage in enterprise bargaining.

Australia's national industrial relations regulator, the Fair Work Commission, also has an influence on inequality through its annual decision on adjustments to minimum wages in Australia. This decision establishes minimum wage levels for millions of employees who are covered by awards and agreements based on awards, and also indirectly influences other

wage outcomes throughout the economy. Since its first minimum wage decision in 2010, the Fair Work Commission has indicated a willingness to raise minimum wages to assist low-paid workers where it has been confident that such increases would be affordable.

In June 2020, the Fair Work Commission announced an increase in the national minimum wage and all modern award minimum wages of 1.75 per cent. The decision raised the hourly minimum wage rate by 35 cents to $19.84 per hour, or $753.80 per week. The increase was also phased in between July 2020 and February 2021, with a delay for sectors worst affected by COVID-19. The increase was significantly lower than in recent years, reflecting the severe impact of COVID-19 on the economy and uncertainty about the timing of recovery. The decision was consistent with the Commission's intention to keep minimum wages at around 55 per cent of median full-time earnings over the past decade, and not to allow them to shrink in relative terms.

Government policies to reduce inequality

Changes in government **taxation, transfer payments and other assistance** have the most direct impact on inequality in Australia. Overall, government intervention tends to reduce income inequality by taxing the wealthiest groups more heavily and **redistributing income** to lower socio-economic groups. The largest transfer payments are the age pension (worth $48.3 billion in 2019–20), the disability support pension ($17.5 billion), the family tax benefit ($18.1 billion), unemployment and other working-age benefits ($16.9 billion) and carers payment ($8.7 billion).

Figure 11.17 shows that income inequality is significantly reduced through government intervention. The final income of households (bottom row) is more evenly distributed than income from private sources (the top row). Without any taxes or government benefits, income for the highest quintile from private sources is around 22 times the average for the lowest quintile (most of whom are age pensioners or people on disability support). As a result of government policies, the average disposable income received by the lowest quintile of income earners is increased from $223 to $591 per week, so that the highest income earners now take home incomes six times those of the lowest quantile.

	Lowest quintile ($)	Second quintile ($)	Third quintile ($)	Fourth quintile ($)	Highest quintile ($)	Average ($)
Private income	223	929	1740	2575	4987	2032
Government benefits	385	363	158	70	35	210
Gross income (before tax)	608	1294	1900	2644	5023	2242
Disposable income (after tax)	591	1176	1619	2155	3690	1805
Source: ABS cat. no. 6523.0 Household Income and Income Distribution 2017–18, Table 5.1						

Figure 11.17 – Distribution of household income, taxes and benefits, 2017–18

As income rises, so too does the level of taxation (the difference between gross income and disposable income). This occurs because Australia has a progressive income tax system, with higher marginal tax rates for higher income levels. Nevertheless, the most recent ABS data on the distribution of government taxes and benefits (ABS Catalogue 6537) showed that the lowest 40 per cent of income earners have a proportionately larger tax burden, earning only 12 per cent of total private income but paying 15 per cent of total taxes. This occurs because of the impact of indirect consumption taxes that are not related to income. This is offset by government benefits that primarily assist those in the lowest three income quintiles. Government payments to the unemployed, low income earners and the elderly, as well as the provision of government services such as health, education

and housing, are the primary mechanism for reducing disadvantage in Australia. Family payments are also an important means of increasing income for low and middle income families. The combined effect of taxes and transfers is a reduction in the Gini coefficient from 0.52 to 0.34.

Recent budgets have contained several policy measures with significant consequences for inequality. Major changes to Australia's personal income system are being introduced in three phases from 2017–18 to 2024–25. The first stage of the cuts was targeted at lower income earners, but the largest tax reductions will be delivered from 2024–25 by abolishing the 37 per cent tax bracket. Although a federal Treasury Working Paper in 2019 found Australia's personal income tax system had become more progressive between 1994 and 2016 due to a larger tax burden being placed on high-income earners, these changes will make the tax system less progressive by reducing the number of tax thresholds from four to three. The abolition of the 37 cent rate means that there is no increase in tax rates between $45,000 (only slightly above the minimum wage) and $200,000 (two and a half times the average wage). An analysis of the distributional effects of the tax changes by the Australia Institute in April 2019 found that 54 per cent of the tax cuts would go to the top 20 per cent of income earners, while just 3 per cent would go to the bottom 20 per cent.

Another significant fiscal policy change introduced in response to the COVID-19 recession in 2020 was an increase in the unemployment benefit. Initially, in response to the onset of COVID-19 the Government doubled the unemployment benefit (previously Newstart, but now called Job Seeker) to $1100 a fortnight, also including some other categories of welfare recipients. This provided a temporary financial safety net to workers who could not access the Job Keeper payment. The Government deferred a decision on a permanent level for the benefit but had been under pressure to increase the payment, which had been calculated in 2019 as the lowest of unemployment benefits among OECD countries.

Compulsory superannuation has improved the **distribution of wealth** in Australia since its introduction in 1992. Employers in Australia are required to contribute a minimum of 9.5 per cent of an employee's wages to a superannuation fund which they cannot access until their retirement. Since the mid-1980s, the proportion of employees covered by superannuation has risen from 42 to 94 per cent. While superannuation assets boost the wealth of all wealth quintiles, they are particularly important for lower and middle income earners, for whom superannuation may be one of few significant financial assets. Given compulsory superannuation has reduced wealth inequality, some economists raised concerns over the federal government's decision as part of its COVID-19 policy response in 2020 to allow individuals to withdraw up to $20,000 from their superannuation account to help cope with financial pressures during the recession. As low income earners were disproportionately affected by the recession, critics argued that this could increase inequality in the longer term as lower income earners lost the benefit of those savings. The beneficial effects of compulsory superannuation for reducing inequality are nevertheless expected to grow further if compulsory superannuation contributions are increased to 12 per cent of employee incomes by 2025 (a longstanding policy commitment of successive governments).

The indirect impact of government policies

The impact of government policies aimed at creating a more equitable distribution of income can be outweighed by the consequences of other government policies that tend to widen the gap between higher and lower income earners.

The use of **monetary policy** to slow the rate of economic growth can influence the distribution of income and wealth. When interest rates increase, this transfers wealth from low to high income earners. This is because more low income earners are borrowers (for example, they have a mortgage or personal debts) and must pay the higher interest rates. High income earners, on the other hand, often have net savings so that high interest rates increase their income. This is an unintended side effect of a policy that is used for other purposes such as maintaining a low rate of inflation.

Microeconomic reform initiatives sometimes require economic restructuring that can create unemployment in the short term, or may result in the closure of some industries. Privatisation of formerly government owned businesses, for example, is often followed by price increases and "downsizing" of the workforce to improve profitability for shareholders. In general, microeconomic reform is intended to improve efficiency and increase the returns on investments to owners of assets. This means that its benefits can tend to flow to wealthier asset owners, while its costs tend to be felt most by lower income earners.

One of the challenges for governments is to implement microeconomic policies in such a way that they do not increase inequality. Microeconomic policies are often accompanied by substantial adjustment packages to compensate for the hardship that lower income groups may experience as a result of the reforms. For example, when a proposal to increase Australia's Goods and Services Tax from 10 to 15 per cent was raised in 2015, its advocates highlighted the need to provide compensation to ensure that low income earners would not be disadvantaged. Targeted transitional support to groups directly affected by microeconomic reforms have proved effective in building greater public support for reform and minimising the hardships associated with structural change.

reviewquestions

1 Outline how THREE government policies may indirectly affect the distribution of income and wealth.

2 Examine how labour market policies might be used to address income inequality.

3 Explain how a government might implement policies to reduce the inequality in income and wealth distribution.

chapter summary

1 Income inequality refers to the degree to which income is unevenly distributed in an economy.

2 The Lorenz curve is a graphical representation of the degree of income inequality in an economy. It plots the cumulative increase in income against the cumulative increase in population when the population is ranked by income level.

3 The Gini coefficient measures the degree of income inequality in an economy, by calculating the degree to which the distribution of income deviates from perfect equality. It is represented by a number between 0 and 1, with a number closer to 0 representing greater equality and a number closer to 1 representing a higher level of inequality. Inequality as measured by the Gini coefficient has increased since the mid-1990s.

4 Like income, wealth is unevenly distributed in the economy. Individuals in the top quintile own around 60 per cent of the total wealth in the economy while the bottom quintile has almost no wealth at all.

5 Wages and salaries are the largest source of income, constituting over half of total income to individuals, followed by business profits, rental property income and returns from enterprise.

6 Household wealth is mostly held in either owned occupied or investment property. Other sources of wealth include superannuation, business ownership, shares, savings accounts and shares.

7 Inequality for individuals is influenced by a range of factors. An individual's social background is a major influence – those who are born in rich families are likely to stay rich, and those born in poor families are likely to stay poor. Age is a significant factor because lower incomes are seen among young people and old people, but incomes are higher in middle age. Other influences include cultural background, family structures and where someone lives.

8 The costs of inequality are that it diminishes total utility in society, reduces social mobility, lowers consumption and economic growth, encourages conspicuous consumption, reduces work efficiency, and contributes to worse wellbeing and health outcomes. It can also create an "underclass" of people who are stuck in poverty.

9 The benefits of inequality in a society are that inequality creates an incentive for people to work harder, to acquire new skills, to undertake entrepreneurial risks and innovate, and to save more in order to be able to start a business. If more productive workers receive higher incomes, this might increase inequality but might also increase national wealth.

10 Government policies have had a mixed impact on the distribution of income and wealth. Progressive income taxation, social welfare payments, government services and compulsory superannuation have reduced inequality, while microeconomic and labour market reforms have contributed to rising inequality.

chapterreview

1 Distinguish between income and wealth.

2 Explain how the following can be used to measure the degree of inequality in the distribution of income:

   a) The Lorenz curve (explain using diagrams)

   b) The Gini coefficient (explain using numerical examples)

3 Explain the relationship between income inequality and wealth inequality.

4 Examine which groups tend to be adversely affected by inequality according to occupation, education and ethnic background in Australia.

5 Discuss the general trends in the distribution of income and wealth in Australia in recent years.

6 Outline the economic costs and benefits associated with income inequality.

7 Outline the social costs and benefits associated with income inequality.

8 Discuss the relationship between increasing level of inequality and the level of economic growth in an economy.

9 Discuss government policy options to improve the distribution of income and wealth in Australia.

10 Analyse the impact of the government's policy mix on income inequality in Australia.

Environmental Sustainability

12

12.1 Introduction
12.2 Ecologically sustainable development
12.3 Market failure: private benefits and social costs
12.4 Public and private goods
12.5 Major environmental issues
12.6 Government policies and environmental sustainability

12.1 Introduction

Economists have traditionally assumed that there is an almost endless supply of natural resources to meet demands for production. If demand for a good increased, it was assumed that the supply of that good would also expand. However, in recent decades economists have shifted away from this traditional model that ignored environmental constraints. As environmental factors such as pollution, rising fuel costs and climate change have increasingly influenced people's lives, economists around the world have been working on new ways to include environmental factors in their economic analysis, alongside traditional concerns such as output, employment and prices.

Australia's key environmental statistics

Forest area (thousand sq. km)	1251
Freshwater resources (per capita cu. m)	20,958
Threatened animals and plants (no. of species)	280
Fossil fuels (% of total energy use)	93.8
Carbon dioxide emissions (per capita metric tons)	21.4

Sources: World Bank 2020; Australian Government Department of Industry, Science, Energy and Resources 2020; Australian Government Department of Agriculture, Water and the Environment 2020.

The **natural environment** represents the totality of the physical environment in which human society lives. It includes the land, water, climate and plant and animal life. Environmental sustainability is about protecting and enhancing the natural environment. This includes protecting the quality of air, water and soil, preserving natural environments and biodiversity, ensuring the sustainable use of renewable and non-renewable resources, and minimising the negative environmental consequences of economic activity. Some of the key environmental sustainability challenges facing Australia include:

- reducing the emission of greenhouse gases, which contribute to climate change
- ensuring adequate supplies of water for use by households, farmers and businesses
- preserving the health of forests, waterways and ecosystems.

Historically, many aspects of economic activity in Australia have caused environmental harm. Economic activities – including farming, mining and industry – have resulted in land degradation, depletion of non-renewable resources, the extinction of many plant and animal species, and the pollution of water systems. Government policies now seek to address the impact of economic activity on the environment to improve quality of life and preserve the natural environment for future generations.

While prioritising environmental concerns may involve economic costs in the short term, sustainable economic growth in the longer term depends on a healthy environment. Action to protect the environment can therefore support economic growth in the medium to long term. For example, a research report from the OECD in 2017 estimated that a combination of policies to support economic growth and mitigate climate change, such as investment in low-emission and climate-resilient infrastructure, could increase the economic output of OECD countries by an average of up to 2.8 per cent by 2050.

In recent decades, environmental factors have been incorporated into economic theory through the emergence of **environmental economics**. This chapter begins with an explanation of how economic theory deals with environmental issues. Concepts such as market failure, public goods and externalities are very useful in understanding the contemporary environmental challenges and policies addressed in sections 12.5 and 12.6.

12.2 Ecologically sustainable development

Environmental economics emphasises the need to pursue a sustainable level of growth, taking into account the effects that economic activity has on the environment. Unless the hidden costs of economic growth are taken into account, fast growth may lead to a rapid depletion of resources, a polluted atmosphere and a reduction in quality of life.

In chapter 7 we looked at the concept of sustainable economic growth. This is the idea that growth should be maintained at a level that is not so low that unemployment increases, and not so high that inflation or the current account deficit increase. As a result of these economic constraints, governments attempt to keep growth within a sustainable range.

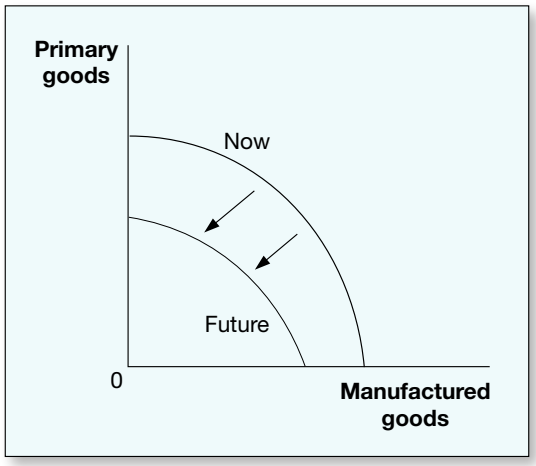


Figure 12.1 – The long-term impact of resource overuse on the production possibilities curve

Environmental concerns provide an additional longer-term dimension to the concept of sustainable economic growth. Overuse or exploitation of natural resources to achieve short-term growth can deplete these resources and permanently damage the environment, reducing the productivity of affected sectors of the economy. Consumption that depletes an economy's natural resources will reduce the future potential output in the longer term, especially in primary industries that rely on natural resources as inputs in the production process. This is represented by a decrease in the economy's production possibility curve, as shown in figure 12.1.

Some historians argue that the severe depletion of natural resources played a major role in the collapse of past civilisations and empires, when deforestation and soil erosion made it impossible to sustain a food supply for local populations. This explanation for the decline of past empires (including the Roman Empire, the Mayan civilisation and smaller communities such as Easter Island) is the most extreme example of the impact of ecologically unsustainable development.

Ecologically sustainable development involves conserving and enhancing the community's resources so that ecological processes and quality of life are maintained.

Ecologically sustainable development involves conserving and enhancing the community's resources so that ecological processes and quality of life are maintained. It is a level of economic activity that is compatible with the long-term preservation of the environment, rather than the maximum level of growth possible in the short term.

The long-term purpose of achieving both economic growth and environmental protection is to improve peoples' quality of life. The benefit of satisfying a greater number of material

wants is diminished if it comes at the expense of damage to the natural environment and the depletion of natural resources. Damage to the natural environment (such as air or water pollution) has harmful effects on human health that diminishes quality of life. Further, harm to the environment reduces the quality of life for future populations by depleting natural resources – and therefore the future growth – of the economy. One of the major principles of ecologically sustainable development is the principle of fairness between generations, or **intergenerational equity**. This describes the concept that resources should not be used in a way that will limit the quality of life of future generations.

KEY PRINCIPLES OF ECOLOGICALLY SUSTAINABLE DEVELOPMENT

- Integrating economic and environmental goals in policies and activities
- Ensuring that environmental assets are appropriately valued
- Managing environmental risks with caution
- Ensuring fairness in the allocating of costs and assets within and between generations
- Taking into account the global effects of environmental issues

Australia's National Strategy for Ecologically Sustainable Development (NSESD) was first developed in 1992. The core objectives of the strategy are:

- to enhance **individual and community well-being and welfare** by following a path of economic development that safeguards the welfare of future generations
- to provide for **equity** within and between generations
- to **protect** biological diversity and **maintain** essential ecological processes and life-support systems.

The pursuit of ecologically sustainable development has been incorporated into the policies and programs of Australian governments as a significant policy objective. For example, government departments are required to report on environmental matters in their annual reports. The principles and objectives under the strategy remain relevant today, and continue to guide government initiatives, such as the recent National Waste Strategy and Action Plan.

reviewquestions

1 Describe what is meant by *ecologically sustainable development* and explain how it fits within the study of economics.

2 Outline the concept of intergenerational equity and discuss the impact of policies to encourage intergenerational equity on economic growth.

12.3 Market failure: private benefits and social costs

In a modern market economy, the price mechanism is the key determinant in decisions about what goods will be produced, in what quantity, and the price at which they will be sold. The price mechanism involves the interaction of the market forces of supply and demand to reach an equilibrium price and quantity of production. Thus market outcomes reflect a balance between consumer preferences (as represented by consumer demand) and the costs of producing output (as represented by the firms' supply schedule). When consumers demand goods, producers will make them available, so long as they can receive a price that at least covers their costs. This means that as demand increases, production will increase.

However, the price mechanism does not effectively take into account the long-term effect of economic activity on the environment. Stocks of fish, for example, may continue to be farmed until they run out, forests may be logged until there are none left, and rivers and the atmosphere may be polluted. This is because producers enjoy a private benefit from the activity that depletes resources or pollutes the environment, but they do not directly face the social costs that their economic activity creates. Similarly, the market price that is paid by consumers does not reflect these social costs.

Market failure occurs because the price mechanism only takes account of private benefits and costs of production to consumers and producers – it does not take account of wider social costs and benefits borne by all of society. These other costs and benefits that are passed on to other members of society are known as externalities. Negative externalities are a cost to society and positive externalities are a benefit to society.

The concept of **negative externalities** generally refers to the adverse spillover effects on the environment from economic activity. Goods and services that have negative externalities are known as **demerit goods**.

A **negative externality** is an unintended negative outcome of an economic activity whose cost is not reflected in the operation of the price mechanism.

In an economic system based on private property ownership, there are no general property rights associated with environmental resources such as oceans and the atmosphere. This is one of the main economic problems that lie behind the market's failure to account for the environmental impacts of production. The price mechanism cannot determine a price or value for these resources, and they are freely used without regard to their depletion. Therefore, the environment and other common resources can be destroyed through **overuse** (such as overfishing the seas or rivers, or polluting the atmosphere and waterways). This market failure is referred to as the **tragedy of the commons**.

ROAD TRANSPORT: A NEGATIVE EXTERNALITY

A company may decide to reduce its freight costs by transporting its goods by road rather than by rail. The use of a fleet of B-double trucks may result in substantial damage to roads in that area and also add to noise and air pollution. This may cause damage to cars because of pot holes, loose stones and increased risk of accidents; increased noise pollution of trucks; and respiratory problems from worsened air quality. None of these events impose costs to the company, which is saving money. In this situation, the company generates a negative externality, because society bears the cost of road damage, noise and air pollution.



Nevertheless, the price mechanism plays a limited role in protecting the environment by limiting the sales of depleted resources that do have a price. When environmental resources become scarce, the cost of natural resources increases, reducing the number of resources consumed. Therefore, if a large number of trees are cut down to be sold on the market, eventually it will become more expensive to supply them. The remaining supply will be in a remote location, and of a lower quantity, so prices will rise and reduce the number of people who can afford them. In addition, the high price will also induce producers and buyers to look for and develop alternative inputs to production.

However, this approach can only protect those resources that are sold in markets, such as minerals and timber. The price mechanism plays no part in allocating environmental resources that can be used for free, such as the use of the atmosphere to dispose of gases generated during the production process. Further, remaining resources may not be protected if the price increases too late and by too little.

Positive externality is an unintended positive outcome of an economic activity whose value is not reflected in the operation of the price mechanism.

Not all externalities are negative. **Positive externalities** are the beneficial spillover effects from economic activity. Although production does not usually generate positive environmental outcomes, it can generate other beneficial spillover effects for society. The use of trucks may cause a negative externality, but the trucks may also provide new job

opportunities for small-business people operating trucks, as well as increasing demand for food from roadside diners. Goods and services that have positive externalities are known as **merit goods**.

The role of externalities in the marketplace can be demonstrated with the use of a demand and supply diagram. In figure 12.2, the costs of production are borne by the producer, and are represented by the producer's supply curve. Negative externalities that are borne by the whole society, however, are an additional cost on top of the producer's costs. If we add the producer costs and social costs together for each level of output, we can plot the supply curve for the whole society – S (social cost), which lies above the normal supply curve. The vertical distance between the two supply curves is the size of the externality.

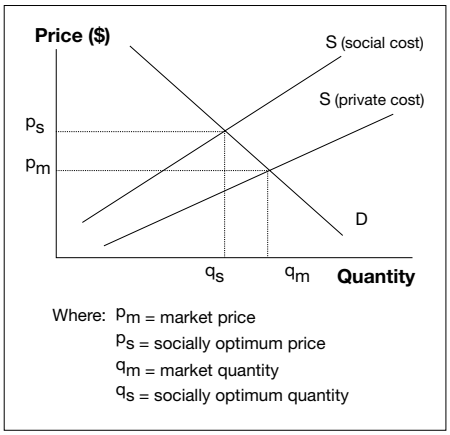


Figure 12.2 – Negative externalities

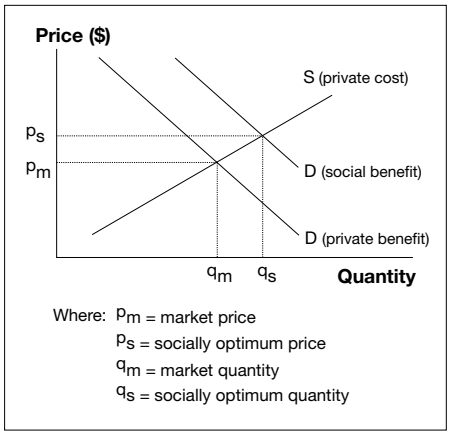


Figure 12.3 – Positive externalities

The market will only take into account private costs and benefits of production, resulting in a price of p_m and an output level of q_m. If the negative externality were borne by either the producer or consumer, however, the price would rise to p_s, reflecting the higher cost of production. Output would fall to q_s, highlighting that goods and services with negative externalities tend to be overproduced.

Positive externalities are the opposite – they are benefits of production that are not enjoyed by the individual consumer. For example, replacing an inefficient old refrigerator with a new energy-efficient refrigerator will not only reduce an individual household's energy bill but also reduce its energy consumption and the emissions of carbon dioxide – a benefit for the whole society. In figure 12.3, the consumers' demand curve is based on the individual benefits of consumption. If we add the social benefits, we can plot the demand curve for the whole of society – D (social benefit), which lies above the normal demand curve. The vertical distance between the two demand curves is the size of the positive externality.

The market will only take into account private costs and benefits of production, resulting in a price of p_m and an output level of q_m. However, if the positive externality were enjoyed by the producer or consumer, the price would rise to p_s, reflecting the higher value of the good's production. Output would rise to q_s, showing that goods and services with positive externalities tend to be under-produced.

reviewquestions

1. Explain why individuals and businesses may not pay for the environmental costs of their economic activities.
2. Identify THREE examples of negative externalities and positive externalities resulting from economic activity.
3. Suppose a particular good has a high social cost that is not accounted for by the price mechanism. With the use of a diagram, contrast the socially optimum equilibrium with the market equilibrium outcomes.

12.4 Public and private goods

Having a clean and unpolluted environment is valued by individuals and society and considered a "good". Yet private markets do not provide environmental "goods" like other goods and services. If all of us value a cleaner environment, why are there no private-sector firms that offer to clean up or maintain an unpolluted environment for a fee?

In order to answer this question, we must appreciate the difference between public and private goods. A clean environment, just like national defence and the maintenance of public law and order, has the characteristics of a public good.

THE TWO CHARACTERISTICS OF PUBLIC GOODS

1. Public goods are **non-excludable** – once public goods are provided, the producer cannot exclude consumers from enjoying the benefit of that good even if they are not prepared to pay.

   Once national defence, street lights or a clean environment is provided, even non-paying consumers cannot be excluded from enjoying the benefits of these goods.

2. Public goods are **non-rival** – consumption of the good by one individual consumer does not reduce the quantity of the good available for other consumers.

   For example, one person's "consumption" of the benefits of public order does not reduce the ability of others to also enjoy this public good.

Free riders refers to groups or individuals who benefit from a good or service without contributing to the cost of supplying the good or service.

These characteristics of public goods create the opportunity for "free rider" behaviour. This occurs when consumers or businesses benefit from a good or service without having to pay for its production or maintenance. A fishing company that benefits from clean oceans without paying the cost of cleaning up ocean pollution is an example of free-riding behaviour.

The potential for **free rider** behaviour means that private markets either do not provide or under-provide public goods, since private-sector firms would not be able to charge consumers for enjoying the benefit of that good. Therefore, the price mechanism cannot produce an equilibrium outcome that properly reflects the forces of supply and demand, and setting a price does not limit the consumption of public goods. The incentive for free riders would therefore tend to undermine any attempt by the private sector to clean up the environment or protect it from overuse and depletion. For this reason, public goods tend to be provided by the government.

Public-sector goods are goods and services provided by the government, such as train services and hospitals.

It is important to distinguish between public goods and **public-sector goods**, that is, goods and services that are provided by the government or its agencies. Not all public-sector goods are public goods. Train services, for example, are provided by the government, but they are not public goods because they are excludable, since train guards can prevent you from riding for free. Likewise, not all public goods are provided by the government.

reviewquestions

1 Identify a public good that is provided in your local area. Outline how the problems of public goods apply in this situation. What role does the government play in providing the good?

2 Using examples, describe the characteristics of a public good. Explain how these characteristics lead to the free rider problem.

3 Distinguish between public goods and public-sector goods.

12.5 Major environmental issues

The task of environmental sustainability appears simple while we discuss it in general terms. Surely it is just a matter of assessing the social costs of economic activity, then introducing laws and establishing authorities so that these costs are borne by the

producer or consumer? In reality it is not so simple. Experts often disagree sharply on the environmental impact of economic activity, and on which policies are most effective in solving environmental problems. Industries resist pressure to change their practices or to pay the full costs of their environmental impact. Governments must then decide whose evidence is most convincing and how environmental and economic goals should be balanced.

Below, we examine four major environmental issues with economic consequences that governments must confront in economic policy-making.

Preserving natural environments

The preservation of the natural environment is an important environmental issue in the context of managing the economy. In the long run, the economy cannot keep growing if the environment is degraded. Environmental damage also affects human health through higher levels of air and water pollution, and restricts the availability of resources. Measures to preserve the environment aim to avoid the social and economic problems that arise when the environment is not actively preserved.

Preservation of the environment may include measures such as:

- restrictions on development in environmentally sensitive areas, such as mining in national parks
- protecting native plant and animal species from extinction
- controls over emissions of waste products
- requiring new plantation in areas where logging has occurred.

Awareness of the importance of environmental issues has been slow to develop in Australia and throughout the industrialised world. Australia protects 19 per cent of its total land area, compared with 33 per cent in New Zealand and 29 per cent in the United Kingdom. Australia also has a poor record of preserving biodiversity despite being one of the six most biodiverse nations on the planet. In 2020, 191 flora and 89 fauna were considered critically endangered under the 1999 *Environment Protection and Biodiversity Conservation Act* and may rise in further years as a result of the Australian bushfire season in 2019–20. However, less than 40 per cent of threatened species that are nationally listed have recovery plans in place. The full extent of Australia's biodiversity is not known – of the estimated 600,000 species in Australia, only 30 per cent have been discovered and named.

THE 2019–20 BUSHFIRES: BURNING THROUGH AUSTRALIA'S BIODIVERSITY

Australia experienced an unprecedented bushfire season in the 2019–20 summer, with devastating impacts for the environment, as well as communities' economic and social well-being. Multiple uncontrolled fires burnt through over 18 million hectares of land, with the loss of many homes and buildings. The fires also devastated natural habitats and assets.

The fires resulted in the loss of an estimated billion birds, mammals and reptiles due to lost habitats and food sources, although the full effects will emerge only over time. The fires burnt through many forest areas with high biodiversity and threatened species. This has global impacts, as biodiversity is concentrated in forests. Australia is one of the few countries with 'megadiversity'. Recovery of these areas will take many years and may result in the permanent extinction of species.

In 2020, the Commonwealth Government committed $50 million to an emergency intervention fund to support wildlife and threatened species affected by extreme bushfires.

In addition to the effects on biodiversity, the fires also generated significant smoke and ash, which created hazardous air quality, polluted environments and affected water quality. These effects could be seen from outer space, and hazardous air quality occurred in areas as far away as South America. The smoke pollution resulted in negative health consequences, including increased respiratory illnesses and exacerbated existing health conditions.

The loss of natural habitats also affected Australia's economic activity, given the destruction of much agricultural land area and the effects of the bushfires on Australia's tourism industry.

Governments often face significant problems in trying to preserve the natural environment:

- In the short term, environmental policies may result in a **reduction in economic growth** through interventions in the price mechanism that may cause higher prices or reduced supply. For example, agricultural producers may oppose a reduction in water allocations for irrigation even though it may be critically important for environmental reasons, because this may result in lower agricultural output in the short term.
- Industries will face **higher costs** if they have to comply with rigorous environmental standards. In a highly competitive global economy, our environmental standards may make us less competitive as a place for some industries compared with other countries with weaker environmental safeguards. As a result, Australia may miss out on opportunities that would lift economic growth and exports. Groups that represent affected industries, such as farming, mining and construction, may try to lobby governments to prevent strict environmental protection policies.
- The **cost of repairing damage** to the environment is often borne by taxpayers rather than by those who have caused the economic damage, such as with the $100 million government expenditure on the Environment Restoration Fund announced in 2019, to provide grants to community groups for projects to manage erosion around waterways and protect the habitat of threatened species. In some situations, the government may try to pass costs on to industry. For example, the NSW Government introduced a Container Deposit Scheme in 2017, where beverage containers can be deposited at recycling facilities in exchange for a 10-cent refund. This reform aims to reduce littering and increase recycling in order to protect the natural environment, with the associated scheme costs borne by beverage producers. The scheme resulted in the return of over 3.5 billion containers in its first two and a half years of operation. Government policy can also improve incentives for industries to better preserve the environment.

Pollution

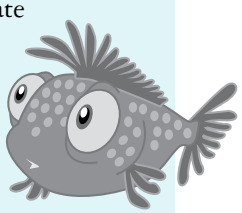
Pollution occurs where the natural environment is degraded in some way, such as by harmful chemical substances, noise and untreated rubbish. Pollution affects the atmosphere, water resources and land. All sectors of the economy, including manufacturing, agriculture and households, contribute to the pollution of our environment.

Pollution has been an environmental problem ever since large numbers of people began living in close proximity in towns and cities. The Industrial Revolution in the 18th century made pollution into a major health and economic concern through the waste and pollution generated by production, population growth and the high concentrations of people in cities. Mining and manufacturing processes create toxic waste and pollution, and the worst polluted areas in the world are in industrial cities in developing countries, such as Delhi in India or Shijiazhuang in China.

The impact of pollution is often felt far away from its original source. Pollution can therefore be a problem for the global economy and for international institutions, as well as for national governments. For example, high levels of industrial pollutants such as toxic metals and plastics are now found in aquatic life throughout all the world's oceans, even in places thousands of kilometres from any land mass.

Within individual countries, governments can implement policies to reduce pollution. The range of options available to the government includes laws banning environmentally damaging production techniques, quotas to restrict the emission of harmful pollutants, subsidies to encourage environmentally friendly practices and taxes to discourage some forms of economic activity.

- **Renewable resources**: Renewable resources can naturally regenerate or replace themselves in a relatively short period of time. However, these resources may be depleted to the point where they become non-renewable (that is, they cannot regenerate) and they are lost forever. For example, overfishing of a species of fish may cause the numbers to fall to a level at which the species cannot reproduce and may become extinct.



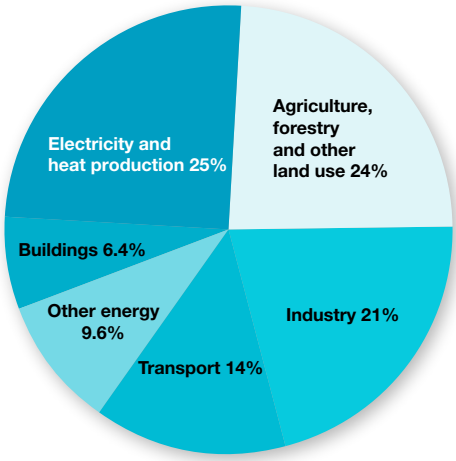
- **Non-renewable resources**: Non-renewable resources are those natural resources that are in limited supply because they can only be replenished over a long period of time, or cannot be replenished at all. Non-renewable resources include fossil fuels such as petroleum and coal, and minerals such as copper and iron ore.



Climate change

The most profound threats to the global environment come from climate change. Climate change, also known as global warming, is related to the emission of greenhouse gases, including carbon dioxide (CO_2), nitrous oxide (N_2O) and methane (CH_4). Total greenhouse gas emissions produced as a result of human activity reached the highest levels in human history from 2000 to 2010, according to the Fifth Assessment Report released in 2014 by the Intergovernmental Panel on Climate Change (IPCC), a scientific body established by the United Nations. The IPCC calculated that about half of cumulative CO_2 emissions from human activity between 1750 and 2010 have occurred in the past 40 years. This has been driven by two main sources:

- the **burning of fossil fuels** to meet the electricity and transportation needs of individuals and businesses, which account for over a third of the world's greenhouse gas emissions
- **changes in land use** due to agricultural practices such as deforestation, irrigation, livestock farming and landfill, accounting for a further third of global emissions.



Source: United Nations Intergovernmental Panel on Climate Change Report 2014

Figure 12.4 – Sources of greenhouse gas emissions

The IPCC has reported that 1 degree Celsius of warming on pre-industrial levels has occurred, and that another half a degree of warming is to occur in the next 10 to 30 years if warming continues at the current rate. This 1.5 degree increase is expected to have adverse environmental, social and economic impacts for the global economy. It is predicted to result in increased ocean temperatures, heavier rainfall, and increase the probability of droughts. The IPCC's next major report will be released in 2022.

Because of the worldwide reliance on fossil fuels, there is a close link between increased economic growth and higher carbon emissions in most economies around the world. As standards of living improve, greater demands are being placed on limited natural resources to satisfy the world's energy and food supply needs. The average estimated increase in carbon dioxide emissions from 2001 to 2025 is 1.9 per cent per year. Large developing economies such China and India are expected to account for much of the increase, with their emissions expected to rise by an average of 2.7 per cent every year over the same period.

Climate change is expected to have major consequences around the world and in Australia, unless action is taken, as outlined in figure 12.5. Australia is particularly vulnerable to the effects of climate change because it is already a hot, dry country. Australia is also vulnerable because of the importance of fossil fuels to energy production and exports, and our proximity to other countries that will be affected by increased temperatures and rising sea levels, such as Indonesia and Bangladesh.

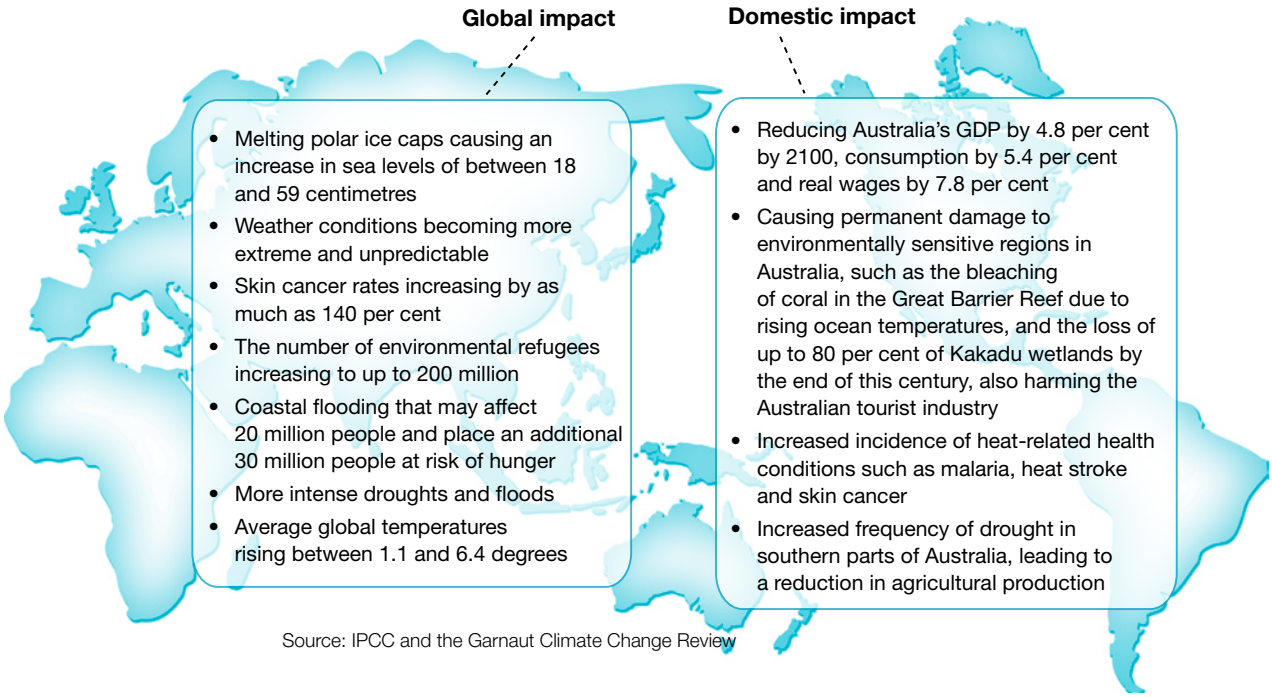


Figure 12.5 – Global and Australian impacts of climate change, 21st century

While there is a scientific basis for targeting reductions in carbon dioxide emissions, many nations, including Australia, have struggled to implement effective policy responses. This is because climate change is a global problem, and addressing climate change by reducing carbon emissions reduces economic growth, particularly in the short term. Nations have been reluctant to make decisions that could affect their economic potential, especially if they are unsure other nations will do the same. In chapter 16, when we examine policies for improved environmental management, we take a closer look at policies to address climate change.

The depletion of natural resources

The depletion of natural resources is both an environmental and an economic problem. Without intervention, the market is likely to fail in this area and allow important resources to be overused.

The impact of the depletion of natural resources is greatest on future generations. Sustainable resource management aims to ensure that the present generation does not overconsume the stocks of renewable resources and minimises depletion of non-renewable resources. It may also ensure that new technology makes alternative resource use possible. In order to determine what level of resource use is sustainable, economists can estimate the optimal rate for the use of resources over time. An optimal rate of resource use may be calculated for both renewable and non-renewable resources.

For renewable resources, establishing an optimal rate of use means arriving at a **threshold exploitation** level that allows the resources to regenerate so that there is no long-term decline in these resources. For example, over-fishing, over-grazing, excessive farming of agricultural land and the over-exploitation of timber resources must be prevented if these resources are to be available in sufficient quantities for future generations. The critical water shortages experienced in many parts of Australia, in particular in areas relying on the Murray-Darling River System, reflect the long-term overuse of the renewable resource of fresh water.

For non-renewable resources, calculating an optimal rate of use involves determining a rate of decline that is acceptable for both the present generation and future generations. This starts with eliminating overuse and waste, but ultimately may result in taking action to recycle or curb consumption of these resources.

Economists face two main challenges in calculating the optimal rate of resource use for a non-renewable resource. First, it can be hard for present generations to predict the needs

For more information about climate change and government policies, visit the websites of the United Nations Framework Convention on Climate Change: **www.unfccc.int** The Garnaut Review: **www.garnautreview.org.au** Department of Agriculture, Water and the Environment: **www.environment.gov.au** and IPCC 2014 Report: **www.ipcc.ch/report/ar5**

of future generations. Second, it is often hard to assess the existing stock of a mineral or other resource. There may be limited or conflicting evidence about the quantity of that resource that remains available. It was often argued in the 1970s, for example, that the world's supply of oil would be exhausted by the end of the twentieth century.

AUSTRALIA'S RESOURCES: PAST, PRESENT AND FUTURE

Throughout Australian history, the economy has relied heavily on the exploitation of natural resources. For many years, abundant natural resources have underpinned our success as a primary commodity producer. In the nineteenth and twentieth centuries, Australia was considered the "bread-basket" of the British Empire because of its wheat exports, and the economy was able to "ride on the sheep's back" because of the strong demand for our wool exports. Since the gold rushes of the mid-nineteenth century, successive waves of commodity booms have played an important role in Australia's economic development, in driving population growth and in forming Australia's national character.

In more recent decades, Australia has relied on its unusually large concentrations of non-renewable mineral and energy resources. This includes major deposits of gold, coal, iron ore, copper, gas and oil, as well as the world's largest reserves of zinc, lead, bauxite, nickel and uranium. The global resources boom of the 2000s made the mining industry more central to Australia's economic prosperity, with mineral and metal exports surging from less than a third to well over half of Australia's total export revenue.

Australia's economic reliance on primary commodity exports, especially non-renewable energy resources, is unlikely to be sustainable in the longer term. Global growth levels have been more subdued in recent years, and economies are increasingly focusing on renewable energy sources and technologies. While exporting non-renewable resources is still a significant contributor to Australia's export mix, Australia will need to diversify its production so it can achieve greater economic and environmental sustainability.

The policy debate on Australia's future energy and resource use has been fraught. Policymakers, economists and politicians have wrestled with complex challenges relating to the security and reliability of Australia's energy supply, short-term shortages, rising prices and the carbon emissions intensity of Australian electricity generation. Disagreements over Australia's energy policy have even divided political parties, and were a factor in Scott Morrison replacing Malcolm Turnbull as Australia's Prime Minister in 2018. Debate over whether governments should support the Carmichael (Adani) coal mine in western Queensland's Galilee Basin played a significant role in the 2019 Federal election campaign.

Australia has favourable conditions for certain types of renewable energy such as solar and wind energy. The share of Australia's electricity generated from renewable sources increased from 8 per cent in 2001 to 17 per cent in 2018, including wind (6 per cent), solar (6 per cent) and hydro (4 per cent). About 12 per cent of Australia's electricity in 2017 was generated by households and industry outside of the electricity sector, through rooftop solar panels and off-grid generation. Australian Government projections indicate that up to 48 per cent of Australia's electricity could be generated from renewable energy sources by 2030.

reviewquestions

1. Outline TWO difficulties facing governments that seek to introduce policies to preserve natural environments.
2. Using the example of climate change, explain the concepts of market failure, externalities, public goods and free riding.
3. Examine the importance of renewable and non-renewable resources for the Australian economy and the environment.

12.6 Government policies and environmental sustainability



Details of Commonwealth environmental policies relating to climate change, conservation, water quality and land management are available from: **www.environment.gov.au** Policies specific to NSW and Sydney are available from: **www.dpie.nsw.gov.au** or **www.epa.nsw.gov.au**

In recent decades environmental sustainability has emerged as an increasingly important issue for policymakers worldwide. However, environmental issues have still tended to play a secondary role to other economic objectives, such as increased economic growth. The benefits of long-term environmental policies are often less apparent than the costs of improving environmental protection. This section outlines some key policies for environmental management, which are examined in more detail in chapter 16.

Government policies can influence environmental management by discouraging environmentally harmful activities, and providing incentives for firms and individuals to act in an environmentally responsible manner.

A **ban on the production** of a particular good or service is the most extreme action a government can take to achieve improved environmental management. For example, since 2002 it has been illegal to sell leaded petrol in Australia, and motorists who formerly used leaded petrol must use lead-replacement petrol instead. Banning a product will eliminate all externalities associated with the use, to the extent that its use can be stopped. Government bans can also impose severe costs on firms and individuals, particularly those whose employment depends on the production of the product. Consequently, governments generally only consider this option if a particular product is causing severe environmental or social damage, or where a suitable substitute product exists. For example, all of Australia's state and territory governments have planned or introduced bans on the retailers providing single-use plastic bags.

Bans may also be used to prevent consumption or other activities that may harm the environment. For example, the Chinese Government recently banned imports of mixed recycled materials from other countries, to protect China's environment and improve public health. This ban had major flow-on effects for the Australian recycling industry, as around 30 per cent of Australia's recyclable waste was exported to China. As a result, prices in recycled waste markets dropped significantly, impacting the viability of the Australian recycling industry. The ban has also caused an oversupply of recyclable waste that has led to the dumping of recyclable materials in landfill.

Another measure governments can take to reduce the consumption of a particular good or service is to impose a **tax on its production or use**. For example, to curb Australia's greenhouse gas emissions, the Gillard Government introduced a tax on carbon emissions in 2012, although it was repealed by the Abbott Government two years later. The Commonwealth Government also imposes a tax or excise on fuels such as petrol. This is recalculated every six months in line with increases in the Consumer Price Index. These taxes aim to internalise the externalities associated with a particular economic activity. That is, they require the firm or individual that causes the externality to pay for some, or all, of its costs. For example, a tax on petrol forces the owners of motor vehicles to pay some of the costs associated with air pollution and road maintenance.

Governments can also introduce policies to encourage firms and individuals to use more environmentally-friendly goods and services. In every major Australian city, governments provide **subsidised** public transport services such as buses, trains and ferries to offer individuals an alternative to motor vehicles. **Government funding** is also used to accelerate the introduction of new technologies that have environmental benefits but high establishment costs. For example, the Clean Energy Innovation Fund was established with $1 billion to encourage the availability of new energy technologies.

In the case of public goods, however, even government subsidies may lead to an under-provision of resources. In this case, the government may have to **provide these services itself**. For example, the government established a Threatened Species Recovery research

hub to support threatened species in Australia and help fight the extinction of at-risk plants and animals – which might not be viable as a privately funded venture.

Governments also seek to **monitor and measure** changes in the environment over time. For example, the Commonwealth Government publishes the *State of the Environment* report, which documents changes in key areas of Australia's environment over a five-year period, including the atmosphere, biodiversity, coasts, marine environment, inland water, land, heritage, Antarctic environment and built environment. The Australian Bureau of Statistics has also started recording the Australian Environmental-Economic Accounts, which measures Australia's stock of environmental assets as an addition to the typical measures of assets within the economy. The availability of better quality data provides governments with better information about the trade-offs involved in decision making to support and manage economic and environmental outcomes, particularly where there may be adverse economic or environmental consequences.

Overall, governments have shifted away from outright bans and directly providing public goods to using market mechanisms such as taxes and subsidies. However, there are exceptions such as the expansion of Australia's renewable energy Snowy Hydro Scheme, which is jointly owned by the Commonwealth, NSW and Victorian Governments. It is anticipated that the expansion will increase generation capacity by 50 per cent, an increase in current electricity generation to provide power for an additional 500,000 homes. In 2019, the Commonwealth Government committed $1.4 billion to the project, just over one quarter of the project costs.

MURRAY-DARLING BASIN

The Murray-Darling Basin is one of the largest river systems in the world, covering 14 per cent of Australia's total land area across Queensland, New South Wales, Victoria and South Australia. Around two million people live in the basin and it is an essential water source for communities, farmers and food production. However, by the beginning of the twenty-first century, decades of water overuse had depleted the health of the river system. Addressing this problem is difficult because responsibilities for the basin are split between different state governments, and environmental groups, farming communities and scientists have different views on what needs to be done.

In 2007 the Murray-Darling Basin Authority was established to take overall responsibility to manage the rivers in the basin. But when a plan was announced in 2010 to return 3000 to 4000 gigalitres of water to the system, it provoked an angry reaction from communities along the river, who argued that reduced agricultural production would cause unemployment and threaten the viability of towns. In 2014, an updated Water Recovery Strategy was released, establishing an annual target of 2750 gigalitres, with flexibility through the Sustainable Diversion Limit Adjustment mechanism. A greater proportion of water would come through on-farm efficiency measures like storage dam outlets rather than water buybacks from farmers, reducing the impact on agriculture.

The implementation of the Murray-Darling Basin Plan has been highly controversial, with allegations of corruption and mismanagement raised in media reports. Debate was heightened in the summer of 2019 by shocking images of thousands of fish dying in the Darling River at Menindee – a "mass fish kill" attributed to the drought and poor water management. A South Australian Royal Commission in 2019 accused the Basin Authority of "gross negligence" and "maladministration".

The unresolved debates about the Murray-Darling River Basin highlight the tensions in balancing the interests of industry, agriculture, the environment and local communities. The difficulties in striking this balance have been further complicated by a perceived lack of transparency from governments, and has led to multiple independent reviews at the state and national level.

Just as most environmental problems take years or even decades to emerge, most solutions to those problems also take many years to have their impact. This can result in governments putting off dealing with environmental problems in favour of shorter-term priorities.

reviewquestions

1 Summarise government policy options to achieve environmental objectives and explain how they influence the behaviour of individuals and businesses.

2 Explain how a tax on the consumption of certain goods and services can be used to address negative externalities.

chapter summary

1 The natural environment represents the totality of the physical environment in which human society lives, and includes the land, water, climate and plant and animal life.

2 Ecologically sustainable development (ESD) is the concept of maintaining a level and quality of economic growth that does not result in long-term damage to the environment or depletion of limited resources.

3 The private interests of business, consumers and government often conflict with environmental objectives. Market failure occurs because the price mechanism only takes into account the private benefits and costs of production to consumers and producers, but does not take into account social costs (such as damage to the environment), also known as externalities.

4 The two characteristics of public goods are non-excludability and non-rivalry. A good is non-excludable where it is not possible to exclude individuals from enjoying the benefits of these goods once they are provided, even if they have not paid for them. A good is non-rival where an individual's enjoyment of a good does not reduce the ability of others to enjoy that good.

5 A major goal of environmental protection is to preserve the natural environment, by controlling development, limiting pollution, restraining the use of non-renewable resources and minimising any other negative effects of economic activity.

6 Pollution occurs where the natural environment is degraded in some way, such as by harmful chemical substances, noise or unattractive development. Pollution affects the atmosphere, water resources and land. Virtually all areas of economic activity, including manufacturing, agriculture and household consumption, contribute to the pollution of our environment.

7 Climate change is the increase in global temperatures and impacts on sea levels and weather patterns, believed to be caused by the emission of greenhouse gases such as carbon dioxide. Its long-term consequences are the most serious environmental threat to the global economy.

8 Non-renewable resources are those natural resources such as oil, coal and gas that are finite in supply and cannot be re-created in a short time frame. Renewable resources, by contrast, naturally regenerate themselves in a time frame that makes their use sustainable.

9 The sustainable use of resources is particularly important in Australia because of the significance of agriculture and mining to Australia's export base.

10 Government policies to address environmental problems include bans or taxes on environmentally-damaging goods and services, and subsidies for, or provision of, environmentally-friendly goods and services.

chapter review

1 Describe what is meant by the term *natural environment*.

2 Discuss why environmental sustainability is often in conflict with other economic objectives.

3 Explain what is meant by the term *ecologically sustainable development*.

4 Outline how market failure occurs in the management of the natural environment.

5 Explain what is meant by an *externality*. Give an example of an externality.

6 Describe what is meant by a *public good*.

7 Identify what methods a government might use to control the level of pollution.

8 Discuss why climate change is widely regarded as the greatest long-term threat to the natural environment.

9 Distinguish between *renewable* and *non-renewable* resources.

10 Examine what initiatives the government can undertake to preserve the natural environment.

TOPIC 4

ECONOMIC POLICIES AND MANAGEMENT

Focus

This topic focuses on the aims and operation of economic policies in the Australian economy and hypothetical situations.

Issues

By the end of Topic 4, you will be able to examine the following economic issues:

- Analyse the opportunity cost of government decisions in addressing specific economic problems or issues
- Investigate structural changes in the Australian economy resulting from microeconomic reforms
- Apply economic theory to explain how a government could address an economic problem or issue in hypothetical situations
- Analyse alternative ways to finance a budget deficit

Skills

Topic 4 skills questions can ask you to:

- Explain how governments are restricted in their ability to simultaneously achieve economic objectives
- Use (simple) multiplier analysis to explain how governments can solve economic problems
- Identify limitations on the effectiveness of economic policies
- Explain the impact of key economic policies on an economy
- Propose and evaluate alternative policies to address an economic problem in hypothetical and the contemporary Australian contexts
- Explain, using economic theory, the general effects of macroeconomic and microeconomic policies on an economy
- Select an appropriate policy mix to address a specific economic problem

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Topic 4

Introduction

The first three topics of this book examined how Australia fits into the global economy and the kinds of economic issues that confront the Australian economy. This final topic examines *Economic Policies and Management* – looking in particular at the policies that can be used to address Australia's economic problems.

In this section we examine both the theory and practice of economic management. Each chapter examines the theory behind the policy, reviewing how economic policies can operate in hypothetical situations. We then examine the **current policy environment** in Australia, including recent Australian policies and alternative approaches.

Chapter 13 In studying economic policy, it is important to remember that there is always a reason why a government implements or changes a policy. In other words, all economic policies are related to policy objectives. Chapter 13 examines policy objectives in Australia and the potential conflicts in objectives that a government may face in implementing the economic policy mix.

In deciding which policies to implement, governments choose between a range of policy alternatives. In general terms, a distinction can be made between the government's use of macroeconomic policies, which are the broad policies that have overall impacts on the economy, and microeconomic policies, which are the policies designed to improve the operation of individual sectors and industries. The following chapters are divided between a discussion of macroeconomic and microeconomic policy instruments.

Chapters 14 and 15 These two chapters examine macroeconomic policy in Australia – fiscal policy and monetary policy – and how they can be used by the government to achieve its economic objectives.

Chapters 16 and 17 These two chapters look at microeconomic policies, with a focus on labour market policies in Chapter 17.

Chapter 18 The book concludes with an evaluation of how well these policies achieve their objectives. Like all kinds of economic decisions, economic management involves making difficult choices between competing aims. Because of the difficulty in achieving all policy objectives, governments must prioritise their goals and respond to changing conditions in the global economic environment. Australia has achieved many of its economic policy objectives during the past fifty years. However, Australia still faces a range of longer term, structural problems and may face difficulty in sustaining its recent successes over time.

13 The Objectives of Economic Policy

13.1 Introduction

13.2 The objectives of economic management

13.3 The goals of government policy in 2021

13.4 Conflicts in government policy objectives

13.5 The economic policy mix

13.1 Introduction

In managing an economy, the first priority for a government is to determine what it will pursue as its economic objectives. Governments can choose to pursue a range of policy goals, and often the priorities of government policy shift over time.

Economists have traditionally described the major objectives of economic management in the following three ways:

- **Economic growth:** An increase in the level of goods and services produced in an economy, which increases the number of material wants satisfied and raises the living standards of individuals in the economy.
- **Internal balance:** Pursuing the goals of price stability (low inflation) and full employment.
- **External balance:** Keeping the current account deficit, foreign liabilities and exchange rate at stable and sustainable levels.

In the following pages we review the main objectives of government policy generally, and then discuss the current objectives of economic management in Australia.

13.2 The objectives of economic management

Economic growth and wellbeing

Economic growth involves an increase in the volume of goods and services that an economy produces. It is measured by the **annual rate of change in real GDP**, that is, the percentage increase in the value of goods and services produced in an economy over a period of one year, adjusted for the rate of inflation.

Economic growth offers substantial benefits to a nation, including:

- an increased standard of living for the population
- improved job prospects for the labour force
- the opportunity for increased public investment in infrastructure and services such as education funded through higher government tax revenues.

Economic growth also contributes to the general wellbeing of households, or **quality of life**, because it means there are more resources available for important contributors to quality of life, such as healthcare, education and programs to support the natural environment.

Quality of life refers to the overall wellbeing of individuals within a country according to their material living standards and a range of other indicators such as education levels, environmental quality and health standards.

Full employment

The objective of full employment involves the full use of all resources (land, labour, capital and enterprise), but economists generally focus on the full employment of labour. This is because when labour resources are not fully utilised, some people will be unemployed – resulting in significant social and economic problems.

Full employment does not mean that there is no unemployment. Rather, it means that the economy is at its **non-accelerating inflation rate of unemployment (NAIRU)**, otherwise known as the natural rate of unemployment. The concept of the NAIRU reflects the fact that there is always going to be a certain level of frictional, seasonal, structural and hard-core unemployment in the economy. The natural rate of unemployment is therefore the level of unemployment that remains after the elimination of cyclical unemployment – the unemployment caused by the upturns and downturns of the economic cycle. This means that the NAIRU is caused by supply side factors rather than deficiency in demand.

The **non-accelerating inflation rate of unemployment (NAIRU)** refers to the level of unemployment at which there is no cyclical unemployment, that is, where the economy is at full employment.

The government can reduce unemployment to its non-accelerating inflation rate through successful implementation of macroeconomic policies. It may also use microeconomic policies to reduce the NAIRU over the longer term. (*The different types of unemployment were discussed in more detail in Chapter 8*).

The benefits of achieving full employment, or minimising unemployment, can be summarised as follows:

- Fully utilising the economy's current capacity to produce, and therefore increasing living standards.
- Minimising the adverse economic and social problems associated with unemployment (for example, personal and family problems, loss of workforce skills and greater inequality).

Price stability

Price stability refers to keeping inflation, or the sustained increase in the general price level, at an acceptable level. This does not mean that the government aims to eliminate inflation altogether; instead, it aims to sustain inflation at a level that will cause minimal distortion to the economy.

High inflation was a significant problem for advanced economies in the 1970s and 1980s. More recently, most governments have been successful in sustaining lower inflation rates. In Australia, the Government and the Reserve Bank have made a commitment to sustaining the average rate of inflation at 2–3 per cent over the course of the business cycle. (*This objective, as well as the causes of inflation, were discussed in more detail in Chapter 9*).

Inflation is seen as a problem because of its economic consequences. A high level of inflation may:

- reduce the real value of income and wealth
- reduce our international competitiveness, due to rising costs of production
- cause a depreciation in the exchange rate as foreign exchange markets lose confidence in an economy
- create uncertainty about future costs and distort economic decision making
- distort the pattern of resource allocation. Inflation encourages speculation in relatively unproductive activities (for example, the buying and selling of existing real estate) that simply redistribute income, and discourage savings and investment in productive activities that contribute to higher output.

External stability

Achieving external stability involves a country meeting its long-term financial obligations to the rest of the world so that its external accounts do not hinder internal economic goals such as higher growth and lower inflation. This is also known as achieving "external balance". Commonly-used measures of external stability include:

Current account is the part of the balance of payments that shows the receipts and payments for trade in goods and services, as well as both primary and secondary income flows between Australia and the rest of the world in a given time period. These are non-reversible transactions.

Balance of payments is the record of the transactions between Australia and the rest of the world during a given period, consisting of the current account and the capital and financial account.

- Achieving a sustainable position on the **current account** of the **balance of payments**. This means, over the long term, balancing our payments for imports of goods and services, as well as other income payments, with our receipts for exports of goods and services, as well as other income receipts.
- **Net foreign debt as a percentage of GDP**. Foreign debt should be kept at a level where an economy can afford to make interest payments on its debt, most often measured via debt-servicing ratio – the percentage of export revenue that is spent on making interest payments on foreign debt.
- **Terms of trade**. This reflects the relative prices of Australia's exports and imports. An increase in the terms of trade improves external stability because it indicates that Australia is able to buy more imports with a given quantity of exports.
- **Exchange rate**. In the short term, the exchange rate is a measure of international confidence in the Australian economy. High volatility in the exchange rate may indicate a lack of external stability.
- **International competitiveness**. Improving Australia's international competitiveness is the best way to maintain external stability over time.

Although Australia has relatively large external imbalances, during recent decades this has not been a major concern for the Australian economy. Nevertheless, improving external imbalances is a policy goal as lower external imbalance will mean reduced vulnerability to adverse developments in global financial markets.

An equitable distribution of income and wealth

An overall objective of government policy is to create a fairer **distribution of income and wealth** in the economy. Governments generally accept that when free markets operate without government intervention, they will produce unfair outcomes because some individuals and some groups in society have fewer opportunities than others.

While governments do not aim to remove all of the inequalities between individuals, it is widely agreed that societies should make provision for the needs of people who are not able to provide for themselves – such as aged persons, people with disabilities or illnesses, and people who are unable to find work. Government policies also generally aim to reduce some of the gap between higher and lower income earners through redistribution policies – such as higher tax rates for high income earners, and social security payments for lower income earners, especially those with families to look after. To address the problem of poverty or social disadvantage often passing from one generation to the next, government policies also aim to improve opportunities for younger Australians who grow up in disadvantaged areas or have limited educational opportunities. Specific policies such as these are often needed to address specific areas of inequality, alongside macroeconomic policies to increase economic growth, keep inflation low and reduce unemployment.

Environmental sustainability

In the process of achieving a society's economic objectives, economic activity may create side effects such as pollution and the depletion of natural resources. In order to address these problems, governments may sometimes establish specific environmental objectives, such as a reduction in greenhouse gas emissions, an improvement in energy efficiency, a reduction in the use of old-growth forests for the timber industry, or a limit on development in certain areas.

Ecologically sustainable development involves conserving and enhancing the community's resources so that ecological processes and quality of life are maintained.

Environmental objectives are part of the government's overall framework of economic management, and a substantial amount of money is spent by Commonwealth and State governments on environmental programs. Traditionally, governments have been willing to trade off some longer-term environmental objectives in favour of the benefits of increased economic activity in the short term. However, with growing recognition of the serious impacts of economic activity on climate change, **ecologically sustainable development** has become an increasingly important economic objective.

reviewquestions

1 Describe the Government's economic objectives of internal stability and economic growth.

2 Discuss how effective you believe the Australian Government has been in achieving external stability in recent years. Has this goal conflicted with other economic objectives?

13.3 The goals of government policy in 2021

Although the broad objectives of economic policy remain largely the same from one year to the next, over time some objectives become higher priorities while other goals become less important. Changing economic conditions influence which goals receive the highest priority at different times. This section examines the current objectives of economic policy.

Economic recovery

The priority of government policy in 2021 is to restore economic growth after the most severe economic downturn since the 1930s. Australia's long-term potential growth rate is 2.75 per cent, according to Treasury estimates in 2019. When there is spare capacity in the economy, an economy can sustain a growth rate above its long-term trend until there is no spare capacity. The COVID-19 recession in 2020 created the unusual situation of a very large amount of spare capacity. The Reserve Bank forecast in August 2020 that following a contraction of 6 per cent in 2020, Australia's economy would grow by 5 per cent in 2021 and 4 per cent in 2022 – the fastest two years of economic growth since the late 1990s.

The policy measures adopted to achieve economic recovery include economy-wide and industry-specific measures. Fiscal policy has played the central role in the policy mix, with the largest fiscal stimulus to the economy in history. The centrepiece of the fiscal strategy in the early phases of the recession was income support measures to keep people in employment and to provide cash support to people who were out of work. A range of industry-specific measures were also introduced to avoid the collapse of firms in specific sectors worst affected by COVID-19, as well as to provide medium-term economic activity (such as through encouraging investment and making direct investments in infrastructure). A significant stimulus was also provided by the Government permitting individuals to draw down on their superannuation savings, up to a maximum of $20,000, which had resulted in withdrawals of $30 billion by the end of July 2020. Monetary policy also played a supportive role to fiscal policy, with the cash rate reduced to its lowest level ever in 2020, to encourage household consumption and business investment. The Reserve Bank also undertook additional unconventional monetary policy measures to support lending to businesses.

Minimising the rise in unemployment

Once it became clear that the outbreak of the COVID-19 pandemic would require temporary shutdowns of economic activity to control the spread of the virus, the Australian Government made it a priority to minimise the increase in unemployment. The key policy initiative to prevent people losing their jobs was a wage subsidy, initially at a fixed rate of $1500 per fortnight, which was provided to 3.5 million Australian workers, more than a quarter of the workforce. Employers would have otherwise retrenched many of those workers (because of their loss of income and activity), leading to higher unemployment and a slower recovery in the jobs market. Government estimates suggested as much as 13 per cent of the labour

market would have been unemployed were it not for the JobKeeper initiative. Although the Government recognised that some increase in unemployment was inevitable as the JobKeeper support was phased down after September 2020, a range of other measures were also introduced to minimise job losses, including industry support packages.

Increasing productivity and the sustainable rate of growth in the longer term

A major focus of the policy mix over the past three decades has been to implement structural changes that will allow Australia to afford a higher rate of economic growth in the long run. A longer-term goal of government policy is to maximise Australia's long-term trend rate of economic growth, which has fallen since the 1990s. This requires measures to improve productivity growth, increase workforce participation and address capacity constraints in the economy (related to inadequate infrastructure or skilled workers). Higher productivity growth is especially important as Australia's ageing population is likely to reduce Australia's workforce participation rate in coming years. Policies to increase productivity growth include reforming education and training, promoting greater competition in key sectors of the economy, replacing state-based economic regulations with national standards, reforming the delivery of government services, and increasing investment in infrastructure.

As part of its economic recovery strategy, the Government has recognised the need for a new wave of economic reforms to drive long-term growth. The Government committed to use the mechanism of the National Cabinet, which was central to the coordination of national efforts to tackle the threat of the coronavirus, to improve cooperation on this reform agenda. The National Cabinet consists of the Prime Minister, State Premiers and Chief Ministers of Territories. It replaces the Council of Australian Governments (COAG), a similar grouping that was set up in the 1990s. The Government also established a National COVID-19 Commission Advisory Board to provide advice from the business sector on recovery efforts.

Maintaining low and stable inflation

During a major economic downturn, governments do not need to focus on the objective of low inflation because inflationary pressures are usually weak during an economic downturn. This is especially the case in 2021, given that inflation has been low for several years and is expected to remain low. With excess capacity in the economy, high unemployment and weak consumer spending, the RBA forecast in 2020 that CPI and underlying inflation would remain below the target range until at least the end of 2022 (with headline inflation of 1 per cent in 2021 and 1.5 per cent in 2022).

Minimising the budget deficit and maintaining investor confidence

During recent decades, governments have committed to the medium-term objective of returning the budget to surplus, recognising that short-term conditions (such as the COVID-19 recession in 2020 and the global financial crisis in 2009) may require fiscal stimulus and large deficits. The objective of returning the budget to surplus is to improve the sustainability of public finances and maintain international investors' confidence in the Australian economy. An important dimension of the Morrison Government's medium-term fiscal strategy, once the economy is in recovery, is to set out its strategy for returning the budget to surplus following the record-level budget deficits caused by the recession. Although the level of net public sector debt has risen sharply (from 19 per cent of GDP in 2018–19 to an estimated 36 per cent of GDP in 2020–21) this remains low by comparison with other OECD economies. With the economic downturn expected to be prolonged, the Government's objective of minimising the budget deficit is expected to be a secondary consideration to other objectives in the immediate future.

Improving distribution of income and wealth

Improving the distribution of income and wealth has been a long-term objective of policy which influenced several policy changes in the past decade, including education funding reforms (to assist disadvantaged schools), childcare reform (to improve access for earners) and welfare changes (such as increases in the age pension). The National Disability Insurance Scheme is also intended to assist low-income earners by establishing a national system across Australia for people with significant and permanent disability, reducing the out-of-pocket expenses.

Minimising the impact on vulnerable groups was a major consideration in the design of policies responding to the economic downturn caused by COVID-19. Besides the JobKeeper wage subsidy program, which kept 3.5 million Australians in work, the Government also temporarily doubled the unemployment benefit and made it easier to access. It also provided two Economic Support Payments, worth $1500 in total, to more than five million households and worked with banks to allow mortgage payments to be deferred. While these measures helped address the impact of the recession on lower income earners, the policy that attracted the most criticism involved allowing superannuation account holders to access their retirement savings. Critics argued that this would deplete the savings on the lowest income earners, resulting in greater wealth inequality in the long run.

Promoting environmental sustainability

Promoting environmental sustainability is an important long-term objective of economic policy. Sustaining long-term prosperity depends on addressing environmental challenges, especially given Australia's vulnerability to climate change, water shortages and threats to diverse marine ecosystems. However, when protecting the environment has involved trade-offs for economic growth or cost of living increases for households, environmental objectives are often given secondary priority to the goal of maximising economic growth. The difficulty of balancing these competing goals was reflected in the political crisis around the National Energy Guarantee (NEG) policy in 2018, which sparked major internal disagreements within the Turnbull Government and ultimately led to Prime Minister Malcolm Turnbull losing the leadership of the Liberal Party and Scott Morrison becoming Prime Minister. The NEG policy had been strongly opposed by some government MPs who argued it should focus only on reducing energy prices and not on reducing carbon emissions.

Questions about the significance of environmental sustainability as an economic objective resurfaced during COVID-19. While many OECD countries have prioritised low-carbon industries and green infrastructure in their economic recovery strategies, these have not been priorities in the Morrison Government's recovery strategy. For example, none of the Government's 15 priority infrastructure projects were focused on environmental goals. In fact, in 2020 the Government announced as part of its recovery strategy measures to reduce delays to approving developments caused by the Environment Protection and Biodiversity Conservation Act of 1999.

"Our budget will be balanced again by keeping expenditures under control, while boosting revenues through pro-growth policies that lift investment and get Australians back into jobs, just like we did it last time [following the GFC].

Neither excessive austerity nor higher taxes are the path that our Government will pursue. We will pursue growth and responsible budget management that ensures that governments live within their means and guarantee the essentials Australians rely on, as ever. Growing our economy all comes back to getting people back into jobs. This is where we must start."

– Scott Morrison, Prime Minister of Australia,
Address to the CEDA's State of the Nation Conference, 15 June 2020

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reviewquestions

1 Outline the long-term objectives of government policy.
2 Briefly outline how successful Australia has been in recent years in achieving each of the economic goals listed above.

13.4 Conflicts in government policy objectives

Governments face significant conflicts in seeking to achieve the goals of economic growth, low inflation, low unemployment, environmental sustainability and external balance simultaneously. In attempting to achieve one goal, the government may limit its ability of achieving another. There are two major conflicts between the government's economic objectives:

1. Achieving a simultaneous reduction in unemployment and inflation

It is often argued that the government faces a trade-off between lower unemployment and inflation in the short to medium term. Stronger aggregate demand causes job growth and reduces unemployment, but is also likely to put upward pressure on prices. Weaker aggregate demand forces businesses to restrain price rises, but also tends to increase unemployment. The **Phillips curve**, shown in figure 13.1, shows this inverse relationship between inflation and unemployment, highlighting the trade-off that governments face when making policy decisions. However, this relationship is not necessarily strong all the time. A Reserve Bank research paper in 2015 concluded that inflation targeting had resulted in a "flatter" Phillips curve, in which lower unemployment now has less of a trade-off with low inflation. Inflation targets moderate inflationary expectations, keeping inflation relatively stable – even when aggregate demand changes unemployment. Since 1993, Australia has had an explicit low inflation target of 2–3 per cent, effectively having policy priority over lower unemployment.

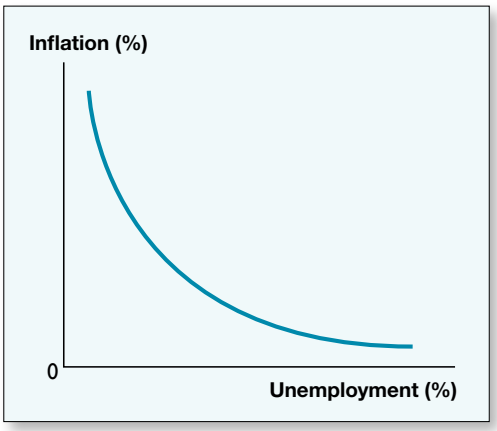


Figure 13.1 – The Phillips curve

Appendix B: Advanced Economic Analysis at the back of this textbook looks at the Long Run Phillips Curve – a more sophisticated analysis of the relationship between unemployment and inflation.

2. Achieving economic growth and external balance

The government also faces the challenge of a conflict between economic growth and external balance. Strong economic growth often results in a deterioration in the current account on the balance of payments. Higher economic growth is usually associated with increased consumption and investment, which will cause the volume of imports to rise. This is known as the **balance of payments constraint**, which refers to the limitation on the rate of growth because of the impact of high growth on the current account deficit.

The **balance of payments constraint** reflects the extent to which a high current account deficit limits the speed at which the economy can grow.

Other conflicts in objectives

The pursuit of economic growth can sometimes come at the cost of **environmental damage** and **greater inequality** in income distribution. A government that approves extensive mining projects or coal-fired power stations without regard to their environmental effects may achieve faster economic growth, but this could occur at a significant cost to the natural environment and could damage other industries such as tourism. Likewise, a government that attempts to reduce Australia's carbon emissions may impose costs on households and

industries that slow down economic growth. Similarly, policies that encourage faster growth may have negative social effects, such as privatised companies sharply raising prices, or microeconomic policies leading to an increase in structural unemployment in the short run. This can worsen inequality. Environmental preservation and achieving a more equitable distribution of income and wealth are long-term challenges for government policy.

The government also experiences a range of other policy conflicts between **shorter-term** and **longer-term** objectives. The conflicts between short- and long-term objectives result from the fact that the policies aimed at long-term goals often involve significant structural change and substantial costs in the shorter-term, such as an increased level of unemployment or additional costs to the government. Governments may often be more focused on short-term objectives because of political considerations such as avoiding unpopular policies, rather than long-term objectives that may not deliver benefits for some time.

reviewquestions

1. Briefly outline which economic objectives can be achieved simultaneously, that is, where the Government does not face a conflict.
2. Describe TWO possible conflicts between the economic objectives of the government.
3. Using a diagram, explain the conflict between the government's internal stability objectives.

13.5 The economic policy mix

Economic policy mix refers to the combination of macroeconomic (fiscal and monetary) and microeconomic policies used by the government to achieve its economic objectives.

Macroeconomic management refers to the use of government policies to influence the economy with the aims of reducing large fluctuations in the level of economic activity and achieving certain economic goals.

Governments have a variety of policy instruments that can be used to achieve their objectives. In a general sense, the instruments of economic policy are divided between macroeconomic and microeconomic policies.

- **Macroeconomic policies,** such as government budgets and changes in the level of interest rates, have an impact on the overall level of economic activity. These policies tend to influence the level of aggregate demand in the economy.
- **Microeconomic policies** involve specific measures to improve the operation of firms, industries and markets, by achieving change at the level of individual firms and industries. These policies tend to influence the aggregate supply of the economy – that is, improving productivity and efficiency so that the overall level of supply may be increased.

Governments normally use a combination of macro and micro policies in order to best achieve their economic objectives. This combination of policies is called the **economic policy mix**, a term which is intended to capture the overall impact of the range of macro and micro policy measures implemented.

Macroeconomic policy

The main role of macroeconomic policy is to manage the business cycle (changes in the level of economic activity). The level of economic activity is never constant. Economies are subject to the ups and downs of the business cycle, caused by changes in the level of aggregate supply and demand. This is shown in figure 13.2.

Government **macroeconomic management** is designed to minimise these fluctuations so that economies experience low rates of inflation and unemployment and relatively stable economic growth. Macroeconomic management can be defined as the use of government policies to influence the economy with the aims

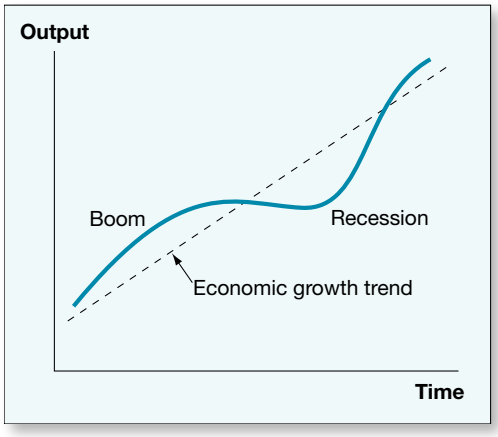


Figure 13.2 – The business cycle

of reducing large fluctuations in the level of economic activity and achieving certain economic goals.

Government policies can help to **stabilise** the level of economic growth by smoothing the peaks and troughs of the economic cycle. This is why macroeconomic policies are also referred to as **counter-cyclical policies**. During periods of fast economic growth, it may be necessary to reduce the level of economic activity to avoid excessive inflation or a blowout in the current account deficit. Governments can increase the level of tax, reduce spending or raise interest rates in order to reduce the level of economic activity:

- Higher tax rates will reduce consumers' disposable income and reduce the level of spending and aggregate demand, also reducing pressures on inflation and the CAD.
- Reduced government spending will also lower the level of aggregate demand by lowering the level of aggregate expenditure in the economy.
- Higher interest rates make borrowing money less attractive and will discourage borrowing and spending by both consumers and businesses.

On the other hand, when the economy experiences a downturn in economic growth, such as during the COVID-19 recession, a government may use macroeconomic policy to stimulate economic activity and raise the level of aggregate demand. This may be done through increased government spending, tax cuts and reductions in the level of interest rates.

One of the major lessons of Australia's economic performance over recent decades is that macroeconomic policy is not enough to achieve complex policy goals. Macroeconomic policy works effectively in either stimulating or dampening the economy in the short term, but it is much less effective in dealing with longer-term problems such as low productivity growth, entrenched underemployment, inequality, weak international competitiveness, a low level of national savings or the need to reduce carbon emissions. However, macro and micro policies can be effective when used together.

Microeconomic policy

Microeconomic policy refers to policies that are aimed at individual industries, seeking to increase aggregate supply by increasing the efficiency and productivity of producers.

Microeconomic policy is action taken by government to improve resource allocation between firms and industries, in order to maximise output from scarce resources. Microeconomic policies are central to the government's long-term aim of addressing potential constraints on growth such as the inflation and external imbalance.

Microeconomic policy over recent decades has reflected a change in the focus of economic management from influencing demand towards measures to influence supply. This economic strategy is known as **supply-side economics**. As governments have wrestled with the limited effectiveness of macroeconomic policies that mainly influenced the level of demand, they have turned to policies that focus on increasing the aggregate supply level by improving the competitiveness, productivity and efficiency of Australian industries, and raising workforce participation.

Microeconomic policy involves a range of specific policies varying from practices in individual government departments to policies for entire industries. The overall aim of microeconomic reforms is to **encourage the efficient operation of markets** and increase aggregate supply – by raising productivity, making the economy more adaptable to change and encouraging Australian producers to take on "world best" practices. The role of these policies is discussed in Chapter 16.

reviewquestions

1 Distinguish between the roles of macroeconomic and microeconomic policies in the Government's policy mix.

2 Discuss how macroeconomic policy responds to changes in the business cycle.

chapter summary

1 The main **objectives of economic management** are economic growth, low inflation, full employment, external balance, an equitable distribution of income and wealth, and environmental sustainability.

2 **Economic growth** involves an increase in the volume of goods and services produced in an economy over a given time period, measured by the rate of change in real GDP. Growth is generally considered to be the highest priority of economic management because of its relationship to improved living standards.

3 An economy is considered to be at **full employment** (or the non-accelerating inflation rate of unemployment) when cyclical unemployment is eliminated.

4 **Price stability** refers to keeping inflation, or the increase in the general price level, at a reasonable level. This is currently reflected in the Reserve Bank's target of an average of 2–3 per cent inflation over the course of the economic cycle.

5 **External stability** refers to a situation where Australia is meeting its financial obligations to the rest of the world and its external accounts – the size of its current account deficit (or surplus) and the size of its foreign liabilities do not hinder it from achieving other economic objectives. Australia has been less successful in sustaining external balance than in achieving other policy objectives.

6 The Government's shorter-term economic priorities in 2021 are to support economic growth and minimise the rise in unemployment as the economy recovers from its most severe recession since the 1930s.

7 The main long-term aims of economic policy are to increase productivity growth to improve international competitiveness and the long-term sustainable growth rate of the economy, as well as increasing the overall level of national savings. Increasingly, environmental sustainability is also a long-term objective of policy.

8 **Conflicts** exist among the objectives of economic management, such as between keeping inflation low and achieving full employment, and between achieving faster economic growth and promoting environmental sustainability.

9 **Macroeconomic policies**, such as fiscal and monetary policies, attempt to reduce fluctuations in the business cycle by influencing the level of aggregate demand.

10 **Microeconomic policies** are aimed at promoting structural change by influencing the supply side of the economy. By improving productivity and workforce participation, microeconomic policies aim to raise Australia's sustainable rate of growth over time.

chapter review

1 Explain why economic growth plays a central role in a government's policy objectives.

2 Distinguish between internal balance and external balance.

3 Identify the key components of Australia's objective of external stability.

4 Identify how the Reserve Bank of Australia attempts to achieve price stability.

5 Explain why Australia's economic policy objectives have changed in recent years.

6 Examine how the objectives of reducing inequality in the distribution of income and wealth and improving environmental sustainability objectives are related to the objective of increasing economic growth.

7 Discuss the current priorities of economic management.

8 Explain why the goals of low inflation and low unemployment are considered to be conflicting aims of economic management.

9 Distinguish between macroeconomic and microeconomic policy, with reference to the concepts of aggregate demand and aggregate supply.

10 Explain how the concept of sustainable economic growth represents a balance between the government's conflicting policy goals.

Fiscal Policy

14

14.1 The meaning of fiscal policy

14.2 Budget outcomes

14.3 Changes in budget outcomes

14.4 Methods of financing a deficit

14.5 The current stance of fiscal policy

14.6 The impact of recent fiscal policy

14.1 The meaning of fiscal policy

Fiscal policy is at the heart of the management of the economy. Although it generally plays a less important role than monetary policy in influencing economic growth, fiscal policy can influence the overall level of economic activity and have a targeted impact on specific sectors of the economy such as individual industries or parts of society.

Fiscal policy involves the use of the Commonwealth Government's Budget in order to achieve the government's economic objectives. By varying the amount of government spending and revenue, the government can alter the level of economic activity, which in turn will influence economic growth, inflation, unemployment and the external indicators in the economy.

Fiscal policy is a macroeconomic policy that can influence resource allocation, redistribute income and reduce the fluctuations of the business cycle. Its instruments include government spending and taxation and the budget outcome.

Further, changes in government spending and revenue collection can also lead to a **reallocation of resources**, which changes the pattern of production in the economy, as well as **redistributing income** within the community.

The **Budget** is the annual statement from the Australian Government of its income and expenditure plans for the next financial year. It is normally released in May. The Budget includes all forms of **revenue** received by the Government, including both taxation and other revenue:

- direct tax (personal income tax and company tax)
- indirect tax (such as customs and excise duties and the Goods and Services Tax)
- other revenues (such as dividends from public trading enterprises).

The Budget is the tool of the government for the exercise of fiscal policy. It shows the government's planned expenditure and revenue for the next financial year.

The other side of the Budget is government expenditure. The major items of expenditure in the Budget are social welfare, health, education, general public services and defence.

In some years, governments make major policy changes in response to changing economic or political conditions. Although most policy changes are announced in the Budget, governments also usually make a series of smaller policy changes at other times. Governments attract more public attention (and therefore political advantages) when the spread out "good news" announcements such as new spending programs over a period of weeks or months before the Budget. On the other hand, "bad news" announcements such as tax increases or spending cuts will often be bunched together in the Budget.

When governments make smaller changes to fiscal policy throughout the course of the year, the full costings of these decisions are set out afterwards, either in the next Budget, or in a statement released around December each year, known as the Mid-Year Economic and Fiscal Outlook statement (or MYEFO). This statement also provides updates to the Treasury's forecasts for the Budget and future economic conditions. Changes in economic conditions can significantly affect planned revenues and expenditures.

14.2 Budget outcomes

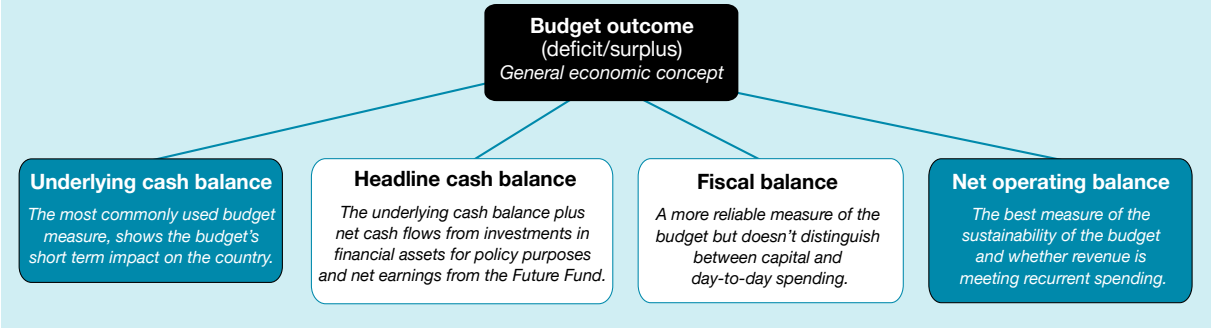
Besides the individual instruments of spending and revenue collection, the overall outcome of the Budget – known as the **budget outcome** – is itself an important feature of fiscal policy. The budget outcome gives an indication of the overall impact of fiscal policy on the economy.

There are three possible budget outcomes: a surplus, a deficit, or a balanced budget.

- **Budget surplus** – A positive balance that occurs when the Commonwealth Government anticipates that total government revenue (T) will exceed total expenditure (G) – that is, T > G.
- **Budget deficit** – A negative balance that occurs when total government expenditure exceeds total revenue – that is, G > T.
- **Balanced budget** – A zero balance that occurs when total government expenditure is equal to total revenue – that is, G = T.

The Government's main fiscal policy aim is to achieve budget surpluses, on average, over the course of the economic cycle. The Government's progress towards that goal is reflected in the four-year projections for budget outcomes that are provided in the Budget and other fiscal documents. In addition, since 2013–14 the Treasury has published a 10-year medium-term budget projection.

MEASURING THE BUDGET OUTCOME



The Commonwealth Government's Budget includes four main measures of the budget outcome, which are the result of different accounting methods:

- The **underlying cash balance** (cash deficit or cash surplus) is the Government's preferred measure of the budget outcome because it gives an indication of the short- to medium-term impact of fiscal policy on the level of economic activity and the budget's call on cash resources from other sectors of the economy. It is calculated using the cash accounting method (which records revenues and expenditures when the money is collected or spent). However, it does not distinguish between the type of spending (for capital or recurrent purposes) and does not reflect international standards of accrual accounting. In figure 14.1, the underlying cash balance may vary from the difference between receipt and payments because net Future Fund earnings are removed until the Australian Government's superannuation liability is expected to be met.

Year	Receipts $bn	Payments $bn	Underlying cash balance		Fiscal balance		Net operating balance	
			$bn	% GDP	$bn	% GDP	$bn	% GDP
2000–01	183.0	177.1	5.9	0.8	6.0	0.9	6.0	0.9
2001–02	187.6	188.7	–1.1	–0.1	–2.9	–0.4	–2.6	–0.3
2002–03	204.6	197.2	7.4	0.9	5.4	0.7	5.7	0.7
2003–04	217.8	209.8	8.0	0.9	6.1	0.7	6.8	0.8
2004–05	236.0	222.4	13.6	1.5	12.2	1.3	13.3	1.4
2005–06	255.9	240.1	15.8	1.6	16.4	1.6	18.9	1.9
2006–07	272.6	253.3	17.2	1.6	16.8	1.5	19.1	1.8
2007–08	294.9	271.8	19.8	1.7	20.9	1.8	23.5	2.0
2008–09	292.6	316.0	–27.0	–2.1	–29.9	–2.4	–25.9	–2.1
2009–10	284.7	336.9	–54.5	–4.2	–53.9	–4.1	–47.4	–3.6
2010–11	302.0	346.1	–47.5	–3.4	–52.2	–3.7	–46.9	–3.3
2011–12	329.9	371.0	–43.4	–2.9	–44.7	–3.0	–39.9	–2.7
2012–13	351.1	367.2	–18.8	–1.2	–23.9	–1.6	–22.9	–1.5
2013–14	360.3	406.4	–48.5	–3.0	–44.2	–2.8	–40.3	–2.5
2014–15	378.3	412.1	–37.9	–2.3	–40.8	–2.5	–38.1	–2.3
2015–16	386.9	423.3	–39.6	–2.4	–37.5	–2.3	–33.6	–2.0
2016–17	409.9	439.4	–33.2	–1.9	–35.0	–2.0	–32.1	–1.8
2017–18	446.9	452.7	–10.1	–0.5	–5.3	–0.3	–4.0	–0.2
2018–19	485.3	478.1	–0.7	0.0	2.6	0.1	8.9	0.4
2019–20*	469.5	550.0	–85.8	–4.3	n/a	n/a	n/a	n/a
2020–21*	455.5	640.0	–184.5	–9.7	n/a	n/a	n/a	n/a

Source: 2019–20 MYEFO Table E1, 2020 July Economic and Fiscal Update Part 3; *Estimate
Note: Fiscal balance and net operating balance were not published in the 2020 July Economic and Fiscal Update.

Figure 14.1 – Recent Commonwealth Budget outcomes

- The **headline cash balance** reflects the underlying cash balance plus the government's purchase or sale of assets. In the past, this calculation was significant because of the number of government assets that were being sold. In more recent years, governments have invested in new infrastructure such as the National Broadband Network by creating new financial assets and borrowing to pay for these assets. This directly adds to gross debt, but the transaction is not captured in the underlying cash balance.
- The **fiscal balance** (fiscal deficit or fiscal surplus) calculates revenue minus expenses less net capital investment, based on accrual accounting. Accrual accounting measures expenditures and revenues when they are incurred or earned, rather than when a cash transaction actually occurs. For example, if the government's superannuation obligations to public servants increased by $5 billion in one year, this would increase a fiscal deficit by $5 billion for that year, even if the money is not paid out until years later. This is regarded as more accurate than cash accounting. However, the fiscal balance does not distinguish between spending for capital or recurrent purposes.
- The **net operating balance** (operating deficit or operating surplus) is regarded as the best measure of the sustainability of the budget because it shows whether a government is meeting its recurrent (day-to-day) obligations from existing revenue. The net operating balance distinguishes between spending for capital or recurrent purposes, and it removes spending on capital from the balance (that is, resulting in a smaller deficit or increased surplus), although it includes the cost of depreciation (the run-down in the value of existing assets). The rationale for separating the two types of expenses is that capital spending is different from other spending because it adds to productive capacity and to the government's assets. Like the fiscal balance, the net operating balance is based on accrual rather than cash accounting.

reviewquestions

1 Explain the difference between a budget surplus and a budget deficit.
2 What is the difference between an underlying cash surplus and a net operating surplus?
3 Identify two key trends in recent budget outcomes and discuss the relationship between these trends and economic conditions.

14.3 Changes in budget outcomes

Each year, the levels of government spending and revenue collection, and thus the budget outcome, change. This reflects the impact of two key factors: changing economic conditions (known as cyclical or non-discretionary changes) and changes in government policy (known as structural or discretionary factors).

- **Discretionary changes in fiscal policy**. Discretionary changes involve deliberate changes to fiscal policy, such as reduced spending or changing taxation rates. If the government deliberately increased expenditure in order to stimulate demand, this would be an example of discretionary fiscal policy. Discretionary changes influence the **structural** component of the budget outcome.
- **Non-discretionary changes in fiscal policy**. The final budget outcome can be influenced by factors other than planned (discretionary) changes to government revenue and expenditure. These non-discretionary changes are caused by **changes in the level of economic activity.** When an economy is in recession, the budget deficit will increase, whereas during a period of strong economic growth the deficit will contract or the budget will shift into surplus. Non-discretionary changes influence the **cyclical** component of the budget outcome.

Automatic stabilisers are policy instruments in the government's budget that counterbalance economic activity. In a boom period, they decrease economic activity, and, in a recession, they increase economic activity. The most common examples are transfer payments and a progressive tax system.

Budgetary changes that are influenced by the level of economic growth are also known as **automatic stabilisers**. Automatic stabilisers can be defined as those changes in the level of government revenue and expenditure that occur as a result of changes in the level of economic activity. They are referred to as "automatic" because they are built into the Budget, and they are activated by a change in the level of economic activity, **not by a deliberate change in government policy** relating to either revenue or expenditure.

There are two main automatic stabilisers:

- **Unemployment benefits**. When the economy moves into recession, the level of economic activity falls, causing a rise in unemployment. An increase in unemployment leads to greater government expenditure on unemployment benefits. Thus, a decline in the level of economic activity automatically leads to an increase in government expenditure. On the other hand, an increase in the level of economic activity would have the opposite effect – causing a decrease in unemployment, and less government expenditure on unemployment benefits.
- The **progressive income tax system.** Progressive income tax means that people on higher incomes pay proportionately more tax than those on lower incomes. During an economic boom, employment opportunities are increasing and incomes are rising. Rising incomes move workers into higher income tax brackets, and previously unemployed persons start paying income tax. Both situations lead to an increase in government taxation revenue. On the other hand, a decrease in the level of economic activity would lead to a decrease in taxation revenue.

Counter-cyclical policies are economic policies designed to smooth fluctuations in the business cycle. Macroeconomic policies such as fiscal policy and monetary policy are usually used as counter-cyclical policies.

Automatic stabilisers are built into the Budget with a **counter-cyclical role**. When economic growth is high, demand is automatically slowed through higher tax revenues and reduced government expenditure. On the other hand, when the economy moves into recession, it is given a boost by increased government expenditure through unemployment benefits.

Nevertheless, it is important to realise that automatic stabilisers, on their own, are rarely strong enough to counter the effects of the economic cycle. Automatic stabilisers are not powerful enough by themselves to bring an economy out of a severe recession, or to curb an economic boom – they merely reduce the severity of the problem. Governments still rely upon discretionary policy measures to smooth the economic cycle as the Morrison Government did with the unprecedented measures to support economic activity in 2020, following the onset of the COVID-19 pandemic.

Impact on economic activity

The most significant short-term impact of fiscal policy is how it affects economic activity. The **budget stance** (not to be confused with the budget outcome) refers to the impact of fiscal policy on economic growth and can be described as expansionary, contractionary or neutral:

- An **expansionary** stance is one where the government is planning to increase the level of economic activity in an economy. This can occur through either a reduction in taxation revenue and/or an increase in government expenditure, creating either a smaller surplus, or a larger deficit than in the previous year. Expansionary fiscal policy leads to a multiplied increase in consumption and investment and stimulates aggregate demand, which will increase the level of economic activity.
- A **contractionary** stance is one where the government is planning to decrease the level of economic activity in an economy. This can occur through either an increase in taxation revenue and/or a decrease in government expenditure, creating either a smaller deficit or a bigger surplus than in the previous year. Contractionary fiscal policy leads to a multiplied decrease in consumption and investment, dampening aggregate demand, which will decrease economic activity.
- A **neutral** fiscal policy stance occurs when the government plans to maintain the gap between revenue and spending at around the same level as the previous year. A neutral fiscal policy should have no effect on the overall level of economic activity.

Impact on resource use

Fiscal policy changes can influence the allocation of resources in the economy directly or indirectly. Fiscal policy may directly affect resource use through government spending in a particular area of the economy, such as transport infrastructure (for example, the Western Sydney Airport construction) to help boost tourism growth. The indirect influence of fiscal policy covers tax and spending decisions that make it more or less attractive for resources to be used in a particular way – for example, removing taxes from ethanol production might encourage farmers to use more of their wheat, sugar and other crops to produce ethanol.

A public good is an item that private firms are unwilling to provide as they are not able to restrict usage and benefits to those willing to pay for the good. Because of this, governments generally provide these goods.

Governments are more likely to use direct measures to provide goods or services if they expect that markets will not provide the resources quickly enough without government intervention. For example, in an emergency situation such as a natural disaster, governments will usually step in and direct relief operations so that emergency resources are made available to the victims of a disaster. Similarly, the government might pay directly to provide **public goods**, because it is unlikely that the private sector will produce such goods, and it is difficult to prevent anyone else from enjoying the benefit of those goods. Examples of public goods include lighthouses, street lighting, national defence and environmental protection agencies that enforce clean air standards.

Governments use specific taxing and spending policies that lead to changes in resource use that meet the government's objectives. For example, if the government wants to discourage the consumption of products without banning them, it might apply high tax rates, as it does with tobacco products (which generate the negative externality of increased health care costs through tobacco-related diseases). This helps to discourage tobacco consumption, which in the longer term may reduce the costs to the health care system.

Impact on income distribution

From year to year, changes in fiscal policy play the most important role of any government policy in influencing the distribution of income in the economy. Australia has a **progressive income tax system** designed to create a more equal distribution of income. People on higher incomes pay higher rates of income tax, allowing the government to use this money for transfer payments, community services and other types of social expenditure, which in particular assist people on lower incomes.

Changes to taxation arrangements can affect income distribution significantly. For example, a reduction in tax rates at the upper end of the income scale would make the tax system less progressive and may create a less equal distribution of income. Likewise, introducing tax concessions (that is, exemptions from tax for certain types of income such as earnings from superannuation) might affect the distribution of income without actually changing the tax rates. Similarly, if the government were to increase the rate of the Goods and Services Tax (a regressive tax), this would make the tax system less progressive and would result in lower-income earners paying a relatively higher proportion of their incomes in tax, increasing income inequality.

Budgetary changes involving government spending can also influence income distribution significantly. Increases in spending on community services such health care and labour market programs, or increases in welfare payments such as the age pension, will tend to reduce income inequality because they have a greater proportional benefit for low-income earners. On the other hand, government spending cuts often increase income inequality because low-income earners tend to be more reliant on income support payments and government services than higher-income earners.

Impact on savings and the current account deficit

Appendix B: Advanced Economic Analysis at the back of this textbook looks at the relationship between the budget and the current account in more detail.

A long-term relationship exists between the budget outcome and the size of the current account deficit and foreign debt. There has been debate over the extent of this relationship for many years (see also Chapter 10.5). Over the long term, a budget deficit decreases national savings because governments finance budget deficits by borrowing from private sector savings. A budget deficit (or more accurately, an overall public sector deficit) is a form of **negative savings**, or **dissavings**, that will reduce the level of national savings, which is composed of public savings plus private savings.

With a depleted national savings pool, the competition for a limited amount of savings to finance domestic consumption and investment will make it more difficult to access funds and place upward pressure on interest rates, making private sector investment more expensive. This is known as the **crowding out effect**. In a closed economy, this will lead to a decrease in private investment. However, in an open economy such as Australia, the crowding out effect is less pronounced as private sector borrowers may simply turn to overseas sources of funds to finance domestic investment and consumption. This will show up as an inflow on the capital and financial account and will increase the size of Australia's foreign debt. Alternatively, if the government borrows from overseas, the inflow of funds will directly lead to an increase in Australia's foreign liabilities. This will raise the net primary income deficit as the higher level of foreign liabilities is serviced with higher interest repayments. Thus when the government consistently runs large fiscal deficits over several years, the current account deficit will tend to be higher. However, there is very little evidence of any short-term relationship between budget deficits and current account deficits.

Australia's current account deficit is mainly related to persistent imbalances between private savings and private investment, rather than public sector borrowing. Nevertheless, one of the reasons for the objective of sustaining fiscal balance is so that fiscal policy is not contributing to higher current account deficits in the longer term.

reviewquestions

1. Explain the role of cyclical and structural factors in influencing the Budget outcome from year to year.
2. If the government wished to slow the pace of economic activity, explain what changes it would make to revenue and expenditure and the impact on the size of: a) a budget deficit b) a budget surplus.
3. Outline how fiscal policy might affect the distribution of income.

14.4 Methods of financing a deficit

In this section, we look at where and how the government obtains the extra money it needs when it budgets to spend more money than it receives, as well as what the government does with surplus funds when revenue exceeds expenditure.

When the government budgets for a deficit, it is planning to spend more than it receives in revenue over the current financial year. In short, this deficit is financed through **borrowing** from the domestic **private sector**, from **overseas investors** or **from the Reserve Bank** (by printing money, known as monetary financing). Alternatively, the government can also sell government assets. In recent times, when it has run a deficit, the Australian government has relied almost exclusively on borrowing from the domestic private sector.

Borrowing from the private sector

The main form of deficit financing is through borrowing from the private sector by selling Treasury Bonds domestically under a tender system. Under this system, the government sets the value of bonds to be sold (determined by the size of the deficit to be financed), and the prospective purchasers tender to buy a certain quantity at a particular rate of interest. The government then accepts the tenders, starting with those offering to buy at the lowest rate of interest, through to the highest, until all bonds are sold. The advantages of this system are twofold: the government can always be certain that it will fully finance its deficit, and the market will set the interest rate on these newly issued bonds.

However, it is also worth considering the effect of a deficit financed by domestic borrowing from the private sector on private sector spending, and in particular on private investment. The **crowding out effect** describes how a budget deficit will soak up funds in Australia's domestic savings pool, putting upward pressure on interest rates and leading to a reduction in private sector spending and investment (as discussed in the previous section). The private sector is "crowded out" of the domestic market by government borrowing, since lenders will prefer to lend money to the government. Under these circumstances, the private sector would have less access to domestic savings and may be forced to borrow overseas instead.

Crowding out effect occurs where government spending is financed through borrowing from the private sector, which puts upward pressure on interest rates and "crowds out" private sector investors who cannot borrow at the higher rates of interest.

The strength of the crowding out effect depends on economic conditions. If the government increases the fiscal deficit when the economy is in recession, it is less likely to crowd out the private sector, since investment spending would be low at this time. But if the government continued to run a deficit during periods of strong economic growth, when substantial private sector activity is already occurring, it would be more likely to lead to a significant crowding out effect. However, in an era of globalised financial markets, the crowding out effect is now much weaker since many of the financial institutions that buy bonds on domestic financial markets are from overseas. Overseas investors are attracted by Australia's low risk profile (reflected in the Australian Government's AAA credit rating) and the interest rate differential between Australia and other advanced economies. The estimated proportion of Australian government securities held by overseas investors fell from 76 per

Appendix B: Advanced Economic Analysis at the back of this textbook looks at the theory of "crowding out" in more detail.

cent in 2012 to around 60 per cent in 2019, as Australia's interest rate differential fell and Australia's securities became less attractive to overseas investors.

Other methods of financing a deficit

While Australian governments have relied on financing deficits mainly through borrowing from the private sector, other methods are also available. These include borrowing from overseas, borrowing from the Reserve Bank and selling assets.

Borrowing from overseas

Governments may borrow from overseas financial markets in order to minimise the crowding out effect, while still stimulating growth. In an era of global financial markets, it is less likely to be necessary to raise funds on overseas markets since old distinctions between domestic and overseas borrowing are now less relevant, as there are now many overseas institutions that participate in Australia's domestic financial markets. However, if the budget was in deficit the government could, at any time, borrow directly on overseas markets and in overseas currencies should this become a less expensive option than domestic borrowing. When the government borrows from overseas it directly adds to Australia's foreign debt, with interest repayments recorded as debits on the net primary income account of the balance of payments.

Borrowing from the Reserve Bank (monetary financing)

The government may simply borrow from the Reserve Bank to finance the deficit – this is sometimes referred to as "monetary financing or monetising the deficit". In effect, this amounts to the government printing money in order to finance its expenditures. Since 1982, with the deregulation of the financial sector, the government has not engaged in this kind of deficit financing. The government has avoided monetary financing to ensure that it does not increase the money supply and add to inflation. This also means that there is no longer any direct connection between the implementation of monetary policy and fiscal policy (that is, they now operate independently of one another). However, as we will discuss in chapter 18, the policy settings of fiscal and monetary policy are indirectly related.

Selling assets

An alternative to funding a deficit by borrowing is to sell government assets. Selling assets, such as Commonwealth land or the Commonwealth's share in businesses such as Medibank Private or Australia Post, does not reduce the level of such underlying cash deficit or the net operating deficit because these are adjusted to reflect one-off transactions like asset sales. However, in cash terms from year to year a government can create a headline budget surplus by selling assets. For example, if the government raises $10 billion through asset sales, it simply means that it needs to sell $10 billion less in Treasury bonds to finance its deficit. However, the demand for funds from Australia's pool of domestic savings remains essentially the same. This is because the buyers of the government asset will either reduce their savings by $10 billion, or borrow $10 billion, instead of the government borrowing that money. The overall effect on the pool of domestic savings is the same, but the financing burden is simply shifted from the public sector to the private sector.

Using budget surpluses

The alternative outcome to a deficit is a surplus. When the government budgets for a surplus, it is planning to receive more revenue than it spends in the current financial year. The government can use the surplus in three ways:

- Depositing it with the Reserve Bank;
- Using it to pay off public sector debt; or
- Placing the money in a specially established, government-owned investment fund.

For several years during the late 1990s and early 2000s, the government used surplus funds to pay off public sector debt. This reduces the size of public debt and frees up funds on financial markets for other purposes. For example, the increase in funds available for

private sector investment may lead to economic activity that offsets the contractionary effect of the fiscal surplus.

During the period of budget surpluses before the global financial crisis, governments began to establish dedicated investment funds to store surpluses for future use. The largest of these, the Future Fund, is intended to help cover the government's superannuation liabilities. Its assets were valued at $154 billion in 2019.

Public sector borrowing and debt

Although changes in the budget outcome provide an important measure of the underlying stance of fiscal policy, they do not represent the full impact of the public sector on the economy. To get the full picture relating to the public sector's revenue raising and expenditure activities, we must also consider the activities of the rest of the public sector in Australia – the state and local levels of government, as well as public trading enterprises (also known as government business enterprises) such as Australia Post, Sydney Water and Sydney Trains.

The overall impact of the public sector on the economy is reflected in the **public sector underlying cash outcome**. The public sector cash deficit or surplus shows the borrowing needs or surplus funds from all levels of government, as well as government authorities and public trading enterprises. It gives the most comprehensive indication of the fiscal impact of the public sector on the Australian economy. Figure 14.2 shows the public sector cash outcome as a percentage of GDP. A negative outcome means that there is an overall public sector deficit.

Year	Gen Govt^ underlying cash outcome (% GDP)	PTEs^ underlying cash outcome (% GDP)	Public sector underlying cash outcome (% GDP)	Public sector net operating balance (% GDP)
2009–10	–5.4	–1.0	–6.2	–3.2
2010–11	–4.2	–1.1	–5.0	–2.7
2011–12	–4.2	–0.8	–4.8	–2.5
2012–13	–2.7	–0.9	–3.4	–1.6
2013–14	–3.8	–0.6	–4.2	–2.2
2014–15	–2.5	–0.6	–2.9	–1.8
2015–16	–2.6	–0.9	–3.2	–1.3
2016–17	–2.2	–0.8	–2.8	–0.9
2017–18	–1.1	–0.7	–1.6	0.5
2018–19*	–1.3	–0.9	–1.8	0.9
2019–20*	–0.8	–0.8	–1.3	1.1

^General Govt includes Commonwealth, State and local; PTEs refers to Public Trading Enterprises within all levels of government.
* Estimate. Source: 2019–20 Budget Paper No. 3 Appendix C, Tables C1, C5, C6, C7, (no update available for COVID-19 impacts)

Figure 14.2 – Public sector outcomes

The public sector cash outcome was in surplus from the late 1990s until 2008–09. The reversal of the Commonwealth Government's Budget position from surpluses throughout the 2000s decade to a deficit in 2008–09 was the main cause of the public sector cash outcome moving into deficit. The net operating deficit shows that since 2008–09 the public sector's revenue has not met its recurrent spending.

Over a period of time, running a public sector deficit results in an accumulation of **public sector debt**. Public sector debt consists of the accumulated debt of the government sector, which is owed both domestically and overseas. This includes debt accumulated by the Commonwealth Government, State and local governments and government-owned businesses. As figure 14.3 shows, public sector debt in Australia rose during three periods: after the early 1990s recession, after the global financial crisis in 2008 and after the COVID-19 pandemic in 2020. The surge in net debt in 2020-21 is especially large by historic comparison.

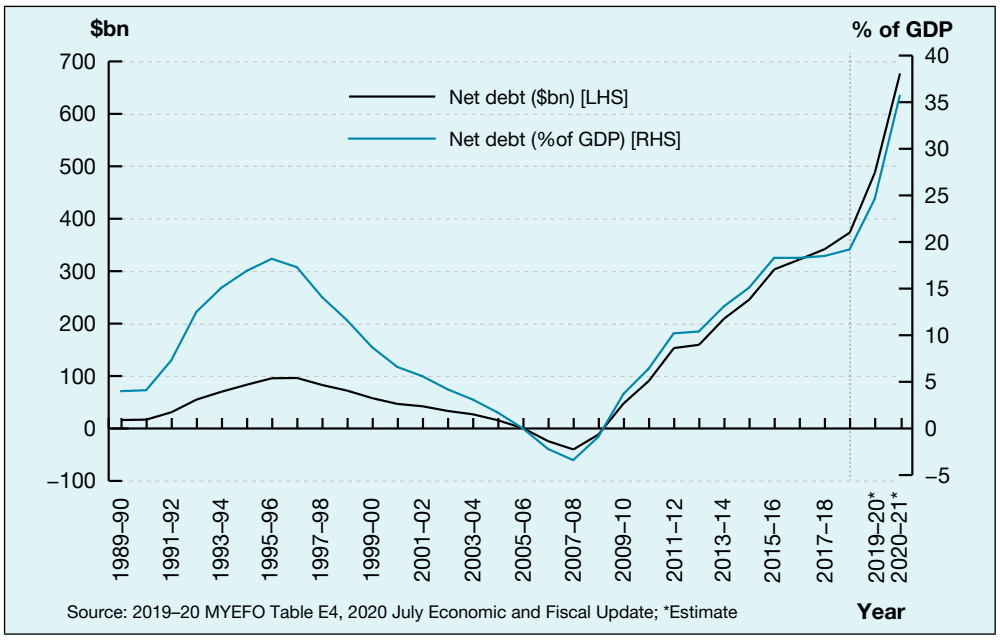


Figure 14.3 – Australia's net public sector debt

It is important to distinguish the public sector debt from the foreign debt, which is the amount owed by both the public and private sectors to overseas lenders. Australia's foreign debt is much higher than our public debt, and it mostly consists of private sector borrowings. When undertaking borrowings, governments generally source their borrowings from within Australia, although some of the participants in Australian financial markets are overseas-based institutions. By borrowing on domestic markets in Australian dollar securities, governments avoid being exposed to exchange rate movements that may increase their debt and interest servicing costs.

reviewquestions

1. Describe three ways in which a government might finance a budget deficit.
2. Explain the factors that could influence a government's decision about how to finance a budget deficit.
3. Outline which budget measure best reflects the overall impact of the public sector on the Australian economy.

14.5 The current stance of fiscal policy

For most years in the business cycle, fiscal policy plays a supporting role in the policy mix, with monetary policy used as the primary tool for macroeconomic management. So long as the economy is growing, governments tend to give priority to medium-term fiscal policy goals rather than using fiscal policy to influence the state of economic activity in the shorter term. However, when the economy experiences a major downturn, an event which tends to happen on average once per decade, governments use fiscal policy very actively to return the economy to growth. The most recent example of this active use of fiscal policy is in response to the COVID-19 pandemic in 2020, and before that, in response to the global financial crisis in 2008. In this section we discuss the stance of fiscal policy in the years leading up to 2020, the fiscal policy stance in response to COVID-19, and then examine five cyclical and five structural factors influencing the overall fiscal policy stance.

In the years prior to COVID-19, the Australian Government's fiscal strategy was centred on a medium-term objective of returning the budget to a surplus of 1 per cent of GDP.

Fiscal policy played only a minor role in influencing the level of economic activity during this period, with a generally neutral or mildly contractionary policy stance. The Coalition Government elected in 2013 (under Prime Minister Tony Abbott) committed to achieving its goal of a budget surplus primarily through spending restraint, and in its 2018–19 Budget (under Prime Minister Malcolm Turnbull) it formalised a commitment not to allow tax receipts to rise above 23.9 per cent of GDP. This 23.9 per cent ceiling was based on the average tax receipts that were collected between the introduction of the GST in 2000–01 and the onset of the global financial crisis in 2007–08. As figure 14.4 shows, during the 2010s the budget outcome gradually improved, but at a slower rate than had occurred during previous recoveries such as in the 1980s and the 1990s. The main reason for the slow progress was that despite a commitment to offset any new spending with other spending cuts, government expenditure continued to increase as a percentage of GDP during this period. At the same time, the recovery in tax receipts was slow. A balanced budget was only achieved in 2018–19, 10 years after the global financial crisis had put it into deficit.

The COVID-19 pandemic – described by the Treasury as a once-in-a-century shock – prompted a dramatic change in the stance of fiscal policy. The emergency public health measures put in place by the Government to counter the pandemic resulted in a collapse in economic activity. Fiscal policy was used to cushion the economic effect of these measures, through a series of expansionary fiscal policy measures implemented on a larger scale than at any other time in Australian history. The Government drew on some of the policy measures that had been implemented successfully during the global financial crisis, such as direct cash support payments to households and investment allowances for businesses. However it went much further, in particular with the JobKeeper program that during 2020 subsidised the wages of around one-third of the workforce.

As at July 2020, the Government had committed $164 billion in measures in response to COVID-19. Automatic stabilisers, lower taxation receipts and higher payments as a result of the crisis were expected to provide an additional $100 billion in support to the economy. The combined impact of discretionary policy and automatic stabilisers unprecedented. The underlying budget outcome was forecast to rise from a budget deficit of just $0.7 billion in 2018–19 (effectively, a balanced budget) to $85.8 billion in 2019–20 and $184.5 billion in 2020–21, by far the largest budget deficit in history, either in cash terms or as a percentage of GDP (9.7 per cent). In just two years from 2018–19 to 2020–21, Australia's net public sector debt was forecast to rise from 19.2 per cent of GDP to 35.7 per cent of GDP.

We can better understand the recent stance of fiscal policy by identifying key cyclical and structural factors. The five key cyclical factors influencing the stance of fiscal policy in recent years are as follows:

- In the years prior to the COVID-19 pandemic, a key reason why Australia only saw a slow recovery in the budget deficit was that the economy was growing below its medium-term growth rate. This reflected a number of factors, including weaker growth in consumption, slower growth in the global economy and the end of the boom in mining construction. This slowed down growth in income levels and profits, and therefore in the growth of tax receipts.
- Australia experienced lower growth in real wages as well as below-average levels of inflation during the 2010s, As a result, personal income tax receipts only recovered slowly compared to past periods of economic recovery, with stronger positive revenue effects only being felt from 2017–18.
- Company tax receipts took a long time to recover in the years after the global financial crisis. Several large companies had incurred significant losses during the financial crisis, and after returning to profitability during the 2010s, for taxation purposes they were able to use their past losses to offset their profits. As a result, many avoided paying company taxes for several years, and company tax revenues only fully recovered in the late 2010s.

- The COVID-19 pandemic brought about the sharpest cyclical downturn in the economy since the Great Depression of the late 1920s. Record falls in business investment, household consumption, the labour market and trade activity triggered the automatic stabilisers in the budget, through decreased taxation receipts (as incomes fell) and increased payments (as unemployment increased). In mid-2020, the Treasury estimated cyclical factors had resulted in a deterioration of the budget outcome of $32.4 billion in 2019–20 and $72.2 billion in 2020–21, mostly as a result of falling tax receipts estimated at $31.7 billion in 2019–20 and $63.9 billion in 2020–21. In total, the Treasury estimated that the budget deficit would rise by $104.6 billion over the two years due to cyclical factors.
- One of the only positive cyclical influences on the budget before and after the onset of the COVID-19 pandemic was Australia's terms of trade, which remained at levels well above historic averages. Stronger export prices helped to increase mining company profits and taxation revenues. While there was some volatility in the terms of trade during the 2010s, overall they proved more resilient than had been expected, with a sustained increase from early 2016. Prices for Australia's largest single export, iron ore, held up during the early phases of the COVID-19 recession due to sustained demand from China and supply problems in Brazil, one of the main competitors to Australia on global markets. The Treasury noted in its Economic and Fiscal Update in July 2020 that while it was expecting global prices for iron ore to fall during 2020–21, a slower fall would result in Australia's nominal GDP being $18 billion larger, and the budget deficit being $2.5 billion lower.

The five key **structural factors** (that is, discretionary government policy decisions) influencing the stance of fiscal policy in recent years are as follows:

- Prior to the onset of the COVID-19 pandemic, a structural reason for the slow pace of efforts to reduce the deficit was a trend increase in government spending. Federal government spending rose from 22.5 per cent of GDP in 2013–14 to 24.9 per cent of GDP in 2018–19. This reflected sustained real increases in spending across several areas of government policy, such as for defence and the National Disability Insurance scheme. The Government also had difficulty in securing enough votes in the Senate for reductions in spending in other policy areas.
- A further structural reason for the slow pace of reduction in the deficit prior to the COVID-19 pandemic was policy decisions that reduced tax revenues. During the peak of the mining boom in the mid-2000s, governments implemented large reductions in personal income taxes that reduced revenue growth in the years after the global financial crisis. After coming to office in 2013, the Coalition Government abolished two taxes that had been introduced by the previous government: the Mineral Resources Rent Tax (known as the mining tax) and the Carbon Pricing Mechanism (the carbon tax). This resulted in an increase in the deficit of around $6 billion per year. In the late 2010s, the Government also announced reductions in personal income tax in the 2018–19 and 2019–20 Budgets, which once fully implemented, are expected to reduce revenue by more than $30 billion per year.
- The Treasury estimated in 2020 that around two-thirds of the impact of the COVID-19 recession on the budget was the result of structural policy decisions, costing $176.7 billion over two years. Whereas more than 90 per cent of the COVID-19 recession's cyclical impact on the budget was due to lower tax revenues, more than 90 per cent of the COVID-19 recession's structural impact on the budget was due to spending increases.
- The single largest spending decision in response to the COVID-19 pandemic was the JobKeeper Payment. It was introduced as a temporary measure to maintain an employment connection between employers and workers at a time when many businesses would otherwise need to reduce staff because of a reduction or cessation of business activity. The first phase of the JobKeeper payment covered the period from

March to September 2020, with its second phase of lower, more targeted payments running through to March 2021. In mid-2020 the Treasury estimated the cost of the JobKeeper payment at $85.7 billion for 2019–20 and 2020–21.

- Finally, a key longer-term structural influence on fiscal policy is the ageing of the population. At the time of the onset of the COVID-19 pandemic in 2020, the Government was conducting a review of aged care homes, due to concern about underfunding and inadequate care. Those concerns were further highlighted by a high incidence of coronavirus deaths in those homes, prompting increased funding commitments. Governments have been expanding programs and allocating more resources to meet the needs of the ageing population during recent years, with the Parliamentary Budget Office estimating that by the end of the 2020s, additional costs will reach $36 billion per year, more than the current total annual expenditure on Medicare.

"The COVID-19 pandemic is causing the largest contraction in global economic activity since the Great Depression … Significant monetary, fiscal, regulatory and financial stability measures have been put in place in all major advanced economies in order to dampen the economic downturn. The scale of the macroeconomic support measures is unprecedented and, in many economies, the measures far outweigh the size of the response to the Global Financial Crisis …

The Government has acted swiftly and decisively to address the significant impacts of COVID-19 on Australia's health system, the economy and jobs, by providing an unprecedented level of support to assist households, keep businesses in business and keep Australians in jobs …

The economy is forecast to recover faster than in past recessions due to the unwinding of restrictions, but it will be a long road back. The unemployment rate will remain elevated for some time …

The outlook for both the global and domestic economies remains highly uncertain. The evolution of the public health crisis will shape the recovery trajectory."

–Treasurer Josh Frydenberg, Economic and Fiscal Update, July 2020

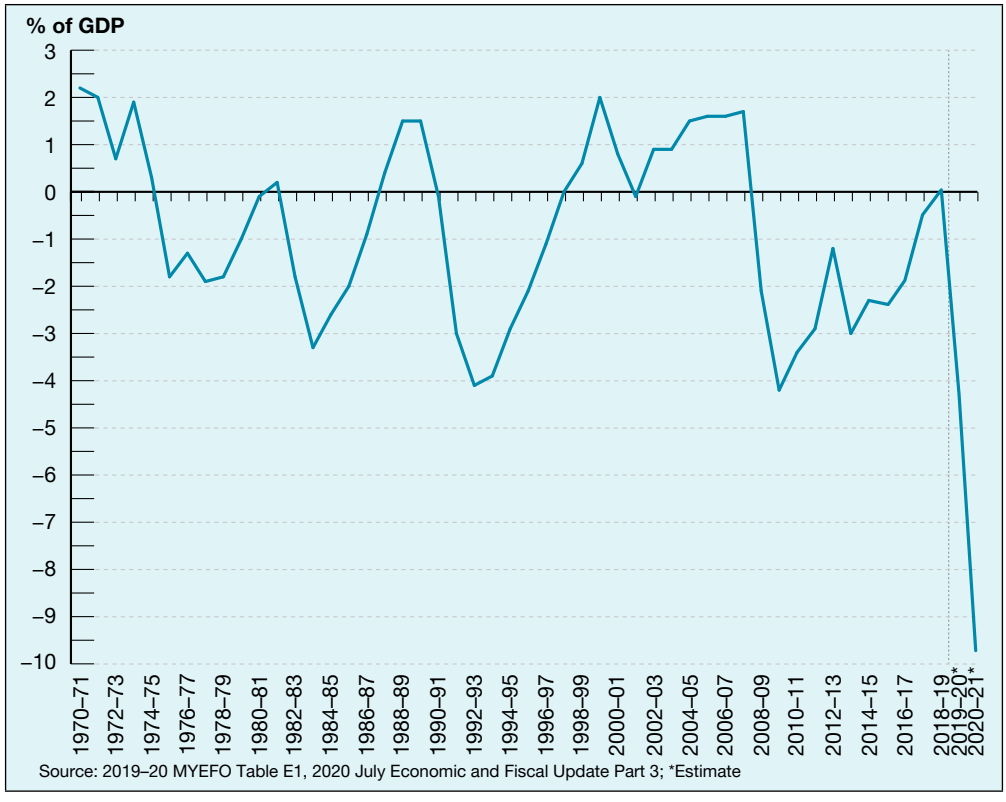


Figure 14.4 – Commonwealth underlying cash budget outcomes since 1970

reviewquestions

1 Describe trends in Australia's budget outcome in recent years.
2 Evaluate the stance of fiscal policy in the current Federal Budget.
3 Explain the difficulties in reducing the budget deficit in recent years.

14.6 The impact of recent fiscal policy

Australia is currently experiencing the impact of the largest-ever fiscal policy interventions in the economy, with the goal of reducing the severity and duration of the COVID-19 recession. In the years before the pandemic, fiscal policy played a smaller role than monetary policy in Australia's economic policy mix. While monetary policy played the critical shorter-term role of influencing the level of economic activity and keeping inflation within its target range, the goal of fiscal policy was to gradually return to surplus and from time to time to achieve specific policy goals relating to the allocation of resources in the economy.

Economic growth

The use of fiscal policy since 2020 demonstrates its potential to influence the level of economic growth. This approach is based on Keynesian economic theory, which dominated policy making between the 1940s and 1970s, and which argued that an expansionary budget involving increased spending or tax cuts would accelerate economic growth, while a contractionary budget involving reduced spending or higher taxes would reduce economic growth. During the Keynesian era in the mid-20th century, governments regularly adjusted fiscal policy to have a counter-cyclical impact on the level of economic growth. By the 1990s, monetary policy became the main macroeconomic policy instrument for influencing the level of economic growth. Fiscal policy still played an active role, but only during major downturns – in the early 1990s, following the global financial crisis in 2008 and following the COVID-19 pandemic in 2020. Outside of those periods, fiscal policy played a much smaller role in influencing the level of economic growth.

The more limited role for fiscal policy in the period before 2020 is reflected in the budgets of the late 2010s. As the budget gradually moved towards balance, the Government legislated long-term plans to reduce taxation rates for businesses and individuals, as part of its policy commitment to keep tax revenues below 23.9 per cent of GDP (in fact, tax revenues peaked at 23.4 per cent of GDP in 2018–19). The Government's objective in reducing tax rates was to provide more incentive for work, investment, job creation and economic growth by allowing individuals to retain more of their income, and companies to retain more of their profits.

The 2019–20 Budget announced three stages of reductions in personal income tax, with the first stage providing a stimulus to economic growth. The first stage delivered a "Low and Middle Income Tax Offset" during the four years from 2018–19 to 2021–22. The LMITO is a tax cut for taxpayers earning up to $126,000. Instead of reducing rates of tax, it provides a dollar reduction on a taxpayer's overall tax bill. The amount varies according to income, with the highest LMITO payment of $1080 going to taxpayers who earn between $48,000 and $90,000. While the 2019–20 Budget aimed to be mildly contractionary overall, the tax offset increased disposable incomes and made fiscal policy less contractionary than it would otherwise have been. If fully implemented, the three stages of tax cuts contained in the 2019–20 Budget were expected to reduce revenue by $158 billion between 2019–20 and 2029–30, in addition to $144 billion in tax cuts announced in the 2018–19 Budget. In addition to these personal income tax cuts, the 2016–17 Budget contained a 10-year plan to reduce company tax from its general rate of 30 per cent to 25 per cent by 2026–27. However, due to a lack of support in the Senate, the Government was only able to reduce taxes for small and medium businesses with a

turnover of up to $50 million. While some of these tax changes had a shorter term impact (such as supporting growth in 2019–20), the fact that the Government legislated tax cuts as many as five years ahead of time reflects that their main goal related to keeping overall taxation low.

"Our fiscal support is targeted, timely and temporary to ensure that it does not undermine the structural integrity of the Budget with all three major credit ratings agencies having now reaffirmed Australia's AAA credit rating during the pandemic.

The economic support in response to the COVID-19 pandemic is estimated to have increased the level of real GDP by around ¾ per cent in 2019–20 and around 4¼ per cent in 2020–21. The fiscal measures are also estimated to have lowered the peak of the unemployment rate by around 5 percentage points."

–Treasurer Josh Frydenberg and Finance Minister Mathias Cormann,
Joint media release, 23 July 2020

Within days of the Australian Government announcing a national lockdown to contain the spread of the coronavirus in March 2020, it became clear that the health crisis would very quickly become an economic crisis, as the fall in economic activity resulted in job losses, business failures and disruption on a scale that had not been experienced since the Great Depression of the 1930s. In subsequent weeks, the Government announced a series of policies including cash payments to households, wage subsidies for businesses, investment allowances, industry support measures and increased expenditure on health and infrastructure. A key goal of these announcements was to strengthen the confidence of business and consumers to keep investing and spending. The Treasury estimated that the Government's fiscal support would increase output by ¾ per cent above what it would otherwise have been in 2019–20, resulting in a contraction in 2019–20 of ¼ per cent in year-on-year terms, followed by a contraction of 2½ per cent in 2020–21 – which is 4¼ per cent less than it would otherwise have been. Among economists there was a consensus that the circumstances required fiscal policy measures on this scale. One reason for this confidence was the success a decade earlier of large-scale fiscal policy measures in 2008 and 2009 Budgets in saving the Australian economy from recession, at a time when most other economies were in recession.

In the circumstances of 2020, there was a widespread consensus that the fiscal policy measures were necessary even though they resulted in a rapid increase in the budget deficit and public debt (with net public sector debt forecast to rise from $374 billion or 19.2 per cent in 2018–19 to $677 billion or 35.7 per cent in 2020–21). In the longer term, the effectiveness of fiscal policy in influencing economic growth may diminish if the accumulation of past budget deficits has created a large level of public debt. This is one of the arguments advanced for why governments sought to reduce the budget deficit in the years following the global financial crisis. The problem of sustained high deficits was seen in Europe during that period, when soaring debt levels led to a crisis of confidence in economies with high debt levels such as Italy, Greece and Portugal. Investors demanded higher interest rates on loans to those governments because of their concerns about the risk of those loans, which in turn undermined confidence in those economies and forced governments to take drastic steps to reduce their deficits by cutting spending and increasing tax revenues. When an economy faces difficult conditions such as these, its prospects for economic growth over the medium-term might be improved through contractionary fiscal policy rather than expansionary fiscal policy, since a lower budget deficit might restore market confidence, lowering interest rates and encouraging greater private investment and economic growth. This situation represents a reversal of the crowding out effect.

In evaluating the impact of fiscal policy on economic growth, it can also be important to take into account any impact that fiscal policy changes might have on monetary policy. Economists have differing views about the relationship between fiscal and monetary policies, but under an inflation-targeting regime, changes in fiscal policy can clearly affect

monetary policy decisions – and possibly reduce any impact that fiscal policy might have. To the extent that changes in fiscal policy impact on inflationary pressures, fiscal policy can affect the Reserve Bank's monetary policy decisions. These considerations were less relevant during the extraordinary circumstances following the onset of COVID-19.

Unemployment and workforce participation

The short-term impact of fiscal policy on unemployment is closely related to the impact of fiscal policy on economic growth. In stimulating aggregate demand, expansionary fiscal policy can help to reduce unemployment or, during an economic downturn, reduce the rate at which cyclical unemployment increases. The highest priority of Australia's fiscal policy measures in response to the COVID-19 pandemic was to prevent a much larger surge in unemployment. The JobKeeper Payment played the central role in this strategy. Under this policy, the Australian Government was in effect paying the wages of workers at a time when many employers could not afford to pay them because of the suspension of normal economic activity. In its first phase from March to September 2020, some 3.5 million Australians were having their wages subsidised. The reasoning behind this policy was that if millions of Australians lost their jobs, and therefore lost any connection to an employer, the recession would be much longer and more severe, given the time required for employers to recruit and hire staff in the months and years that followed. In addition, the payment provided a large ongoing injection of income into the economy, helping to sustain economic activity and jobs for other workers. The second phase of JobKeeper, involving a two-tier structure, was limited to those industries most affected by the recession, running from September 2020 to March 2021. The Treasury estimated in 2020 that without JobKeeper and its other policy measures, an additional 700,000 Australian would have lost their jobs, adding a further 5 percentage points to the rate of unemployment.

Prior to the recession in 2020, fiscal policy measures relating to reducing unemployment were focused on some of Australia's longer-term labour market challenges – in particular, the challenge of an ageing population and the need to increase the participation rate and reduce structural unemployment. Many of these policies were aimed at boosting labour supply and reducing Australia's non-accelerating inflation rate of unemployment (NAIRU):

- The 2019–20 Budget included a $525 million Skills Package to address skills shortages and boost apprenticeships. The Government announced incentives of up to $8000 for businesses to hire apprentices in areas of skill shortages. The package also offers individuals an incentive payment of $2000 to take up an apprenticeship. Over five years, the Government plans to create 80,000 apprenticeships with this program.
- The 2018–19 Budget introduced "More Choices for a Longer Life", a package designed to assist older Australians. The package incorporated a number of measures involving jobs and skills initiatives to allow Australians to remain in the workforce for longer.
- The 2017–18 Budget announced that employers who bring overseas workers into Australia on temporary work visas would be required to pay a levy to a new "Skilling Australians Fund" to fund skills training and apprenticeships for Australians. Over four years an estimated $1.5 billion will be provided to State and Territory governments to support up to 300,000 apprentices and trainees. The funding gives priority to emerging industries and regional areas.
- The provision of accessible childcare has a major influence on how quickly parents are able to return to the workforce. In recent years governments have continued to change the policies relating to childcare subsidies, such as with the 2017–18 Budget's reforms that aimed to simplify childcare assistance. The importance of the childcare sector was reflected in the Government's decision to temporarily make childcare free during the COVID-19 pandemic, in order to prevent centres from closing and therefore making it harder for parents to return to work in the medium term.

Allocation of resources

Governments use expenditure and revenue measures to influence resource allocation in the economy less actively than in the past. Other than where there are market failures that need to be corrected, governments generally rely on market forces to achieve the most efficient allocation of resources. With the shift away from governments directly influencing resource allocation, the factors that shape market forces – such as changing consumer preferences, changing business practices, new technologies and the forces of globalisation – generally have the greatest influence on resource use.

Governments were once much more involved in the provision of services in Australia – they owned airlines, airports, banks, electricity utilities, insurance companies, phone companies, pharmaceutical businesses, printers, agricultural marketing businesses and gambling businesses. During the 1990s and the years that followed, most of these public trading enterprises were privatised and "user pays" systems have been introduced. Direct subsidies to industries have declined to less than $4 billion per year, and governments have even been willing to allow industries to shut down altogether, as the Abbott Government did with the closure of Australia's car manufacturing sector in 2013. Nevertheless, some areas of government expenditure still have a significant effect on resource allocation. For example, the 2016–17 Budget included a $30 billion increase in defence spending over 10 years, in part to pay for a new submarine building program based in South Australia (which would have been cheaper if sourced entirely from overseas).

As part of its response to the COVID-19 recession, the Morrison Government announced a number of industry-specific support measures. The goal of these measures was to minimise long-term damage to those industries, with a focus on industries most exposed to the impact of the pandemic. Three examples of these support measures were a $1.9 billion Early Childhood Education Care and Relief Package, which provided funding to keep childcare centres open and operating during the lockdown period (to prevent permanent closures); a $1.9 billion aviation package to prevent key airlines going into bankruptcy; and a $250 million Creative Economy Support Package, designed to sustain arts and live entertainment businesses whose revenue streams were effectively shut down by the pandemic.

Besides temporary influences on resource use, governments still have a significant influence on resource allocation through policy settings, especially through regulations, tax concessions and exemptions. An example of regulation that influences resource use is the Renewable Energy Target that successfully required by 2020 that around 23 per cent of energy generation came from renewable sources (through a system of renewable energy certificates). An example of a tax concession that influences resource use is the Government's tax concession for the cost of diesel fuel for the farming and mining sectors that costs around $7.5 billion every year.

National savings and the current account deficit

Fiscal policy can influence an economy's level of national savings, either by increasing savings (through surpluses) or detracting from savings (through deficits). Rather than using the Budget directly to address Australia's large current account deficit, in recent decades the Government has pursued a goal of budget surpluses over the medium term so that the Government is not directly adding to Australia's savings imbalance. Over time, this should help contribute to reducing Australia's external imbalance.

The extent to which a budget deficit leads to a current account deficit (a relationship sometimes known as the "twin deficits" hypothesis) has been a matter of economic debate in Australia since the 1980s. In reality, the relationship between the budget outcome and the current account deficit is influenced by many other factors. As figure 14.5 shows, there is no obvious linkage between Australia's budget outcome and the current account deficit. In some periods, such as the mid-2000s, the current account deficit may increase even when Australia is recording sustained budget surpluses. This reflects the fact that,

although budget surpluses may have been contributing to higher national savings during this time, increased private investment was having a much larger effect of increasing Australia's savings and investment gap, in turn contributing to a larger current account deficit. Similarly, after the 2020 Budget, a large increase in the budget deficit had very little short-term effect on the current account. Nevertheless, the specific impact of the policy of balanced or surplus budgets pursued by the Government should be a higher level of public savings and a higher level of national savings. In the longer term this should result in the current account deficit being lower than it would be if the Government were running budget deficits throughout the economic cycle.

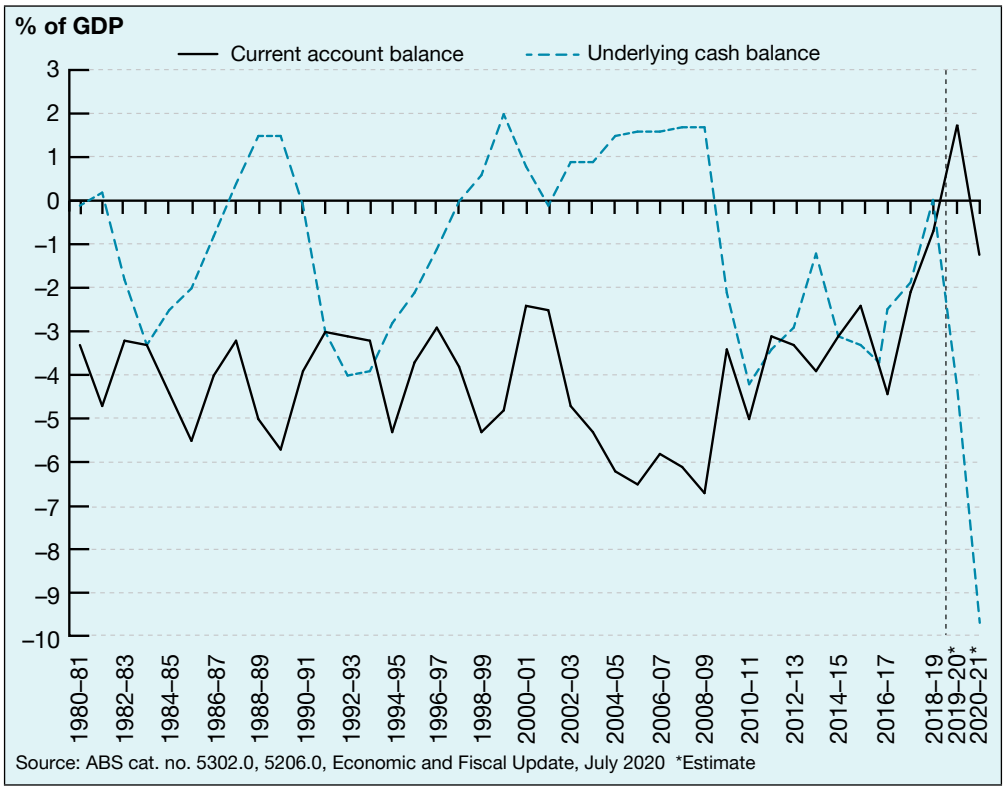


Figure 14.5 – The budget outcome and the current account deficit since 1980

Even during periods of budget deficit, the government can create assets and funds to increase the level of net national savings. In 2006, the Government used a surplus to create the Future Fund, in order to help pay for the Government's superannuation liabilities. The Fund was started with an initial outlay of $61 billion in 2006. The Future Fund earned an average over 9 per cent per year in the decade to 2020, by which time its assets were worth $162 billion.

Distribution of income

Fiscal policy decisions have significant impacts on the distribution of income, and the distributional effects of policy changes are often a major feature of debates about budget policies. The budget can impact income distribution through specific tax and revenue measures, as well as through its broader impact on economic conditions.

A key goal of the Australian Government's response to the COVID-19 pandemic was to prevent the large-scale job losses that could lead to a widening of inequality in the distribution of income. In addition to the JobKeeper Payment that subsidised the wages of around 3.5 million Australians, the Government temporarily relaxed access to unemployment benefits, while also increasing payments through the Coronavirus Supplement of $550 per fortnight, at a cost of $16.8 billion. It also provided a direct cash support payment of $1500 to pensioners, income support recipients, carers and student payment recipients, costing $9.4 billion. These measures provided assistance to lower income earners. One of the few measures that attracted criticism was a decision to allow

individuals to access a maximum of $20,000 from their superannuation accounts, free of any tax. The negative consequence of this policy was that it would result in a lasting reduction in the savings of lower income earners.

In contrast to the positive effect of the post-COVID-19 policies on the distribution of income, the income tax reductions phased in from the late 2010s through to 2024–25 were widely criticised for the lack of economic rationale behind them, and for their negative effect on income distribution. These changes made the tax system less progressive by reducing the number of tax thresholds from four to three. Other measures included a reduction in tax rates and a lifting of tax brackets. An analysis of the tax package by the Grattan Institute in 2019 concluded that it will have a regressive effect, making Australia's tax system less progressive than at any time since the 1950s. Their modelling showed that while someone in the middle of the income distribution would have an increase in their tax rate of 3.7 per cent by 2030 under the package, the average tax rate for the top 15 per cent of income earners would fall by 1 per cent. Overall, the share of income tax paid by middle income earners will rise from 32 per cent in 2017–18 to 35 per cent by 2029–30. On a standard measure of progressivity of tax systems (comparing tax paid on incomes 0.5 versus 2.5 times average earnings), Australia would fall from 12th in the OECD in 2017–18 to 19th by 2024–25.

KEY COVID-19 MEASURES

In the initial months after the onset of COVID-19, the Government announced $164 billion in measures in response to the economic and health crisis. Key initiatives included:

- **JobKeeper** ($86 billion): a wage subsidy for employers significantly impacted by the pandemic. Between March and September 2020, the payment was $1500 per fortnight. Between September 2020 and January 2021, the payment was $1200 per fortnight for those working more than 20 hours per week prior to COVID-19 and $750 per fortnight for others. Between January and March 2021, it was reduced to $1000 per fortnight and $650 per fortnight, respectively.
- **Boosting cash flow for businesses** ($32 billion): Businesses were provided with one-off income support payments, ranging up to $100,000. The purpose of this payment was to prevent a business collapse and encourage employers to retain staff.
- **Income support for individuals** ($19 billion): The Government introduced a range of measures to provide additional household income support. The Coronavirus supplement, a temporary payment to income support recipients, was $550 per fortnight, effectively doubling the unemployment benefit. Other income support measures included allowing easier access to income support payments by relaxing asset tests, mutual obligation requirements (where income support recipients must apply for jobs), income-earning thresholds and partner income tests.
- **Backing business investment** and **instant asset write-off** ($4 billion): tax incentives for business investment expenditure and the purchase of new assets.
- **Supporting apprentices and trainees** ($3 billion): a subsidy of up to 50 per cent of the wages of apprentices and trainees.
- **Temporary early release of superannuation** ($2 billion): giving individuals tax free access of up to $10,000 of their superannuation in 2019–20 and a further $10,000 in 2020–21. (The cost to the Budget reflected the cost to tax revenue of allowing individuals to access their superannuation tax-free). In 2019–20, around $25 billion was withdrawn by up to 2.4 million people.
- **HomeBuilder** ($0.7 billion): grants of $25,000 to build new homes or substantially renovate existing homes.

reviewquestions

1. Outline the main impacts of fiscal policy in recent years.
2. Identify two ways in which the recent Budget might impact the level of economic growth.
3. With reference to recent economic examples in Australia, identify two ways in which a fiscal policy change might affect the distribution of income.

chapter summary

1 **Fiscal policy** involves the use of the Commonwealth Government's Budget to achieve the government's objectives by influencing economic activity, resource allocation and income distribution.

2 The main tools of fiscal policy are government **spending, revenue collection** and the **budget outcome**. These are usually changed once each year in the Commonwealth Government Budget, which is usually released in May.

3 The budget outcome can be a surplus, deficit or balanced. The budget stance gives an indication of the overall impact of fiscal policy on the state of the economy and can be described as **expansionary, contractionary** or **neutral**.

4 The two main measures of the budget outcome are the **net operating balance**, which is calculated as revenue minus expenses, with capital expenditure removed, and the **underlying cash outcome**, which is calculated through a different accounting method, known as cash accounting and which includes capital spending.

5 The **net operating balance** is the best indicator of the sustainability of the fiscal strategy because it shows the gap between recurrent expenses and revenue (that is, it distinguishes between capital spending and day-to-day spending). The **underlying cash outcome** is the best indicator of the short-term impact of fiscal policy on the level of economic activity because it shows actual cash revenue and spending in a year.

6 Spending, revenue and budget outcomes are affected by **discretionary** or **structural** factors, involving policy changes by the government, and **non-discretionary** or **cyclical** factors, which relate to the impact of changing economic conditions on the levels of spending and revenue collection.

7 Unemployment benefits and progressive income tax are known as **automatic stabilisers** because they are a built-in counter-cyclical component of the Budget.

8 A **budget deficit** is usually financed through borrowing from the private sector, which reduces national saving and may put upward pressure on interest rates. It can also be financed by borrowing from overseas or from the Reserve Bank (printing money), or by selling government assets.

9 Generally, fiscal policy plays a limited role in macroeconomic policy. Monetary policy is usually the primary tool to control short-run fluctuations in growth and inflation. However, during periods of economic crisis, fiscal policy can play an important role in supporting aggregate demand.

10 In contrast to its generally neutral or mildly contractionary stance during the 2010s, in 2020 the Government shifted fiscal policy to a very expansionary stance, to prevent an extremely severe recession following the onset of the COVID-19 pandemic.

chapter review

1. Explain what is meant by *fiscal policy*.
2. Distinguish between the possible budget outcomes of surplus, deficit and balance.
3. Describe the major instruments of fiscal policy.
4. Distinguish between the underlying cash balance and the net operating balance. Explain what each indicates about the budget stance.
5. Explain how automatic stabilisers play a counter-cyclical role in the budget.
6. Outline how fiscal policy impacts on the following:
   (a) economic growth
   (b) resource use
   (c) income distribution
7. Explain how the government can finance a budget deficit.
8. Distinguish between public debt and foreign debt.
9. Discuss the impact of recent changes in fiscal policy on the Australian economy.
10. Account for the persistence of budget deficits during the past decade.

15 Monetary Policy

15.1 Introduction
15.2 The objectives of monetary policy
15.3 The implementation of monetary policy
15.4 The impact of changes in interest rates
15.5 The stance of monetary policy in Australia

15.1 Introduction

Monetary policy refers to actions by the Reserve Bank of Australia (RBA), Australia's central bank, to influence the cost and availability of credit in the Australian economy. Monetary policy is a macroeconomic policy that, like fiscal policy, can smooth fluctuations in the business cycle and influence the level of economic activity, employment and prices. Monetary policy is generally the primary macroeconomic policy used to manage economic conditions in Australia and in other advanced economies. This chapter outlines how monetary policy operates, including recent changes.

Phillip Lowe was appointed Governor of the Reserve Bank of Australia in 2016, having worked there for all but two years since 1980. As Chairman of the Reserve Bank Board, which decides monetary policy settings, the RBA Governor is considered the most powerful person influencing economic conditions in Australia in the short to medium term.

The formal objectives of monetary policy are set out in federal legislation in the *Reserve Bank Act* (1959), along with the broader powers and responsibilities of the RBA. There is also a complementary agreement between the Commonwealth government and the RBA Governor called the *Statement on the Conduct of Monetary Policy*. This agreement expresses a shared understanding of how the formal objectives can be met by the RBA and how monetary policy should be conducted. While the Commonwealth government effectively owns the RBA, the RBA is authorised to make monetary policy decisions independent of the government through its board.

One of the RBA's key roles is to hold and manage deposits owned by commercial banks in Australia that they use to settle transactions between each other. This gives the RBA the ability to influence the supply of money in the economy and therefore interest rates. The RBA exerts this influence by setting a desired target for the **cash rate**, which is the interest rate on loans in the overnight money market, and using **domestic market operations** (DMOs) to help achieve it. The cash rate influences other interest rates in the economy.

Contractionary monetary policy is when the RBA tries to increase interest rates in the economy, which reduces the amount that households with mortgages have available for consumption and makes business investment more expensive. This lowers economic activity, reduces employment growth and reduces inflationary pressure. **Expansionary** monetary policy is when the RBA tries to lower interest rates, resulting in higher consumption and investment, economic activity, employment growth and inflation. Since the early 1990s, monetary policy has been guided by an inflation-targeting framework, which seeks to keep inflation between 2 and 3 per cent, on average, over time.

15.2 The objectives of monetary policy

The objectives of monetary policy are laid out formally in the *Reserve Bank Act of 1959*, which states that in its implementation of monetary policy the RBA should aim for:

- The stability of Australia's currency – which now means maintaining low and stable inflation and preserving the purchasing power of the Australian dollar.
- The maintenance of full employment in Australia – which in effect means reducing the level of unemployment.
- The promotion of the economic prosperity and welfare of the people of Australia – which means encouraging a sustained level of economic growth.

At times, it can be difficult for the RBA to achieve these three objectives simultaneously. Since the early 1990s, the RBA has often focused primarily on the first objective, particularly, the maintenance of low and stable inflation (this is the inflation-targeting regime). The government has generally used other policies to assist with achieving its other objectives. Inflation has been persistently low in recent years, which has given the RBA significantly more scope to focus on its other objectives than it has had in the past without the fear of a rapid increase in inflation.

Inflation targeting

Since the early 1990s, Australia has followed the example of several other countries, including Canada and New Zealand, where the central bank sets a target range for inflation and then operates independently of the government to try keep inflation in this range. This reflects several important aspects of monetary policy:

- Monetary policy is particularly suited to fighting inflation, since inflation is a monetary phenomenon.
- When assigned a number of strict goals in the past, monetary policy was often unsuccessful in achieving them simultaneously.
- When governments control monetary policy directly, their policy decisions can be distorted by political pressures, particularly at times of elections, when politicians may want to keep interest rates low even if that might be contrary to economic advice. Giving independence to a central bank in its conduct of monetary policy helps to reduce the risk of political factors distorting interest rate decisions.
- Inflation targeting has generally been successful at keeping inflation low and stable without central banks having to resort to high interest rates (which can lower economic growth and increase unemployment). To do so, inflation targets need to establish and entrench expectations of low and stable inflation in the near to medium term. This is because expectations are a significant factor influencing inflation.

The RBA's specific inflation target is to keep inflation between "two and three per cent, on average, over time". The words "on average, over time" are important. The words refer to the fact that the RBA's inflation target is a **flexible target**; inflation does not have to be kept strictly within the target band at all times and at all costs. This approach recognises that inflation can be affected by shocks and events that occur outside of the Reserve Bank's control at any given time. For this reason, natural fluctuations should be accepted (and are often unavoidable anyway) so long as inflation is kept within the target on average over the medium to long run. More importantly, the flexible target recognises that inflation between 2 and 3 per cent is not desirable for its own sake. Price stability is desirable because it allows households and businesses to prosper and improves overall welfare in the economy. This prosperity is the ultimate goal of monetary policy in Australia, so it is pursued by the RBA even if it means short-term inflation numbers are inconsistent with the target.

Both Coalition and Labor governments have supported the RBA's flexible inflation target consistently since its introduction. Every Australian Government since the early 1990s has broadly endorsed this approach in agreements on the framework for monetary policy between the Governor of the RBA and the Government (these agreements can be thought of as agreements on how the RBA should go about pursuing the overarching objectives described previously). The most recent agreement is the 2016 Statement on the Conduct of Monetary Policy:

> "The Reserve Bank and the Government [both] agree that a flexible medium-term inflation target is the appropriate framework for achieving medium-term price stability. They [both] agree that an appropriate goal is to **keep consumer price inflation between 2 and 3 per cent, on average, over tim**e. This formulation allows for the natural short-run variation in inflation over the economic cycle and the medium-term focus provides the flexibility for the Reserve Bank to set its policy so as best to achieve its broad objectives, including financial stability. The 2–3 per cent medium-term goal provides a clearly identifiable performance benchmark over time."
>
> *– Statement on the Conduct of Monetary Policy, 19 September 2016*

The inflation-targeting regime clearly places the price stability goal at the centre of monetary policy. However, the other two goals of reducing unemployment and promoting prosperity are still recognised as important objectives of monetary policy (and are identified in the full statement). The flexibility of the regime allows the RBA to pursue its broader objectives at times when achieving them may be inconsistent with short-term inflation outcomes.

The RBA introduced the inflation-targeting regime over 25 years ago to achieve its economic objectives. Overall, the RBA's regime has been highly successful. During the past 28 years, inflation has averaged around 2.4 per cent. Expansionary monetary policy also supported economic activity during the Asian financial crisis in the late 1990s, the global financial crisis in 2007–08 and several other economic shocks.

> "… an inflation targeting regime should consist of the following four elements.
>
> 1. The inflation target should establish a clear and credible medium-term nominal anchor for the economy …
> 2. The inflation target should be nested within the broader objective of welfare maximisation … inflation control is not the ultimate objective. Rather, it is a means to an end. And that end is the welfare of the society that we serve …
> 3. The inflation target should have a degree of flexibility …
> 4. The inflation target needs to be accompanied by a high level of accountability and transparency …
>
> … We have all four elements in Australia …
>
> Our overall assessment is that Australia's monetary policy framework has served the country well over the past three decades. The flexibility that has always been part of our regime has helped underpin a strong and stable economy and has helped Australia deal with some very large economic shocks. We are not inflation nutters. Rather, we are seeking to deliver low and stable inflation in a way that maximises the welfare of our society."
>
> *– Philip Lowe, RBA Governor, 25 July 2019*

MAIN ECONOMIC INDICATORS TAKEN INTO ACCOUNT BY THE RBA

- The inflation rate
- Inflation expectations
- Wages growth
- The rate of unemployment
- The rate of economic growth
- Interest rates
- The exchange rate
- Commodity prices
- Terms of trade
- Global economic growth

In the past few years, however, monetary policy has been less effective. Even at record low levels, interest rates have not stimulated strong growth and inflation has remained below the target band. Even before the COVID-19 recession, the Treasurer had in 2019 contemplated formally changing the Statement on the Conduct of Monetary Policy to emphasise the need for lifting economic activity, before deciding against a change.

reviewquestions

1 Outline the THREE broad objectives of monetary policy.
2 Define *inflation targeting* and discuss why it is used in Australia.
3 Briefly explain how the following events would impact on the RBA's decision-making process when it influences interest rates:
   a) wage growth of 6 per cent
   b) a sustained fall in business investment
   c) a one-off spike in the value of the Australian dollar
   d) predictions of a sharp increase in inflation in 2022

15.3 The implementation of monetary policy

The **cash rate** is the main tool that the RBA uses to implement monetary policy. The cash rate is the interest rate in a financial market called the overnight money market – the market for very short-term loans between banks, where loans are literally made for overnight use in many cases. The cash rate influences many other interest rates in the economy (such as rates on mortgages), and the general level of interest rates influences inflation and the overall level of economic activity. The RBA can therefore achieve its economic objectives through its ability to change the cash rate.

Cash rate is the interest rate paid on overnight loans in the short-term money market.

The board of the RBA is responsible for the direction of monetary policy. Every month except for January, the board considers and publicly announces a target for the cash rate in order to achieve the RBA's economic objectives. The board and the RBA more broadly does this by considering the economic issues covered in Topic 3 of the HSC economics course, as well as developments in financial markets and other economic policies such as fiscal policy. The board meeting takes place on the first Tuesday of every non-January month, and the RBA publicly announces the decision made at 2.30pm on the same day. Once the target is announced, the RBA takes steps to ensure that the actual cash rate is consistent with the target.

To fully understand monetary policy it is important to understand what the cash rate is and the mechanics of how it is determined. The mechanics of the cash rate and the overnight money market can be jointly explained by three things: (1) exchange settlement accounts, (2) the policy interest rate corridor, and (3) domestic market operations.



Whenever the RBA announces the cash rate, the Reserve Bank Governor releases a statement to explain the RBA's decision, and the minutes from the meeting are released two weeks later. These documents, along with a range of other useful information, are available on the RBA's website: **www.rba.gov.au**

Using the RBA's statistics page, identify the most recent statistics for inflation, growth, unemployment and wages. Explain how these indicators justify the current level of interest rates in the Australian economy.

Exchange settlement accounts

Banks need to hold a certain proportion of their funds with the Reserve Bank in exchange settlement accounts (ES accounts) in order to settle payments with other banks and the Reserve Bank. For example, when a customer of the Commonwealth Bank of Australia (CBA) uses a debit card to buy a good or service from a business that has a bank account at National Australia Bank (NAB), funds need to flow from CBA to NAB to complete the transaction. Many interbank payments like this need to happen every day. These payments are made by transferring funds between banks' ES accounts. At the end of every trading day, some banks will not have enough funds in their ES accounts to satisfy all of their interbank payment obligations for that day, while other banks will have a surplus of ES funds that they do not need to hold. Some banks also choose to hold ES balances in accounts at the RBA as a way of storing value.

The overnight money market (also known as the short-term money market) is the market where banks that have a shortage of ES funds can borrow money from banks that have an excess of ES funds beyond what they need in their accounts. The market therefore enables banks to always settle their interbank payment obligations with each other. Like with any other financial market, demand by borrowers and supply from lenders interact to set the market price (interest rate). For example, when the supply of funds from lenders that have excess ES balances increases, the price of borrowing this money, that is, the cash rate, will fall. But unlike other financial markets, the RBA intervenes heavily to ensure that the actual cash rate lines up with a target that the RBA sets for it. The RBA does this using the policy rate corridor and open market operations.

The policy rate corridor

The RBA does not have the power to directly set the actual cash rate at the target that it sets for it. But the RBA is able to ensure that the actual cash rate can never stray far from the target because of how the RBA deals with ES funds outside of the overnight money market.

Firstly, the RBA pays an interest rate to banks on funds held in ES accounts that is always 0.25 percentage points below the cash rate target (for example, if the cash rate target is 1 per cent, the RBA's deposit rate is set to 0.75 per cent). This means that banks with excess ES balances are not given an incentive to lend funds to other banks if the actual cash rate is less than 0.25 percentage points below the target; these banks could earn greater returns by simply leaving their extra funds in their ES account. The RBA's deposit rate therefore creates a 'floor' or minimum value for the cash rate.

Secondly, the RBA is always willing to lend ES balances directly to banks outside of the overnight market. The RBA always sets an interest rate on these loans equal to 0.25 percentage points above the cash rate target (for example, if the cash rate target is 1 per cent, the interest rate on these loans is set to 1.25 per cent). Banks that need to borrow ES balances are not incentivised to pay a rate higher than the RBA's lending rate in the overnight money market. If the cash rate were higher than the RBA's lending rate, banks would simply borrow ES funds directly from the RBA. The RBA's lending rate therefore creates a 'ceiling' or maximum value for the cash rate.

The floor created by the RBA's deposit rate and the ceiling created by the RBA's lending rate together form the policy rate corridor for the cash rate. No banks, whether they have a surplus or a shortage of ES funds, have an incentive to complete transactions in the overnight money market outside of this corridor. It is called the policy rate corridor because the RBA's policy target for the cash rate is always exactly in the middle. This ensures that the actual cash rate always closely follows the RBA's target cash rate.

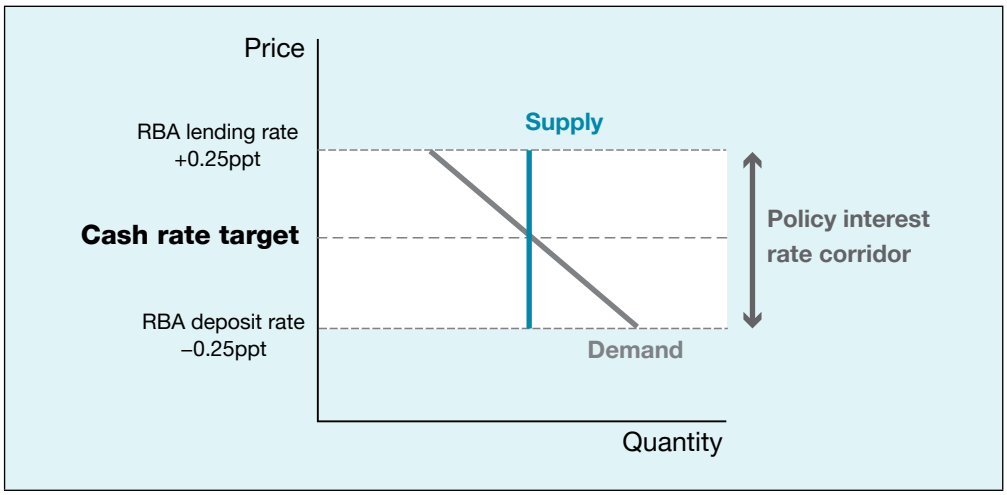


Figure 15.1 – The Australian cash market

The policy rate corridor is responsible for implementing changes to the RBA's cash rate target. This is because the ceiling and floor of the corridor are automatically set so that the cash rate target is in the middle of the corridor. If the RBA were to decrease the target, the floor and ceiling of the corridor would shift downwards immediately, and banks would be immediately incentivised to borrow and lend from each other within a new range that is consistent with the new cash rate target (see figure 15.2 below). There is no mechanism that forces the actual cash rate to be exactly the same as the cash rate target (that is, in the middle of the band). However, there is a strong convention or understanding in the market that the actual cash rate should be the same as the target. Borrowers and lenders in the overnight money market generally follow this convention. Because of this, changes to the cash rate happen as soon as the RBA announces a change to its target – the RBA does not have to do anything besides make the announcement.

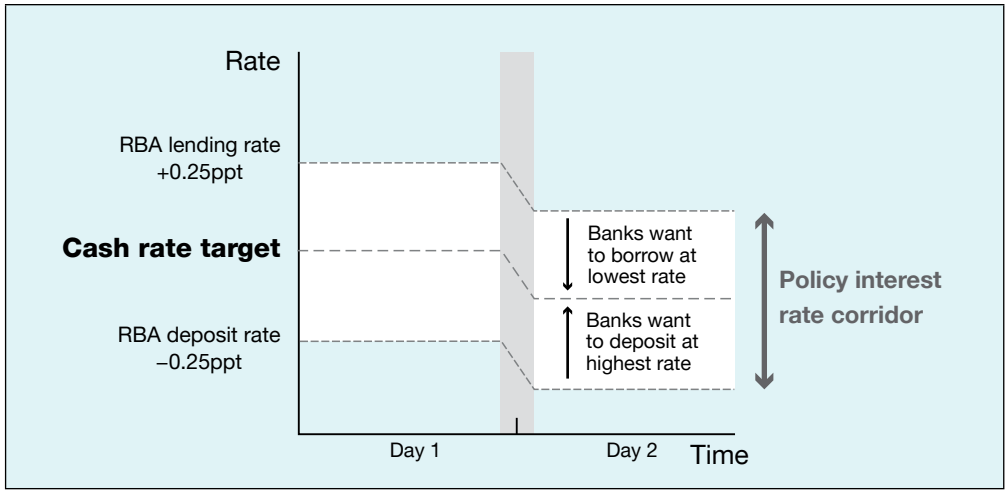


Figure 15.2 – Policy interest rate corridor

Domestic market operations

Demand for ES balances by banks fluctuates on a daily basis. This is especially the case on days where there are large transactions or payments in the economy, such as when the Government pays social security benefits. The actual cash rate is the price at which this demand intersects with the supply of ES funds that are available. The RBA manages the level of supply of ES funds so that it meets demand at a price equal to the RBA's cash rate target. This management of supply is what keeps the cash rate at its target on a daily basis. Without this intervention, the cash rate would bounce around inside the policy rate corridor whenever demand fluctuates. This intervention is also responsible for the strong market convention that helps ensure that the actual cash rate is closely aligned with the cash rate target.

The RBA manages the supply of ES funds by conducting **domestic market operations** (DMO). DMO refers to the purchase and sale of financial securities by the RBA in exchange for ES balances. These purchases and sales affect the supply of ES funds because ES funds are used to actually complete these transactions. If the demand for ES funds increases, the RBA would need to increase the supply of ES funds to keep the cash rate at target all else equal. To do this, the RBA would **buy financial securities** held by banks, and in exchange deposit additional funds in their exchange settlement accounts. As with any market, this would increase the supply of ES funds so that it could meet the additional demand. If the RBA needed to decrease the supply of ES funds to keep the cash rate at target (because of a decrease in demand), the RBA would **sell financial securities** to banks, and in exchange withdraw funds that were sitting in their exchange settlement accounts. This would decrease the supply of ES funds down to the lower level of demand.

Domestic market operations are actions by the Reserve Bank in the short-term money market to buy and sell second-hand Commonwealth Government Securities in order to influence the cash rate and the general level of interest rates.

DMO usually involves the use of **repurchase agreements** (also called repos), where the 'seller' of a bond or other financial security effectively agrees to buy the bond or security back from the 'buyer' at a later date. The RBA prefers using repos to conduct DMO because they are highly flexible instruments and can be used to manage ES supply much more precisely than outright purchases or sales of financial securities.

In summary, the RBA uses the cash rate policy corridor to implement changes to the cash rate target, and uses domestic market operations to ensure that the cash rate stays at its target every day when the demand for ES funds changes. Both features of the overnight money market allow the RBA to control the cash rate.

The transmission of the cash rate to other interest rates

The cash rate is often called the foundation or the anchor of the interest rate structure in the Australian economy. This simply means that the cash rate has a major influence on many other interest rates in Australia, because it affects how much it costs financial institutions such as banks to fund themselves. An increase in the cash rate means that it becomes more expensive for financial institutions to obtain funds in the short-term money market (and generally other funding markets too). To maintain their profit margins financial institutions generally respond by increasing the interest rates that they charge to borrowers, such as on household mortgages used to buy houses. Similarly, a reduction in the cash rate lowers the funding costs for banks and other financial institutions (that is, it costs them less to borrow money), and competition between financial institutions causes them to pass this cost saving on to their customers in the form of lower lending interest rates.

However, it is important to recognise that factors other than the cash rate also influence the main interest rates in the economy (home loans, credit cards, personal loans and commercial loans). These other factors include competition in the banking sector, regulations, conditions in global and domestic financial markets and risk assessments relating to economic conditions. While many interest rates move up and down with the cash rate, these interest rates can move because of other factors. This means that the margin or difference between the cash rate and those other interest rates can change over time in response to these other factors.

The Reserve Bank can either tighten monetary policy by raising the cash rate target or loosen monetary policy by lowering the target. The impacts of the Reserve Bank's implementation of monetary policy are summarised in figure 15.3.

Monetary policy stance	Cash rate target	Policy rate corridor	Overnight money market	Cash rate	Market interest rates
Tightening	Increases	Shifts upward	Influenced by RBA to ensure cash rate is consistent with target	Rises	Rise
Loosening	Decreases	Shifts downward	Influenced by RBA to ensure cash rate is consistent with target	Falls	Fall

Figure 15.3 – The conduct of monetary policy

While announcements of changes in the cash rate are the most important statements by the RBA, other releases such as board minutes and speeches by key RBA officials are also scrutinised closely by markets. Financial markets often interpret small changes in the RBA's description of economic conditions as a signal of future interest rate movements. Markets can "price in" a future interest rate increase or decrease even before it has happened, with banks sometimes changing key home loan rates in anticipation of a change in the cash rate.

Unconventional monetary policy

The economic crisis induced by the COVID-19 pandemic motivated the RBA in 2020 to do more than just change the cash rate target. With the cash rate lowered to just above zero (0.25 per cent), the RBA had to turn to other tools to provide further stimulus to the Australian economy.

The use of tools other than a central bank's policy interest rate (that is, the cash rate in Australia) is often called unconventional monetary policy. 'Unconventional' refers to the fact that central banks in advanced countries have only begun using these tools since the global financial crisis in 2008, and mostly in response to extreme economic events. This is in contrast to conventional monetary policy, when central banks use their policy interest rate to achieve the goals of monetary policy, which has been the norm in central banking for several decades.

UNCONVENTIONAL MONETARY POLICY MEASURES

The RBA introduced the following unconventional monetary policy measures in 2020:

- **Asset purchases or quantitative easing (QE)**: the RBA purchased government securities outright in the secondary market from financial institutions and paid for them by depositing newly created ES balances in their accounts (this is why asset purchases are often referred to as QE or 'printing money'). The purpose of these purchases is to lower the interest rate on three-year government bonds to around 0.25 per cent. Like the cash rate, the interest rate on three-year government securities is an important interest rate that influences other interest rates in the economy.
- **Forward guidance:** this is when central banks use official communications about the future stance of monetary policy to influence current interest rates on longer-term assets. Interest rates on longer-term assets are partly determined by what financial markets think the cash rate will be in future. For example, if markets think that the cash rate will be much higher in 10 years time, interest rates on 10-year assets such as 10-year government bonds would reflect that belief. The RBA officially stated that it would leave the cash rate target at 0.25 per cent until the 2–3 per cent inflation target is sustainably reached. By committing to a low cash rate for a potentially long period of time, the RBA is trying to lower interest rates on longer-term assets by influencing interest rate expectations.
- **More liquidity:** the RBA increased the size of its DMO compared to normal, and created a new funding facility called the Term Funding Facility (TFF), which provides very cheap additional loans to commercial banks that they can use to lend more funds to households and businesses. The TFF also includes incentives for these commercial lenders to lend more money to smaller businesses, which have been particularly affected by COVID-19. So much liquidity was provided through these measures that the actual cash rate fell below the cash rate target for some time, in spite of the normal arrangements described above.
- **Increasing the corridor floor:** the RBA changed the structure of the policy rate corridor system. Instead of paying zero interest rates on ES balances, which is what the RBA would have normally paid (that is, 0.25 percentage points below the cash rate target), the RBA decided to set the corridor floor at 0.10 per cent (that is, only 0.15 percentage points below the target). A goal of this measure was to encourage commercial banks to reduce interest rates on loans to households and businesses.

Negative interest rates are another form of unconventional monetary policy, but they are generally regarded as ineffective in stimulating economic activity, based on experience in Japan and Sweden. The RBA made an explicit decision to not introduce negative interest rates in March 2020 along with the other unconventional measures.

Appendix B: Modern Monetary Theory gained public attention from 2020. For an explanation see Appendix B (section B.4).

Another way to think about the influence of unconventional monetary policy is the 'yield curve', which shows how, in general, loans of longer maturity tend to have higher interest rates because lenders expect higher returns to bear greater risk that interest rates change. Unconventional monetary policy measures, such as providing forward guidance might not reduce the cash rate on overnight loans, but it can reduce market interest rates on longer term loans. While conventional measures usually lower the yield curve – reducing interest rates across the board, unconventional measures can flatten the curve, as shown in figure 15.2.

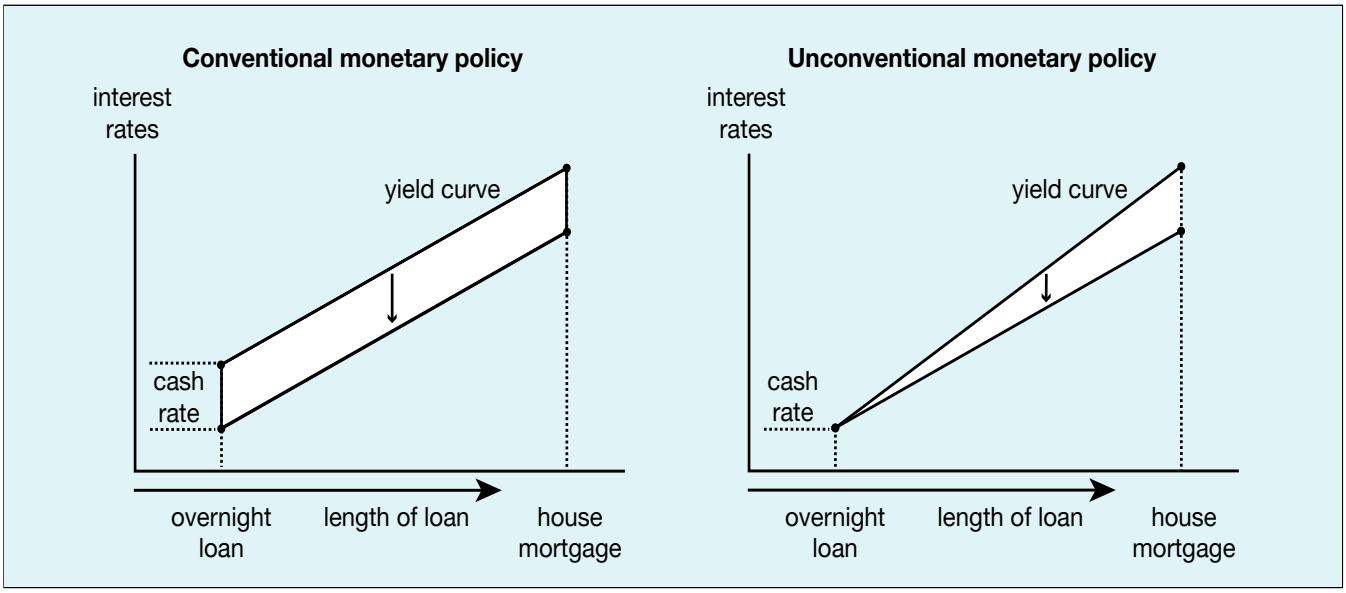


Figure 15.4 – Impact of conventional and unconventional monetary policy on the yield curve

reviewquestions

1. Explain how interest rates are determined in Australia with reference to *domestic market operations*, *exchange settlement accounts* and the *cash rate*.
2. Explain what is meant by *unconventional monetary policy measures*.
3. Identify the impact of the following transactions on the supply of funds in the short-term money market and their impact on the cash rate.
   a) The Reserve Bank buys Commonwealth Government Securities from a bank.
   b) The Reserve Bank sells Commonwealth Government Securities to a financial institution.

Transmission mechanism explains how changes in the stance of monetary policy pass through the economy to influence economic objectives such as inflation and economic growth.

15.4 The impact of changes in interest rates

The main effect of a change in the general level of interest rates is to change the demand for credit. Higher interest rates make borrowing more expensive, which is likely to deter borrowing, while lower interest rates will encourage it.

Economists sometimes describe the process through which monetary policy impacts upon the economy as the **transmission mechanism**:

- Downward pressure on interest rates through DMO makes borrowing cheaper for both consumers and businesses. Consumers often need to borrow to make major purchases such as housing and consumer durables. Similarly, businesses borrow for the purposes of investment in capital, plant upgrades and expansions. In addition, the interest rate they can obtain by investing in financial assets represents an opportunity cost of investing funds in the business for business owners. Thus, a fall in the level of interest rates should **encourage borrowing by both businesses and consumers**, leading to rising consumption and investment demand in the economy, thus increasing the level of spending and raising the level of economic activity.
- Reduced interest rates also have an effect on businesses and consumers that already have loans since the cost of servicing existing loans becomes cheaper. This means that existing borrowers now need less money to service those loans, and this could lead to **additional spending**.
- A fall in the level of interest rates also discourages financial inflow into Australia and, as discussed in chapter 5, leads to a **depreciation** of the currency. A depreciation of the Australian dollar makes Australian goods relatively more competitive in both domestic markets (since imports are more expensive) and overseas markets. This unintended consequence of a fall in the level of interest rates also has the effect of stimulating aggregate demand and economic activity, and adding to inflation.
- The increase in **aggregate demand**, which results from lower interest rates, will lead to either higher output and employment (if, for example, the economy was previously in recession) or will spill over into higher prices and wages if the economy is close to full employment.
- The rise in aggregate spending that results from a fall in the level of interest rates will lead to an increase in the **demand for money**, which will be accommodated by the Reserve Bank raising the supply of money (in equilibrium, the demand for and supply of money will be equal).

Thus, monetary policy can be either tightened or loosened depending on whether the government wishes to dampen or boost the level of economic activity.

A **tightening of monetary** policy puts upward pressure on interest rates, which has the effect of dampening consumer and investment spending, resulting in a lower level of economic activity, with lower inflation and the possibility of higher unemployment.

On the other hand, a loosening of **monetary policy** puts downward pressure on interest rates, boosting consumer and investment spending, resulting in a higher level of economic activity, with falling unemployment, and often an increase in inflationary pressures.

While a change in monetary policy can be implemented almost immediately (that is, it does not require legislation or parliamentary approval) it can take considerably longer for that change to bring about the desired impact on economic growth, inflation and unemployment. Monetary policy can have a **time lag** of somewhere between 6 and 18 months before the full impact of interest rate changes are felt in the economy. This time lag can sometimes pose problems for policymakers. Economic circumstances can change during the relatively long lag period and make current monetary policy inappropriate. For example, a series of interest rate increases that has reduced consumption and investment may still be dampening economic activity at a time when a sudden global slowdown means that looser monetary policy is needed to avoid recession. This is why the RBA needs to focus on the likely economic conditions in 12 to 18 months' time when it sets interest rates. For this reason, the RBA spends a lot of time and resources on forecasting future values of macroeconomic variables including GDP, inflation and unemployment.

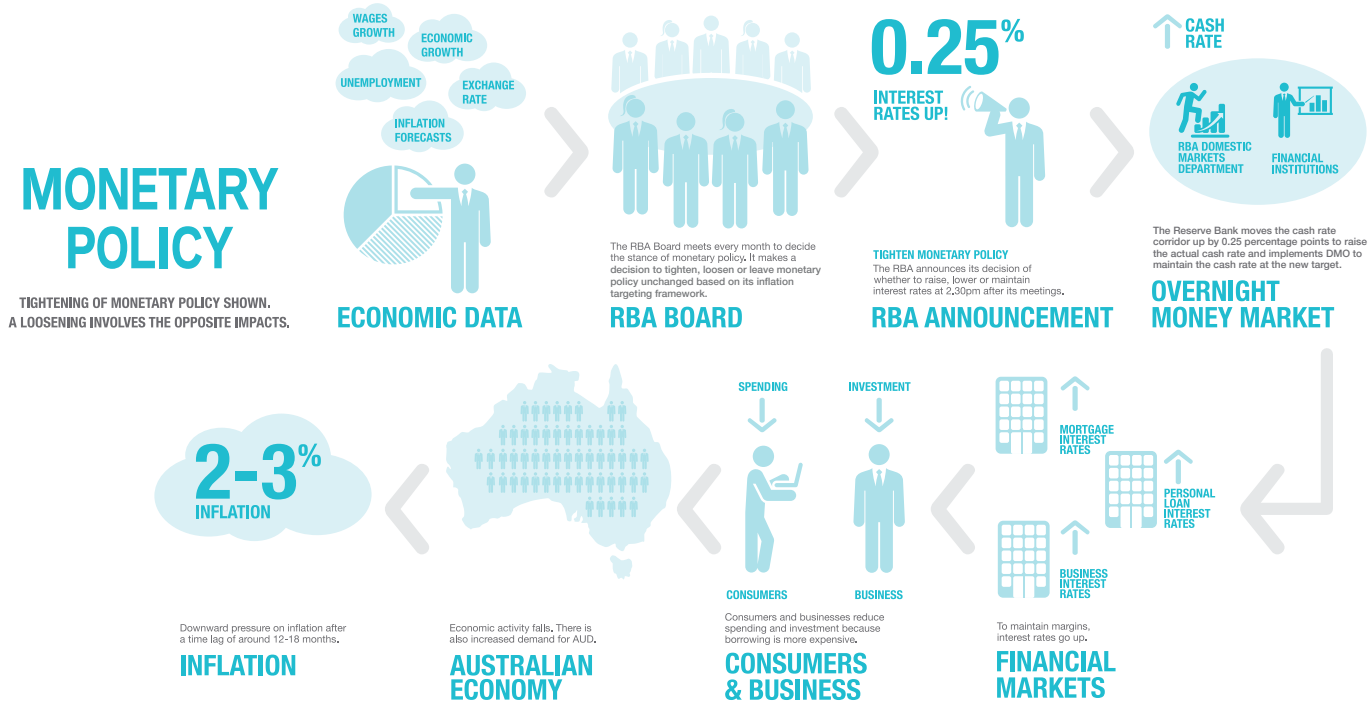
THE TRANSMISSION MECHANISM AND HOUSEHOLD CONSUMPTION

The monetary policy transmission mechanism is not always as straightforward as it appears to be. For example, changes in interest rates do not uniformly affect consumption across all households in exactly the same way. Lower interest rates boost consumption expenditure from indebted households (by reducing the amount of income required to service existing debt) as well as those wanting to fund more purchases by borrowing money. However, other households rely on interest payments from the money that they keep in bank accounts for income. With lower interest rates, these payments fall, which in turn can reduce consumption expenditure from such households. Research from the RBA in 2016 found that the positive effect of lower interest rates on "borrower" households more than offsets the negative consumption impact on "saver" households. The RBA estimated in 2019 that for every dollar that savers lose when the cash rate is cut, borrowers receive an extra two dollars of income. Overall, economic activity increases because of higher consumption, but interest rate changes have different effects on households and their consumption behaviour.

Appendix B:
"Advanced Economic Analysis" at the back of this textbook looks at the implementation and limitations of monetary policy in more detail.

reviewquestions

1 Explain what is meant by the monetary policy *transmission mechanism*.
2 For each of the following scenarios, explain how DMO might be used to influence the economy and what impact these changes would have.
   a) A shortage of skilled workers is putting upward pressure on wages growth and creating inflationary pressures.
   b) Global economic growth is raising demand and prices for raw materials and commodities that are used as inputs to production.
   c) A fall in consumer and business confidence causes reductions in consumption and employment growth.
3 Describe the role of time lags in the conduct of monetary policy in Australia.



15.5 The stance of monetary policy in Australia

The stance of monetary policy in Australia is communicated by the RBA in its cash rate target announcement every month (other than January). To make its decision-making process more transparent, the RBA also publishes official minutes from the board meeting two weeks after the meeting takes place. The stance of monetary policy is further revealed by broader interest rate changes in the economy. Interest rates in Australia have varied considerably over time as monetary policy has been altered to respond to varying economic conditions (see figure 15 .5).

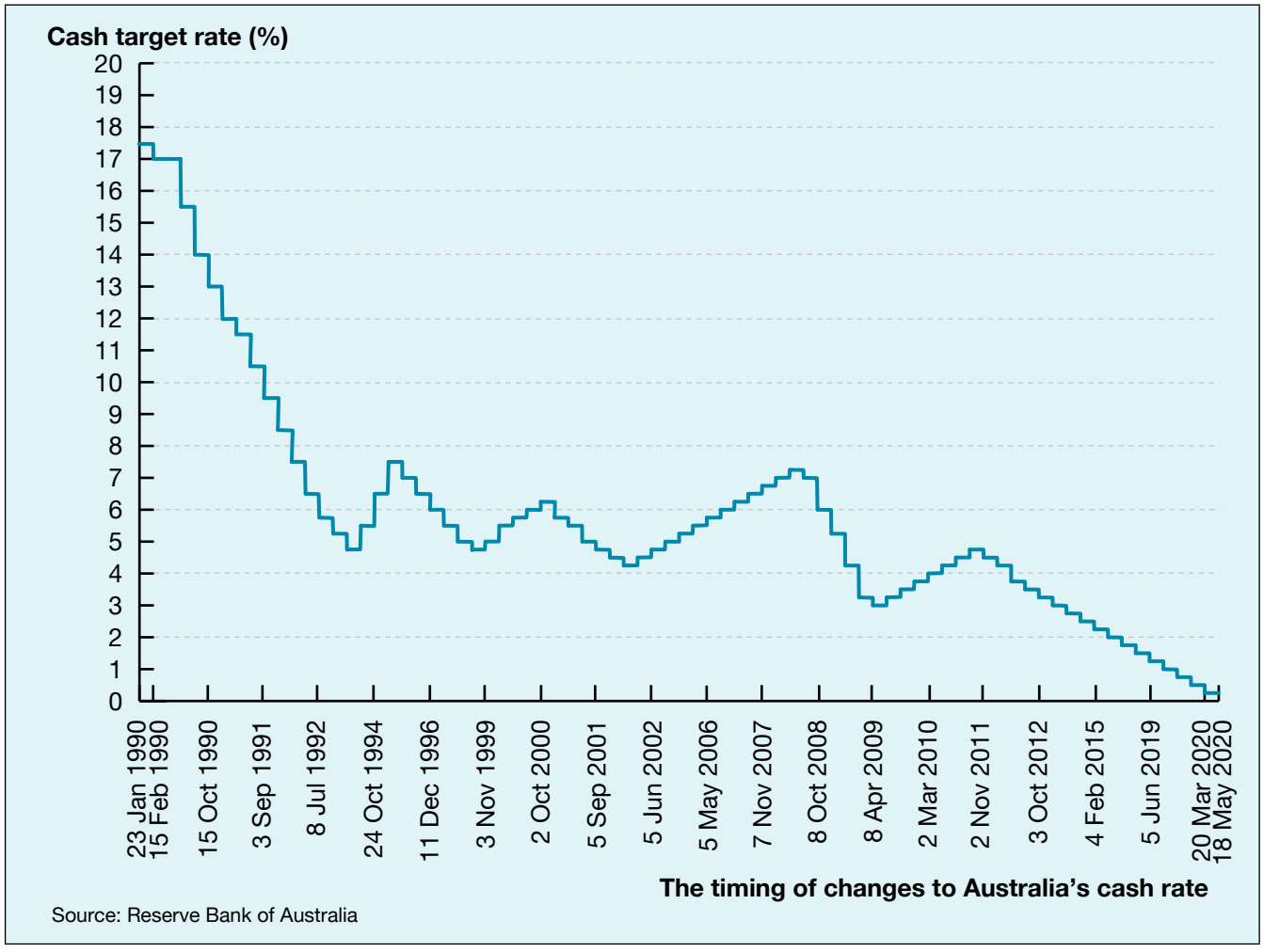


Figure 15.5 – Australian cash rate

Monetary policy became very expansionary in response to COVID-19. Even before the onset of the pandemic, the cash rate target had reached historically low levels in response to modest economic activity and weak inflation. In response to the pandemic, the cash rate target was lowered further to 0.25 per cent, its lowest on record and the lowest that it can be without the RBA introducing negative interest rates. In addition, the RBA introduced several unconventional monetary policy measures that further eased the stance of monetary policy. Because of these measures, interest rates on mortgages to buy houses and business loans fell to historically low levels.

Aside from the one-off impact of the GST in 2000, which pushed inflation to 6 per cent, the RBA has generally been successful in controlling the level of inflation. Inflation has averaged around 2.4 per cent since the adoption of inflation targeting in the early 1990s. As the experience of recent years has shown, monetary policy can still play an important role in supporting economic growth and employment in the short term.

However, recent years have shown the limited effectiveness of low interest rates to lift consumer spending and business investment when there is uncertainty and pessimism about the future of the economy. For example, a manufacturing business is unlikely to invest in new machinery if it does not expect demand for its products, even if it can borrow money cheaply to fund the investment.

Late 1980s	Contractionary monetary policy, with interest rates of almost 18 per cent, used to reduce demand, inflation and the current account deficit.
Early 1990s	Expansionary monetary policy used to stimulate growth during the recession, with unemployment rising to 11 per cent.
Mid-1990s	Pre-emptive interest rate rises used to prevent inflationary pressures re-emerging during the recovery of the mid-1990s.
Late 1990s	A long decade of relatively stable interest rates (in the 4 per cent to 7 per cent band) begins with lower interest rates to support economic growth.
Early 2000s	Monetary policy is tightened to deal with the inflationary consequences of the depreciation of the exchange rate and the introduction of the Goods and Services Tax.
Mid-2000s	Expansionary monetary policy to support growth during a mild downturn, followed by gradually increasing interest rates as inflationary pressures emerge during the boom in commodity prices.
2008–2009	Concern about the potential impacts of the global financial crisis on Australia sees the RBA slash the cash rate to 50-year lows of just 3 per cent.
2009–2011	Monetary policy returns to a more neutral position as the crisis eases, with the cash rate rising to 4.75 per cent by late 2010. The domestic recovery and strong mining sector growth sees the RBA refocus on containing inflationary pressures.
2011–2018	Monetary policy remains expansionary for a long time period, against the backdrop of low inflation and below-average economic growth. The cash rate target reached a historic low of 1.5 per cent in 2016, where it remained until 2019.
2019–2020	Subdued economic conditions, modest employment growth and low inflation motivated the RBA to ease monetary policy further. In 2019 the cash rate target was gradually lowered to 0.75 per cent. Following the outbreak of COVID-19 and its associated economic shock, the RBA slashed the cash rate target to the lowest possible conventional value of 0.25 per cent. The RBA also introduced a range of unconventional measures to strengthen the financial system and support growth.

There are five main factors that help to explain the stance of monetary policy:

1. The **low inflation objective**: Both the government and the Reserve Bank are committed to maintaining the RBA's inflation target – an average rate of inflation between 2 to 3 per cent over the course of the business cycle. Monetary policy is the major tool used to achieve this outcome. The Reserve Bank argues that Australia will achieve higher economic growth in the longer run by raising interest rates when there are increasing inflationary pressures. If the RBA sees inflation moving too far outside the target range, it will tighten monetary policy.

2. **Inflationary expectations:** One key element in the government's strategy of achieving low inflation is reinforcing expectations of sustained low inflation. If inflationary expectations remain low, businesses will plan lower price increases and unions will push for lower wage rises. The RBA will raise interest rates and maintain high interest rates if this is necessary to reduce inflationary expectations.

3. **Labour costs:** Future interest rate movements are dependent upon movements in the level of inflation, and one of the most significant determinants of inflation is the cost of labour trends in productivity growth. The best indicator of wages growth is the Wage Price Index.

4. The RBA remains committed to the two other objectives of the charter, that is, **economic growth** and **lower unemployment**. The level of growth and unemployment are also important indicators of whether the economy is close to its supply constraint. If the economy is operating at a point that is close to capacity (that is, close to full employment of labour and other resources), continued growth in spending and demand will not lead to higher output and employment, and will instead spill over into higher prices. Therefore, if the RBA feels that the level of unemployment is approaching the natural rate, it is likely to tighten monetary policy to prevent excessive spending feeding into higher prices and wages. The RBA actually believes that the natural rate of unemployment has decreased in recent years. This can partly explain why inflation has been persistently low in recent years despite the cash rate reaching historically low levels; unemployment was not thought to be low enough (even pre-COVID-19) to generate inflation that is too high.

5. **External factors**: Australia's integration with the global economy means that international conditions consistently influence RBA monetary policy settings. For example, if global conditions deteriorate, Australia is more likely to face slower economic growth and higher unemployment, and the RBA may move to reduce interest rates to prevent a downturn. More broadly, the RBA monitors conditions in global financial markets for any early warning signs of inflationary pressure or economic volatility so that it can move pre-emptively to change monetary policy settings.

reviewquestions

1 Examine recent changes in the stance of monetary policy in Australia.

2 For each of the following scenarios, propose an appropriate monetary policy response (and justify your decision).

a) A rise in fuel prices increases inflation but lowers consumer spending.

b) A recession overseas causes the Australian dollar to depreciate and increases domestic unemployment.

3 Explain how wages growth may impact monetary policy decisions.

chapter summary

1 **Monetary policy** involves actions by the **Reserve Bank of Australia** to influence the cost and supply of money and credit in the economy, in order to achieve the government's policy objectives.

2 Monetary policy is the main **macroeconomic policy** instrument used to influence the level of economic activity in the short to medium term.

3 Monetary policy has three main **objectives**: low inflation, economic growth and reducing the level of unemployment. Its primary goal is to contain inflation within a target range of 2–3 per cent on average, over the course of the economic cycle.

4 Like many other industrialised nations, Australia adopted an **inflation-targeting** monetary policy regime in the early to mid-1990s that has proved highly successful.

5 The **objectives** of monetary policy are often in conflict since faster economic growth and job creation tend to be associated with higher levels of inflation.

6 Monetary policy is implemented through **domestic market operations** – the purchase and sale of second-hand government securities by the Reserve Bank in the short-term money market for the purpose of influencing interest rates.

7 When the RBA sells government securities in the short-term money market, it reduces the supply of funds, and this results in higher interest rates. The RBA implements this policy when it wants to slow down the level of economic growth and reduce inflationary pressures. Alternatively, if it wants to accelerate growth, the RBA buys government securities, increasing the supply of funds and reducing interest rates.

8 In recent years the Reserve Bank has deployed several unconventional monetary policy measures to support growth, stabilise financial markets, encourage lending and influence market expectations. These measures have been used when conventional monetary policy has reached the limits of its effectiveness.

9 Interest rate changes affect the economy through the monetary policy **transmission mechanism**, in which lower interest rates encourage increased consumer spending and business investment, raising the level of aggregate demand. Higher interest rates dampen aggregate demand by discouraging consumer spending and business investment.

10 In making monetary policy decisions, the **RBA**'s Board considers a number of economic indicators that are likely to affect its policy goals over the coming year, including inflation, inflationary expectations, wages growth, the rate of economic growth, the unemployment rate, interest rates overseas, the exchange rate and the balance of payments.

chapter review

1. Define *monetary policy*.
2. Outline the broad objectives of monetary policy.
3. Identify what is meant by *inflation targeting* and why it has been implemented in Australia.
4. Explain what is meant when we describe Australia's inflation target as a *flexible target*.
5. Identify the economic indicators monitored by the government and the Reserve Bank to determine whether a change in monetary policy is necessary.
6. Explain how the RBA conducts *domestic market operations*.
7. Outline what action the Reserve Bank would take if it wanted to:
   a) tighten monetary policy
   b) loosen monetary policy
8. Discuss how changes in interest rates influence the level of economic activity.
9. Discuss how Australia's growth and inflation levels have influenced the conduct of monetary policy in recent years.
10. Outline how time lags influence the implementation of monetary policy.

16 Microeconomic and Environmental Policies

16.1 Microeconomic policies and aggregate supply

16.2 Microeconomic policies and individual industries

16.3 Environmental management policies

16.1 Microeconomic policies and aggregate supply

Microeconomic policies are policies that aim to increase aggregate supply by improving the efficiency and productivity of producers and industries.

Microeconomic policy is action taken by government to improve the economic efficiency of firms and industries, in order to maximise the amount of output that can be produced from the scarce resources that are available. Microeconomic policy is central to the government's long-term aim of increasing the level of sustainable growth in Australia and reducing the extent to which inflation and external imbalances constrain economic growth.

Microeconomic policy is also important because many of Australia's economic problems are caused by structural factors that cannot be addressed through macroeconomic policies, which simply aim to manage the level of economic activity. Over the last decade, for example, despite a long period of record-low interest rates, economic growth has remained below long-term average levels. Lifting Australia's growth rate requires structural changes to lift productivity and help Australia transition successfully to new knowledge-based and service-based industries. The economic policies required to lift productivity are less concerned with macroeconomic policy settings, and more concerned with microeconomic reforms such as tax reform, improving the education system and supporting investment in technology infrastructure.

Microeconomic policy is different from macroeconomic policy because instead of influencing demand, microeconomic policy influences supply. It is therefore sometimes called **supply-side economics**. The focus of supply-side economics is ultimately reducing business costs, which should have the effect of shifting the aggregate supply curve to the right – that is, more goods and services should be provided at lower prices. This is shown in figure 16.1. Policies that focus on increasing the level of aggregate supply do so by improving the competitiveness, productivity and efficiency of Australian industries.

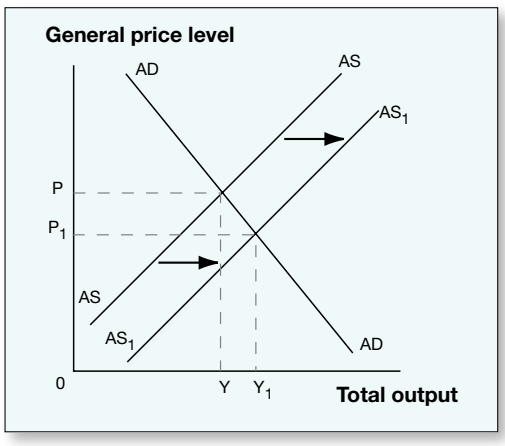


Figure 16.1 – Increasing supply as a result of microeconomic reform

Microeconomic policies are closely associated with structural change. **Structural change** refers to shifts in the pattern of production that reflect changes in technology, consumer demand, policy, global competitiveness and various other factors. It results in some products, processes and even entire industries disappearing, while facilitating the emergence of others. Microeconomic policies promote structural changes and assist the Australian economy in dealing with the challenges and taking advantage of the opportunities that they can present by making product and factor markets work more efficiently. **Product markets** include the market for goods, such as motor vehicles, and services, such as transport. **Factor markets** are markets for the inputs to production, such as the labour market and financial markets. Markets work efficiently when goods are produced at the lowest cost and resources flow to areas where they have the highest value.

Structural change involves changes in the pattern of production that reflect changes in technology, consumer demand, global competitiveness and other factors. It results in some products, processes and even entire industries disappearing, while others emerge.

The structure of the Australian economy has changed in recent decades because of improvements in technology, increased trade, changes in patterns of consumer demand and the implementation of wide-ranging microeconomic policies between the early 1980s and the beginning of the 21st century. Figure 16.2 shows that since 1979–80, the two main shifts in the allocation of resources in Australia have been the reduction of the relative size of manufacturing and growth in the mining and services sectors. As we will see in the next section, each of these trends can be at least partly explained by the implementation of microeconomic policies.

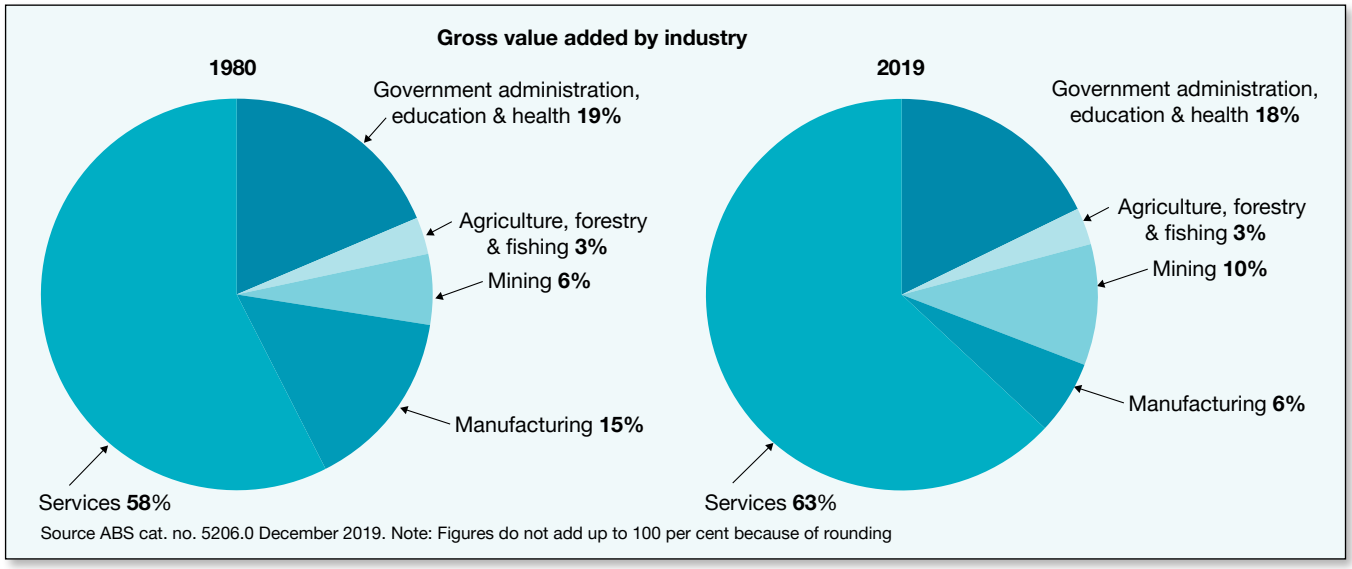


Figure 16.2 – Australian industry structure

Microeconomic theory says product and factor markets will generally be more efficient if there is greater competition between private businesses and the market forces of supply and demand are able to operate without interference from government rules. Therefore, many microeconomic reforms aim to remove "distortions" that can be created by government policies. For example, electricity is a major input to production and a necessity for households. The price of electricity is highly regulated. This leads to lower prices for households in the short term but also results in lower investment in new energy generation facilities due to the prospect of lower profits than can be earned with a regulated price. In the long run, this could result in insufficient investment in the energy sector, less reliable energy supply, lower productivity and higher energy prices. Some advocates of microeconomic reform regard price regulation in the electricity sector as a distortion of market forces that should be removed (while others regard such regulation as necessary, to prevent large energy firms from exploiting their market power and extracting excessive profits).

Microeconomic policies can operate on different levels, from decisions by an individual government official about a single company to sweeping policies for entire industries. However, the general aim of all microeconomic reforms is to **encourage the efficient**

operation of markets – to lift productivity, improve flexibility and responsiveness to change, and encourage Australian firms to take on "world best" practices in order to increase aggregate supply.

While there are three dimensions to improving the efficiency of markets – allocative, technical and dynamic – many microeconomic policies will have impacts on all three aspects of efficiency simultaneously, potentially blurring the distinctions between the concepts. For example, past reforms to Australia's telecommunications industry have

ALLOCATIVE EFFICIENCY

Allocative efficiency refers to the economy's ability to shift resources to where they are most valued and can be used most efficiently.

By minimising the distortions to the market economy (such as the impact of government regulations, tax loopholes, subsidies and anti-competitive behaviour), the operation of market forces should bring about a more efficient allocation of resources. In a free market economy, resources should shift to those producers who have the greatest capacity to pay, and that capacity to pay will reflect relative efficiency and value to the economy (more efficient producers stand to make greater profits from production and so are willing to pay more for resources). Achieving allocative efficiency promotes structural change by allowing resources to flow to those areas where they are used most efficiently. For example, economists argue that the removal of tariff protection has led to a reallocation of resources away from inefficient producers who could only survive behind tariff barriers towards the more efficient producers who are competitive without protection.

TECHNICAL EFFICIENCY

Technical efficiency refers to the economy's ability to produce the maximum level of output from a given quantity of inputs.

Technical efficiency is the ability of an economy to achieve the maximum level of output from a given quantity of inputs. Technical efficiency is measured by the productivity of a business or an economy: that is, how much output can be produced from a given quantity of inputs. Greater productivity means that businesses can produce output more cheaply, which makes them more competitive in domestic and global product markets. Businesses operating in a competitive market therefore have very powerful financial incentives to maximise technical efficiency. They will be more inclined to adopt the latest production technology and use the least-cost combination of resources to produce.



The **finance and insurance industry** achieved higher multifactor productivity growth (measured across both labour and capital inputs) than most other sectors in Australia during the period from 1997 to 2019, recording average annual productivity increases of around 2 per cent. Some of the changes that have contributed to this include online banking for customers, reductions in branch staff numbers, shifting business processes online or overseas, organisational restructures and more recently the low interest rate environment in Australia. The drivers of these changes can be traced back to policy decisions and structural changes in the 1980s and 1990s, including deregulation, privatisation and increased competition for traditional financial institutions.

DYNAMIC EFFICIENCY AND INNOVATION

Dynamic efficiency refers to the economy's ability to shift resources between industries in response to changing patterns of consumer demand.

The elimination of distortions such as excessive government regulation and subsidies improves dynamic efficiency and accelerates positive structural change. Dynamic efficiency means that producers are able to respond quickly to changing patterns of demand in both the domestic and global economy. In addition, producers who are dynamically efficient are able to adopt new technologies and innovative business practices. One of the major ways in which microeconomic reforms can increase dynamic efficiency is by increasing the level of competition in industries, which will tend to force producers to be more responsive to changes in demand and supply.

increased competition, forcing companies to become more technically efficient to maintain and improve market share. The forces of competition have also encouraged innovation and dynamic efficiency, attracting more investment to the telecommunications industry (a sign of allocative efficiency). Nevertheless, it is useful to identify the specific ways in which individual microeconomic reforms have affected the allocative, technical and dynamic efficiency of specific sectors in the Australian economy.

In the following section we look at industries and how they have been affected by a range of microeconomic policies, including deregulation, reforms to public trading enterprises and competition policy. In section 16.3 we look at the national and global context for environmental management. Although the ultimate objectives of environmental policies are different to microeconomic policies, they are included in this chapter because of the similar way in which they impact households, businesses, sectors of industry and the economy. It is also important to note that as well as the policies covered in this chapter, examples of other microeconomic policies are provided in several other chapters in topics 3 and 4.

MICROECONOMIC REFORM POLICIES
Deregulation
Reforms to public trading enterprises
Competition policy
Environmental management
Reducing protection – see chapter 6
Tax policy – see chapter 14
Labour market policy – see chapter 17

reviewquestions

1. Define *microeconomic policy*.
2. Describe the three different types of efficiency that microeconomic policies aim to improve.
3. Explain how microeconomic policies promote structural change and increase aggregate supply.

16.2 Microeconomic policies and individual industries

Deregulation

Deregulation involves the simplification or removal of rules that constrain the operation of market forces, and it aims to improve the efficiency of industries. The shift towards industry deregulation since the early 1980s has helped drive extensive structural change across many industries.

Financial sector

The financial sector plays an important role in ensuring that businesses can access funds for investment and growth, and investors can easily and confidently invest their savings in various ways. Microeconomic policies in the financial sector in the 1980s aimed to make the sector's provision of these services more efficient and competitive. The first step in financial deregulation was the floating of the Australian dollar and the removal of the Reserve Bank's direct monetary controls over banks (which gave the RBA more autonomy to set interest rates on their deposit accounts and loans). The second was the removal of barriers to foreign banks entering the Australian market.

Financial deregulation has resulted in a more competitive environment for many financial services. The benefits of a more competitive financial sector are spread across the entire economy as consumers and businesses pay lower prices to access finance. Better access to finance can facilitate more consumption by individuals and more investment by businesses.

The global financial crisis of the late 2000s resulted in some businesses in the financial sector collapsing or being acquired by other businesses, reducing competition in the financial sector. In many countries, the financial crisis was also blamed on governments having gone too far in deregulating the financial sector, allowing banks to take too many risks with depositors' money. This highlights the need for a balance between the goals of efficiency and competition (which favour deregulation) and the goals of consumer protection and financial system stability (which favour regulation).

Finding this balance was the overarching aim of the Financial System Inquiry also known as the Murray Review, a policy review of Australia's financial sector conducted in 2014. Its recommendations included: increasing the minimum capital requirements of banks to levels among the safest in the world to reduce the potential impact of future financial crises; levelling the playing field for smaller banks by making regulatory requirements more competitively neutral rather than advantaging the big banks; and strengthening consumer protection laws on financial product design and distribution. The increased bank capital that was built up in Australia as a result of this inquiry enabled banks to support lending to businesses during the economic downturn caused by COVID-19. Consumers also benefited from laws banning excessive credit card surcharges since 2016 (another recommendation from the inquiry). However, some important recommendations – including giving the Australian Securities and Investment Commission (ASIC) more explicit powers and a more direct mandate to deal with competition issues – have not yet been implemented.

Tensions between adequately protecting customers of financial products and facilitating efficient market outcomes were further demonstrated by the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry conducted in 2018. The Royal Commission uncovered a range of dishonest practices, including breaches of industry codes of practice, failings on contracts, and widespread mistreatment of customers. The Royal Commission also found widespread governance problems at senior levels in financial institutions and major flaws in how the industry was regulated by ASIC.

The Royal Commission concluded in its final report in 2019 that the current suite of laws and regulations are already largely appropriate, with certain exceptions. The Commission recommended banning "trailing commissions" charged by mortgage brokers (who help borrowers find the best loan from a financial institution), although this suggestion was not adopted by the Government, which argued that it would reduce competition. The Commission also recommended that regulatory agencies should apply current regulations more strictly and impose harsher punishments when they are breached. This change in approach led to agencies adopting a tougher approach to litigation, reflected in several high-profile cases against banks and other finance companies, including allegations that Westpac Banking Corporation breached responsible lending laws when extending housing loans to some customers, and that the National Australia Bank had charged superannuation customers fees without providing any financial services. However, the Commission did not recommend major legislative changes, despite the problems it uncovered, because of concerns that introducing more regulations might make it harder to obtain credit in Australia, especially for small businesses.



Agricultural industries

Deregulation in the agricultural sector has created more competition in markets for farm produce. In the past, single government-owned businesses or industry cooperatives had a monopoly on buying farmers' produce in areas such as dairy, wheat and wool. With deregulation those monopolies ended and farmers were given new incentives to innovate and diversify their outputs. Nevertheless, in the past decade, annual growth in agricultural productivity has slowed significantly, falling to an annual average of 0.6 per cent from its average of 2 per cent in the second half of the 20th century. Evidence from the Australian

Bureau of Agricultural and Resource Economics and Sciences suggests that this decline can mostly be attributed to deteriorating climate conditions rather than a failure to innovate.



Transport industries

Transport industries are crucial to Australia's economy because of the large distances both within Australia and between Australia and other nations. Two key examples of deregulation in Australia's transport industries are:

1. Australia's **domestic aviation** industry was deregulated in 1990, ending the Two Airline Policy that since 1952 had seen the aviation industry divided between two companies. Several airline businesses have entered the Australian aviation market since 1990, but after consolidation within the industry, Australia had two dominant airline groups: Qantas/Jetstar and Virgin Australia/Tigerair. In 2020, the structure of the industry came under further pressure when the collapse in travel following the COVID-19 pandemic forced Virgin Australia, which had $7 billion in accumulated debt, into voluntary administration so it could be sold and restructured.
2. **Rail:** The efficiency of the rail freight industry has been improved by a range of reforms over the past decade. In 1997, the Commonwealth and State Governments established the Australian Rail Track Corporation (ARTC) to manage the 10,000-kilometre national interstate rail network. The ARTC sells access to privately owned freight businesses such as Pacific National and oversees maintenance of the network and new capital works.



Telecommunications industry

Telecommunications is an important contributor to business productivity and as a sector contributes around 3 per cent of economic output. Until the early 1990s, the telecommunications industry was dominated by Telecom Australia (now Telstra) as the monopoly provider of services to businesses and consumers. The market was opened up to competition in the 1990s, resulting in many new telecommunications businesses entering the market and reducing telecommunications costs dramatically, particularly in competitive areas of the market such as mobile phones and long-distance calls. Nevertheless, Telstra still has the largest market share for fixed-line telecommunications and mobile telecommunications.

For many years Telstra was accused of making it difficult for competitors to gain access to its local monopoly over residential phone connections. For this reason, the decision was made during the rollout of the National Broadband Network (NBN) to separate the wholesale business of providing access to the infrastructure from the retail businesses that offer telecommunication services to households and businesses. This should increase competition among retailers in the telecommunications industry, although in its early years NBN received tens of thousands of complaints related to price, service connections and broadband speeds.

Continuing regulation

Effective deregulation involves striking a balance between competing policy goals. Excessive regulation can impose additional costs, constrain economic growth and undermine competitiveness. On the other hand, excessive deregulation (or to put it another way, inadequate regulation) can lead to market failure and economic instability. As alluded to above, this tension is perhaps most apparent (at least currently) in the finance industry.

Australia has repealed many regulations that reduced competition and most comparative studies conclude that Australia has a less regulated economy than most advanced economies. Even so, many aspects of business activity are regulated. Environmental regulations play a significant role in the agricultural and mining industries. Construction,

energy and transport have comprehensive safety regimes. Pricing and investment decisions are overseen by regulators in industries such as electricity, gas, water, postal services, and telecommunications – as these industries are dominated by very large players that would otherwise have the ability to charge much higher prices because of the lack of outside competition. Professional services industries, such as law and accounting, exist in part to help businesses comply with and navigate regulation. When new areas of business emerge, such as ridesharing services offered by Uber, homesharing through Airbnb, or online services through Facebook and Amazon, governments have responded with new transport, safety, planning, privacy, tax and other laws. So while Australia's economy has been in once sense "deregulated", in another sense, changes in the economy also bring about the need for new forms of regulation.

Reforms to public trading enterprises

Microeconomic policies have promoted efficiency in public trading enterprises (PTEs) – also known as government business enterprises – through two main approaches: **corporatisation** of PTEs and **privatisation** of PTEs.

Corporatisation of PTEs

Corporatisation aims to encourage PTEs to operate independently from the government, as if they are private business enterprises. This involves eliminating political and bureaucratic supervision and making public enterprise managers accountable for enterprise performance. Corporatised public enterprises attempt to achieve a rate of return on assets comparable to private sector companies, and they often operate in competitive markets (although in some cases they continue to operate as regulated monopolies). In doing so, they must still comply with competitive neutrality laws that try to ensure that PTEs do not receive artificial competitive advantages over private businesses just because they are publicly owned. Examples of PTEs that have been subject to corporatisation are Australia Post, Energy Australia and the Sydney Water Corporation.

Privatisation of PTEs

Examples of privatised public trading enterprises are:

Telstra, Qantas, GIO, Commonwealth Bank, NSW Ports, Queensland Rail, Victorian electricity, state banks and airports.

Privatisation takes corporatisation a step further by selling off PTEs so that they do in fact become private enterprises, either in whole or in part. Australia has undertaken extensive privatisation in recent decades, and the total value of privatised businesses is among the highest in the world. The most recent major privatisation by the Federal Government was health insurer Medibank Private, which after 38 years in government ownership was sold for $5.6 billion in 2014. In recent years, State Governments have also privatised assets to free up capital for other purposes, such as transport projects. For example, the NSW Government's $20 billion privatisation of its electricity "poles and wires" business helped to fund several transport infrastructure projects, including a second harbour rail crossing, a light rail project and extension of the North West Rail Link. Governments have implemented privatisation with the aim of raising one-off revenues, increasing competition, encouraging more rational management and pricing behaviour, and forcing businesses to become more efficient.

In a rare departure from the trend of privatisation, in 2009 the Federal Government established a new public trading enterprise to build and operate an optical fibre telecommunications system, the NBN. The final cost of building the network was estimated in 2018 to be $51 billion. The NBN company is one of the largest in the country.

National Competition Policy

Competition policy aims to promote competition in markets so that firms increase efficiency and lower prices for consumers. Although Australia has always had laws about business practices, they went through a major shake-up after 1995 when the Commonwealth and

State Governments agreed to implement the **National Competition Policy**. Under the policy, governments agreed to implement reforms that would increase competition in the sectors where they operated monopolies, such as electricity, gas, water, and rail and road transport. Governments also agreed to remove special provisions that gave publicly owned enterprises an advantage over private sector competitors (what is known as the "competitive neutrality" principle). The national competition watchdog, the **Australian Competition and Consumer Commission** (ACCC), was also established. In 2019, the ACCC concluded nearly 100 separate investigations of possible breaches to competition and consumer protection laws and imposed over $60 million in penalties on offending businesses.

National Competition Policy is an agreement between Australia's Commonwealth and State Governments signed in 1995 to encourage microeconomic reform throughout the Australian economy.

An important aspect of the reforms was the establishment of a national regime to regulate the cost of **access to infrastructure**. This meant that where businesses owned a monopoly infrastructure asset (such as owning an airport, rail line or telecommunications network), they were required to give competitors access to that network at a reasonable price.

A key principle of competition policy in Australia is **workable competition**. While governments generally aim to maximise competitive forces, workable competition may sometimes mean that in order to achieve international competitiveness, it may be necessary to reduce the number of firms in an industry. Those remaining firms can then operate on a larger scale and achieve the lowest possible long-run average costs of production.

A major review of competition policy led by Professor Ian Harper (the Harper Review) in 2015 recommended that competition principles should be incorporated into a wider range of government regulations, procurement and service delivery systems, and extended to human services such as health and aged care. A Productivity Commission (PC) report concluded that with the public sector spending around $200 billion per year on human services, significant improvements in economic outcomes could be achieved by extending competition laws to social housing, public hospitals, services in remote Indigenous communities, and family and community services. The Harper Review concluded that implementing its reform could boost economic growth as much as the first round of competition policy reforms in the 1990s.

While many of the Harper Report recommendations were not implemented, several changes were made to Australia's competition policy regime in 2017, principally by expanding the laws on misuse of market power. Businesses must not misuse their market power to reduce competition in the market by lowering prices, refusing to supply goods or services or other behaviours. Previously regulators had to prove that a business actually intended to harm competitors in order to convict it of misusing market powers; under the new law, regulators only have to establish that the business practice in question had the effect of harming competition – this is considered much easier to prove in court. "Concerted practices" were also banned; they include actions such as sending price information to competitors, even if there is no formal agreement to collude to raise prices.

BUSINESS PRACTICES THAT ARE OUTLAWED BY THE COMPETITION AND CONSUMER ACT INCLUDE:

- **Monopolisation**, which occurs when a firm uses its dominant market position to eliminate competition, such as through temporary price cutting.
- **Price discrimination**, which occurs when a firm sells the same type of good or service in different markets at different prices (for reasons not related to different costs such as for transport).
- **Exclusive dealing**, which occurs when a firm sets conditions for supply that exclude retailers from dealing with other competitors.
- **Collusion and market sharing**, which occurs when firms get together to fix prices or agree on a market sharing arrangement that reduces effective competition between firms.

Future of microeconomic policy

The period from the mid-1980s to the early 2000s witnessed extensive microeconomic reforms that saw industries change dramatically in Australia. Fewer reforms have been achieved in the past two decades, as the policy focus has shifted to more macroeconomic concerns such as managing the mining boom, the global financial crisis and reducing the size of the budget deficit. The Rudd and Gillard Labor Governments from 2007 to 2013 implemented a range of "seamless national economy" reforms designed to make it easier to do business, but they achieved poor take-up by state governments. The Abbott Government commissioned a major audit of the budget in 2013, but measures to cut spending did not achieve political support. A major review of the energy sector in 2017 was led by Dr Alan Finkel, but the subsequent National Energy Guarantee policy to reduce Australia's carbon emissions was scrapped by the Turnbull Government in 2018. Many other major recommendations made by policy reviews over the past decade have also gained little political traction and have not been implemented. As a result, business and economic commentators have regularly criticised the lack of policy reform achieved in recent times. In 2020, the Government signalled it would use the recovery phase following the COVID-19 pandemic as an opportunity to revisit long-standing economic reform opportunities, such as for taxation, industrial relations and business regulation. At the height of the crisis in May, the Government replaced the long-standing Council of Australian Governments (COAG) with a National Federation Reform Council (NFRC) that would be based on the success of the "National Cabinet" that brought the Federal and State Governments together in their response to COVID-19.

The Productivity Commission outlined Australia's future microeconomic reform priorities in a major report in 2017, *Shifting the Dial*. It estimated that the increase in productivity resulting from the changes it recommended could eventually lift Australia's GDP by $80 billion a year. Some of the key microeconomic reform initiatives included:

- health reforms such as making regional health funding more flexible, reducing support for less effective health services, making the patient the centre of care, improved access to patients' medical records, changing the structure of pharmacy, and reforming alcohol tax
- education reforms such as aiming for proficiency not just competency, extending consumer laws to cover universities, independent assessment of skills at university, and extending access to learning options
- city reforms including changing public infrastructure funding, using competition principles for land use, introducing charges for road use, and improving the assessment of development assessments
- market reforms including for energy, encouraging innovation, better cooperation between the Commonwealth and State Governments, tax reform, public sector reform and improving public sector capabilities.

Overall impacts

Microeconomic policies have generally been championed by successive Australian governments because of their potential to lift economic growth and living standards. However, microeconomic reform has always been associated with shorter-term costs, such as job losses, business closures and damage to regional economies. As a result, many microeconomic reforms were met with strong opposition, especially from those sectors that stood to lose out from the changes. Microeconomic policies nevertheless achieved extensive long-term benefits, which have become clearer over time.

Higher productivity growth from microeconomic policies has contributed to an **increase in economic output** and lower unemployment. According to the PC, Australia's GDP was around 2.5 per cent or $25 billion higher in 2005–06 as a result of Australia's extensive national competition policy reforms of the 1990s. This translated into **higher living**

standards of around $1200 per person. These improved outcomes were the result of increased productivity growth as sectors of the economy became more competitive, innovative and flexible. The Productivity Commission has cited as evidence the pattern of higher productivity growth in sectors most affected by microeconomic reform in the years following implementation, such as telecommunications and financial services in the 1990s.



For more information on microeconomic policies, visit the following websites: **www.pc.gov.au** (Productivity Commission), **www.accc.gov.au** (Australian Competition and Consumer Commission).

Outline some areas the Productivity Commission has investigated for possible future microeconomic policies.

Australia has achieved weaker productivity growth since the mid-2000s, around the time that the pace of microeconomic reform slowed. In the last few years, this slowdown in productivity growth has been particularly pronounced, especially the productivity of labour (as distinct from the productivity of all combined factors of production). This has led many, including the PC, the IMF and the OECD, to argue that further reform is needed if Australia is to return to the higher productivity growth that is needed to lift higher living standards. In a 2018 report, the OECD stressed the need for Australia to reform its education and training policies so that the labour force can better navigate the structural changes caused by globalisation, technology advancements and automation. In particular, it recommended that Australia – like other OECD nations – develop a more comprehensive framework for facilitating job transitions for workers displaced by global forces and automation.

Another major benefit of microeconomic reform is **lower inflation**, resulting from greater competitive pressures in sectors affected by microeconomic reforms. The PC estimated that since the early 1990s, rail freight rates have fallen by as much as 42 per cent, whilst both port and telecommunications charges have dropped by up to 50 per cent. Other Commission research has concluded that because of lower prices and higher wages, the benefits of microeconomic policies have been relatively evenly shared between individuals and businesses.

Microeconomic policies are not without critics. Some argue that poorly designed reforms have simply replaced one problem with another. For example, the chairman of the ACCC, Rod Sims, in 2017 argued that privatisation was "severely damaging" the Australian economy because governments were selling vital assets such as ports and airports to private-sector monopolies, resulting in higher one-off revenues for governments but then large increases in prices to consumers. Another common criticism is that reforms have often benefited wealthy investors while costs have been borne unevenly by lower-income earners. Critics also question whether the productivity statistics exaggerate the benefit of microeconomic policies. For example, research has demonstrated that many workers are experiencing an increase in **work intensity** – that is, people working longer hours without extra pay. This means that some of the claimed increase in labour productivity may disguise the fact that people are now working longer hours than in previous decades but these extra work hours are not recorded.

BENEFITS	COSTS
Greater efficiency and productivity growth	Higher unemployment in the short term
New business and job opportunities	Closure of inefficient businesses
Higher economic growth and living standards	Greater work intensity
Lower inflation	Less equal distribution of income

reviewquestions

1 Using one industry as an example, explain how microeconomic policies deliver better outcomes for consumers. Identify why businesses in this industry might resist microeconomic reform.

2 Summarise the microeconomic policies that have been implemented in individual sectors of the Australian economy.

3 Explain how microeconomic policies can lead to improved economic performance in the long term. Identify any costs of microeconomic policies.

4 Outline three areas for future microeconomic policies in Australia and explain how they might boost economic growth and productivity.

16.3 Environmental management policies

Environmental management policies are designed to address issues of environmental sustainability. These include the preservation of natural environments, pollution and climate change, and managing the use of renewable and non-renewable resources. As we saw in chapter 12, environmental issues tend to be a lower priority in the Australian economy than other economic objectives, such as maintaining growth and reducing unemployment, but their significance has risen in recent years.

While environmental management policies often address different objectives than microeconomic policies, they are included in this chapter because in many ways they have a similar role in the economic policy mix. Like microeconomic policies, environmental policies aim to influence the behaviour of individual households, businesses and industries. The two main policy tools for environmental management are regulations and market-based policies to influence behaviour and reduce environmental impacts. Like other areas of economic policy, environmental management is guided by research bodies such as the Productivity Commission and by targets set by governments, and is influenced by international agreements between governments from around the world.

Targets

The Australian Government uses many targets to guide its environmental policies. For example, Australia's Renewable Energy Target played a critical role in creating incentives for the increased use of renewable energy. The 2020 target placed a legal obligation on electricity companies to produce or pay for renewable energy, resulting in Australia exceeding the 23.5 per cent target for electricity supply from renewable energy sources like solar and wind power.

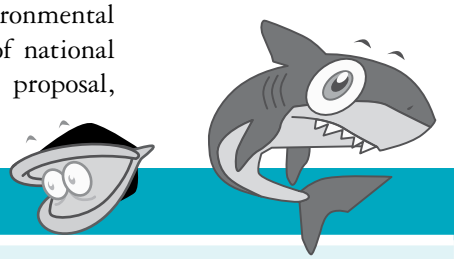
One of Australia's most important long-term policy goals is to reduce the "carbon intensity" of the Australian economy and lower Australia's carbon emissions. This has proved to be the most difficult area of policymaking in the past decade in Australia, with several Prime Ministers losing office after a backlash over their policies relating to energy prices and emission reductions. In 2015 the Abbott Government announced an emissions reduction target of 26–28 per cent on 2005 levels by 2030. A mix of policies were announced to help achieve this target, including the Emissions Reduction Fund and the National Energy Productivity Plan.

Regulations

Environmental **regulations** are the traditional policy tool for achieving environmental sustainability goals. Regulations are laws or rules that govern economic behaviour. Regulations may prohibit a person from doing something that causes environmental damage, such as littering or producing polluting chemicals. Alternatively, regulations may specify how a good or service is produced or consumed, as with rules relating to agricultural or mining techniques. In Australia, environmental regulations can be made by local, state or federal governments, or by their agencies.

Some regulations impose requirements that the quality of goods meet environmental standards. For example, the Fuel Quality Standards Act 2000 regulates the quality of fuel for Australia. The aim of the legislation is to reduce the levels of pollutants and emissions from fuels that may cause environmental and health problems.

Regulation can require firms and individuals to follow certain environmental procedures. For example, the Environment Protection and Biodiversity Conservation (EPBC) Act provides a framework for the protection and management of matters of national environmental significance. This includes the protection of World and National Heritage sites, Commonwealth marine areas, nationally threatened species and ecological communities and migratory species. States and territories have responsibility for all other matters of state and local significance. Under the EPBC Act, developers must provide an environmental impact assessment of a proposal if it has the potential to harm a matter of national environmental significance. The government can then accept or reject the proposal, depending on the impact on the environment.



THE GREAT BARRIER REEF

The Great Barrier Reef is the largest living structure in the world, covering 344,400 km^2 in area, with 3000 coral reefs, 1625 types of fish, 133 types of sharks and rays, over 200 types of birds and 600 types of coral. As the world's largest coral reef ecosystem, the Great Barrier Reef became a UNESCO World Heritage site in 1981 and is the most biodiverse heritage site, indicating its significant scientific and intrinsic importance. The Great Barrier Reef is also a major tourist destination, with over 2 million visitors each year, which contributes approximately $6.4 billion to the economy each year.

The Great Barrier Reef is increasingly in the news in Australia because of the devastating threat posed by the impacts of climate change. Changes in ocean temperatures threaten the reef's delicate ecosystem. The latest five-yearly Great Barrier Reef Outlook Report downgraded the condition of the reef from "poor" to "very poor". In the previous five years, the reef experienced multiple episodes of coral bleaching as a result of marine heat waves, as well as cyclones and crown-of-thorns starfish. A recent aerial survey of the reef indicates that around two-thirds of the reef has now suffered from coral bleaching (around 1500 km of the total 2300 km length), and it will take many years to recover from the death of the coral, even without further water temperature rises.

In 2018, the Queensland Government joined the Commonwealth Government to commit to the Reef 2050 Long-Term Sustainability Plan. In response to the recommendations for management and protection made in a monitoring report from the World Heritage Centre, the Reef 2050 Plan was developed on the basis of a two-year strategic assessment of the reef and provides $140 million in funding. Its priorities include ecosystem health, biodiversity, heritage, water quality, community benefits, economic benefits and governance. Key elements include:

- establishing the $40 million Great Barrier Reef Trust
- banning the disposal of material from capital dredging projects within the Great Barrier Reef Marine Park, as well as restricting these activities to limited surrounding areas
- providing additional protections for turtles and dugongs through anti-poaching laws, improved sustainability agreements and funding to reduce marine debris
- reversing the decline in water quality associated with agriculture, through $35 million in ongoing funding and an additional $100 million over five years to support water quality initiatives and scientific research and to transition current business practices
- reducing the presence of the crown-of-thorns starfish to support coral populations.

Overall, the Federal and Queensland Governments are jointly investing a total of $2 billion to protect the reef.

Market-based policies

Policies that create market-based incentives for environmental protection have been increasingly used in Australia and other economies during recent decades. Market-based policies involve financial incentives and disincentives (such as subsidies and taxes) to influence the behaviour of households and businesses.

As we saw in chapter 12, many environmental problems arise because of market failure. Environmental costs (or benefits), known as externalities, are borne by all of society and are not taken into account by producers and consumers in the marketplace. In the case of negative externalities, this results in the equilibrium price being too low and production being too high. Figure 16.3 shows the demand and supply for goods with negative environmental externalities.

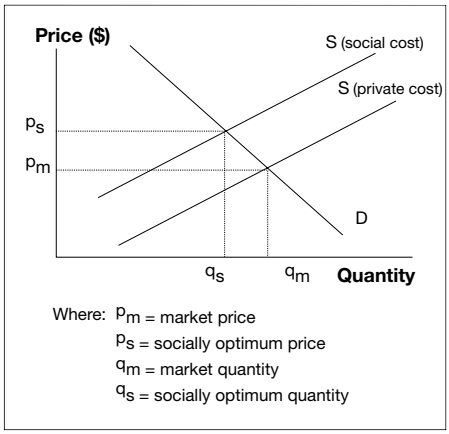


Figure 16.3 – Negative externalities

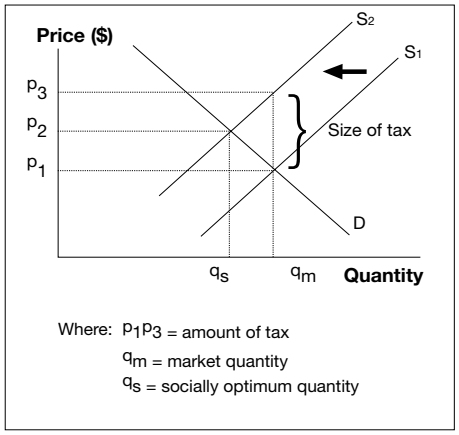


Figure 16.4 – Taxing the externality

A market-based response to this scenario would be to levy a tax or fee on production that is approximately the same as the environmental costs associated with this economic activity. This should move the supply curve to the left, increasing the market price and reducing the amount consumed in the economy.

Figure 16.4 shows how a tax equal to the vertical distance between the curves shifts the supply curve from S_1 to S_2 and influences the market. This is sometimes called "internalising the externality" because it makes consumers and producers pay for environmental costs. Likewise, governments can provide subsidies to consumers or producers to encourage production of environmentally beneficial goods and services.

Governments generally prefer taxes over subsidies when they want to influence economic behaviour. Although it is difficult to calculate the full cost of an externality, and therefore to calculate the optimum tax rate to implement, there are other benefits to taxes over subsidies. Taxes discourage environmentally damaging activities. They also raise government revenue that can be used for other environmental programs. For example, through the Product Stewardship for Oil Program, the Government imposes a 8.5 cent per litre levy on the purchase of oil to help fund the recycling of old oil. Environmental tax revenues constitute a varying proportion of government tax revenues in OECD countries, ranging from less than 3 per cent in the United States to nearly 9 per cent in the Netherlands. Australia's revenues from environmental taxes are 6 per cent.

Subsidies are grants provided by the government to producers with the aim of reducing costs of production and promoting environmentally beneficial activities. For example, the Federal Government's Australian Renewable Energy Agency (ARENA) provides funding for research and development, as well as large-scale renewable energy projects.

Over time, there has been a shift towards policies to facilitate market development and support private sector investment, rather than more direct forms of government intervention. Professor Ross Garnaut, lead author of Australia's last two climate change reviews, argued in his 2019 book *Superpower*, that Australia has the potential to become a global renewable energy "superpower" by facilitating large-scale private sector investment in new, low-carbon industries and markets. The microeconomic agenda laid out by Garnaut would support cheap and reliable renewable energy and stimulate private investment in new, internationally competitive industries for carbon sequestration and manufacturing energy-intensive commodities, such as "green" steel. A 2020 Grattan Institute report found that, in addition to environmental benefits, producing green steel in Australia could generate substantial export revenue and create jobs in areas such as manufacturing, which have previously been in decline.

CLIMATE CHANGE POLICIES

"Decarbonising" economies – that is, reducing the carbon emissions from economic activity that contribute to climate change – is widely regarded by economists as the greatest economic reform challenge of the 2020s. Climate change poses a profound threat to the global economy, the stability of international relations and the environment. As the Reserve Bank noted in 2019, climate change threatens disruption to economic output through extreme weather events as well as higher insurance costs, legal risks and falling asset values. Scientists predict that its environmental consequences in coming years will include rising sea levels, more intense droughts and floods, and more extreme and unpredictable weather events. Despite widespread agreement that climate change is a problem, it has been very difficult for governments around the world to agree on how to respond and who should bear the costs of the structural changes required to reduce carbon emissions.

International agreements

The global threat of climate change was recognised in December 1997 when 160 nations reached an agreement in Kyoto, Japan. The agreement limited emissions of carbon dioxide and other greenhouse gases. The Kyoto Protocol is an international agreement that required industrialised countries to set internationally binding emission reduction targets. In its first commitment period, the Protocol required industrialised nations to reduce their average national emissions by approximately 5 per cent below 1990 levels over the period 2008–2012. In its second commitment period from 2013–2020, countries pledged to reduce their average national emissions by at least 18 per cent below 1990 levels over 2013–2020. However, only 37 countries covering around 15 per cent of total global emissions made this commitment, with major polluters such as the United States and Canada failing to take part.

At the 2015 UNFCCC Conference in Paris, representatives from nearly 200 countries made a commitment to keep "the increase in global average temperature to well below 2 degrees Celsius above pre-industrial levels". This is the benchmark scientists believe is necessary to prevent the most dangerous impacts of climate change. This agreement reflected the difficulty in climate change negotiations of achieving a compromise between the interests of high-income and developing countries. High-income countries have large per capita greenhouse gas emissions, whereas developing countries have lower but rising levels of emissions and rely on using cheap fossil fuels to expand their output and improve living standards. The agreement, effective from 2020, is significant because, for the first time, it included developing nations such as China and India, alongside the United States (although the Trump Administration later withdrew the United States from the Paris Agreement). The Paris Agreement has mechanisms for transparency and monitoring progress, but its weakness is that individual countries set their own targets for emissions reduction. The Paris Agreement came into force in November 2016, and has 195 signatories. Its implementation received a setback with the COVID-19 pandemic, with countries delaying negotiations for the "rulebook" that is set to guide individual country actions.

Targets

Targets are an important part of the policy response to climate change. According to scientists, if too much carbon dioxide is emitted, it will raise the amount of CO_2 in the atmosphere to unsustainable levels, with severe environmental consequences. Australia's current emissions target is a 26–28 per cent reduction on 2005 levels by 2030. This target was announced in the lead-up to the 2015 UNFCCC Paris Conference.

Australia's target is comparatively low compared to other developed countries. However, some economists argue that Australia also has a higher cost of emissions abatement, meaning that the cost of reducing each unit of emissions in Australia is higher than in many other countries. This is mainly due to Australia's reliance on emissions-intensive industry and energy production based on fossil fuels. Australia's targeted reduction in emissions is intended to be achieved through the Emission Reduction Fund, Renewable Energy Target, investments in low emissions technologies through the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation, the National Energy Productivity Plan and general technological improvements over time.

Australia's target is below the advice from the Climate Change Authority (CCA), an independent government agency that recommended a 30 per cent reduction in carbon emissions by 2025 and a 40–60 per cent reduction by 2030. Australia's 2020 target (under international obligations) was to reduce emissions by 5 per cent on 2000 levels, and while this was expected to be met based on a multi-year average measurement, it was unlikely to be met based on annual measurements. Reductions were mostly achieved as a result of broader economic conditions and cheaper renewable technologies rather than the success of specific climate change policies.

Market-based policies

Individual governments have implemented a range of market-based policies to meet emissions reductions targets. The most well-known example in Australia was the Gillard Government's carbon pricing scheme in 2012. It put a price on each tonne of carbon dioxide emitted as part of energy or industrial production processes. Adding a price factored the cost of carbon pollution into the cost of production, giving Australia's 500 largest polluters a financial incentive to switch to comparatively cheaper, lower-emissions processes. The carbon price was initially fixed and was due to be replaced by a "cap and trade" emissions trading scheme (ETS). In 2014, the Abbott Government abolished this scheme, arguing it was adding to business and household costs and damaging economic growth.

Emissions trading is used across the world, including in the EU and New Zealand. China is also seeking to implement emissions trading. Under an ETS, businesses are issued permits or need to buy permits for the emissions of greenhouse gases. Such a scheme can be "internationally linked", meaning that businesses with excess emissions may buy permits internationally from businesses that produce fewer emissions and hold spare permits. This system of trading permits effectively puts a price on the emission of greenhouse gases and incorporates the real cost of carbon emissions into the price mechanism. It is a market-based mechanism to create incentives for businesses to develop new technologies and processes to reduce emissions. However, critics argue that acting ahead of other economies creates the risk of "carbon leakage" – where emissions-intensive industries simply move to countries with no emissions target, increasing domestic unemployment, but with no overall reduction in emissions.

The centrepiece of Australia's emissions reduction policy in recent years has been the Emissions Reduction Fund, which was introduced to replace the previous carbon pricing policy. Firms are paid out of this fund to reduce emissions from their production processes, to reduce emissions at the lowest cost of abatement. Projects are submitted by businesses to the government's Clean Energy Regulator. Once approved, firms enter an auction, bidding to sell their emissions reductions at the lowest level. The lowest-price emissions are purchased by the government. After 10 rounds of auctions, the Emissions Reduction Fund has funded around 200 million tonnes of CO_2 abatement, at an average cost around $14 per tonne, with further reductions planned through future auction rounds. Uptake of

the policy has declined over time as low-cost opportunities for abatement have been exhausted. A criticism of the policy is that it does not impose any costs or constraints on other businesses that increase their carbon emissions, so there is no guarantee that it will produce an overall emissions reduction. In 2019, the Federal Government announced a Climate Solutions Fund, which included an additional $2 billion to support the continuation of the Emissions Reduction Fund.

Regulations

Regulations also act to ensure that newly produced goods meet environmental standards that are consistent with Australia's aim to reduce greenhouse gas emissions. For example, in 2007 Australia banned older-style incandescent light bulbs, replacing them with more energy-efficient options such as fluorescent and LED bulbs. In 2010, planning laws in several states were changed to require newly constructed homes to comply with six-star energy ratings involving improved insulation, water recycling and other features. Government policy decisions around agriculture, mining and transport also have major effects on carbon emissions.

International agreements

For environmental management policies to be successful they often require international cooperation. Collective action is often necessary because individual nations cannot successfully address global environmental problems on their own. Additionally, when addressing environmental issues, individual nations are often reluctant to impose strict environmental management policies on their own economy if other nations are not willing to do the same.

One of the best-known global pollution problems is the **depletion of the ozone layer** (the atmospheric layer that filters out dangerous ultraviolet radiation). This is related to the emission of chlorofluorocarbons into the atmosphere from industry refrigeration units and aerosols. To reduce this problem, an international agreement known as the Montreal Protocol committed members to phasing out the production of ozone-depleting products by 2000. According to the United Nations Development Programme, over 98 per cent of ozone-depleting substances were eliminated between 1987 and 2014. As a result, scientists predict that the ozone layer should recover to pre-1980 levels between 2050 and 2065.

A number of other international environmental agreements are also in force. In many cases, international agreements are required to prevent the overuse of common international resources. This is an issue known as the **tragedy of the commons**. For example, the United Nations Fish Stocks Agreement, to which Australia is a signatory, was developed to ensure the long-term conservation and sustainable use of highly migratory fish stocks.

Australia's participation in international treaties

Treaty	Year signed
The **CITIES Convention** on International Trade in Endangered Species of Wild Fauna and Flora	1976
The **Vienna Convention** for the Protection of the Ozone Layer	1987
The **Montreal Protocol** for Chlorofluorocarbon Control	1989
The **Convention on Biological Diversity**	1993
The **Convention to Combat Desertification**, to address land degradation in the world's drylands	2000
The **Stockholm Convention** for the protection of human health and the environment from organic pollutants	2004
The **Kyoto Protocol** on climate change	2008
The **Paris Agreement** on climate change	2016

reviewquestions

1 Outline the impact of international agreements on Australia's environmental management policies.

2 Explain the tools available to policymakers to achieve environmental sustainability.

3 Analyse the role of market-based environmental management policies in improving the economy's environmental sustainability.

chapter summary

1 **Microeconomic policy** is action taken by government to improve resource allocation between firms and industries, in order to maximise output from scarce resources and promote structural change. Microeconomic policy can help to accelerate the process of structural change by making the economy able to move factors of production from one area to another more quickly.

2 By reducing costs and increasing efficiency, microeconomic policies should have the effect of shifting the aggregate supply curve to the right so that more goods and services are produced at lower prices.

3 Since the 1980s, microeconomic policy has played a critical role in the Government's economic strategy. This reflects the limitations of macroeconomic policy in dealing with longer-term structural problems in the economy.

4 Microeconomic reform improves the efficiency of the operation of markets on the supply side of the economy. This results in an improvement in **allocative** efficiency, **technical** efficiency and **dynamic** efficiency.

5 **Deregulation** involves the removal of legislation and other rules that constrain the operation of market forces, and it aims to improve the efficiency of industries. In the past three decades, Australia has deregulated its financial services, telecommunications, electricity, gas, aviation and agricultural industries. This has had both positive and negative consequences.

6 Reforms to **public trading enterprises** have included **corporatisation**, putting the organisations at arm's length from government so they run like private sector businesses, and **privatisation**, which involves selling the business to the private sector.

7 **National Competition Policy** reforms introduced since 1995 have increased the level of competition across many sectors of the economy. The rules for business practices and prohibitions on anti-competitive behaviour are set out in the *Competition and Consumer Act 2010*, which is enforced by the Australian Competition and Consumer Commission.

8 Most economists agree that microeconomic policies have contributed to Australia's improved economic performance since the 1980s, with higher levels of productivity and economic growth and lower inflation and unemployment.

9 Environmental sustainability has been increasingly recognised as an important policy objective in the context of managing the economy. **Environmental management policies** such as targets, market-based policies and regulations aim to improve the environmental sustainability of the Australian economy.

10 The environmental issue that has received the most attention in recent years is **climate change**. International agreements such as the **Paris Agreement** have encouraged individual nations to reduce greenhouse gas emission and promote the use of renewable energy sources.

chapterreview

1 Explain how microeconomic policies aim to increase economic growth.

2 Discuss how microeconomic policies contribute to greater efficiency in the economy.

3 With the aid of a diagram, explain how microeconomic policy influences aggregate supply in the economy.

4 Outline the main areas in which the government has implemented microeconomic policies.

5 Outline how and why the government regulates specific sectors of the economy.

6 Explain what is meant by deregulation. Using two specific examples, discuss the benefits of deregulating major industries.

7 Examine the benefits and costs of microeconomic policies.

8 Describe three environmental management policies that have been implemented in Australia.

9 Evaluate the effectiveness of regulations compared with market-based policies in achieving environmental sustainability.

10 Outline the influence of targets and international agreements on environmental management in Australia.

Labour Market Policies

17

17.1 Introduction
17.2 The role of national and state industrial systems
17.3 Australia's wage determination system
17.4 Dispute resolution
17.5 Decentralisation of the labour market
17.6 Education, training and employment programs
17.7 Evaluating labour market outcomes in Australia

17.1 Introduction

In this chapter we examine the role that governments play in the labour market to influence the process or outcomes of wage determination. Governments intervene in labour markets for several reasons, including:

- Achieving **macroeconomic objectives such as low inflation** and macroeconomic stability (since wages growth is a major influence on inflation).
- Achieving **microeconomic objectives such as productivity growth** and improved competitiveness for Australian businesses, and resolving disputes that arise in the workplace. The cost of labour generally represents around 60 per cent of business costs, so policy changes that influence labour costs are a major influence on the economy.
- Achieving objectives relating to the **distribution of income and wealth**, such as ensuring that fair minimum standards apply to all employees (since wages are the main source of income for most households).

Historically, wage determination in Australia has not been left to the free operation of the forces of supply and demand in the labour market. Rather, the government has played an important role in influencing wage outcomes either directly or through independent industrial courts and tribunals. The extent of government regulation of the labour market has been a matter of ongoing debate in Australia since Federation in 1901.

reviewquestions

1 Define the term *productivity.*
2 Outline THREE economic objectives of labour market policies.

17.2 The role of national and state industrial systems

Australia has traditionally regulated its labour market through a mix of federal and state laws, with significant overlaps between the different systems. This is because the Australian Constitution does not give the Commonwealth government the power to legislate directly over industrial relations – instead, it only gives the Commonwealth the power to resolve industrial disputes that cross state boundaries. Nevertheless, the Commonwealth has gradually expanded its role in labour market policies over the past century through other constitutional powers.

Over time, Australia developed separate industrial relations systems – with six different state systems, plus the federal system. These systems established minimum wages and conditions for employees through a system of **industrial awards** for employees, based on their industry or their occupation. Some awards were made at a Commonwealth level, while others were made at a state level. Many employers had to comply with both federal and state systems, because some of their employees were covered by state awards and others by federal awards. Employers with workers in different states would also need to comply separately with the laws of each state, which might apply different award standards.

The inefficiency of separate state and federal systems created growing pressure to move towards a national industrial relations system. After the commonwealth attempted to legislate for a single nation system in 2005, a High Court decision established that the Commonwealth now has the power to regulate industrial relations for employees of incorporated businesses. This left around 15 per cent of employees in state systems – including state government employees, local council workers and employees of sole traders.

The *Fair Work Act* (2009) expanded the coverage of the federal system to include private sector employees in all states except Western Australia from 2010. It was estimated at the time by Access Economics that creating a single national industrial relations system for the private sector would reduce compliance costs by $4.8 billion in the decade to 2020.

	Corporations	Partnerships and sole traders	Local Government	State Government Public Sector	Federal Government Public Sector
NSW	✔	✔	✘	✘	✔
QLD	✔	✔	✘	✘	✔
SA	✔	✔	✘	✘	✔
VIC	✔	✔	✔	✔	✔
ACT	✔	✔	✔	✔	✔
NT	✔	✔	✔	✔	✔
TAS	✔	✔	✔	✘	✔
WA	✔	✘	✘	✘	✔

Figure 17.1 – Coverage of employees under the national industrial relations system

In addition to the national workplace relations system, the Commonwealth replaced most state-based awards with simpler federal awards and also established a national system of occupational health and safety legislation, replacing separate state systems. State and Territory regulation of the labour market is now limited mostly to state government employees and to a smaller range of specific issues such as the regulation of workers' compensation, public holidays and long service leave. The national system is overseen by the Fair Work Commission.

reviewquestions

1 Explain the role that national and state systems have traditionally played in the regulation of the Australian labour market.

2 Outline the benefits of shifting towards a national system of industrial relations regulation.

17.3 Australia's wage determination system

Australia's national wage determination system directly covers around 7 out of every 10 workers, or approximately 9 million people. The rules of the national system are set out in the *Fair Work Act 2009* and related regulations, and it establishes three main streams that determine the pay and conditions of employees – industrial awards, collective agreements and individual employment contracts. A snapshot of the labour market shows that among Australian employees:

- 38 per cent of employees are covered by some kind of collective agreement.
- 38 per cent of employees are covered by an individual agreement.
- 21 per cent of employees are covered only by industrial awards.

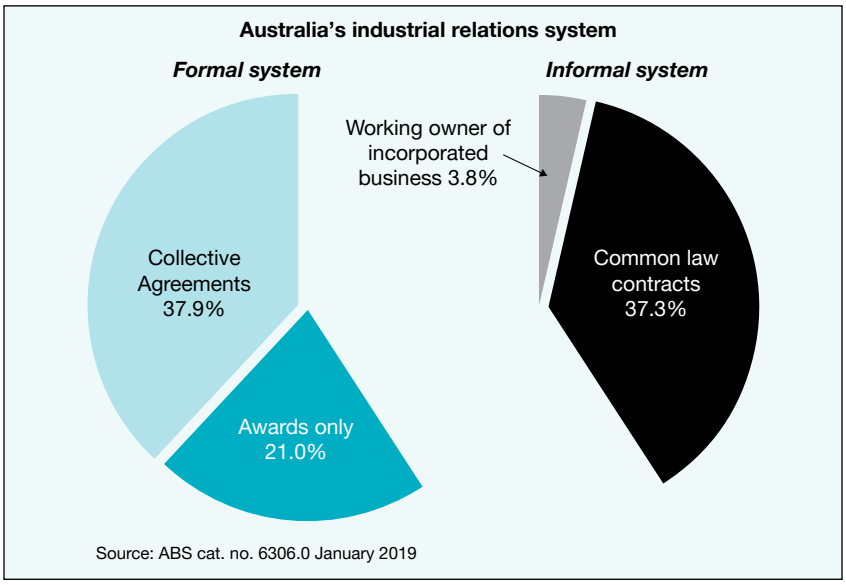


Figure 17.2 – Proportion of employees by type of employment contract, 2019

The distribution of workers between these streams within the industrial relations system has been reasonably stable over the past decade. Around 3 in 10 of Australian workers (just under 4 million people) are outside of the national wage determination system but their conditions can still be influenced by the national system. These workers are divided into two main groups:

- Individuals whose conditions are unregulated (17 per cent of Australian workers), divided evenly between independent contractors (8 per cent) and other business operators (9 per cent).
- Individuals whose conditions are regulated by a state workplace relations system (12 per cent of Australian workers), divided between state public sector employees (11 per cent) and Western Australian employees of small businesses that are not incorporated (1 per cent).

For a detailed review of Australia's wage determination system, visit the Productivity Commission's website and download the Workplace Relations Framework report from December 2015: **www.pc.gov.au/inquiries/completed/workplace-relations/report**

Minimum employment standards

Australian employees have 10 guaranteed employment conditions, which are set out in law through a document called the **National Employment Standards**. These provisions include:

- *Maximum weekly hours of work:* A full-time employee's hours of work must not exceed 38 ordinary hours per week, plus reasonable additional hours of work.
- *Right to request flexible working arrangements:* Parents or carers may request a change in working arrangements to assist them for caring for a child, such as changes to start and finish times, split shifts, job sharing and working from home. Employers can only refuse on "reasonable business grounds", and must justify their actions in writing.
- *Leave:* Employees have the right to paid annual leave, public holidays, and carers and compassionate leave. They further have the right to unpaid parental, community service and long service leave.
- *Notice of termination and redundancy pay:* Employers are required to give between one and four weeks of notice of a job termination, determined by how long a person has been employed. In addition, in most circumstances workers are entitled to redundancy pay, determined by the duration of their employment.

Minimum wages

In addition, a **national minimum wage** provides a safety net for any employee not covered by an award. A specialist Minimum Wage Panel within the Fair Work Commission is responsible for setting minimum wages and casual loadings. The Panel conducts a wage review annually, with its decision announced around June each year and coming into effect from July 1. The *Fair Work Act* requires the panel to consider both economic and social objectives when determining the minimum wage. The panel must assess the performance and competitiveness of the national economy, and consider the macroeconomic impact of its decision. It must also balance the needs of both unemployed people and low paid workers, because high minimum wages can discourage employers from hiring additional employees. The panel is empowered to commission research into wage-related issues prior to making a wage decision.

> "We have decided to award a substantially lower increase this year than that awarded last year due to the marked change in the economic environment and the tax-transfer system and other changes which have taken effect in the current Review period which have benefited low-paid households. The increases we have awarded are likely to maintain the real value of the wages of NMW and award-reliant employees ...
>
> The prevailing economic circumstances and the uncertainty surrounding the pathway out of recession have led us to adopt a cautious approach to both the quantum and the timing of an adjustment to the NMW and modern award minimum wages."
>
> *– Fair Work Commission Statement, Annual Wage Review 2019–20, 19 June 2020*

In June 2020, the Fair Work Commission announced an increase in the national minimum wage and all modern award minimum wages of 1.75 per cent. The decision raised the hourly minimum wage rate by 35 cents to $19.84 per hour, or $753.80 per week. This increase was significantly lower than in recent years, reflecting the severe impact of COVID-19 on the economy and uncertainty about the timing of recovery. The Commission concluded that the smaller increase was more appropriate than the proposal from employer groups not to award any increase, which would result in a real wage decrease for workers on minimum wages. In addition, instead of coming into effect for all awards on July 1, which is the normal arrangement, the Commission scheduled the increase to apply at different times for three different groups of Awards. The first group of awards (including health care and teachers) were adjusted from July 2020, the second (including manufacturing and construction) from November 2020 and the third (including accommodation, tourism and food services) from February 2021.

EMPLOYEES OR INDEPENDENT CONTRACTORS? THE DILEMMA OF WORK IN THE "GIG ECONOMY"

Perhaps the greatest challenge to Australia's labour market policies today is the transformation of work taking place because of the rise of new business models in what has become known as the "sharing economy" or the "gig economy". Sharing economy businesses provide a platform for customers to interact directly with individual workers who provide services such as fast food delivery, transport, cleaning, general household assistance and graphic design.

Although workers often rely on these platforms for most of their income and in some cases do not set the price for their services, sharing economy businesses usually classify their workers not as employees, but as individual contractors. This means that the businesses have far fewer obligations to those workers, because only employees have a right to minimum wage rates and other conditions outlined in the National Employment Standards.

The Fair Work Commission has begun to deal with these issues in recent years, and in December 2017 it issued a landmark ruling that identified the key factors that determine whether a worker is an employee or independent determine whether a worker is an employee or independent contractor (see figure 17.3). The ruling determined that drivers on the Uber platform are independent contractors, and not employees. This means that Uber does not have obligations to them if their earnings over the course of a period of work are lower than the minimum hourly wage rate. It also means that they need to collect Goods and Services Tax (GST) on their fares through the Uber platform.

A review of the "on-demand" workforce commissioned by the Victorian Government in 2020 found that some 7.1 per cent of people in a large survey found work through one or more of the over 100 digital platforms available across many sectors, including transportation and food services, professional services, and odd jobs and maintenance work. 2.7 per cent earned all their income as "gig workers". The ground-breaking report found that while gig workers were able to access new flexible job opportunities, they lacked clarity about their work status, received inadequate advice, and platforms did not always treat them fairly. The report proposed six recommendations, most of which were about the work status process (determining whether a worker is an employee or contractor). Fair Conduct and Accountability Standards, another recommendation, could improve transparency for workers but would rely on platforms themselves to develop such standards with stakeholder consultation.

	EMPLOYEE	INDIVIDUAL CONTRACTOR
Control over how work is performed	Less control	More control
Hours of work	Standard or set hours	Controls hours of work
Bears financial risk	No risk	Bears the risk of making a financial loss on each task
Superannuation	Employers pay	Pays themselves
Entitled to receive paid leave	Yes	No
Expectation of work	Ongoing expectation	Engaged only for specific tasks
Tools and equipment	Provided by employer	Uses their own

Source: https://www.fairwork.gov.au/how-we-will-help/templates-and-guides/fact-sheets/rights-and-obligations/independent-contractors-and-employees

Figure 17.3 – How the FWC distinguishes employees from independent contractors

Awards

Awards establish the minimum wage and working conditions for employees.

Awards are a set of pay and conditions that are specific to an employee's work or industry sector (such as a shop assistant or a construction industry worker). Awards provide a safety net of minimum wages and conditions. Many employers pay above award wage rates, but awards set the minimum rates of pay and entitlements. This means that instead of having a single minimum wage rate, Australia has different minimum pay rates in different awards. The Fair Work Commission sets these minimum award wage rates.

In the past, awards were comprehensive documents outlining in detail the wages and working conditions within certain industries and firms. Under the *Fair Work Act*, Australia's award system was restructured and streamlined from around 4300 awards to 122 awards (although some state awards continue to operate). These consolidated awards

are known as modern awards, with 154 in operation in 2020 due to the creation of several enterprise awards. In the retail sector, one of Australia's largest industries, the *Fair Work Act* replaced 41 federal and state awards totaling 2082 pages with just 2 awards with a total of 76 pages. Among the 122 modern awards, 107 are based on an industry classification (for example, the Pest Control Industry Award) and 15 on an occupational classification (for example, the Nurses Award).

Awards continue to be an important part of the industrial relation system. Even though only 21 per cent of workers have their wages set by awards, research in 2013 found that in addition, a further one in every five employees were employed under "over-award" arrangements – employees with individual or collective agreements where awards influence or guided employment arrangements in some way. This suggests that in total, around 40 per cent of employees are on "award-based" arrangements.

POST-COVID-19 CHANGES TO WAGE DETERMINATION

Australia's wage determination system was designed to provide flexibility in response to the ups and downs of the economic cycle. However, the labour market impacts of the COVID-19 pandemic in 2020 were so unprecedented that temporary changes to the system were taken to minimise job losses during the crisis – with the support of governments, businesses and unions.

Federal and state governments agreed to impose a national lockdown in March 2020, requiring many industries to shut down operations and close offices. A Bureau of Statistics survey in May 2020 found that 46 per cent of Australians were working from home during the lockdown, while for others this was not possible because their work could only be done on-location – such as for most workers in sectors such as retail, hospitality, accommodation, transport, distribution, construction and healthcare. As lockdown restrictions changed over the following months, some employees, such as retail workers, were able to return to work, as their business adjusted to the new social-distancing requirements. Other businesses, such as live entertainment venues and travel businesses, remained mostly closed and unable to continue providing work for employees.

One of the priorities of economic management during this time was to prevent employers terminating their relationship with employees, even if they were temporarily unable to provide work. A lesson from past recessions is that it takes much longer to reduce unemployment when individuals have lost their job. To ensure businesses temporarily affected by the crisis maintained their relationship with as many employees as possible, the Federal Government introduced the JobKeeper employment support program in March 2020. It provided businesses affected by the crisis with support to continue paying workers $1500 per fortnight.

In addition to the JobKeeper programme, agreement was reached between governments, employer groups and the Australian Council of Trade Unions (ACTU) to implement temporary changes to the Fair Work Act that would allow businesses to change their employment conditions with workers. Rules relating to workers' hours, duties, days and location were suspended for a period of six months, giving employers powers to change existing arrangements quickly and to require employees to use up their annual leave.

In May 2020, Prime Minister Scott Morrison also announced a "dedicated process bringing employers, industry groups, employee representatives and government to the table to chart a practical reform agenda, a job making agenda, for Australia's industrial relations system". As part of this process, the Federal Government established five working groups composed of 10 members, drawn equally from employer groups and unions, to work on proposing further changes to workplace relations that could be implemented on a permanent basis. The purpose for these changes would be to help accelerate job growth as the economy recovered from the impact of the coronavirus. The five areas covered by the working groups were:

- casual and fixed-term employees;
- simplification of awards in sectors most impacted by COVID-19;
- the making of enterprise agreements;
- compliance and enforcement of laws, and
- "greenfields" agreements for new enterprises.

It was expected that this would involve the most far-reaching changes to the Fair Work Act since it came into effect in 2009.

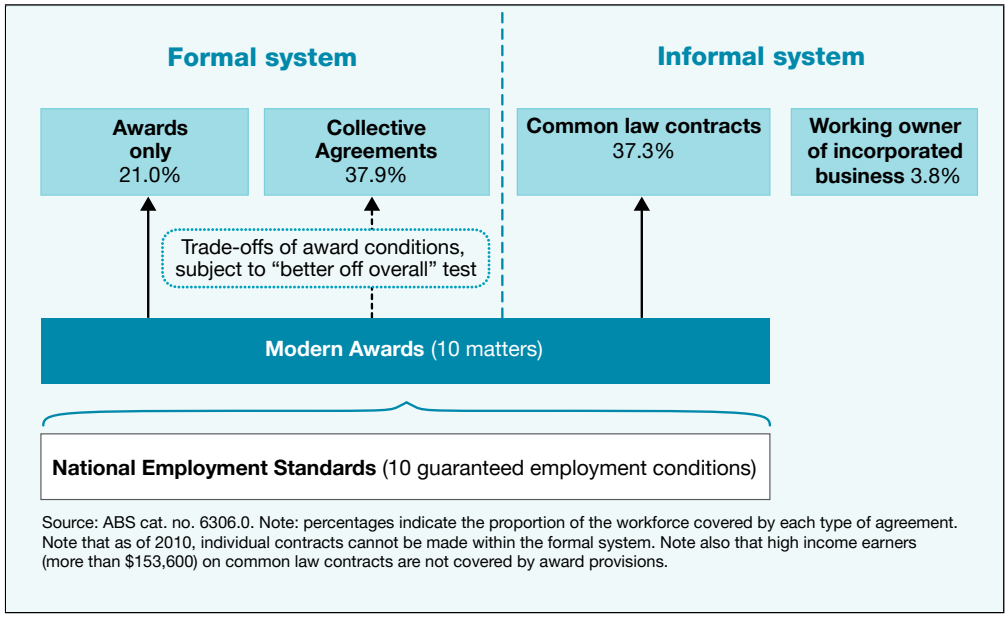
Modern awards extend the protections of the National Employment Standards, with provisions tailored to the needs of the specific industry or occupation. These may include types of employment, arrangements for when work is performed, overtime and penalty rates, annualised wage or salary arrangements, allowances, leave-related matters, superannuation and procedures for consultation, representation and dispute settlement.

Further, modern awards (as well as enterprise agreements) must now include a clause that allows for an **individual flexibility agreement (or IFA)**. This clause enables an individual employee and employer to vary the effect of an award to meet their individual needs without negotiating a separate agreement. The flexibility clause can only vary certain specific award (or enterprise agreement) terms, such as when work is performed, overtime rates, penalty rates and leave loading. The clause must leave the employee better off overall. Flexibility clauses can only be made after the employee has commenced employment and cannot be offered as a condition of employment. Flexibility clauses are intended to make it easier to adjust work arrangements to the particular needs of firms and individuals, while preventing employers from using flexibility arrangements to reduce pay and conditions. Research by the Productivity Commission in 2015 concluded that around 2 per cent of workers have entered into an individual flexibility agreement.

Enterprise agreements

The most common method of wage determination in the formal system in Australia is a workplace agreement that is negotiated collectively between an employer (or employers) and employees, usually represented by unions. These agreements are known as Enterprise Agreements (previously called Collective Agreements or Certified Agreements). The *Fair Work Act* introduced a right for employees to engage in enterprise bargaining with employers. Employers can be required to engage in bargaining discussions if a majority of employees vote in favour of seeking a collective agreement. With coverage of 38 per cent of employees, Australia is slightly above the average coverage of collective agreements among OECD economies, estimated in 2019 at 32 per cent.

As a minimum, all agreements must comply with the National Employment Standards, and cannot offer pay rates below that mandated by the equivalent award. Workplace agreements must also pass the "**Better Off Overall Test**" **(BOOT)**, requiring that the employees be made better off overall by an agreement compared to an applicable award. This test is administered by the Fair Work Commission. The BOOT also applies to any individual flexibility agreement, a clause that can be negotiated as part of the enterprise agreement (usually to vary working hours).



Source: ABS cat. no. 6306.0. Note: percentages indicate the proportion of the workforce covered by each type of agreement. Note that as of 2010, individual contracts cannot be made within the formal system. Note also that high income earners (more than $153,600) on common law contracts are not covered by award provisions.

Figure 17.4 – The industrial relations framework

Collective enterprise agreements usually cover all of the workers up to management level in a company or workplace. Unions usually negotiate these agreements on behalf of all of the employees in a workplace, even though in most workplaces less than half of the employees

belong to the union. Collective agreements normally cover issues such as wage increases, loadings for additional work hours, changes to workplace practices and other changes that are intended to increase productivity. Wage increases under collective agreements have declined from an average of around 4 per cent (from 1991 to 2015) to below 3 per cent since 2015, and by the end of 2019 just 2.6 per cent. Figure 17.4 shows how the National Employment Standards and modern awards together provide the basis for the three main ways of determining pay and conditions for employees.

Employment contracts for high income earners

One of the most important changes introduced by the *Fair Work Act* was the abolition of individual contracts as part of the formal industrial relations system. These individual contracts, known as Australian Workplace Agreements, had been criticised as unfair because employers have much greater bargaining power than individual employees, so that AWAs were often imposed on employees with no genuine negotiation process. In some cases, employers used Australian Workplace Agreements to remove entitlements that employees had previously enjoyed under enterprise agreements and awards, such as the right to penalty rates and additional pay for working overtime.

Although the *Fair Work Act* abolished individual contracts, it made an exception for **employment contracts for high income earners**. Under the Act, modern awards do not apply where an employee is earning in excess of a threshold (set in 2020–21 at an annual salary of $153,600 and adjusted each year). Instead, such employees are only covered by the provisions in the agreement they make with their employer, which is known as a **common law contract**, and by the National Employment Standards. The rationale behind excluding such workers from modern awards is that the award system is intended to establish a safety net for lower income workers, and employees on high incomes do not need the protection of the award system.

More generally, common law contracts cover more than one-third of the workforce who have informal contracts that provide extra pay or conditions in addition to their award entitlements. The key differences between common law contracts and enterprise agreements is that common law contracts are made individually, and they generally cannot remove or trade off minimum award conditions such as penalty rates. In other words, employers must still comply with all award requirements that apply to such employees. Common law contracts are especially common in small businesses and are often just one or two pages long with employment terms contained in an offer of employment. These contracts are enforced through ordinary law courts, rather than through industrial tribunals, and are not considered to be part of the formal industrial relations system.

reviewquestions

1. Identify the THREE main ways in which the wages and conditions of Australia's employees are determined.
2. Describe how minimum wages and conditions are determined.
3. Explain the difference between an enterprise agreement and an individual contract.
4. Explain how an employer can make an individual contract with an employee.

17.4 Dispute resolution

One of the most important roles of an industrial relations system – alongside determining wages and work practices – is to resolve disputes that arise from time to time between employers and employees (commonly described as the "parties" to an agreement). Disputes can arise because of disagreements over many issues, including changes to wages, work conditions, business restructuring and specific actions of employers that employees consider wrong or unfair, such as a decision to sack an employee or some employees. Disputes can lead to different forms of industrial action that interrupt work, including:

- strikes, where employees withdraw their labour and refuse to work
- work bans, where employees refuse to undertake a certain aspect of their work
- lockouts, where employers refuse to give employees access to their workplace.

An **industrial dispute** occurs when employers or employees take action to disrupt the production process in order to highlight a disagreement between employers and employees.

One of the aims of an industrial relations system is to solve these disputes quickly, efficiently and fairly, because industrial action can result in reduced productivity, lower output, lower profits and damage to a business's customer relationships.

The processes for resolving industrial disputes in Australia have undergone major change in recent decades. Since the early twentieth century, Australia has mostly relied on a unique system of specialist industrial tribunals to administer dispute resolution processes. The specialist tribunals aimed to avoid drawn-out disputes that occurred in other countries, and allowed for an independent umpire to make a judgment based on fairness and business conditions. The two main forms of dispute resolution that have been practiced in Australia are:

- **Conciliation** – a process whereby an industrial tribunal tries to help the parties to a dispute reach a mutual agreement. The tribunal does not impose a resolution on the parties, but once the parties reach an agreement, they might undertake proceedings with the tribunal to formally implement their respective sides of the agreement.
- **Arbitration** – when an industrial tribunal makes a ruling that resolves a dispute and is legally binding on the parties. This occurs after the tribunal has given both parties the opportunity to put forward their arguments. Where conciliation is unsuccessful, arbitration can end an industrial dispute by resolving the dispute and requiring employees to return to work.

Conciliation is a dispute resolution process in which firms and employees meet to discuss their differences in the presence of a third party (such as from an industrial tribunal) who attempts to bring the parties to an agreement.

Arbitration is a dispute resolution process in which an industrial tribunal hands down a legally binding ruling to firms and employees.

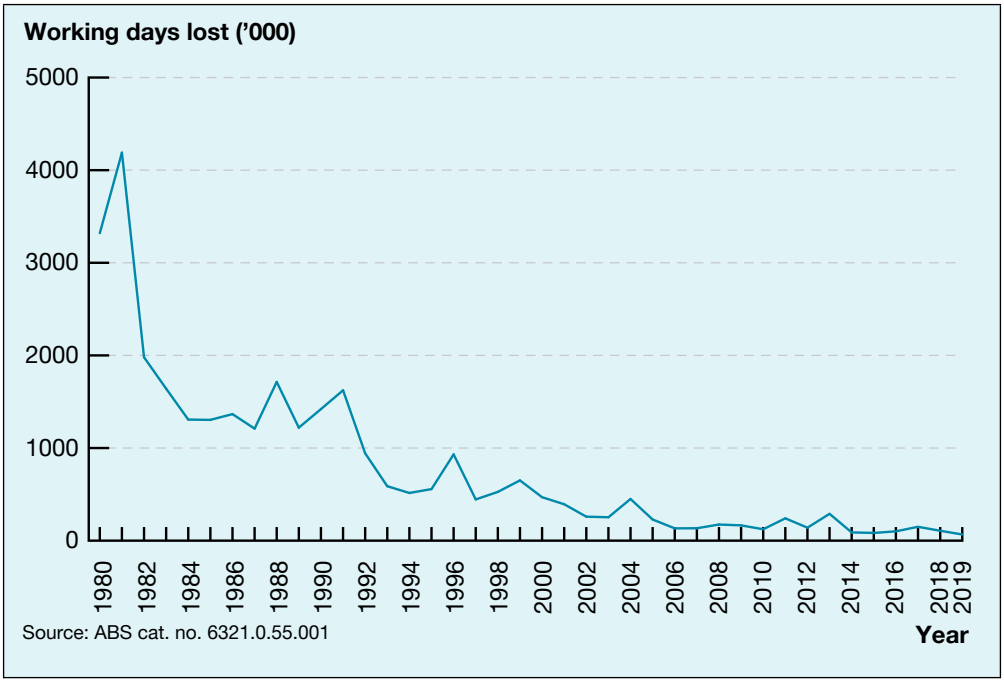


Figure 17.5 – Number of working days lost due to industrial disputes in Australia, 1980–2019

Australia has shifted from resolving industrial disputes mainly through compulsory arbitration to a system where arbitration is only used in rare circumstances. In most instances, employers and employees take responsibility for resolving their disputes. Under the *Fair Work Act*, the Fair Work Commission only intervenes to resolve disputes in specific circumstances:

- **Compulsory dispute settlement terms:** The *Fair Work Act* requires that all awards and enterprise agreements must include a term explaining the process that the parties will adopt if they have a dispute relating to their agreement. A common feature of such a term is that if parties cannot resolve a dispute between themselves, they must refer it to a third party organisation that can assist in resolving the dispute. This third party might be the Fair Work Commission or it can be a non-government organisation that offers dispute resolution services.
- **Bargaining in good faith:** Good faith bargaining aims to reform the conduct of negotiations. It obliges employers and employees to adhere to certain provisions when at the bargaining table. The six good faith obligations include participating in all meetings, disclosing relevant information, giving genuine consideration to all proposals, and refraining from conduct that would undermine collective bargaining. If these provisions are not adhered to, the Fair Work Commission can make legally binding orders, although these powers are rarely used (less than 100 bargaining orders are issued each year). In rare circumstances the Fair Work Commission can also arbitrate an agreement. The threshold for access to arbitration in these circumstances is high. The aim of the bargaining rules is to put pressure on both parties in a negotiation to be constructive and reach agreement, rather than adopting the traditional approach to disputes, based on conflict with employers.
- **Resolving industrial action:** Industrial action is permitted during the process of enterprise bargaining. The Fair Work Commission is only able to step in to suspend or terminate such industrial action if special circumstances exist, including where there is threat of significant harm to the economy or the population, or the industrial action has been going on for a long period of time and is causing damage to the bargaining parties.

One measure of the effectiveness of an industrial relations system and its dispute resolution processes is the level of disputes and strikes. As figure 17.5 shows, Australia has experienced a very low level of days lost in industrial disputes since the early 2000s. The fall in industrial disputes reflects the way in which employer/employee relations changed in recent decades, with increased competitive pressures, changes in industry structures and lower levels of union membership. There is now less conflict and a stronger focus on employers and employees (often represented by unions) working together and resolving disputes themselves through cooperative processes. In addition, since the 1990s the right to strike has been curtailed by laws that mostly limit the right to industrial action to those periods of time when employers and employees are engaged in a formal bargaining process. During the period that an enterprise agreement is in place (on average, just over three years), employees are only permitted to go on strike in very limited circumstances. Nevertheless, the Productivity Commission's report on Australia's industrial relations system in 2015 concluded that industrial disputes still play a positive role in reducing power imbalances between employers and employees and can in fact lead to efficiency gains in the long term.

IF MEN AND WOMEN'S WORK IS WORTH THE SAME, WHY ISN'T IT PAID THE SAME?

One aspect of Australia's industrial relations system that has recently been tested through industrial action is the pay gap between men and women. This is known as the gender pay gap. The pay gap is monitored by the specialist Workplace Gender Equality Agency.

The national gender pay gap was 13.9 per cent in November 2019, meaning that women earn on average 13.9 per cent less than males. Five years before, in 2014, the gender pay gap was 18.5 per cent. One reason for this gap is that male-dominated industries, such as mining and construction, tend to pay more than industries with higher proportions of female workers, such as health and education (the gender pay gap is 22.1 per cent in Western Australia, which has a high proportion of mining industry jobs, whereas it is only 8.9 per cent in the Australian Capital Territory).

A recent campaign of industrial action in the child-care sector attempted to challenge the pay gap. As a result of strikes, in 2018 the Fair Work Commission ruled on a union application for an **equal remuneration order**, which is a decision under the *Fair Work Act* requiring employers to pay men and women workers equal pay for work of equal or comparable value. The application compared the pay of child-care workers, which is generally award-based, to the pay of manufacturing workers, who are more often paid above-award rates as a result of enterprise bargaining.

The application required the FWC to determine whether the reason for the pay gap between child-care workers and manufacturing workers was because of gender or the nature of the work performed. The FWC rejected the union application on technical legal grounds. However, it noted that the nature of child-care work has evolved from "child minding" to one of early child development, learning, care and education and left the door open for another application on different legal grounds.

reviewquestions

1 Describe TWO ways in which disputes between employers and employees might be solved.

2 Explain how the role of industrial tribunals in dispute resolution has changed in recent years.

17.5 Decentralisation of the labour market

Australia's industrial relations system has undergone a historic shift in recent decades from a highly centralised wage determination system for most of the twentieth century, to a system where wages are mostly determined through enterprise bargaining at the level of individual businesses or workplaces. This reflects a shift from using **non-market forces** to a greater reliance on **market forces** to determine wage outcomes.

A **centralised** labour market is one in which wages and other labour market outcomes are primarily determined by a government, or a government-appointed tribunal such as the Fair Work Commission. A **decentralised** labour market determines wage outcomes at an enterprise or workplace level, with a more limited role for industrial tribunals. This means that market forces of supply and demand for labour, as well as the individual firm's capacity to pay, play a greater role in determining wage increases. This ensures that there is more flexibility, and wage levels can change between different firms and industries.

Early in the twentieth century, Australia developed a centralised system of wage determination that differed from most other nations. This reflected a strong cultural ethic of fairness and egalitarian values, and a belief that a centralised system would create a fairer society, where workers were paid the same rate of pay for doing the same work. It also reflected the influence of the union movement, with most workers belonging to a union. At a national level, this industrial tribunal was known from 1904 to 1956 as the Commonwealth Court of Conciliation and Arbitration (now known as the Fair Work

Commission), and similar tribunals also existed at a state level. Governments believed that allowing the market to set wage levels would result in some workers being underpaid and exploited. Instead, a system of tribunals could deliver fairer and more consistent outcomes, often through a formal process in which representatives of employers and unions presented their arguments for or against a wage increase or a change in working conditions.

By the early 1990s, the centralised system was regarded as no longer appropriate for the needs of a modern economy. Economists argued that greater flexibility was needed so that wages could increase faster in more efficient sectors (to attract more labour), and wage increases needed to be more closely tied to productivity growth so that employees had the incentive to improve their skills and work practices. As a result, from 1991 Australia began shifting to a labour market where wages were mostly set through enterprise bargaining, while the highly centralised award system would only provide a safety net of minimum wages and conditions.

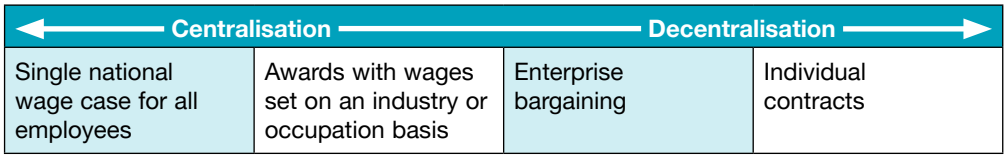


Figure 17.6 – Centralised and decentralised wage determination systems

Arguments in favour of decentralisation

- A decentralised system can lead to a more **efficient allocation of resources** and structural change. Firms that are more efficient can afford to pay more and therefore attract higher skilled employees. In contrast, centralisation can slow down the pace of structural change. If the same wage increases occurs across all industries, wages in one industry are less likely to change significantly in comparison with wages in another industry. This makes it more difficult for more profitable and growing industries to attract more highly skilled labour from less profitable and declining industries – therefore slowing down the process of structural change in the economy. For example, between 2005 and 2015, the Wage Price Index for the mining industry grew by 53 per cent, compared to 40 per cent for workers generally, reflecting the boom conditions in the resources sector for much of that time.
- A decentralised system can promote **productivity**. It gives employees the incentive to work more efficiently, because they can be rewarded directly for their productivity improvements through arrangements at the workplace level. Conversely, under a centralised wage determination system employees in individual workplaces may not have enough incentive to implement productivity improvements if they are already guaranteed a uniform wage increase, regardless of whether or not they improve their skills or adopt more efficient work practices. Higher productivity also helps to reduce **inflationary pressures** in the economy.
- Wage flexibility can help the labour market adjust when the economy is affected by negative shocks, which helps keep **unemployment** at a lower rate. If a recession causes a reduction in the aggregate demand for goods and services, therefore decreasing the demand for labour, a flexible labour market can allow wages to fall while keeping people in jobs. This might help to minimise job losses or reductions in corporate profits during a downturn.

Arguments against decentralisation

- Decentralisation tends to lead to greater **inequality** through increased "wage dispersion". Workers doing the same job in different industries or firms may receive different rates of pay and working conditions. Those employees who are in an industry or firm where unions have little power are less likely to achieve wage increases, regardless of their productivity, because they lack bargaining power with employers. In practice, wage increases may reflect the bargaining power of employees rather than productivity improvements. This is particularly the case for low-skilled workers, who are easier to replace and are less able to demand pay rises from their employers.

- A decentralised labour market can produce **outcomes that reflect imbalances in bargaining power** between employers and employees. Historically, economists were concerned about the capacity of powerful unions to bargain collectively for large increases that would lead to wage-push inflation. More recently, economists have been concerned about the lack of bargaining power among workers, which has led to wage outcomes so low that they have contributed to weaker household consumption and slower economic growth during the past decade.
- Enforcement of wage entitlements becomes more difficult under a decentralised system. In recent years, Australia has experienced increasing problems with enforcement of wages due to the increasingly fragmented nature of workplace relations. The powers of the Fair Work Ombudsman (FWO) have been expanded, and maximum penalties for employers have been increased to $630,000. In 2018–19, the FWO recovered $40 million in underpayments owed to 18,000 workers. In 2019, the FWO identified the "FRAC" industry (fast food, restaurants and cafes) as its top priority. The FWO noted at the time that it receives far more tip-offs about underpayments, and issues far more infringement notices, against FRAC businesses than any other sector. As one example, the FWO reported that 24 of 34 Pizza Hut stores that it audited had broken the law by underpaying their staff, who were mostly younger and more vulnerable to underpayment.
- Centralised wage determination provides an additional policy tool that the government can use to achieve its economic objectives, such as lower inflation and reduced unemployment. For example, it could restrain wages growth to avoid cost-push inflation, or trade-off a tax cut in exchange for lower wage increases. The *OECD Employment Outlook 2019* highlighted that more centralised forms of collective bargaining and wage determination offer advantages for the needs of labour markets in the 2020s. More centralised systems are better able to reach larger numbers of employees with adapting to change such as through retraining, adopting new technologies, improving work practices and protecting the rights of all employees. While the OECD argues the need to achieve both fairness and flexibility, its support for more centralised versions of collective bargaining reflects a shift in the views of economists in recent years.

reviewquestions

1 Explain the difference between a centralised and decentralised industrial relations system.

2 Discuss the advantages and disadvantages of centralised and decentralised wage determination systems.

17.6 Education, training and employment programs

In addition to regulating the industrial relations system, governments also influence labour market outcomes through their policies relating to education and training, apprenticeships, social security (welfare benefits) and employment services. These policies aim to increase participation in the workforce, improve the productivity of the workforce and prepare workers for future changes in the labour market. Labour market policies can use a wide range of policy instruments to improve skills and increase participation, including funding individual employees to obtain training, subsidising employers for staff training, wage subsidies to encourage employers to hire specific certain workers (for example, apprentices), and funding for employment agencies to place people who are out of work into jobs.

Education and training



For further information on industrial relations issues and policies, visit the following websites:

www.ag.gov.au (Attorney-General's Department)

www.fwc.gov.au (Fair Work Commission)

www.nationalskillscommission.gov.au (National Skills Commission)

Governments play a central role in shaping the education system, ranging from pre-school and school education through to vocational education and training, university and postgraduate research programs. From an economic perspective the most successful education system is one that provides students with a broad range of skills that will help make them more productive and able to adjust to changing economic conditions. Overall, the economy will be more productive and grow faster if it has a higher quality and more responsive education and training system.

One of the major challenges for education and training policies is to address the large mismatch in the labour market between the skills demanded by a fast-changing job market and the capacities of workers, most of whom finished their formal education or training decades before. Research published by the OECD in 2019 estimated that among OECD economies, 14 per cent of existing jobs could disappear by 2040, with a further 32 per cent of jobs changing radically. Already significant mismatches exist in the labour market, and without major changes to training systems many employees will not be equipped for the changing demands of the workplace.

Several new education and training programs and reforms have been introduced during recent years with the goals of improving workforce skills, increasing job growth and raising productivity:

- In 2019 the Government announced the establishment of a National Skills Commission, a key recommendation of the Joyce Review into Australia's vocational education and training (VET) system. Its role includes identifying future skills needs and reforming the pricing of VET courses, which varies widely from state to state. A major initial priority is building the Jobs and Education Data Infrastructure (JEDI) project, which aims to provide more comprehensive and up-to-date information so that the VET system is more focused on the current needs of the labour market. The Commission has identified this as a priority as it aims to re-train employees whose jobs were lost as a result of the COVID-19 pandemic.
- Following the huge number of job losses associated with the COVID-19 pandemic, the Government introduced the JobTrainer package in 2020, involving subsidies for training places for school leavers and jobseekers, to help them improve their skills.
- Early childhood education standards have been increased and placements have been made available for all children before starting school.
- Training places for students pursuing careers in trades have been increased, providing more flexible opportunities to those in the workforce to complete a trade or technical qualification.
- Students are more easily able to obtain loans for vocational education courses.
- Goals have been set to halve the number of people in the workforce who do not have a minimum skill qualification level, increase school retention rates and raise the number of 25–34-year-olds with a university degree to 40 per cent by 2025.

Secondary education (high school) policy has also been at the centre of policy debate in recent years, with a restructuring of school funding towards a "needs-based" model that was recommended in the 2012 Gonski Review, which in particular highlighted the need to focus on schools in disadvantaged areas whose students have the weakest job prospects. The needs-based model is consistent with international economic evidence that improved access to educational opportunity is one of the most effective ways of reducing inequality and increasing social mobility. After some years of policy debate, an amended plan to continue funding the Gonski reforms (widely known as "Gonski 2.0") was agreed to in 2017, with a plan to increase funding by up to $23.5 billion over a further 10 years. The Gonski reforms aim to replace 27 separate school funding arrangements between different states with a nationally consistent funding system that is expected to bring an additional $2300 per student. There has also been extensive debate about the Coalition Government's

proposals to deregulate universities. These plans have been rejected in the Senate because of concerns that university deregulation would lead to excessive increases in fees for students.

Labour market programs

Governments deliver a range of labour market assistance programs that aim to improve people's readiness for the labour market and increase participation and productivity. A wide variety of programs operate to deal with individual circumstances that might make it harder for a person to find suitable work – including a disability, mental illness, language barriers or having been out of the paid workforce for a long period of time. These programs are increasingly integrated with income support (or welfare) payments, so that the ability of individuals to receive continued income support is often tied to them making genuine efforts to find paid work. In Australia, a national agency called Centrelink oversees individuals' access to income support and their interaction with labour market programs.

Employment services – matching people to jobs and giving them adequate training – are provided through organisations that are contracted through **Jobactive**, a federally-funded network of employment agencies. The 62 agencies that belong to the Jobactive network are paid on the basis of getting results in placing the unemployed into jobs, with a $1.3 billion budget in 2019–20. Service providers are paid according to how long an employee stays in a job, and they also receive additional incentives for success in finding permanent work for individuals who have been out of work for an extended period of time. By mid-2020, Jobactive had achieved 1.6 million job placements during its first five years of operation. Nevertheless, from 2022 Jobactive will be replaced with a new employment services framework focused more on digital engagement with jobseekers and employers.

Jobactive is the federally-funded network of employment services agencies, providing employers with recruitment assistance and helping jobseekers find work.

A major long-term goal of labour market policies is to increase and sustain participation in the workforce. Projections by the Australian Treasury predict a long-term decline in workforce participation, driven by the ageing of the population. Higher levels of participation among people of working age (people aged between 15 and retirement) will be required to offset the growing costs of the ageing population. Some of the measures taken in recent years to increase workforce participation include:

- Increased efforts to make young workers better prepared for the job market, such as the Youth Jobs PaTH program (Prepare, Trial and Hire) announced in 2016, which aims to lift youth participation in the labour market through a mandatory program of employability skills training for jobseekers under 25, voluntary internships, and wage subsidies for employers willing to hire an unemployed person under 25 who has been out of work for more than six months.
- Increased funding to reduce the gap in opportunities for people in regional Australia (outside of major cities) and for future growth industries. The 2019–20 Federal Budget expanded the Harvest Labour Services program which gives horticultural businesses subsidies to hire Australian workers for seasonal jobs.
- Increased subsidies for businesses to engage individuals who are at greater risk of long-term unemployment or dropping out of the workforce altogether.
- The introduction of a national minimum scheme of paid parental leave in 2011, to make it easier for women to stay in the workforce after starting a family.
- Increased child-care subsidies and an expansion in child-care places, making it easier for both parents in a family to maintain paid employment and take care of children. For three months during the COVID-19 lockdown in 2020, the Government took the unprecedented step of covering the full cost of childcare to prevent the permanent closure of centres, as well as making it easier for people in essential jobs such as healthcare to keep working during the lockdown period.
- Reforms to the interaction of the tax and welfare systems, to reduce high "effective marginal tax rates" (EMTRs). High EMTRs mean that for every extra dollar that welfare recipients earn, they have to pay tax as well as lose a portion of their welfare benefit, and this can undermine incentives to find paid work.

THE PRODUCTIVITY COMMISSION'S REVIEW OF WORKPLACE RELATIONS

The last time that Australia undertook a comprehensive review of its labour market rules was 2015. While it does not deal with the unique policy challenges around recovering from a pandemic, much of this report remains relevant in the 2020s. It concluded that the main elements of the workplace relations system – modern awards, the National Employment Standards, enterprise agreements and individual flexibility clauses – were functioning well, and Australia's labour market was relatively flexible. Many of the criticisms of Australia's industrial relations system, it concluded, are inaccurate.

The report noted that the outcomes in Australia's labour market – in terms of wages growth, the level of industrial disputes, productivity growth – demonstrate that Australia has been successful in modernising its labour market, while also protecting the interests of employees. As one example, it noted that the surge in wages in the mining sector during the resources boom of the previous decade had little "contagion" to other sectors. It also noted that while Australia's minimum wage relative to median wage levels is high by comparison with most other countries, it had actually declined faster over the past decade than in any other OECD country.

The Commission made a number of proposals for reform, including making the Fair Work Commission less legalistic, and separating the role of wage determination from the FWC by creating a new Workplace Standards Commission to set the national minimum wage and make award determinations. It also proposed changes to simplify some administrative and compliance processes and floated the idea of a new type of agreement called an "enterprise contract", targeted at small businesses, that would allow them to vary awards without having to negotiate with each individual employee. The Commission's most controversial recommendation was that Sunday penalty rates should be reduced and aligned to the same rates as Saturday.

> "Labour is not just an ordinary input. There are ethical and community norms about the way in which a country treats its employees. Without regulation and an ability to act collectively, many employees are likely to have much less bargaining power than employers, with adverse outcomes for their wages and conditions …
>
> Contrary to perceptions, Australia's labour market performance and flexibility is relatively good by global standards, and many of the concerns that pervaded historical arrangements have now abated. Strike activity is low, wages are responsive to the economic cycle and there are multiple forms of employment arrangements that offer employees and employers flexible options for working. Set against that background, Australia's WR system is not dysfunctional — it needs repair not replacement."
>
> *– Productivity Commission, Workplace Relations Framework, December 2015.*

reviewquestions

1. Discuss the potential impact of increasing the quality of education of the labour market.
2. Identify THREE government policies that aim to shift people from unemployment into work.
3. Explain why increased workforce participation is a priority for labour market policy.

17.7 Evaluating labour market outcomes in Australia

Australia's labour market has a hybrid system of wage determination that has an emphasis on **market** forces through enterprise bargaining, while still retaining some role for **non-market** forces such as labour market institutions like the Fair Work Commission. In concluding this chapter we review some of the evidence about the performance of the system in recent years.

In overall terms, under enterprise bargaining Australia has sustained moderate wage increases, low inflation, and relatively strong employment growth. The shift to a decentralised industrial relations system appears to have contributed to Australia's recent economic outcomes in several ways:

- **Wages growth and inflation**: A key objective of industrial relations policy is to control wage growth at a level that does not contribute to cost-push inflation. Wage outcomes during recent decades have been consistent with sustained low inflation. The flexibility of the decentralised system has allowed larger wage rises in specific areas where strong wage pressures exist, without this spilling over to wage increases across the board. Despite Australia's falling levels of unemployment in the late 2010s, the Wage Price Index recorded some of its lowest rates of wage rises ever. Between 2016 and 2019, the average wage increase across Australia was just 2 per cent. Wage outcomes have fell so far that in 2017 Reserve Bank Governor Philip Lowe urged employees to advocate more strongly for wage increases, in order to increase spending and strengthen economic growth.
- **Work practices and productivity**: The deregulation of the labour market since the 1990s has helped to bring about major changes in Australian work practices. Since wage negotiations are based on the specific conditions of individual workplaces, they have encouraged employers and employees to trade-off specific productivity improvements for wage increases. Australia experienced its best sustained productivity growth performance on record during the 1990s, as enterprise agreements eliminated old, outdated work practices. Annual labour productivity growth averaged 2.1 per cent per year during the growth cycle of the 1990s, compared to 1.3 per cent during the previous growth cycle in the 1980s. However these reflect one-off gains from reforms, and since then productivity growth has been slower. Productivity growth averaged just 1.2 per cent in the 2000s decade, and 1.0 per cent in the 2010s. The solutions to low productivity advocated by economists include improving training pathways, encouraging technology uptake and making labour market transitions easier for employees.
- **Unemployment**: Reforms to the industrial relations system have provided Australian workplaces with greater flexibility to adjust to variations in the business cycle. In overall terms, Australia has been successful in combining lower unemployment with rising wages and productivity since the early 1990s. In 2019 Australia's unemployment was the same as the average for advanced OECD economies, despite the fact that minimum wage levels in Australia are higher than in many other countries. The labour market's record of responding flexibly to changing circumstances, such as in the mining boom era, is being tested as Australia endeavours to bring unemployment back down to pre-COVID-19 levels.
- **Income inequality**: One of the main effects of decentralised wage determination is an increase in the degree of wage dispersion – that is, a widening of the gap between higher and lower income earners. Workers with greater skills and who belong to stronger unions tend to receive larger wage increases under enterprise agreements, while those with lesser skills and in weaker bargaining positions receive the smaller safety net wage adjustments. Although the past three decades of enterprise bargaining have resulted in a widening of income equality, the safety net of awards and minimum

wage increases has modestly increased real wages for the lowest income earners. In the decade to 2020, while consumer prices rose 22 per cent, the national minimum wage rose 32 per cent – slightly faster than the increase in the overall wage price index of 29 per cent.

For well over a century, Australians have been debating how the economy should set wages and conditions for workers. At the heart of this debate are different views of the role of market forces and non-market forces in Australia's wage determination system. People disagree over the issue of whether wage and work conditions issues should be left to employers to negotiate with their employees (that is, the market forces). Historically, Australian governments have believed that because employers possess unequal bargaining power over individual employees, non-market institutions such as industrial tribunals should be created to ensure outcomes that are fair to employees. In fact, Australia was among the first nations in the world to recognise minimum entitlements for employees, such as the eight-hour day and the right to a minimum wage that was high enough to support a decent standard of living for a family. In 2020, Australia had the second-highest national minimum wage in the world, alongside below-average levels of unemployment.

The continued debate over industrial relations demonstrates that workplace issues remain as much a part of Australian economic policy debate now as they were more than a century ago, when Australia was first developing a national industrial relations system. The processes for determining wages, work conditions and work practices are among the most important aspects of economic policy because they have such wide impacts on the economy and on people's lives. For this reason, the debate over industrial relations policies and their impacts is likely to continue for many years to come.

reviewquestions

1. Explain the relationship between the industrial relations system and productivity outcomes.
2. Discuss the advantages and disadvantages of Australia's shift to a decentralised system of wage determination.
3. Analyse the impacts of industrial relations changes on employers and employees.

chapter summary

1 While the Australian labour market has traditionally been governed by a combined system of federal and state laws, Australia now has a unified national system for the private sector under the ***Fair Work Act***. This system covers around 7 in every 10 Australian workers.

2 Australia's industrial relations system consists of three main streams – awards, collective agreements and individual contracts (common law contracts).

3 The **National Employment Standards** set out in law the minimum employment entitlements of all Australian employees. It includes maximum weekly hours of work, annual leave, personal leave (including sick leave), parental leave, a right to request flexible working arrangements if caring for a child and a requirement of notice before termination and a right to redundancy pay.

4 **Modern awards** are a set of pay and conditions that are specific to an employee's work or industry sector, that provide a safety net of minimum wages and conditions. They include flexibility clauses so that employers and employees can vary the effect of an award.

5 **Enterprise bargaining** is a method of wage determination where a workplace agreement is negotiated collectively between an employer and employees, often represented by unions.

6 **Common law contracts** are individual employment contracts that play a role outside of the formal industrial relations system. They apply automatically and to employees who have informal employment contracts that provide above-award conditions.

7 In recent decades, Australia has shifted from a system in which industrial tribunals played the main role in **dispute resolution** to a system where employers and employees are largely responsible for resolving their own disputes.

8 **Decentralisation** refers to a situation where instead of decisions about wages being made by a government or a central industrial tribunal, they are made in individual workplaces such as through enterprise bargaining.

9 Decentralisation of wage determination can increase productivity and help prevent a flow-on of wage rises from one sector of the economy to another, but as a result can also contribute to greater inequality in the distribution of income.

10 **Labour market programs** are implemented to address unemployment that is related to supply-side factors such as frictional, structural and long-term unemployment. These programs attempt to reduce the non-accelerating inflation rate of unemployment by improving the skills, job-readiness and employment opportunities of people who are currently out of work.

chapterreview

1 Outline the main features of Australia's national industrial relations framework.

2 Outline how the minimum entitlements of employees are determined.

3 Define *enterprise bargaining*. Explain the role of enterprise bargaining in Australia's labour market.

4 Explain the role of individual contracts in Australia's labour market.

5 Discuss how wage earners who do not have a workplace agreement can achieve wage rises.

6 Describe how disputes between employers and employees are resolved under Australia's industrial relations system.

7 Explain the difference between a centralised and decentralised system of wage determination.

8 Describe the relationship between wage outcomes and productivity.

9 Discuss the arguments for and against increasing the use of individual contracts within the labour market.

10 Analyse the effectiveness of labour market policies in achieving government economic objectives in recent years.

Effectiveness and Limitations of Economic Policy

18

18.1 An overview of the effectiveness of economic management

18.2 Limitations of economic policy

18.3 Evaluating the effectiveness of economic policies

This chapter concludes our study of the Australian economy with a discussion of the effectiveness and limitations of economic policies. This ties together some of the themes of topic 3 and topic 4, as well as reviewing some aspects of the global economy from the first half of the book that impact the effectiveness of economic policies.

As a starting point, we can evaluate the effectiveness of government policies against the six objectives that were discussed in chapter 13:

1. economic growth and wellbeing
2. full employment
3. low inflation
4. external balance
5. an equitable distribution of income and wealth
6. environmental sustainability.

It is also important to consider the limitations of economic policy, including time lags, political constraints and global influences. We conclude by outlining how to evaluate specific policies, with reference to their objectives, implementation, and outcomes, and provide a general overview of the effectiveness of macroeconomic and microeconomic policies in Australia in recent decades.

18.1 An overview of the effectiveness of economic management

Assessing the effectiveness of economic policies involves evaluating their outcomes against the objectives that they were implemented to achieve. Policy objectives change over time, and governments have changed how they prioritise different objectives over recent decades. Policymakers often need to choose between conflicting objectives (as discussed in chapter 13). It is also important to consider the wider context for economic management to assess the effectiveness of policy in addressing specific economic issues.

Macroeconomic policies are policies that affect the economy as a whole with the aim of minimising fluctuations in the business cycle. Also referred to as demand management or counter-cyclical policies.

Since the early 1990s, the roles of different economic policies have been defined in fairly clear terms. Overall, **macroeconomic policy** has aimed to achieve the maximum sustainable rate of economic growth. Australia's long-term potential growth rate has in recent years been revised down to 2.75 per cent, according to Treasury estimates in 2019. However, when there

is spare capacity in the economy, the economy can sustain a higher growth rate in the short to medium term (especially in the context of recovery from a severe recession, as is the case in 2021). Achieving this goal has required balancing the objectives of stronger growth and lower unemployment against the objectives of keeping inflation within the 2 to 3 per cent target range and avoiding an unsustainable blowout in the current account deficit. The goal of **microeconomic policies** has been to improve productivity and competitiveness, with the outcome of achieving a higher level of economic growth over the longer term (that is, lifting the sustainable rate of economic growth).

Australia's most distinctive economic achievement in recent decades is that it sustained the longest unbroken run of economic growth on record anywhere in the world, beginning in 1991 and ending in 2019. Australia's economic growth rate averaged 2.9 per cent during the growth cycle from 1991 to 2019, significantly stronger than the average 2.1 per cent growth rate among OECD economies during the same period. However in the past decade Australia's growth rate was just 2.4 per cent, and just 2 per cent in the second half of the 2010s – only fractionally above the OECD average. Australia ranks well on comparative measures for living conditions and economic development. For example, Australia ranks third in the world on the Human Development Index. Global investment bank Credit Suisse in its 2019 *Global Wealth Report* ranked Australians second in the world by median adult wealth, with US$181,361. On the other hand, while it is still among the top 20 countries, Australia's ranking on the global Prosperity Index fell from 3rd in 2011 to 17th in 2019. The Prosperity Index, which is published annually by the Legatum Institute, ranks countries on the basis of a range of statistical factors, including economic growth, education, health, governance, human rights and environmental standards.

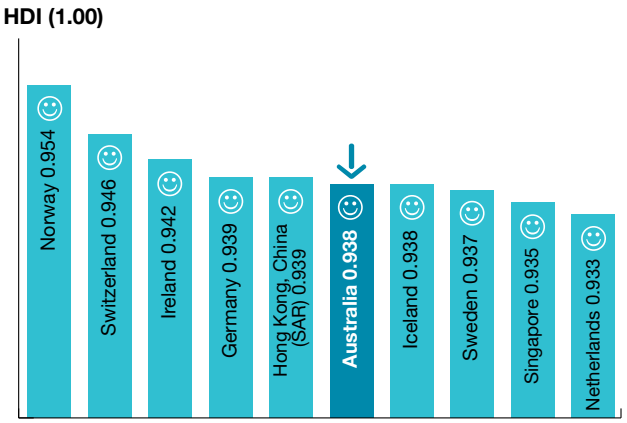
Australia's economic outcomes indicate the improved effectiveness of economic policies since the 1990s. Governments have managed the conflicts between economic policies better, and have generally not been forced to sacrifice one macroeconomic objective for another. This has been helped by reduced volatility in the economy, and governments have been able to strike a balance between their goals for growth, inflation, unemployment and external balance. In contrast, economic management in the 1970s and 1980s was characterised by constant tensions over whether priority should be given to maintaining low inflation or reducing the level of unemployment, both of which remained high during those two decades.

> "[T]here is no denying that Australia's relative fortunes have improved since 1990.
>
> Over that 30 year period, our real per capita GDP (that is, excluding population growth and terms of trade effects) has out-performed all of the G7 economies, and our incomes have risen back to being well above the OECD average. This is for a range of reasons, not least of which was avoiding a recession during the global financial crisis.
>
> We have among the strongest fiscal positions and the most redistributive tax transfer system in the OECD — helped by two Aussie inventions: compulsory superannuation and the income-contingent loan. By virtue of that tax transfer system and the progressive impact of in kind services (like health and education), income inequality in Australia has changed very little over the last 30 years.
>
> Australians' average net wealth is high and wealth inequality is low by OECD standards. Our life expectancy is high, for a health spend that is modest as a share of GDP. We face neither the fiscal and demographic problems of the Eurozone, the inequality of the US or the stagnation of Japan."
>
> *– Michael Brennan, Chair, Productivity Commission Economic Knowledge and the State: past, present, future Symposium, ANU, Canberra, 12 December 2019*

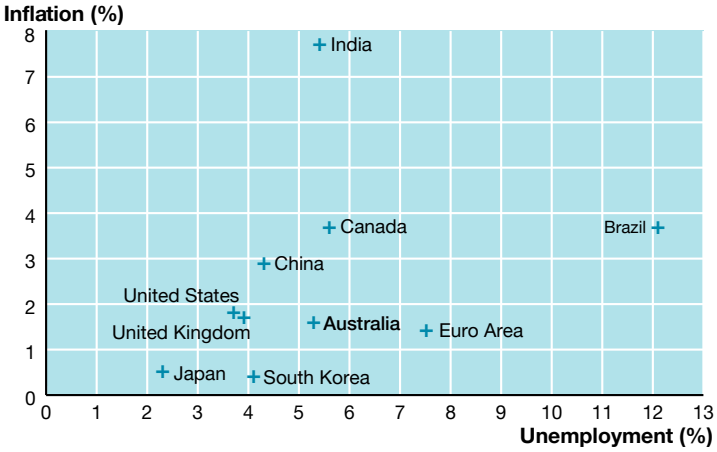
In part, Australia's stronger economic performance reflects more favourable external conditions than those of most other economies. Australia has benefited from its rich endowment of natural resources, which allowed it to take advantage of a historic rise in global commodity prices and the rapid industrialisation of China. Australia's terms of trade rose in the 2000s to almost double their average during the last quarter of the century. A Reserve Bank research paper in 2014 estimated that the terms of trade boom added an extra 13 per cent to real per

HOW AUSTRALIA STACKS UP

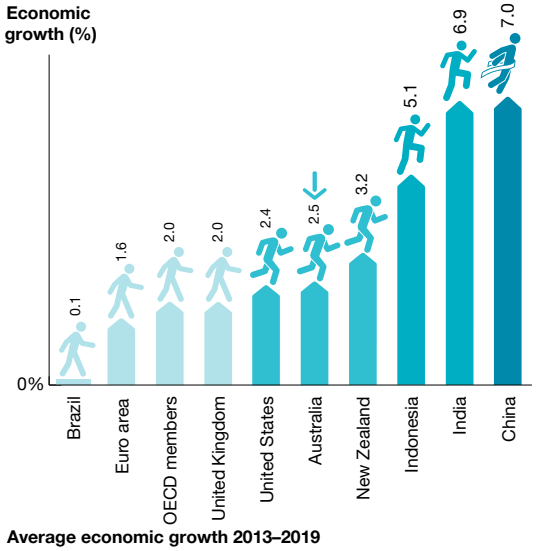
OVERALL, AUSTRALIA IS AMONG THE BEST PLACES TO LIVE IN THE WORLD – WITH A VERY HIGH HUMAN DEVELOPMENT INDEX.



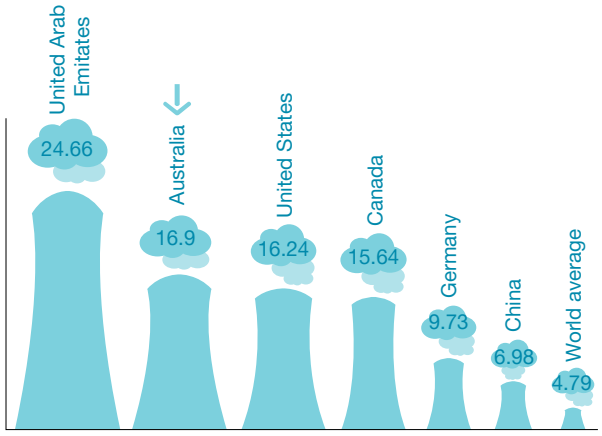
PRE-COVID-19, UNEMPLOYMENT WAS AT THE OECD AVERAGE, AND LIKE OTHER ADVANCED ECONOMIES, INFLATION WAS LOW AND STABLE.



OUR ECONOMY SUSTAINED STRONGER GROWTH THAN MOST COMPARABLE COUNTRIES, HAVING AVOIDED A RECESSION FOR 28 YEARS.



AS MANY NATIONS TRANSITION TO LOWER CARBON ECONOMIES, AUSTRALIA FACES BIG ADJUSTMENTS AS ONE OF THE LARGEST PER CAPITA EMITTERS OF GREENHOUSE GASES.



Sources: ourworldindata.org 2020, various sources

capita household disposable income and raised real wages by 6 per cent by 2013. Despite fluctuations over the past decade, Australia's terms of trade remain above their long-term average. Australia also benefited from strong population growth (the highest rate in the OECD) with a migration program that focuses on skilled migrants who contribute directly to increasing the economy's productive capacity.

Outcomes for growth, inflation, unemployment and external balance

One way to assess the effectiveness of economic policies is to examine specific economic outcomes. The sustained **economic growth** in the period from 1991 to 2019 was achieved because the economy avoided major fluctuations in the business cycle, such as where a boom in growth triggers a surge in inflation, which then needs to be curbed by

contractionary policies such as high interest rates that might trigger recession. Australia's moderate growth (of 2.4 per cent) in the 2010s is slightly below its long-term potential. Growth was stable and was underpinned by relatively high population growth, resilient terms of trade that underpinned export revenue and high levels of workforce participation. On the other hand, there has been a gradual decline in the level of growth that we considerable as sustainable. Governments aimed for a sustainable growth rate of 3 to 4 per cent through the 1990s and into the 2000s, with the goal of pushing towards the higher end of that range. By 2020, the long-term sustainable growth rate had fallen to 2.75 per cent, reflecting Australia's sustained low rates of productivity growth, and a failure to find new sources of growth or investment after the end of the mining boom.

Australia's **inflation** record since the early 1990s has been outstanding. After averaging 10 per cent during the 1970s and 8 per cent during the 1980s, inflation has averaged around 2.5 per cent since the introduction of inflation targeting in the early 1990s. This was a result of several factors, including a clear and transparent framework for monetary policy, lower tariff barriers, increased competition across many industry sectors, price reductions resulting from new technologies and cheaper imports, moderate wage outcomes and a period of strong productivity growth in the 1990s. Even during the mining boom, which brought about cost pressures and capacity constraints, Australia was successful in controlling inflationary pressures. Figure 18.1 shows Australia's economic performance since 1990.

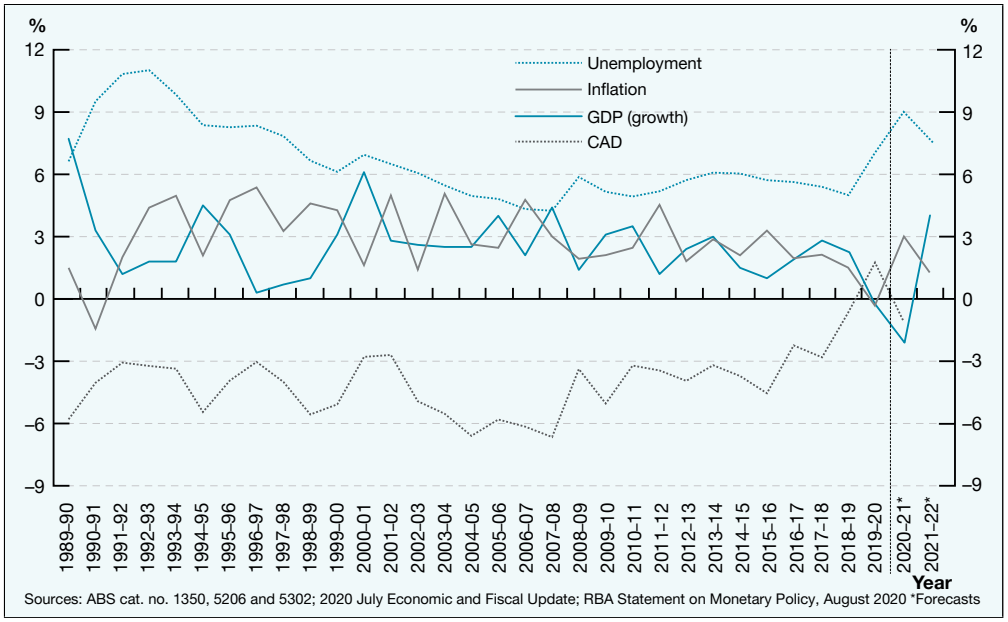


Figure 18.1 – Australia's economic performance since 1990

Australia's unemployment rate prior to the COVID-19 recession was around the average level for OECD economies. While official unemployment was relatively low, moving in the range of 5 to 6 per cent in the years before the recession, underemployment was growing in the last decade, from under 7 per cent in the 2000s to over 9 per cent before the recession in 2020. Australia has a higher level of underemployment than many other countries, due to our high level of part-time and casual jobs. In its review of the Australian economy in December 2018, the OECD recommended several further steps to reduce unemployment, including improvements in vocational education and training, increased funding for disadvantaged schools and active labour market programs to address long-term unemployment.

Favourable external conditions in the past decade helped Australia to reduce its large **external imbalances**. The structural improvement in the current account and net foreign liabilities came about as a result of three major developments: China's emergence as Australia's largest export market, a remarkable turnaround in Australia's terms of trade and a long period of record-low global interest rates. Between 2015 and 2019, the current

TIME FOR A PARADIGM SHIFT IN ECONOMICS?

For many decades, the economic reform debate in advanced economies has been dominated by the "Washington consensus" policies: reduced government intervention in markets, deregulation, trade liberalisation and privatisation of public assets. Those policies have been advocated by think tanks, business lobby groups and international bodies such as the IMF and World Bank. No other organisation has championed those policies more than the Organisation for Economic Cooperation and Development (OECD) – an organisation that brings together many of the world's leading economists to advise on economic policy for advanced economies, and which has been a major influence on Australian economic policy. Although the OECD never advocated a complete "laissez-faire" approach of governments not intervening in free markets, it paid limited attention to questions of inequality and focused strongly on increasing economic growth.

In the past decade, this has changed dramatically. The OECD now argues that its past approach failed. The world has seen weak growth and increasing inequality in the decade since the global financial crisis. In addition, there is a widespread backlash against globalisation and growing resistance to open trade in many countries.

In recent years, the OECD has called for a major paradigm shift in economic policy around the world. It is urging member countries such as Australia to focus on an agenda of inclusive growth. This approach emphasises issues of income and wealth distribution and economic opportunity, alongside growth. The inclusive growth agenda does not abandon the OECD's historic commitment to market-based mechanisms. But it requires a more active long-term role for government in addressing the inequalities that now pose a growing threat to the stability and social cohesion of many countries. Among other policies, the OECD's Inclusive Growth Initiative urges governments to:

- remove distortions in tax systems that are contributing to inequality (such as capital gains tax concessions, loopholes exploited by multinational companies and the exclusion of housing and inherited wealth from tax systems)
- invest in early childhood development programs (currently, a child born to parents who did not complete high school has a 15 per cent chance of going to university, while there is a 60 per cent chance for a child born with at least one parent who has a university degree)
- support young firms and small and medium-sized enterprises by reducing the barriers to entry to markets, encouraging research and development, and making it easier to obtain finance.

> "For years, we counted on economic growth as the only engine of prosperity, failing to realise that this model was leaving many behind: specifically, the bottom 40 per cent …
>
> In a context where global markets and increased connectivity of economic structures were skewed to benefit a minority of people and firms, disempowered citizens and communities called a halt. This growth model failed us …
>
> [T]here is … a growing sense that the global economy is rigged to work in favour of the few and not the many and that governments are not able to respond to challenges that open trade raises …
>
> For too long, the benefits of globalisation and rapid technological change have been interpreted within an overly simplistic economic framework, a framework that relied too heavily on averages – blurring differentiated outcomes for distinct income groups …
>
> The OECD's Inclusive Growth Initiative seeks to take these lessons on board. We need to move away from averages, to look at how policies impact different income groups, and focus on the bottom 40 per cent. Acknowledge that inequalities – far from being just negative externalities – are central features of the way our economic systems function …
>
> If we want to save openness and interconnectedness of people and places, we need to re-write the rules of the economic system to make them work for everyone. We also need to bring back fairness to the heart of the policy debate. The role of governments is key to this discussion. We need to redefine and re-image their responsibilities, to ensure that they are set up to empower all people to contribute and make the most from economic growth."
>
> *– OECD, Time to Act: Making Inclusive Growth Happen, 2017.*

account deficit averaged around 1 per cent of GDP, compared with an average of 4 per cent in the previous three decades. In 2019–20, Australia recorded its first current account surplus in 44 years, reflecting a combination of strong export prices and a fall in demand for imports as the COVID-19 recession struck. However, Australia still has a high level of foreign liabilities and remains vulnerable to adverse external shocks, especially given its reliance on a small number of commodity exports and its dependence on China as its major export market. Nevertheless, Australia's external imbalances cause less concern now than in previous decades, and the fact that most external debt is denominated in Australian dollars reduces the economy's risk exposure.

While Australia has managed shorter and medium-term risks, and is now preoccupied with recovery from recession, its greatest long-term vulnerability may come from the impacts

of climate change. Australia's ecological vulnerability has been demonstrated by natural disasters in recent years, including prolonged drought, water shortages and the "Black Summer" bushfires that burned 186,000 km^2 of bushland across Australia in 2019–20. Agriculture, tourism and regional economies are especially vulnerable to these impacts. Australia has a poor record in preserving its biodiversity, protecting natural environments, managing scarce water resources and overusing agricultural land. Australia has also made slower progress than other economies in reducing its carbon emissions as one of the world's highest emitters of greenhouse gases per capita, with a heavy reliance on carbon-intensive fossil fuels for both energy generation and export income. Political disagreements over the economic policy response to climate change and frequent policy changes have also resulted in ongoing policy uncertainty and further complicated Australia's pathway to reducing emissions.

Another longer-term concern is that despite a long period of sustained economic growth and falling unemployment, Australia has experienced an increase in inequality in its **distribution of income and wealth**. Like other advanced economies, Australia has experienced a shrinkage of middle-level jobs alongside growth in earnings at the top end and an expansion of lower-paid service industry jobs. The impact of these changes on inequality has been intensified by a decline in wage growth during recent years. A review of the evidence on rising inequality published by the Productivity Commission in 2018 found that, while the evidence is mixed, in overall terms inequality has increased in the past three decades, with the fastest growth in income and wealth occurring among the highest earners.

Since 2015, wage growth in Australia has been below the average for OECD economies, following a long period in which Australians became accustomed to some of the highest levels of real wage growth in the world. Together, these factors are contributing to some Australians feeling left behind by globalisation and technological change. In addition, specific groups of Australians are disproportionately affected by entrenched social disadvantage, including Indigenous Australians and people who are excluded from the labour market.

reviewquestions

1. Discuss the extent to which the goals of economic management have been achieved in Australia in recent years.
2. Assess the role of macroeconomic policies, microeconomic policies and international factors in influencing Australia's economic performance in recent years.

18.2 Limitations of economic policy

Several factors can constrain the effectiveness of economic policies and affect whether or not the policies achieve their goals. Below we note three key factors that can influence the effectiveness of policies: time lags, political constraints and global influences.

Time lags

There are two types of time lags that can limit the effectiveness of economic policies. **Implementation time lags** exist when it takes time for the government to make changes to or introduce new economic policies. **Impact time lags** exist where it takes time for a new policy or a policy change to have an impact on the economy. Both of these time lags are summarised for different policies in figure 18.2. A change in **monetary policy** can be implemented very quickly. The Reserve Bank meets on the first Tuesday of each month.

The outcome of the meeting is announced to financial markets at 2.30pm on the day of the meeting. In some extreme situations, however, the RBA Governor may be given the discretion to change interest rates if conditions change during the period of time between RBA meetings. Once the decision is announced, it has an immediate effect on the cash rate.

Policy	Implementation time lag	Impact time lag
Fiscal	Medium term (annual budget)	Short term (a few months)
Monetary	Short term (monthly RBA meeting)	Medium term (6–18 months)
Microeconomic reform	Long term (a few years)	Long term (up to 20 years)

Figure 18.2 – Policy time lags

On the other hand, the implementation of **fiscal policy** can take a substantial amount of time. Major changes to fiscal policy usually occur annually with the Budget. Substantial changes to spending or revenue collection are mostly made at the time of the Budget, although a government can also announce fiscal policy changes between budgets. Most spending and revenue changes need to go through a complex process of budget committee meetings and will be scrutinised by several government departments before being approved. The process of developing each year's Budget starts early in the year and runs for several months until the Budget is finalised in May. It can then take several months for budget legislation to pass through Parliament, and as discussed in more detail below, political constraints can sometimes stop governments from implementing their budget proposals.

Similarly, changes to **microeconomic policies** can take a long period of time. This is because of the planning and complex policymaking involved in microeconomic policies. Microeconomic policy can also take a lot of time to implement if it is necessary to secure the support of state governments as well as the Commonwealth. For example, introducing a national energy policy, reforming Australia's system for schools funding, implementing uniform consumer protection laws and introducing a national disability insurance scheme all required the support of the six states and two territory governments. The process of negotiating these changes through the Council of Australian Governments (COAG) often takes a considerable time because of the different interests of each state. In 2020, the Prime Minister replaced COAG with the National Cabinet – a more informal meeting arrangement established to coordinate a national response to the pandemic. Through this forum, Premiers, First Ministers and the Prime Minister subsequently agreed to pursue microeconomic reforms to support post-pandemic economic recovery.

Policies can also take time to achieve their aims due to the differing time lags in their **impacts**. Some policies will take effect in a relatively short time period – for example, while it takes a long time to implement changes in fiscal policy, these changes can have a quick effect on economic activity. A tax reduction can immediately affect income levels or prices, and an increase in government spending can quickly affect economic conditions. The impacts of shorter-term changes in the stance of fiscal policy can generally be seen within a year. Fiscal policy therefore becomes more important during a downturn, as fiscal policy's shorter time lag in impacting the economy makes it the most effective policy to achieve an immediate boost in aggregate demand. This was evident in the Government's rapid expansionary fiscal policy response to shocks such as the global pandemic in 2020 and the global financial crisis in 2008–09.

On the other hand, there is a time lag of around 6 to 18 months for monetary policy changes to have an impact on the economy. This is because it takes some time for changes in the level of interest rates to feed through to changes in the borrowing and savings behaviour of consumers and businesses. Part of the challenge for the Reserve Bank is to

adjust monetary policy pre-emptively, based on the future level of inflation and other economic conditions that it expects in a year to 18 months' time, to address this impact lag.

The impacts of microeconomic policies can probably only be assessed after a period of several years – and perhaps decades if we are to get a fuller picture of the effectiveness of these policies. The benefits of structural change can take several years to become apparent as resources are reallocated from one sector to another, and the full effects of those changes flow through to costs, business profits, export growth and productivity. In addition, it can be difficult to accurately measure the impact of microeconomic policies since several microeconomic policies might be implemented at the same time and it may be hard to distinguish the impacts of one reform from another.

Political constraints

Economic policy decisions are made in a democratic context. Governments in Australia are elected to represent the public, and often have specific election commitments that they are responsible to deliver. Once elected, governments can face difficult trade-offs in making decisions that are consistent with their commitments and compatible with economic conditions, and that will be passed through the Parliament. For example, the Morrison Government was elected in May 2019 with a commitment to balance the budget in 2019–20. This was in conflict with pressures later in 2019 to loosen fiscal policy to address a slowdown, and this priority was later abandoned due to the global pandemic.

Governments must be sensitive to whether a policy is likely to have public support. Governments also consider whether a policy will be supported by members of their own political party, and by other stakeholders, including business or union groups who contribute substantially to the funds that parties need for advertising during election campaigns. Typically, governments implement longer-term (and less popular) policies in the first year of the three-year term. Around halfway through their three-year term they begin preparing for the next election. In the year before an election, governments can be reluctant to make unpopular decisions and are often under pressure to implement policies that are popular with the electorate but may not have long-term economic benefits.

The constraints on implementing **unpopular policies** are a major consideration for economic management. For example, countries have been slow to address climate change, despite the consensus of the scientific community, in part because climate change policies are often unpopular and costly. However, in some instances governments will consider an economic reform to be such a high priority that they will risk unpopularity in order to implement it, as can be the case with the introduction of new taxes. For example, the Gillard Government introduced an unpopular carbon tax in 2012 because of the priority of reducing Australia's carbon emissions, just as the Howard Government went to the 1998 election with the unpopular policy of introducing the Goods and Services Tax because of its priority as an economic reform.

Governments can delegate authority for some decisions to independent government agencies to minimise these political constraints. For example, the Reserve Bank makes interest rate decisions and the Fair Work Commission decides on increases to the national minimum wage and award wages. In addition, independent authorities approve pricing decisions in regulated sectors like postal services and electricity prices. A government responsible for making these decisions would be under political pressure to make short-term, popular decisions, which might not be consistent with long-term economic objectives.

Another aspect of the political constraints on government is the role of the Australian Parliament, and especially the **Senate**. Many economic policies can only be implemented through legislation, including budget measures, changes to the industrial relations system, and changes to business laws. Under the Australian parliamentary system, legislation must

receive a majority of votes in both the House of Representatives (the Lower House) and the Senate (the Upper House). Historically, it has been uncommon for a government to have a majority in the Senate, and as a consequence governments have to make compromises to win the support of other senators, from either the Opposition or minor parties, to pass the proposed legislation. In both the 2016 and 2019 elections, neither party won a majority in the Senate. In the 2016 elections, the Coalition Government was returned to power with a majority of just one seat in the House of Representatives, which made it difficult to pass legislation, as it required the support of every government MP. The previous Labor Government faced even greater political constraints from 2010 to 2013, because it did not have a majority of seats in either House.

Australia's system of federalism can act as another political constraint on the Commonwealth Government. The Commonwealth and state governments share responsibility for major parts of the economy, including energy policy, the education system, health care, aged care, business regulation, and infrastructure such as roads. This means that to implement major changes, the Commonwealth often must win the cooperation and agreement of some or all of the states.

When the Commonwealth and the states are unable to agree on a policy compromise, the Commonwealth might try to impose changes on the states, a step that can lead to lengthy constitutional challenges in the High Court. In 2006, for example, the Commonwealth won a major constitutional case where the states challenged its takeover of their industrial relations powers. The High Court has generally favoured an expansive interpretation of the power of the Commonwealth over the states in recent decades, but the states still retain significant powers under the Australian Constitution.

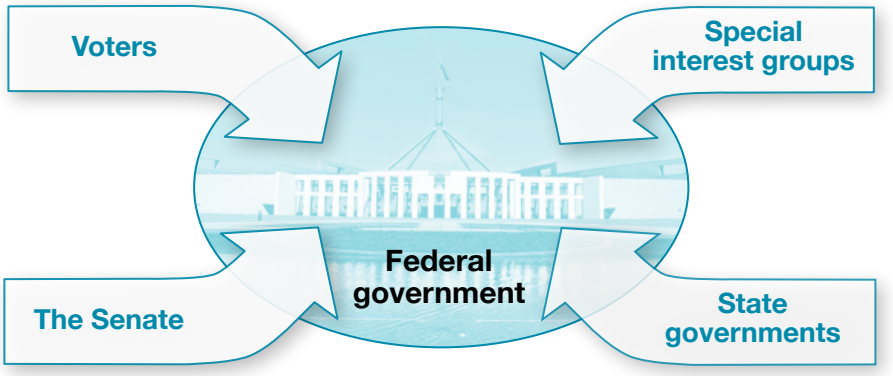


Figure 18.3 – Political constraints on economic policy

Special interest groups can also play an important role in government policymaking. Often, political parties have strong relationships with supporters – business groups tend to have significant influence on the policies of both major political parties, especially the Coalition parties, while unions have a close relationship with the Labor Party. Large businesses often employ lobbyists to influence government policies because of the potential financial impacts of policy decisions on their activities.

In the 2019 federal election, opposing interest groups actively participated in debate over the proposed Adani coal mine, a large new development in the Galilee Basin in Queensland. On one hand, environmental groups opposed the mine, expressing concerns relating to environmental damage and climate pollution. These groups held large-scale protests and public campaigns against its approval. On the other hand, business groups such as the Minerals Council of Australia advocated for the project, citing the potential economic contribution and regional employment opportunities as reasons to support the project. Some commentators argued that Queenslanders resented the perceived intrusion of environmental interest groups, and this contributed to the large swings towards the Liberal/National Party in regional Queensland that helped determine the election result.

Global influences

As the Australian economy has become more integrated with the global economy, global factors have become a greater constraint on economic policy. The constraints imposed by globalisation work at many levels. Conditions in the global economy have a more immediate impact on Australia. Economies often face immediate consequences for economic mismanagement, mainly through the reaction of financial markets. For example, there was a sharp fall in the value of the Turkish lira in 2018 after Turkey's president appointed his son-in-law as Turkey's finance minister. Governments also voluntarily accept constraints on their own economic policy in order to win concessions from other nations, such as through trade agreements.

In a global environment in which exchange rates and economies are vulnerable to sudden shifts in financial flows, governments place a high priority on maintaining the confidence of international investors and **global financial markets**. This has become particularly important in recent years with global financial markets experiencing enormous volatility following the global financial crisis and the pandemic. As we saw in chapter 5, foreign exchange markets tend to support policies that promote stronger trade and financial linkages to the global economy, and support economic and financial stability. These policies include:

- reduced government spending and reduced budget deficits
- low rates of corporate and capital gains taxes
- reduced trade barriers and removal of restrictions on foreign investment
- deregulation of the financial sector, including the removal of restrictions on international financial flows
- deregulation across most areas of the economy, with the aim of increasing competition
- privatisation of government-owned businesses
- deregulation of labour markets and better targeting of social welfare
- trade agreements that give overseas businesses the power to sue national governments for policy changes that undermine the profitability of their investments.

This creates a difficult environment for governments to pursue policies that differ from the generally accepted formula for good economic management. Most advanced economies have adopted a similar policy mix in recent years. Critics argue that global financial markets effectively restrict the policy options available to governments (although others argue that financial markets provide a helpful discipline on governments that might otherwise make bad policy decisions). A government that adopts alternative policies may face a loss of foreign investor confidence and a fall in their currency. For example, after the United Kingdom voted in June 2016 to leave the European Union, its currency (pound sterling) soon lost almost one-fifth of its value and has experienced ongoing volatility as financial markets have continued to react to significant political and policy uncertainty. Some foreign investors froze their investment plans, worried that the UK economy would lose many of the benefits of integration with European economies.

Global financial flows and overseas interest rates can also directly influence the conduct of monetary policy. If interest rates are rising in other countries, a country's rate of return will be relatively less attractive for overseas investors. This might result in an outflow of funds and a depreciation in the currency, which in turn may add to inflation and undermine confidence. In order to prevent this, governments will often adjust interest rates in response to changes in other economies. Market interest rates in Australia can also be directly affected by changes in overseas interest rates, because Australian banks rely on borrowing from overseas to fund their loan portfolios. A period of rising global interest rates prompted Australian banks to review their lending rates in 2018 even though there was no immediate prospect of a rise in the RBA cash rate.

The **international business cycle** can also restrict the scope of policymaking within individual countries. It is difficult for a country to significantly increase its level of economic growth if the global economy is in an economic downturn. Faster domestic growth will cause an increase in imports while export growth weakens, resulting in a substantial increase in the current account deficit. This can force the government to slow down the economy through tighter fiscal and monetary policy, risking a more severe recession. This is one reason why industrialised countries generally keep their economic growth in step with both the international and regional business cycle.

Finally, **international organisations** can have a direct influence on domestic macroeconomic and microeconomic policies. The **World Trade Organisation** (WTO) can influence individual trade policies because of its enforcement powers. The WTO can place trade sanctions on economies that do not comply with international trade agreements, which can have significant consequences for a country's trade policy. On occasion, the WTO has forced the Australian Government to change export assistance policies or Australia's strict quarantine regulations – such as when Australia was forced to abandon its ban on fresh salmon imports from Canada.

Decisions of the **Group of Seven** (G7) nations and the **G20 group** (see chapter 2) can have a significant influence over the global economy and the domestic macroeconomic policies of small countries such as Australia. The growing integration of economies through globalisation leaves limited scope for small countries to adopt a different macroeconomic policy stance to that adopted by the major industrialised economies.

reviewquestions

1. Explain how time lags limit the effectiveness of economic policies.
2. Outline two major economic policy initiatives undertaken by the Government during the past year, and for each:
   - Summarise arguments for and against the initiative as raised by any special interest group or the media.
   - Discuss how the initiative may have been influenced by political factors.
3. Discuss how the separation of monetary policy decisions from the control of the Commonwealth Government to the Reserve Bank might influence the effectiveness of the policy mix in Australia.
4. Briefly discuss how global economic conditions have constrained or assisted Australia's economic performance in the past year.

18.3 Evaluating the effectiveness of specific policies

To examine the effectiveness of economic policies we must look at individual policies and determine whether or not they have been effective in achieving their goals in comparison with other policies. This can be a challenge because it is often difficult to isolate the specific effects of one policy compared with another. However, we can assess the effectiveness of policies by analysing:

- the specific objectives of a policy
- whether the policy was implemented effectively
- the relevant economic outcomes, and how they compare with the objectives
- time lags
- other factors that may have affected outcomes during that period, including external factors
- whether there were any side effects associated with policy implementation.

In evaluating whether a policy has been effective, we need to identify the policy's original objective. For example, in evaluating the effectiveness of monetary policy we first identify that the Reserve Bank's goal is to keep inflation within a target range of 2 to 3 per cent over the medium term. With this objective, monetary policy over the past two decades at the very least would appear to have been successful. If its target was to achieve zero inflation, then we would conclude that it has failed to achieve its objective.

The next question to ask is whether the government **actually implemented** the policy that it had originally set out to implement. Policies might be changed before they are fully implemented, for example, if a government is voted out of office or has changed its priorities. In addition, sometimes governments have economic policies that they are not able to implement because of political constraints.



For further information on Australia's economic performance and policies, visit the OECD website: **www.oecd.org** and the Treasury website: **www.treasury.gov.au**

The next step in evaluating policies is to review the **economic outcomes**, and how closely they relate to the policy objectives. Sometimes it is difficult to determine whether a policy has been successful, because governments do not always set themselves specific targets or objectives when they implement a policy. For example, governments have set targets for economic growth and inflation during recent years, but not for unemployment, other than a general aim of reducing the rate. Without specific goals, it is more difficult to measure the effectiveness of policies.

The next step to is ask **whether other factors significantly affected the economic outcome**. Government economic policy is always at the mercy of other developments, and economic policy is often just one of many factors that determines economic outcomes. Economists often speak of policies being effective in terms of the Latin phrase "ceteris paribus" – meaning "with everything else being the same" or effectively, "if nothing else changes". The problem in measuring the effectiveness of policies is that other things do change. For example, per capita growth in greenhouse gas emissions fell in the years after Australia abandoned the carbon tax in 2014. However, this was not because of the policy change. Other factors had a larger effect, including reduced fossil fuel emissions given the closure of large-scale manufacturing, oil refineries and aluminium smelters, reduced household demand due to higher energy prices, and the rapid take-up of residential solar power.

Some of the factors that might affect economic outcomes include:

- changes in global economic conditions or the economy of a major trading partner
- overseas interest rate movements
- a sharp movement in the value of the currency
- developments that might affect future expectations, such as a crisis in a particular industry or region of the world
- changes in commodity prices, such as a fall in oil prices or a rise in iron ore prices (such as in 2019, when a major mining disaster in Brazil resulted in a sharp rise in iron ore prices globally)
- seasonal factors, including droughts, floods, natural disasters and outbreaks of infectious diseases
- industrial unrest, such as a major dispute between a union and a major company
- new technologies or shifts in consumer preferences
- a shift in sentiment relating to the economy, for example, as a result of a downward adjustment in credit ratings.

The final question to be considered is whether a policy had any **other consequences** or side effects. This is especially important to ask if there are signs that the policy was reasonably effective in achieving its main aim. At this point, we might ask: at what price was this achieved? Was another part of the economy badly affected by this policy? This highlights the trade-off between policy objectives because of the **conflicting objectives** of economic management. For example:

- There is a short-term trade-off between reducing inflation and reducing unemployment. When inflation exceeds the Reserve Bank's two to three per cent target band, it may be necessary to raise interest rates to reduce inflation, resulting in a short-term contraction in economic activity and increased cyclical unemployment. It could be tempting for the Government to avoid taking action against inflation using contractionary macroeconomic policy, particularly during an election year. This is why the Reserve Bank operates independently from the Government, to prevent political considerations from constraining the conduct of monetary policy in achieving price stability.
- In recent years the Reserve Bank of Australia has raised concerns about excessive growth in housing prices in Sydney and other cities, and whether Australia's household debt levels are sustainable. Some economists have argued that the RBA should impose greater prudential controls on residential lending, or keep interest rates at higher levels. However, such measures would also result in lower levels of economic activity and household incomes.
- After the global recession of 2008 and 2009, many overseas governments (especially in Europe) had to make difficult trade-offs between reducing their budget deficit (to address financial market concerns about public debt levels) and the risk that contractionary fiscal policy could put their economy back in recession. Australia was fortunate in avoiding this difficult trade-off, because it had much lower deficits and debt levels than other advanced economies.
- Decentralisation of wage determination was effective in raising productivity levels and growth in incomes in the 1990s. However, it has also contributed to increasing inequality in the distribution of income (because the rate of wage growth for higher-income earners is greater than for lower-income earners), increased work intensity and less job security for individuals.
- Economists have historically accepted that there is a trade-off between achieving higher levels of economic growth and increased inequality in the distribution of income and wealth. In particular, "boom" periods (such as the resources boom in Australia, or the rapid growth in the Chinese economy in the past two decades) often generate income and wealth that is distributed very unevenly. Traditionally, it was thought that countries must accept higher levels of inequality if they wish to achieve faster growth. However, organisations such as the OECD and IMF now emphasise the need for a more inclusive approach to economic growth, because of the negative economic and social effects of increasing inequality. Advocates of inclusive growth argue that policies to promote greater income equality will boost economic growth (because measures to increase the incomes of lower-income earners will boost consumption, and therefore growth). This suggests that there is no longer a clear trade-off between increased equality and increased growth.
- Large long-term reductions in Australia's carbon emissions will be necessary if Australia is to make its contribution to the global response to climate change. However, this area of policy has proved very difficult for governments for more than a decade. On several occasions governments have changed their policy plans, and policy proposals have been rejected in Parliament. There has been extensive debate about how policies that put a price on carbon emissions might affect different parts of the economy, especially carbon-intensive industries in regions like Wollongong, Newcastle and the Hunter Valley. Governments have been forced to make trade-offs between the long-term goal of reducing greenhouse gas emissions and the short-term impact of a carbon price, including higher energy prices, slower economic growth and potential job losses.

Appendix B: Advanced Economic Analysis at the back of this textbook looks at "crowding out", the twin deficits hypothesis and the quantity theory of money – theories that explain the limitations of macroeconomic policies.

Examining the side effects of economic policies, such as those discussed above, can help us to reach a more balanced assessment of the effectiveness of the policy mix.

Economic management in Australia: Past, present and future

Macroeconomic management

Macroeconomic management has mostly proved effective in achieving its **short- to medium-term goals** since the early 1990s. When the global COVID-19 pandemic forced the economy into recession in 2020, Australia was in its 29th consecutive year of economic growth, a world record. Equally important, growth had been sustained alongside low inflation and relatively low rates of unemployment.

Monetary policy has worked well since the early 1990s in managing the growth cycle and achieving price stability. The inflation target has largely been achieved (notwithstanding occasional periods of inflation outside the target, as has recently occurred) and Australia has maintained stable economic growth.

Early 1990s: Expansionary	Expansionary fiscal and monetary policies were needed to bring about a gradual economic recovery.
Mid-1990s: Contractionary	Monetary and fiscal policy were both successfully tightened, addressing growing pressures on inflation and the current account by 1996.
Late-1990s: Expansionary then contractionary	The macroeconomic policy mix changed as tighter fiscal policy was offset by looser monetary policy between 1996 and 1998, and interest rates began increasing to head off rising inflation rates with the introduction of GST in 2000.
Early 2000s: Expansionary	As the global economy dipped into recession in 2001, Australia shifted to expansionary fiscal and monetary policies – with interest rates falling to their lowest levels in 30 years – and avoided recession.
Mid-2000s: Contractionary	As the Australian economy returned to normal growth rates, both fiscal and monetary policy became less expansionary to avoid excessive growth and increasing inflationary pressures from the boom in commodity prices. By 2007, monetary policy was contractionary.
2008–2009: Strongly expansionary	With the onset of the global financial crisis in late 2008, policy settings were reversed to provide a large expansionary stimulus for a weakening economy. Interest rates were reduced to their lowest level in 50 years, and the Government embarked on a massive fiscal stimulus to cushion Australia from the full force of the recession.
2010–2019: Neutral stance	As growth recovered, interest rates were returned to more neutral levels, whilst fiscal policy became mildly contractionary. From 2012, mildly contractionary fiscal policy was offset with expansionary monetary policy where interest rates were reduced to record lows.
2020: Strongly expansionary	The COVID-19 recession prompted the most aggressively expansionary macroeconomic policy settings in Australian history, taking the previously balanced budget to a record-level deficit in 2020–21. Interest rates fell to just above zero, their lowest on record.

The effectiveness of monetary policy relies on the overall **policy mix.** The main limitation of monetary policy is that it is rarely effective when it is used on its own – it needs to be supported by similar fiscal policy settings. It is not effective when it is working in the opposite direction to fiscal policy, such as in 2008 when inflation had risen to 5 per cent, and interest rates had to be increased further to counter the inflationary effect of income tax cuts.

The past three decades have also shown that monetary policy is more effective in implementing contractionary macroeconomic policy than expansionary policy. During periods of major economic downturn or an extended period of sub-par growth, low interest rates are generally not enough to stimulate economic activity and lower unemployment. In an effort to support economic growth after they had already reduced interest rates to just above zero in response to the COVID-19 recession in 2020, central banks have engaged in more unconventional monetary policy measures such as purchasing government debt ("asset purchase programs") from the private sector, providing low-cost credit to the banking sector and introducing a yield target for government bonds. The use of these approaches demonstrates that conventional monetary policy can be ineffective in an already low interest rate and inflation environment. Nevertheless, low interest rates can play a supporting role to expansionary fiscal policy in boosting economic growth. This is because fiscal policy has a direct impact on aggregate demand while monetary policy relies on households and businesses responding to interest rate incentives.

The other main limitation of monetary policy is that it is a **demand management** policy – that is, it can influence aggregate demand but not the structural (or supply-side) causes of certain problems. During the global commodity boom of the mid-2000s, the Reserve Bank highlighted the fact that inflation was increasing because of capacity constraints – with the economy getting close to its full capacity. While higher interest rates can reduce demand pressures, they do not deal with the supply-side problem of capacity constraints and cost-push inflation. Monetary policy can also struggle with conflicting goals, especially in its impact on demand and asset prices. Prior to the pandemic, the Reserve Bank noted the tension between raising interest rates in order to curb a potentially dangerous housing price bubble and wanting to encourage stronger economic growth. Monetary policy is a blunt policy instrument, and has limited effectiveness when policymakers may want to support growth in one sector or region of the economy while restraining growth in another.

Monetary policy also cannot successfully address the problem of a high current account deficit (historically an issue for Australia), because it cannot bring about a structural improvement in international competitiveness or the level of national savings. In fact, even though monetary policy is intended to sustain low inflation, it can do little to address inflationary pressures other than those driven by demand from consumers and businesses. Raising interest rates to address other sources of inflation, such as a falling currency, would be attempting to solve the inflation problem by attacking something other than its real cause.

Monetary policy can also face an additional strain during periods of sustained economic growth, because it is also the tool of last resort if wages are growing too quickly. In the absence of an incomes policy that can control wage increases directly, the most effective tool to limit inflation and wage rises is tighter monetary policy. In past times when wages growth threatened to push inflation above its target range, the Reserve Bank warned that it would, if necessary, increase interest rates in response to high wage growth. But in recent years the Reserve Bank has been more concerned with wages growth being too weak rather than too strong.

Fiscal policy is the most effective policy to stimulate the economy and job creation during a downturn, but it is less effective in slowing it down when the economy is overheating. Australia's fiscal response to the COVID-19 recession in 2020 followed a similar approach (at a larger scale) to the successful approach used in 2009 in response to the global financial crisis. The aim of this strategy was to immediately strengthen aggregate demand before the global downturn had a dramatic impact on Australia. Fiscal policy was effective, with the Treasury concluding that the stimulus added 2 per cent to economic growth in 2009, resulting in growth of 1.3 per cent instead of a 0.7 per cent contraction in GDP. It will be some years before the effectiveness of the fiscal response to the recession in 2020 can be fully evaluated in Australia. From an economic perspective, the COVID-19 recession has created one of the best possible tests of different policies, because so many economies

were confronted with an identical crisis at the same time. Economists are likely to be comparing and learning lessons from the results for many years to come.

Like monetary policy, fiscal policy also has its limitations. Expansionary fiscal policy leads to increased budget deficits and higher public debt levels. In an environment where an economy is growing, it can draw savings away from private investment. Economists generally agree that sustained higher budget deficits over the longer term can contribute to higher long-term interest rates, lower national savings and an increased current account deficit. Although interest rates have been at very low levels in more recent times, one of the longer term concerns about the huge increases in public debt resulting from the COVID-19 recession is that it could take decades to pay off the debt, and higher interest rates in the future could make these debt levels a heavier burden on economies.

> "With 27 years of positive economic growth, Australia has demonstrated a remarkable capacity to sustain steady increases in material living standards and absorb economic shocks ... Also, the economy's adjustment in the wake of the commodity super-cycle has been reasonably smooth ...
>
> Economic reforms largely completed during the 1980s and 1990s are often considered as a key ingredient to Australia's economic success ...
>
> However, Australia faces economic challenges that, if not handled well, could see an end to its strong track record. Risks include potential instabilities from high house prices and large household debt, along with exposure to global uncertainties in policy and politics, notably as regards trade disputes. Also, as do many economies, Australia faces challenges in productivity growth."
>
> *– Australia: OECD Economic Survey, December 2018.*

In the broadest sense, the Government's **macroeconomic policy mix** was successful in sustaining 28 years of economic growth in which Australia progressively reduced unemployment, kept inflation low and enjoyed rising living standards. There was no realistic way that the policy mix could have saved the economy from recession in 2020, given the severe economic effect of lockdowns that imposed a shutdown on several sectors of economic activity. But the policy mix faces a harsh test throughout the early 2020s as the economy recovers.

Despite the successes of the policy mix during the growth cycle from 1991 to 2019, by the 2010s its growth rate had become stuck at disappointingly low levels. This points to the greatest limitation of macroeconomic policies – addressing structural problems.

Microeconomic management

Australia's extensive **microeconomic reforms** since the 1980s are generally regarded as a success. Microeconomic policy has made it possible for the economy to avoid the boom/bust cycle and sustain growth, with improved living standards and reduced unemployment. The Australian economy has become more internationally competitive, and inflationary pressures have been contained. Australia's economy is generally regarded as one of the world's more open and successful economies, despite our geographic isolation from the major centres of the global economy.

Some economists have criticised the lack of ongoing microeconomic reform in the past two decades. Compared with the rapid pace of micro reform in the 1990s – when governments implemented national competition policy, enterprise bargaining, major industry deregulation, accelerated tariff cuts and the introduction of the GST – microeconomic reform has moved slowly in recent years. To some extent, this is inevitable since many of the reforms of the 1990s involved once-off structural changes that could not be repeated. Nevertheless, the OECD and economic agencies, such as the Treasury and the Productivity Commission, have argued that more needs to be done to accelerate microeconomic reform. For example, the OECD's report on the Australian economy in 2018 called for an increase in the GST, investment in active labour market programs and

greater use of land tax and road congestion pricing. Likewise, the Grattan Institute in 2019 highlighted more than 50 microeconomic reform policy options in *Priorities for the Next Commonwealth Government*. However, many of the recommended policies face political constraints in being implemented.

Critics argue that despite Australia's relatively successful economic performance, the economy has structural weaknesses. They make the case that Australia has become too reliant on its resources exports to China and other developing economies. Productivity growth has remained lacklustre since the 1990s. Even prior to COVID-19, a significant number of working-age Australians remained either unemployed, underemployed or outside the labour force. Australia has lacked a clear, consistent economic policy response to climate change and has adopted expensive and often ineffective policies. Australia's ranking on various measures of competitiveness has also slipped in recent years (for example, falling from 4th in 2004 to 18th in the 2019 World Competitiveness Yearbook, and from 7th in 2003 to 16th in the World Economic Forum's 2019 Global Competitiveness Index). Australia also faces significant looming challenges, including an ageing population, declining workforce participation, the impact of climate change and the risk of a sustained slowdown in China. All these factors underline the need for continued microeconomic reform, diversification of the economy and investments in education, early childhood programs and infrastructure to underpin future productivity growth.

In the longer term, the success or failure of the Government's policy mix will be measured by our capacity to restore and **sustain growth**, employment and living standards, while preparing for the far-reaching disruptive effects of climate change and water shortages, distributing the rewards of economic growth more equitably and achieving a **sustainable** position on the external accounts.

The effectiveness of economic policies cannot ultimately be judged by reference to economic outcomes alone. Economic policies affect the kind of society we live in and how we lead our lives. Should we question our assumption that increasing GDP will increase people's wellbeing and happiness? Should we always pursue increased material wealth and GDP growth no matter what its effects on families, communities and the environment? Do we have a responsibility to future generations to act with more urgency in reducing our carbon emissions and slowing down our consumption of non-renewable resources? Is it fair that one person who grows up in a poor family has far fewer opportunities than someone who grows up in a prosperous family? Is it fair that Australians enjoy such good living standards compared to other nations when so many people are dying of easily preventable diseases in developing countries? These are more than just technical economic issues. They are issues that go to our values as a nation, and what we think is important in life – and answering these questions requires us to go beyond an economics textbook.



For discussion of the recent conduct of monetary policy, visit the Reserve Bank website **www.rba.gov.au** and view the speeches section. In particular, look at the Hansard transcript of the Governor's parliamentary testimony given every six months (around February and August).

reviewquestions

1. Identify two major global events in recent years and explain how they have influenced Australian economic policy.
2. Describe an example of a recent government policy that illustrates the conflicts in economic policy objectives.
3. Critically analyse which economic policy instruments have been most effective in recent years in achieving their goals.

chapter summary

1. Since the early 1990s, the main goal of the economic policy mix has been to achieve the maximum **sustainable economic growth rate** in the short to medium term (through macroeconomic policies), while implementing policies that will raise the long-term sustainable growth rate (through microeconomic policies). In overall terms, this policy mix has been reasonably successful.

2. Economic policies differ in their **implementation** time. While monetary policy decisions can be implemented immediately, major changes to fiscal policy generally take several months to plan and implement, and microeconomic policies can often take several years to implement.

3. Economic policies can differ in the **time lag** involved before they impact the economy. While fiscal policy changes such as tax cuts can have an immediate impact on the economy, monetary policy changes take 6–18 months to have their full impact and microeconomic reforms can take many years to have their full effect.

4. In the short term, the main **global influences** on the Australian economy are the international business cycle, overseas interest rates, financial market conditions and commodity prices.

5. In the long term, the Australian economy is influenced by global trends in economic management. Examples include the shift away from government intervention to deregulation and privatisation in the 1980s, the adoption of inflation targeting in the 1990s, and the adoption of policies to reduce carbon emissions during the past decade.

6. **Political constraints** can have a significant impact on economic management, including the three-year political cycle, the unpopularity of some policies and the difficulty governments often experience in getting legislation through Parliament.

7. Effective economic management often requires governments to trade off some objectives against others and to balance **conflicting goals** such as achieving both low inflation and low unemployment.

8. The goal of achieving a **sustainable rate of economic growth** in the short term balances the objectives of inflation, growth, unemployment and external balance. The longer-term goal of raising the sustainable growth rate involves improving international competitiveness, workforce participation and productivity, and ensuring that Australia's economic growth is compatible with a fair distribution of income and wealth, and environmental outcomes.

9. **Microeconomic policy** is generally regarded as having succeeded in boosting productivity, economic growth and living standards over recent decades. However, some economists argue that Australia has not undertaken enough microeconomic reform in recent years.

10. Governments often face a **trade-off** between the goals of **equity** and **efficiency** in economic management. Inclusive growth policies aim to overcome this trade-off by simultaneously supporting growth and reducing economic inequality.

chapter review

1. Identify which economic objectives have had the highest priority in recent years.
2. Explain to what extent time lags affect the operation of monetary, fiscal and microeconomic policies.
3. Explain two ways in which global influences affect the conduct of economic management in Australia.
4. Discuss how a major downturn in the global economy might affect the key economic indicators in Australia.
5. Explain how political constraints can influence economic policymaking.
6. Evaluate the effectiveness of the Government's policy mix in sustaining economic growth and low inflation during the past decade.
7. Identify a policy objective that has been achieved during recent years and explain the factors contributing to that success.
8. Discuss the relationship between economic growth and increased inequality in the distribution of income and wealth.
9. Evaluate the extent to which economic management in Australia has been more successful in recent years compared with preceding decades. Analyse the extent to which this is the result of global or domestic factors.
10. Critically evaluate the extent to which equity and environmental outcomes have been sacrificed to achieve other economic objectives in recent years.

Key Economic Skills

A.1 Introduction

A.2 Drawing and interpreting economics diagrams

A.3 Equations and calculations in economics

A.4 Interpreting economic data and information

A.1 Introduction

Economics is a subject that requires you to understand the relationships between different economic indicators, such as trade flows, exchange rates, unemployment and interest rates, and the role of different actors in the economy such as transnational corporations, international organisations, and government agencies. It is a mix of social science, with an emphasis on human activities, and scientific analysis, where we can test our theories of how economies operate by analysing the relationships between different economic indicators.

Throughout the 18 chapters of this textbook, you've probably found that one of the most challenging aspects of economics is that it is neither a "writing" subject nor a "numbers" subject, but a unique blend of both qualitative and quantitative analysis. In the Year 12 exam, the expected length for each extended response is 800 words, although you will not be penalised for writing more. This is the same as for other courses such as Business Studies and Geography.

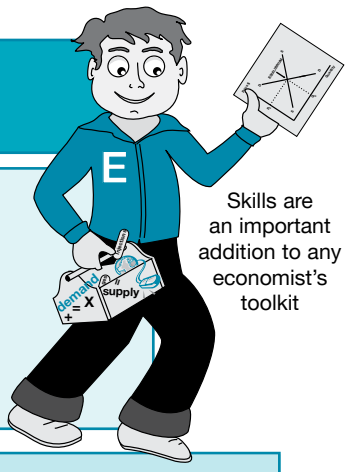


For further information on skills and assessment in Economics, or a full copy of the Economics Syllabus, visit the website of the NSW Education Standards Authority: **http://educationstandards.nsw.edu.au**

Studying economics is not simply about memorising a lot of information. You must also learn a range of skills to understand how modern economies function, and predict how changes in one part of the economy can affect other parts. For this reason, **applying economic skills is central to the Year 12 Economics Course**. Each topic of the course contains between 3 and 8 skills, and there are 23 skills in total for the whole course.

It is best to learn economic skills as you learn the content of the course. For this reason, each of the economic skills is listed at the beginning of each topic area in this textbook, and the skills are incorporated into the chapter material. **The aim of this section is to reinforce your grasp of economic skills** because of the crucial role that these skills play in economic analysis for the Year 12 Course.

YEAR 12 COURSE TOPIC	SYLLABUS SKILLS
The Global Economy	• analyse statistics on trade and financial flows to determine the nature and extent of global interdependence • assess the impact on the global economy of international organisations and contemporary trading bloc agreements • evaluate the impact of development strategies used in a range of contemporary and hypothetical situations
Australia's Place in the Global Economy	• calculate the main components of Australia's balance of payments • analyse the relationship between the balance of the capital and financial account and the net income balance • explain the relationship between the current account balance and the balance of the capital and financial account • use supply and demand diagrams to explain how the value of a currency is determined under different exchange rate systems • analyse the impact of changes in the components of the balance of payments on the value of the Australian dollar
Economic Issues	• identify and analyse problems facing contemporary and hypothetical economies • calculate an equilibrium position for an economy using leakages and injections • determine the impact of the (simple) multiplier effect on national income • explain the implications of the multiplier for fluctuations in the level of economic activity in an economy • calculate the unemployment rate and the participation rate using labour force statistics • interpret a Lorenz curve and a Gini coefficient for the distribution of income in an economy • use economic concepts to analyse a contemporary environmental issue • assess the key problems and issues facing the Australian economy
Economic Policies and Management	• explain how governments are restricted in their ability to simultaneously achieve economic objectives • use (simple) multiplier analysis to explain how governments can solve economic problems • identify limitations of the effectiveness of economic policies • explain the impact of key economic policies on an economy • propose and evaluate alternative policies to address an economic problem in hypothetical and the contemporary Australian contexts • explain, using economic theory, the general effects of macroeconomic and microeconomic policies on an economy • select an appropriate policy mix to address a specific economic problem



Skills are an important addition to any economist's toolkit

Source: NSW Board of Studies, Offical Notice BOS 47/09, 2009

Figure A.1 – Economic skills in the Year 12 Economics Course

Economics Stage 6 Syllabus 2009 extracts © NSW Education Standards Authority for and on behalf of the Crown in right of the State of New South Wales, 2009.

Knowledge and understanding of course content is worth 40 per cent of Year 12 assessment. The other 60 per cent is divided equally between three other components – each of which you can strengthen with the material in this chapter: *stimulus-based skills* (20 per cent); *inquiry and research* (20 per cent); and *communication of economic information, ideas and issues in appropriate forms* (20 per cent).

The course skills can be divided into three main areas:

- drawing and interpreting economics diagrams
- equations and calculations in economics
- interpreting economic data and information.

A.2 Drawing and interpreting economics diagrams

Being able to draw and interpret diagrams is an essential skill in the Year 12 Economics course. Some diagrams, like supply and demand in the foreign exchange market, are explicitly referred to in the syllabus. Other diagrams, such as those representing the labour market and market failure, are not explicitly referred to in the syllabus but are nevertheless useful for deepening your understanding of how economies operate. Some diagrams are useful for representing the macro-economy at the "big picture" level, while others are useful for analysing the microeconomic impacts of changes in specific parts of the economy.

In this section, we review the skills of the Course where diagrams can be used to help explain how economies operate.

Assess the impact on the global economy of international organisations and contemporary trading bloc agreements

Global protection levels have been significantly affected by international organisations and trade agreements. The World Trade Organisation (supported by the International Monetary Fund and World Bank) has tried to achieve reductions in trade protection levels, such as tariffs, by facilitating trade negotiations. The impact of these organisations on tariff levels can be shown in a simple supply and demand diagram (see figure A.2). For an individual economy, the removal of a tariff lowers the domestic price of products (from P^T to P^W), and increases the amount of foreign products available (from Q_2Q_3 to QQ_1). The contraction in domestic supply from import-competing firms (from $0Q_2$ to 0Q) may cause a (short-term) rise in domestic unemployment.

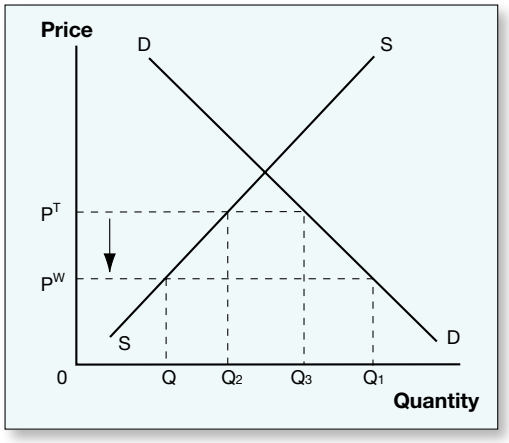


Figure A.2 – International organisations and trade agreements may result in lower tariff levels

The impact of contemporary trading bloc agreements is more complex. They may work to reduce tariff levels for all their trading partners (as is the goal of the APEC forum), or they may only reduce tariff levels for members of the trading bloc (as is the case in USMCA). In some cases, such as the European Union, however, trading blocs may not only maintain high tariff levels to shield producers from outside competition, but may also increase production subsidies, the effects of which can be shown in a diagram (see figure A.3). The production subsidies reduce the cost of production, shifting the industry's supply curve to the right, causing an oversupply of products and depressing global price levels, which will have adverse impacts on exporters outside the trading bloc that do not receive government subsidies.

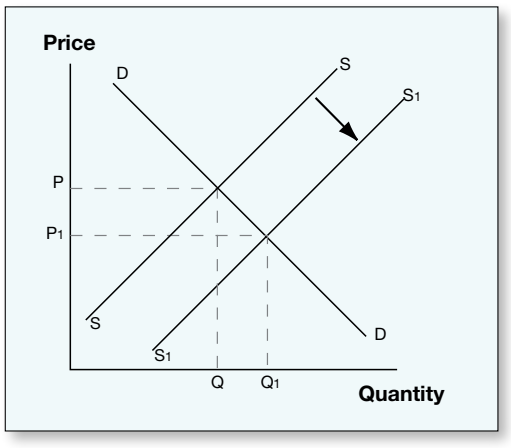


Figure A.3 – Trading blocs may increase subsidies and depress global price levels

Analyse the relationship between the balance of the capital and financial account and the net income balance

If a nation experiences a current account deficit (CAD), it must be offset by a capital and financial account (KAFA) surplus if it has a floating exchange rate system (because the supply and demand for currency must always be equal). In simple terms, the financial inflow on the KAFA must either come from overseas borrowing, which adds to the foreign debt, or through the sale of assets to overseas investors, which adds to foreign equity. Either way, a build up of debt and equity (together known as foreign liabilities) must be serviced through either interest repayments or dividend payments on the primary income account of the CAD. If a nation continues down this path, it can result in the "debt-trap" cycle, which can be difficult to break because further borrowing is required just to service past borrowings.

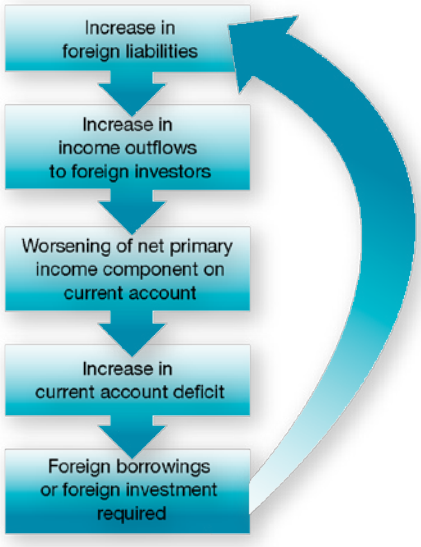


Figure A.4 – The "debt-trap" cycle

Use supply and demand diagrams to explain how the value of a currency is determined under different exchange rate systems

Supply and demand diagrams can be used to show how the value of a currency is determined. In the case of a floating exchange rate mechanism, the factors affecting the supply and demand for a currency, such as interest rates, international competitiveness, inflation rates, economic conditions and the sentiment of foreign exchange market speculators, will determine the value of the currency. Changes in these factors can be shown by shifts to the right or left of either the supply or demand curves, which will cause either an appreciation or depreciation of the currency.

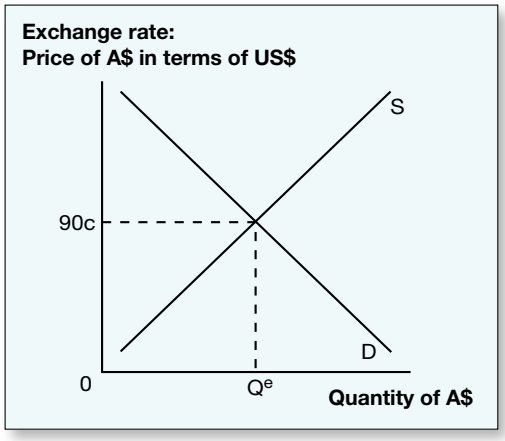


Figure A.5 – Exchange rate determination under a floating exchange rate system

A fixed exchange rate system can be explained using a similar diagram (see figure A.6). For this exchange rate mechanism, the fixed rate is drawn above or below the exchange rate that would prevail under a floating system, known as the "market rate". The government or central bank need to buy the excess currency (Q_1Q_2) if the fixed rate is above the market rate, or sell currency if the fixed rate is below the market rate.

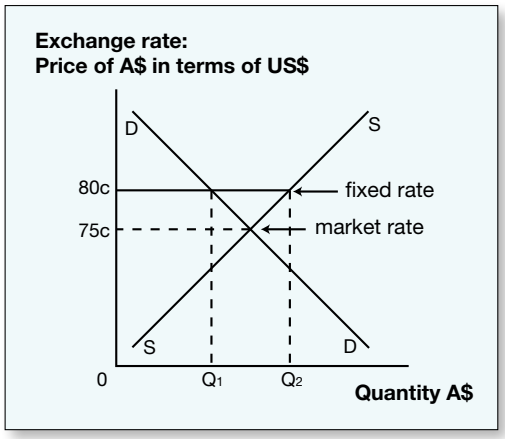


Figure A.6 – Exchange rate determination under a fixed exchange rate system

Analyse the impact of changes in the components of the balance of payments on the value of the Australian dollar

The balance of payments comprises the current account, and the capital and financial account. Any credit on the balance of payments, such as an increase in exports, increase in primary or secondary income received, or an increase in capital or financial inflow, will increase demand for the Australian dollar, causing an appreciation. Alternatively, any debit on the balance of payments, such as an increase in imports, increase in primary or secondary income payments, or an increase in capital or financial outflow, will increase the supply of the Australian dollar, causing a depreciation.

Figure A.7 shows that an increase in demand leads to an appreciation of the exchange rate. Figure A.8 shows that an increase in supply leads to a depreciation of the exchange rate.

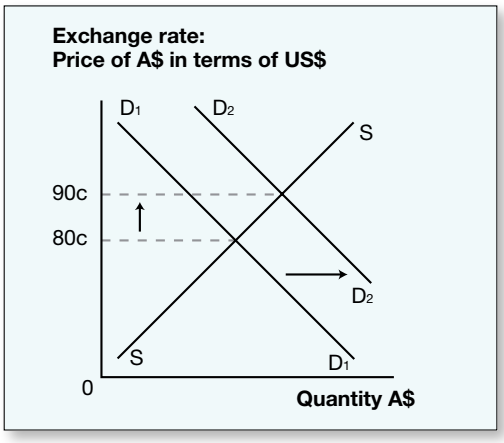


Figure A.7 – An increase in demand and appreciation of the Australian dollar

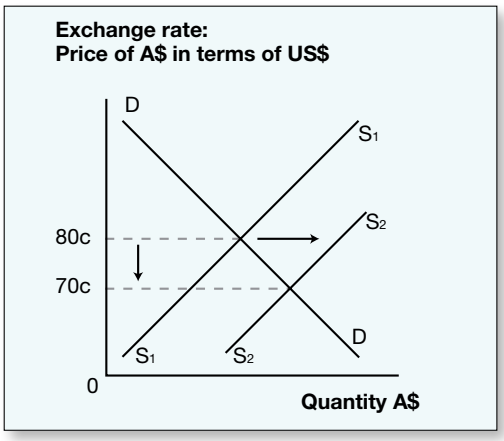


Figure A.8 – An increase in supply and depreciation of the Australian dollar

Interpret a Lorenz curve and a Gini coefficient for the distribution of income in an economy

The Lorenz curve shows us the cumulative proportion of income that is received (vertical axis) by the cumulative proportion of income recipients (horizontal axis). If income were distributed evenly across the whole population, the Lorenz curve would be the diagonal line through the origin of the graph. The further the Lorenz curve is away from this line, the greater the degree of income inequality in society.

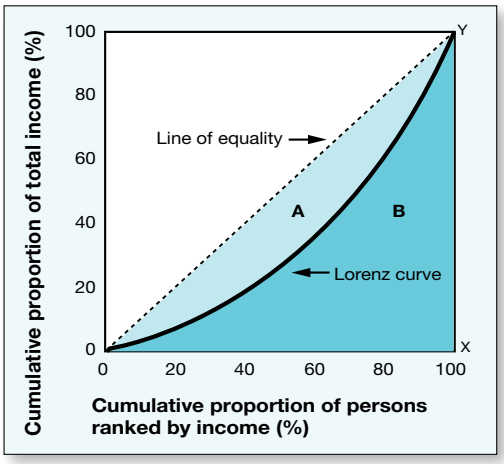


Figure A.9 – A hypothetical Lorenz curve

The Gini coefficient is a single statistic that summarises the distribution of income across the population, calculated as the ratio of the area between the actual Lorenz curve and the line of equality (area A in figure A.9) and the total area under the line of equality (A+B). The Gini coefficient ranges between zero when all incomes are equal, and one when a single individual receives all the income. The smaller the Gini coefficient, the more even is the distribution of income.

$$\text{Gini coefficient} = \frac{A}{A + B}$$

Use economic concepts to analyse a contemporary environmental issue

A key concept in explaining contemporary environmental issues such as pollution, climate change and preserving natural environments is externalities. Externalities occur because the price mechanism takes account of private benefits and costs of production to consumers and producers but does not take account of wider social costs and benefits borne by all of society. Negative externalities are a cost to society and can be shown as in figure A.10.

The society's supply curve is above the producer's supply curve. The socially optimum price is above the market price and the socially optimum quantity is below the market quantity.

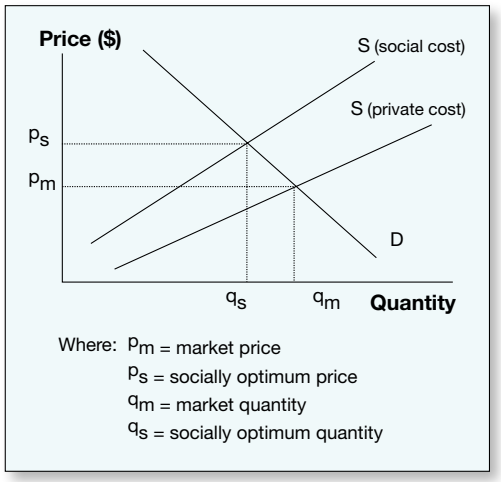


Figure A.10 – Negative externalities

Explain how governments are restricted in their ability to simultaneously achieve economic objectives

Governments face many trade-offs when trying to simultaneously achieve their economic and other policy objectives, not all of which can be demonstrated by the use of diagrams. The best known diagram that shows these conflicts is the Phillips curve diagram, which demonstrates, in the short term at least, that governments face a choice between achieving their goal of price stability (low inflation) or full employment (low unemployment) (see figure A.11). Implementing expansionary macroeconomic policy is likely to see the economy move up the curve to the left (with lower unemployment but higher inflation), while contractionary macroeconomic policy settings may see the economy move down the curve to the right (with lower inflation but higher unemployment).

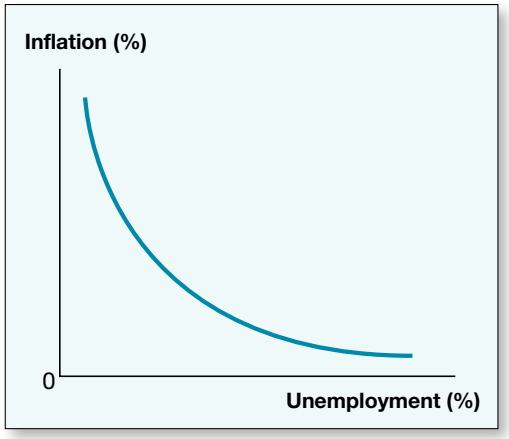


Figure A.11 – The Phillips curve

The government may also face a trade-off in its goals of full employment and a fair distribution of income. If the government imposes a minimum wage rate above the market clearing wage level, such as W_1 in figure A.12, it may reduce the level of income inequality between workers, but may also see some workers remain unemployed ($L_S - L_D$) if the real wage rate is too high to achieve equilibrium in the labour market.

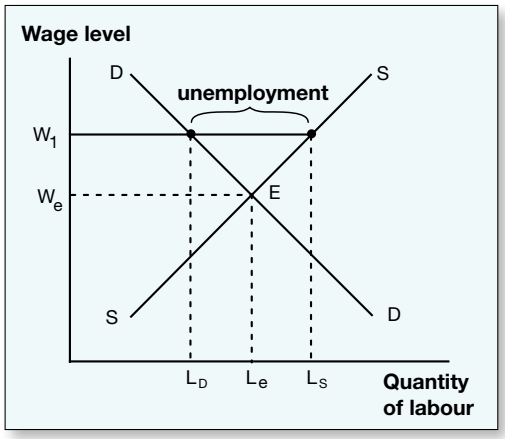


Figure A.12 – High minimum wages may cause unemployment

The government may also face a trade-off between its short-term objective of economic growth and its longer-term objective of ecologically sustainable development. If economic growth is unsustainable because of poor production techniques or the rapid depletion of natural resources, it may over time reduce the productive capacity of the economy. This can be shown by a production possibilities curve moving towards the origin because fewer goods and services can be produced.

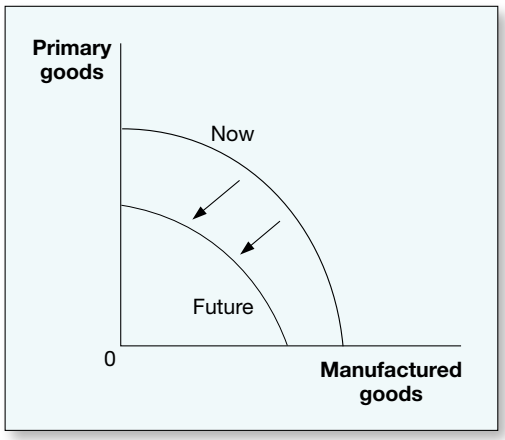


Figure A.13 – Unsustainable economic growth may reduce productive capacity in the long term

Explain the impact of key economic policies on an economy

No single diagram will show all of the economic effects of any single policy. Here are some suggestions of how diagrams explained in this section could be used to illustrate the impacts of key economic policies on particular economic indicators:

- The general impacts on output and price levels of macroeconomic and microeconomic policies can be demonstrated using the aggregate supply and aggregate demand diagram.
- The expansionary and contractionary impacts of macroeconomic policies on inflation and unemployment can be shown using the Phillips curve.
- The impacts of reducing protection levels on prices, imports, and production levels of import-competing firms can be shown using the tariff diagram.
- The impact of central bank intervention in foreign exchange markets, or of abandoning a fixed exchange rate system, could be illustrated using the exchange rate diagram.
- The impact of labour market reforms or income policy changes, such as a rise or fall in the minimum wage rate and fall or rise in unemployment, could be illustrated using the labour market diagram.
- The impact of policies on income inequality could be illustrated using a Lorenz curve.
- The impact of environmental policies to conserve or better use natural resources could be illustrated using a production possibility curve.

Explain, using economic theory, the general effects of macroeconomic and microeconomic policies on an economy

The aggregate supply and aggregate demand diagram (known as the AS-AD diagram) can be used to show the impacts of changes in macroeconomic policy, also known as demand-management policy, and microeconomic policy, also know as supply-side policy. The AS-AD diagram graphs the impacts of changes in aggregate demand and supply on the general price level and the total output (or income) of the economy.

Expansionary macroeconomic policy (such as a reduction in interest rates, a reduction in taxation or an increase in government spending) increases aggregate demand, shifting the AD curve to the right (see figure A.14). At the new equilibrium, total output and income have increased, so unemployment will fall, and there is a rise in the general price level (higher inflation).

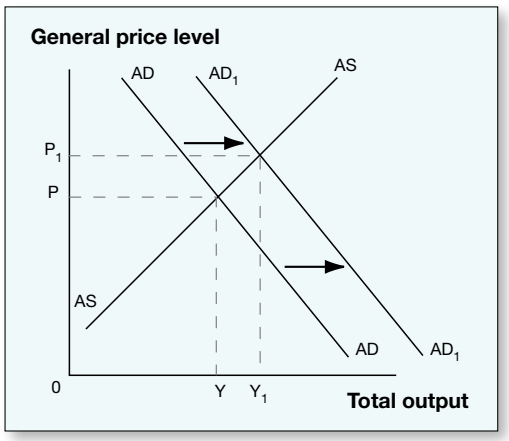


Figure A.14 – Expansionary macroeconomic policy shifts AD to the right, causing a rise in output and inflation

Contractionary macroeconomic policy (such as an increase in interest rates, an increase in taxation or a decrease in government spending) reduces aggregate demand, shifting the AD curve to the left (see figure A.15). At the new equilibrium, total output and income have decreased, so unemployment will rise, and there is a fall in the general price level (lower inflation).

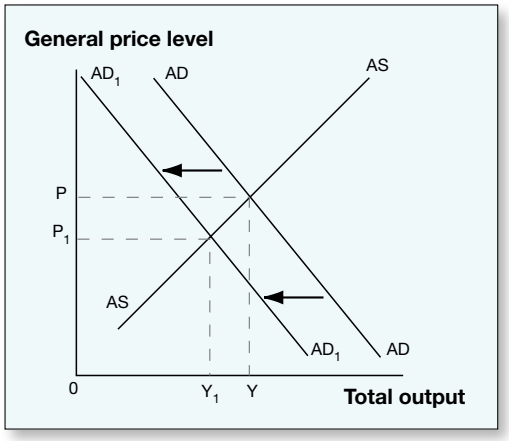


Figure A.15 – Contractionary macroeconomic policy shifts AD to the left, causing a fall in output and inflation

Microeconomic policies, such as reducing protection, deregulating markets or increasing competition, should in the long term increase aggregate supply, shifting the AS curve to the right (see figure A.16). At the new equilibrium, total output and income have increased, so unemployment will fall, and there is a fall in the general price level (lower inflation).

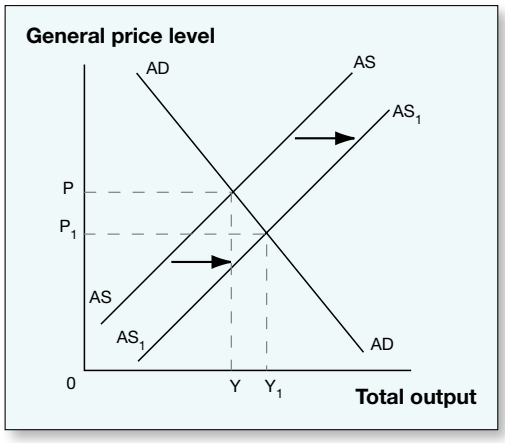


Figure A.16 – Microeconomic reform shifts AS to the right, causing a rise in output and a fall in inflation

A.3 Equations and calculations in economics

Mathematical skills play a small but important role in the Year 12 Economics course. Compared with natural sciences, the "mathematical" component of economics is relatively straightforward, involving only a handful of calculations and equations. But compared with other humanities (essay writing) subjects, like History and English, studying economics does require a greater understanding of how numbers operate, or more technically, how quantitative information can be used to understand how economies operate. Equations and calculations can be used to examine the economy as a whole, such as through the injections and leakages equations, or to quantify specific economic outcomes, such as the terms of trade index and the level of unemployment. In this section, we review the skills that require equations and calculations.

Calculate the main components of Australia's balance of payments

Explain the relationship between the current account balance and the balance of the capital and financial account

The current account and the capital and financial account are the two main components making up the balance of payments, and the sum of these two accounts adds up to zero under a floating exchange rate system. The numerical value of the current account is equal to the capital and financial account, but one account will have a positive value (in surplus) and the other will be negative (in deficit). If there is an increase in the value of the current account deficit there would be an equal increase in the value of the capital and financial account surplus.

The current account is calculated as:

net goods + net services
(the balance on goods and services)
+
net primary income + net secondary income

The capital and financial account is calculated as:

capital account + direct investment + portfolio investment
+
other investment + reserve assets + financial derivatives

The balance of payments is calculated as:

current account + capital and financial account
+
net errors and omissions = 0

Figure A.17 – Calculating the balance of payments

If you are provided a limited number of components of the balance of payments you can use the formulas shown in figure A.17 to calculate unknown components. For example, if you are provided with values of the capital and financial account surplus, and the net primary income deficit and net secondary income deficit, you can calculate the balance on goods and services.

Calculate an equilibrium position for an economy using leakages and injections

An economy is in equilibrium if savings, taxation and import leakages are equal to investment, government spending and export injections. If you are provided with the values of all six leakages and injections, you can test to see whether the economy is in equilibrium or not. If you are told that the economy is in equilibrium and you are provided with the values of five items, you can calculate the sixth item. If you know the economy is in equilibrium and you are provided with the value of three of these items and either the trade deficit

(X-M), the budget deficit (G-T) or the savings-investment imbalance (S-I), you can also calculate the remaining item. **Remember** – the leakage and injection equation is only true when the economy is in equilibrium. Therefore, it is sometimes called an **equilibrium condition**.

$$S + T + M = I + G + X$$
$$\text{Leakages} = \text{Injections}$$

- **S** = saving by households
- **T** = taxation by the government
- **M** = spending on imports
- **I** = investment spending by businesses
- **G** = government spending
- **X** = export revenue

Note: If you are given a question and you are provided with or need to calculate the level of consumption (C), aggregate demand (AD), or income (Y, also known as aggregate supply), the leakage/injection equation will not help because C, AD and Y are not in that equation. In this case you need two other equations – those for aggregate demand and aggregate supply. The equation for aggregate demand is consumption plus investment plus government spending plus "net exports". The equation for aggregate supply (income) is consumption plus savings plus taxation. Both the AD and AS equations are **identities**, in that they are always true regardless of whether the economy is in equilibrium or disequilibrium. If you set AD and AS equal to each other, that is, for equilibrium, a simple substitution and rearrangement of the equation gives the leakage and injection equation.

Equilibrium occurs when:

Aggregate Supply = Aggregate Demand

Y = AD

Substituting for aggregate demand gives:

$Y = C + I + G + (X - M)$

Substituting for aggregate supply gives:

$C + S + T = C + I + G + (X - M)$

By rearranging the equation:

$S + T + M = I + G + X$

Leakages = Injections

It is a good idea to become very familiar with the various combinations of these equations that can be used to calculate the values of economic indicators.

Determine the impact of the (simple) multiplier effect on national income

Explain the implications of the multiplier for fluctuations in the level of economic activity in an economy

Use (simple) multiplier analysis to explain how governments can solve economic problems

The multiplier shows that if equilibrium in the circular flow is disrupted by an injection or leakage, it will have a more than proportional impact on national income. An injection of export revenue to businesses, for example, initially results in a proportional increase in income for individuals. When individuals spend this income on consumption, it further boosts firm revenue and individual income – multiplying the effect of the export injection. However, the increase in individual income will also increase individuals' savings, taxation payments and spending on imports (which are all leakages). These all reduce the "speed" of the multiplier.

For the Year 12 Course, we limit our concern to the "simple" multiplier, which only takes into account the savings leakage. The multiplier is calculated as 1 divided by the "speed limit" – the marginal propensity to save. To calculate the total impact on national income of an injection or leakage, multiply the initial change in the injection or leakage (the change in aggregate demand) by the multiplier.

$$AD = C + I + G + (X - M)$$

Where:

- AD = aggregate demand
- C = consumer spending by households
- I = investment spending by businesses
- G = government spending
- X = export revenue
- M = spending on imports

$$Y = C + S + T$$

Where:

- Y = aggregate supply or national income
- C = consumer spending by households
- S = saving by households
- T = taxation by the government

$$k = \frac{1}{MPS}$$ (k being the symbol for the multiplier)

or

$$k = \frac{1}{1-MPC}$$ (since MPC + MPS = 1)

$$\triangle Y = k \times \triangle AD$$

The size of the multiplier is an indication of how much economic activity will fluctuate in the event of an economic shock. A lower marginal propensity to save increases the multiplier and makes economic fluctuations larger. Conversely, a higher marginal propensity to save decreases the multiplier and reduces economic fluctuations.

$$\uparrow k = \frac{1}{\downarrow MPS}$$

Lower savings leakage increases the multiplier and economic fluctuations

A higher multiplier generally makes life more difficult for governments. The economy will experience greater fluctuations when there are economic shocks of increased injections or leakages, suggesting the economy will need more active macroeconomic (counter-cyclical) policies. And yet the economy with the higher multiplier will also be more responsive to policy instruments, making "fine-tuning" more difficult. When the multiplier is lower, fiscal policy adjustments (government spending and taxation) and monetary policy adjustments (interest rates, which mainly affect investment and consumption flows) are less necessary and have a smaller impact.

Calculate the unemployment rate and the participation rate using labour force statistics

Two important labour market outcomes require a calculation. The first is the labour force participation rate, which is the total number of people employed or unemployed, divided by the working-age population. The second is the unemployment rate, which is the total number unemployed, divided by the labour force.

$$\text{Labour force participation rate (\%)} = \frac{\text{Labour force}}{\text{Working-age population (15+)}} \times \frac{100}{1}$$

$$\text{Unemployment rate (\%)} = \frac{\text{Number of persons unemployed}}{\text{Total labour force}} \times \frac{100}{1}$$

A.4 Interpreting economic data and information

Our study of economics would be incomplete (and fairly boring) if we only ever looked at diagrams, equations and economic theories without reference to how economies operate in the real world. Analysing the nature of economic relationships and the performance and structure of economies in the real world is central to the Year 12 Course. In broad terms, the Syllabus highlights the importance of researching information from a variety of sources; analysing, synthesizing and evaluating that information; and being able to communicate economic information, ideas and issues. In the final section of this chapter, we look at the key skills in the Year 12 Syllabus that require individual research and how you can **find, interpret and explain economic data and information**.

In what follows, we **focus on the use of the internet and websites**, highlighting the role of online resources on economic research methods and techniques. For each of the key skills highlighted in the Syllabus, we have identified a range of useful websites, and information on how to best use them. There are six broad categories of websites that we discuss – latest news, Australian Government sites, financial institutions, community sector organisations, international organisations, and educational bodies.

Analyse statistics on trade and financial flows to determine the nature and extent of global interdependence

Global interdependence is a complex phenomenon that can not be adequately described by a couple of statistics showing that trade flows and financial flows have increased in recent decades. Appreciating the more subtle features of global interdependence requires an understanding of specific trends in trade and financial flows, such as the pace and volatility of trade growth, the level of interdependence between regions and countries, the extent of changes to financial flows, and identifying who and what are the most important drivers of global economic flows. The World Bank website provides sample tables of globalisation statistics and links to other websites and documents. Most major international organisations have their own statistical databases, and key economic publications: the World

Development Indicators (from the World Bank), the World Trade Report (from the World Trade Organisation), the Trade and Development Report and the World Investment Report (from the United Nations Conference on Trade and Development), and the World Economic Outlook (from the International Monetary Fund).

World Bank: www.worldbank.org

World Trade Organisation: www.wto.org

United Nations Conference on Trade and Development: www.unctad.org

International Monetary Fund: www.imf.org

Assess the impact on the global economy of international organisations and contemporary trading bloc agreements

Globalisation has increased the importance and role of organisations that operate across the borders of different economies. Most of these bodies are trade-related – from the global influence of the World Trade Organisation to the regional influence of the Association of South-East Asian Nations, to the local influence of bilateral trade deals. Each of these organisations and agreements has a website that outlines their basic functions, explains how they have influenced economic policies in member countries and provides research and publications analysing their economic impact. Several organisations such as Oxfam provide websites with information and arguments that are critical of the current structure of global trade. The World Bank's website has a wealth of analysis and statistics about the global economy and its activities. Australia's free trade agreements are also explained on a government web page.

World Trade Organisation: www.wto.org

International Monetary Fund: www.imf.org

World Bank: www.worldbank.org

United Nations: www.un.org

European Union: europa.eu/index_en.htm

APEC Forum: www.apec.org

Association of South-East Asian Nations: asean.org

Free Trade Agreements: www.dfat.gov.au/trade

Evaluate the impact of development strategies used in a range of contemporary and hypothetical situations

One of the most complex tasks faced by economists is assessing whether or not development strategies in individual economics have been successful. A central requirement in the Year 12 Course is that you must undertake a case study of an economy other than Australia. *The Economist* magazine offers analysis of development strategies and the economic performance of individual countries (although not all information is free). The United Nations Development Programme and United Nations Conference on Trade and Development publish a lot of material about development strategies. The Organisation of Cooperation and Development publishes economic briefings for OECD and some non-member economies. The Centre for Global Development in Washington is one of the world's most highly regarded think tanks on development issues.

United Nations Development Programme: www.undp.org

The Economist: www.economist.com

OECD: www.oecd.org

United Nations Conference on Trade and Development: www.unctad.org

Centre for Global Development: www.cgdev.org

Use economic concepts to analyse a contemporary environmental issue

At a general level, some of the environmental issues facing the Australian economy include preserving natural environments and controlling pollution of land, water and the air. More specific problems include dry-land salinity and the sustainable use of water for agricultural, household and business use. Useful Government websites include the federal Department of the Environment and Energy and the NSW Office of Environment and Heritage. At a global level, the main contemporary environmental issue is climate change. You can get information about climate change and policies from a range of sources, including the United Nations.

Australian Government Department of the Environment and Energy: www.environment.gov.au

Australian Conservation Foundation: www.acf.org.au

United Nations Framework Convention on Climate Change: www.unfccc.int

www.environment.nsw.gov.au

Identify and analyse problems facing contemporary and hypothetical economies

Assess the key problems and issues facing the Australian economy

Identify limitations of the effectiveness of economic policies

Propose and evaluate alternative policies to address an economic problem in hypothetical and the contemporary Australian contexts

Select an appropriate policy mix to address a specific economic problem

These final five economic skills are of a general nature, covering the second half of the Course – Topic 3 Economic Issues and Topic 4 Economic Policies and Management. Interpreting economic data and information for these skills is a potentially endless job. So instead of limiting you to a few websites, we would recommend you consult widely from a range of sources. In visiting some of the following websites, you should be able to explain, using statistics and other evidence, the key features of economic problems and how government policies are (or could) addressing these problems.

- **Government agencies** like the Australian Bureau of Statistics, the Reserve Bank, the Productivity Commission and the Australian Competition and Consumer Commission, and Government departments like Treasury and Foreign Affairs and Trade all publish statistics and analysis of Australian economic problems and policies.
- **Research bodies** like the National Centre for Social and Economic Modelling and the Melbourne Institute (attached to universities), the Grattan Institute (independent), and the Economic Society of Australia and Australian Business Economists (professional associations) publish more specialised (and more difficult to understand) economic papers.
- **Private sector organisations** such as commercial banks and financial services companies are good sources for up-to-date and market-oriented commentary about Australia's economic policy and performance.
- **Economic media** sources such as the *Australian Financial Review* and Australian Policy Online have some of the most concise and up-to-date commentary on Australian economic issues and policies.
- **Think tanks, industry associations, trade unions and community organisations** often focus on a small number of economic issues, and can have highly relevant commentary for some parts of the Course. Examples include The Australia Institute, the Australian Industry Group, the Business Council of Australia, the Committee for the Economic Development of Australia, the Australian Council of Trade Unions and the Australian Council of Social Services.

If you still haven't had enough of economics, check out some of the following websites:

www.economics.com.au – the blog of Core Economics has commentary on current economic issues from a range of authors.

www.institutional-economics.com – website with views on economics and financial markets run by Dr Stephen Kirchner.

https://www.nytimes.com/column/paul-krugman – blog of one of the world's leading economic commentators, Princeton Economics Professor and *New York Times* Columnist Paul Krugman.

https://thekouk.com/blog.html – blog of one of Australia's leading economists

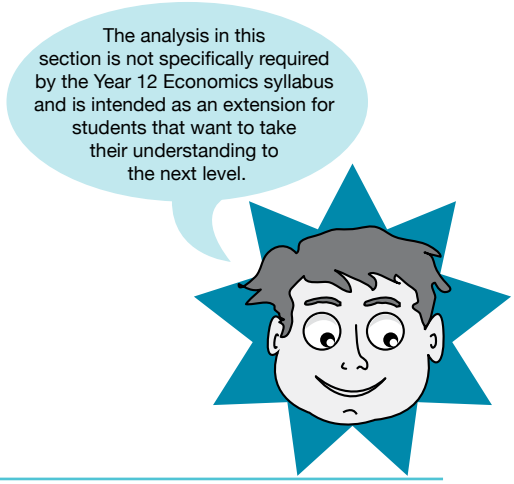
Advanced Economic Analysis

B.1 Comparative advantage and gains from trade

B.2 Income-expenditure diagram

B.3 Long-run Phillips curve

B.4 Limitations of macroeconomic policy



B.1 Comparative advantage and gains from trade

In sections 2.1 and 2.2 of chapter 2 we examined the advantages and disadvantages of free trade and the reasons for protection. In this section we take our analysis further, looking at how countries can achieve gains from trade when they specialise in the production of goods and services in which they have a comparative advantage.

Absolute advantage

By way of background, it is important to note that in the field of economics, few topics have generated quite as much debate as the issue of free trade. These debates returned to centre stage in global affairs after the 2016 election in the United States, with protectionist policies at the top of President Trump's agenda. Among economists, debates over trade policy are mainly concerned with a range of more subtle issues, such as whether protection is justified for certain industries or during certain circumstances; which methods of protection are better and worse for the economy; and whether bilateral and regional trade agreements play a constructive role in achieving global free trade. Most fierce, however, are the debates inside the World Trade Organisation negotiations in recent years about the process by which freer global trade should be achieved.

Trade theory traces its origins back to the writings of Scottish economist Adam Smith, a man generally regarded as the founder of modern economics. In his 1776 book, *The Wealth of Nations*, Smith argued against the prevailing wisdom of the time, known as **mercantilism**, which stated that countries should use heavy protectionist methods to maximise their exports and minimise their imports, thus achieving a trade surplus and an inflow of wealth in the form of gold and silver (used for international transactions at the time). Adam Smith, by contrast, argued that this strategy would produce inflation because the inflow of gold and silver might not be matched by an increase in the production of goods and services. Smith argued that it was better for a country to specialise in the production of goods it could produce efficiently, and import goods from other countries if they could produce them more efficiently.

Adam Smith's argument for free trade is known as **absolute advantage**. This theory states that achieving an increase in a nation's wealth requires the removal of protection and encouraging specialisation in those products in which the economy has an absolute advantage. An economy has an absolute advantage if it can produce a greater quantity of a product with a given level of resources than another economy is able to. Smith argued that by reducing protection, consumers would gain access to more goods and services at lower prices, which would improve standards of living.

> *"If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of [sic] them with some part of the produce of our own industry, employed in a way in which we have some advantage."*
>
> *– Adam Smith, An Inquiry Into the Nature and Causes of the Wealth of Nations, Book IV.*

However, the theory of absolute advantage is not a sufficient basis for global free trade. It suggests that countries that are unable to produce any product with an absolute advantage (perhaps due to a lower skilled labour force or poor production techniques) have no basis for trade.

Comparative advantage

The theory that best illustrates the benefits of free trade is **comparative advantage**, which was developed by another British economist, David Ricardo, writing almost half a century after Adam Smith.

Comparative advantage states that an economy should specialise in the production of goods and services that it can produce at a **lower opportunity cost**, even if it cannot produce a greater quantity than another economy. Comparative advantage is focused on the relative efficiencies of production. When an economy specialises in production of a good in which it has a comparative advantage, it can trade with other economies using the income from its exports to pay for imports of products in which it does not have a comparative advantage.

The theory of comparative advantage can be illustrated using a simple model with a few assumptions. There are two economies, Australia and France, which produce two products, grapes and cheese, of identical quality and each economy has the same resource endowment. Each economy has a different set of production techniques, which leads to different output quantities. In the example in figure B.1, Australia can produce a maximum of 300 tonnes of grapes or a maximum of 100 tonnes of cheese. France can produce a maximum of 400 tonnes of grapes or 300 tonnes of cheese.

	Grapes (tonnes)	Cheese (tonnes)
Australia	300	100
France	400	300

Figure B.1 – A simple two-good two-economy model

In the example above, France has the absolute advantage in the production of both grapes and cheese since with the same level of inputs it can produce a greater quantity of each compared with Australia. Under the theory of absolute advantage there is no basis for trade between the countries.

To determine which economy has a comparative advantage we must calculate the opportunity costs within each economy. We first determine which economy has a comparative advantage in grapes. To do so, we must calculate the opportunity cost of growing grapes in Australia and then in France.

In Australia:

$$\text{Opportunity cost of grapes} = \frac{\text{Cheese}}{\text{Grapes}} = \frac{100}{300} = \tfrac{1}{3} \text{ tonnes of cheese}$$

In France:

$$\text{Opportunity cost of grapes} = \frac{\text{Cheese}}{\text{Grapes}} = \frac{300}{400} = \tfrac{3}{4} \text{ tonnes of cheese}$$

For Australia to produce an additional tonne of grapes it must give up production of one-third of a tonne of cheese, whereas France must give up three-quarters of a tonne of cheese. Since Australia had to give up fewer resources to produce grapes, Australia has a comparative advantage in grapes.

We will now determine which economy has a comparative advantage in cheese. As we did before, we calculate the opportunity costs of making cheese in Australia and then in France.

In Australia:

$$\text{Opportunity cost of cheese} = \frac{\text{Grapes}}{\text{Cheese}} = \frac{300}{100} = 3 \text{ tonnes of grapes}$$

In France:

$$\text{Opportunity cost of cheese} = \frac{\text{Grapes}}{\text{Cheese}} = \frac{400}{300} = 1\tfrac{1}{3} \text{ tonnes of grapes}$$

For Australia to produce one additional tonne of cheese it must give up producing three tonnes of grapes, whereas France must give up only one and a third tonnes. Since France had to give up fewer resources to produce cheese, France has a comparative advantage in cheese.

You will notice from the previous example that it is impossible for one economy to have a comparative advantage in both products. If one economy is relatively better at producing one product, then it must be relatively worse at producing the other.

Following the theory of comparative advantage, Australia ought to specialise in the production of grapes and import cheese from France. France ought to specialise in the production of cheese and import grapes from Australia.

Ordinarily, the level of consumption within an economy is limited by its production possibilities curve. In a closed economy (one which does not trade), the economy will consume all that it produces. In the Preliminary Economics Course we saw that if an economy is at full employment of resources, it cannot produce on a point outside the production possibilities curve. The only way to increase production levels is to improve production methods or discover new resources.

However, an economy is able to consume at a point above its production possibility curve through international trade. By specialising in the production of goods and services in which the economy has a comparative advantage and trading with another economy, there will be a greater amount of goods and services available in the global economy, allowing for higher consumption in each economy.

Gains from trade

To examine the gains from trade we return to our example where Australia was specialising in grapes and France was specialising in cheese. Remember that Australia could produce 300 tonnes of grapes or 100 tonnes of cheese and France could produce 400 tonnes of grapes or 300 tonnes of cheese. These production possibilities are shown in the production possibility curves (unbroken lines) in figure B.2.

To calculate gains from trade we must now also consider the **prices** of the two products. Let us suppose that cheese is twice as expensive as grapes – that is, one tonne of cheese will purchase two tonnes of grapes or one tonne of grapes will buy half a tonne of cheese.

Australia begins by producing 300 tonnes of grapes. It exports some of its produce. For each tonne of grapes that Australia exports it is able to import half a tonne of cheese. If Australia exports all of its grapes, it will be able to import a total of 150 tonnes of cheese. This is illustrated graphically in Australia's **consumption possibilities curve** (the broken line in figure B.2). The consumption possibilities curve begins at the country's point of specialisation (in this case, 300 tonnes of grapes) and extends out to the maximum number of imports the country can afford (150 tonnes of cheese).

Similarly, imagine France begins by producing 300 tonnes of cheese. It exports some of its produce. For each tonne of cheese it exports, it is able to import two tonnes of grapes. If France wants to purchase all of Australia's grapes, it only has to sell 150 tonnes of cheese. This is illustrated in France's consumption possibilities curve.

Notice that in figure B.2 for each economy the consumption possibilities curve is higher than the production possibilities curve, allowing each economy to consume a greater quantity than it could without trade.

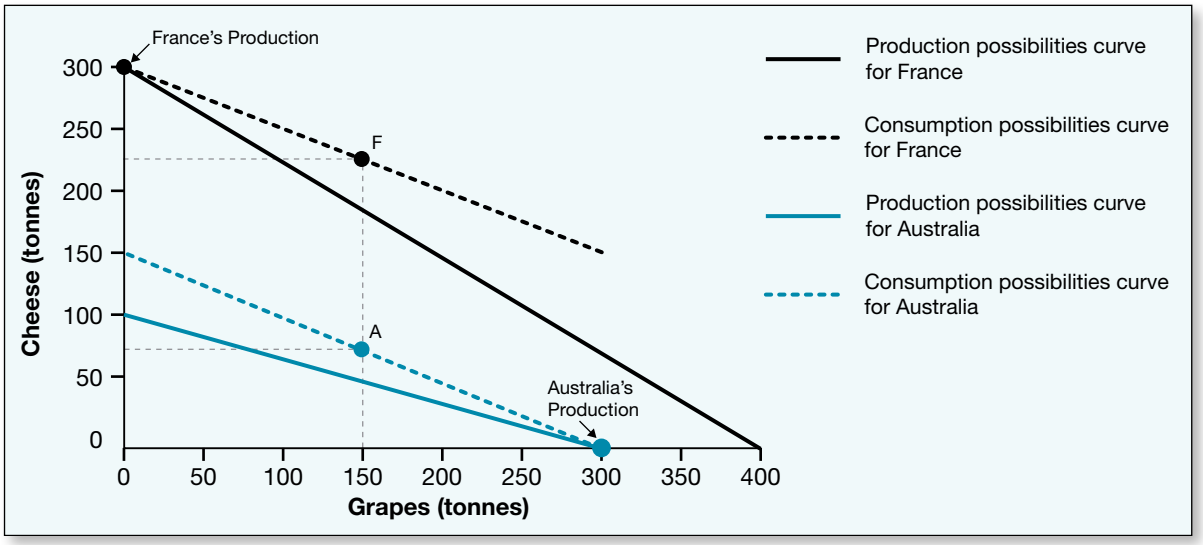


Figure B.2 – Gains from trade

The actual consumption combination will be determined by consumer demand within each economy. Suppose, for example, that given the price of cheese, Australia sells 150 tonnes of grapes to buy 75 tonnes of cheese. Australia will consume at point A on its consumption possibilities curve, and is able to consume 25 more tonnes of cheese than it could produce itself. France sells 75 tonnes of cheese and purchases 150 tonnes of grapes, consuming at point F, also above what it could have produced itself.

Terms of Trade

The consumption possibilities curve is determined by the **terms of trade**, which measures the price level of an economy's exports relative to the price of its imports. If the terms of trade improve, an economy is able to purchase more imports with a given quantity of exports. If the terms of trade deteriorate, the economy can purchase fewer imports with the same level of exports.

A movement in the terms of trade will alter the consumption possibilities curve. Suppose now that Australia's terms of trade improves, and when Australia sells 150 tonnes of grapes it can purchase 100 tonnes of cheese. Australia's consumption possibilities curve will shift upward – the improvement in the terms of trade means that for every tonne of grapes Australia exports it can now import a higher quantity of cheese.

However, since France exports cheese, which has fallen in price, its terms of trade will have deteriorated. Its consumption possibilities curve will fall since every tonne of grapes that France wishes to import must be paid for with a higher quantity of cheese. However, France's consumption possibilities curve is still higher than the production possibilities curve, and so France will continue to trade with Australia so long as the gains from trade exist.

The theory of comparative advantage provides a powerful argument in favour of free trade. Not only will firms benefit from increased levels of output, but overall levels of consumption can rise throughout the world, improving the standards of living for millions of people in absolute poverty, and overcoming some of the limits imposed by the natural scarcities within individual countries.

This does not mean, however, that the arguments supporting protection (examined in section 2.2) are all invalid or that continued use of protectionist policies in the global economy is surprising. In the simple model above, for example, we assumed the free movement of labour and capital between the grape and cheese industries in Australia, depending on changes in consumer tastes and price levels.

The real world is very different: if cheese production were to grind to a halt overnight, dairy industry workers would not simply leave their Victorian cheese factory to take up a job on a South Australian vineyard. It might be too far away. They may not have the right skills. The former dairy worker might be unemployed for a long period of time. The grape and cheese example also does not consider the impact of a shrinking grape industry on French culture and farm life, for example, or how a surge in imported grapes will affect the French economy's trade balance or exchange rate. While it is one of the most powerful theories in economics, comparative advantage has clearly not ended all disagreements about trade policy in the global economy.

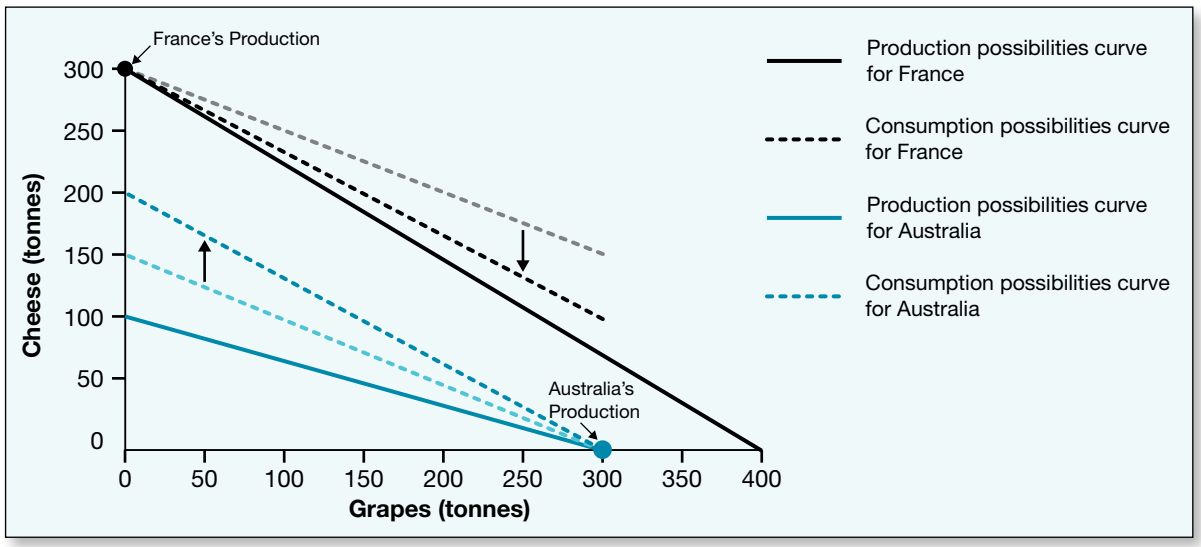


Figure B.3 – Effect of terms of trade

B.2 Income-expenditure diagram

In sections 7.2 and 7.3, we examined the conditions for equilibrium in the economy, the components of aggregate demand and supply, and the multiplier process through which changes in aggregate demand cause the economy to grow. In this section we examine these economic principles through the income-expenditure diagram.

The income-expenditure diagram is shown in figure B.4. It has income (Y) on the x-axis and expenditure (E) on the y-axis. And on the income-expenditure diagram there are two lines – the line of equilibrium and the line of aggregate demand.

First, the line of equilibrium. When expenditure (aggregate demand) is equal to income (aggregate supply), the economy is in equilibrium. This means that whenever the economy is on a point on the **Y = E line**, that is the **45-degree diagonal line**, the economy's injections equal its leakages, and the economy is in **equilibrium**.

Another relationship between income and expenditure is shown in the **aggregate demand line**. When there is a change in income, there is a change in expenditure by individuals across the economy.

In section 7.2, we looked at a simple version of the aggregate demand equation:

$$AD = C + I + G + (X - M)$$

So, what is the relationship between aggregate demand and income? In our most simple model, investment, government spending, and net exports are considered independent of income (that is, they do not rise or fall when income changes). Therefore, it is **via consumption** that income and expenditure are related. When income increases so too does consumption, and hence, overall expenditure in the economy. However, not all additional income is spent on consumption; some is leaked into savings. And even when income is very low, individuals will still spend a small amount on necessities, paid for out of their savings, or by borrowing money. Consumption is equal to this "autonomous consumption", C_0, plus the proportion of income that is spent on "induced consumption", calculated as the marginal propensity to consume multiplied by income.

$$C = C_0 + mpcY$$

Therefore,

$$AD = C_0 + mpcY + I + G + (X - M)$$

Putting these three factors together, the aggregate demand line is **upward sloping** (because higher income means higher expenditure), **flatter than 45 degrees** (because of the savings leakage) and **cuts the y-axis above the origin** (because investment, government spending, net exports and autonomous consumption are independent of income). Figure B.4 shows the income-expenditure diagram. Where the aggregate demand line cuts the 45 degree line, the economy is in equilibrium, at Y_1.

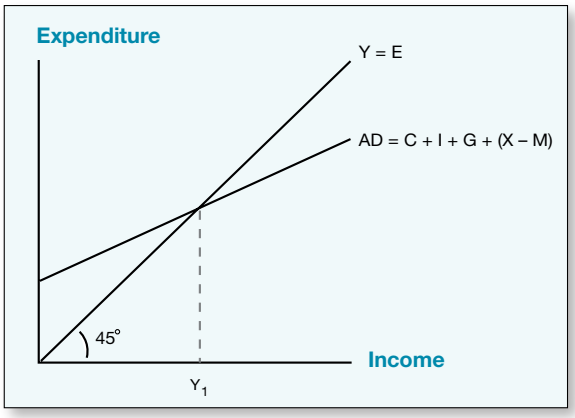


Figure B.4 – Income-expenditure diagram

If there is a change in any of the components of aggregate demand (for a reason other than a change in income), the AD line will move upwards or downwards.

- A rise in consumption, investment, government spending, exports (or a fall in imports) will shift the AD line upwards.
- A fall in consumption, investment, government spending, exports (or a rise in imports) will shift the AD line downwards.

Also note that the AD line will become steeper if there is a rise in the marginal propensity to consume and flatter if there is a decrease in the marginal propensity to consume.

Figure B.5 shows that a rise in aggregate demand (such as from a rise in investment caused by an increase in business confidence) shifts the AD line upwards from AD_1 to AD_2. Equilibrium will be achieved when income increases from Y_1 to Y_2. Note that income has increased by more than the initial change in aggregate demand because changes in AD have a multiplied impact on national income. If you were to calculate $Y_2 - Y_1$ divided by $AD_2 - AD_1$, this would give you the size of the multiplier in the economy.

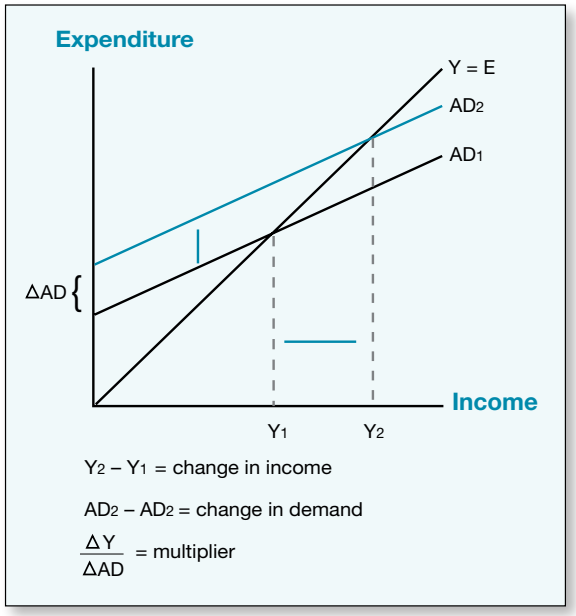


Figure B.5 – An increase in aggregate demand and national income

With the orderly adjustment process outlined above, it is not immediately obvious why governments decide to intervene in the operation of the economy. Each time there is a shock, the multiplier process does its magic, and the economy adjusts to its new level of equilibrium income and expenditure. Why should governments use macroeconomic policies to increase or decrease aggregate demand if the multiplier process can already do the job?

The answer, as outlined by British economist John Maynard Keynes, is that there may be a difference between the equilibrium level of income determined by the forces of demand and supply, and the level of income consistent with full employment. Put another way, it is possible for the economy to reach an equilibrium, that is, there be no tendency to change, and for the unemployment rate to still be high. In figure B.6, the **current equilibrium level of income**, Y_e is below the **full employment level of income** Y_f. The difference between AD_1 and the 45 degree line at Y_f is called the **deflationary gap**.

In this economy, the government may want to increase government spending, G, to increase aggregate demand and raise income to its full employment level. Figure B.6 shows that the government, by increasing government spending from G_1 to G_2, can increase aggregate demand from AD_1 to AD_2 and boost income from its initial equilibrium level Y_e to the full employment level of income, Y_f.

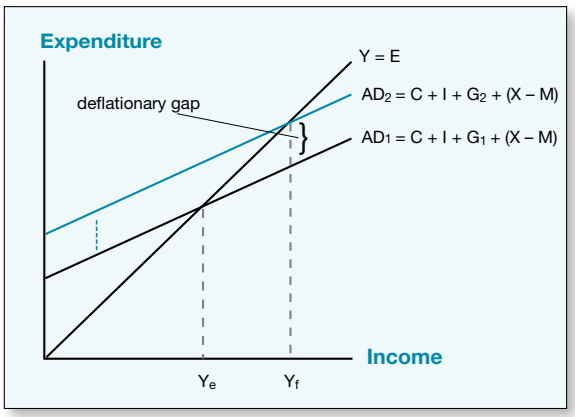


Figure B.6 – Full employment equilibrium and the deflationary gap

Alternatively, if the full employment level of income was below the current equilibrium level (that is, Y_f was to the left of Y_e), there would be an **inflationary gap**. The government may want to decrease government spending, G, to reduce aggregate demand and income to contain inflationary pressures in the economy. Therefore, macroeconomic policies are important to achieve the government's objective of reducing unemployment and inflation. The relationship between the output of the economy, unemployment and inflation is discussed in further detail in chapters 8, 9 and 13.

B.3 Long-run Phillips curve

The Phillips curve shows the trade-off governments face in trying to simultaneously achieve the economic objectives of low inflation and low unemployment. While higher economic growth creates jobs and reduces unemployment, it can also lead to excessive demand in the goods market, pushing up prices. It can also create extra demand in the labour market, causing an increase in wages, which will add to inflation as businesses raise prices to protect profit margins. The principle of a trade-off between low inflation and low unemployment was an important part of macroeconomic policy setting in the decades following the Second World War. In the economy shown in figure B.7, for example, expansionary government policies could reduce the unemployment rate from 6 per cent to 3 per cent, but only at the cost of increasing the rate of inflation from 2 per cent to 4 per cent (that is, moving from point A to point B).

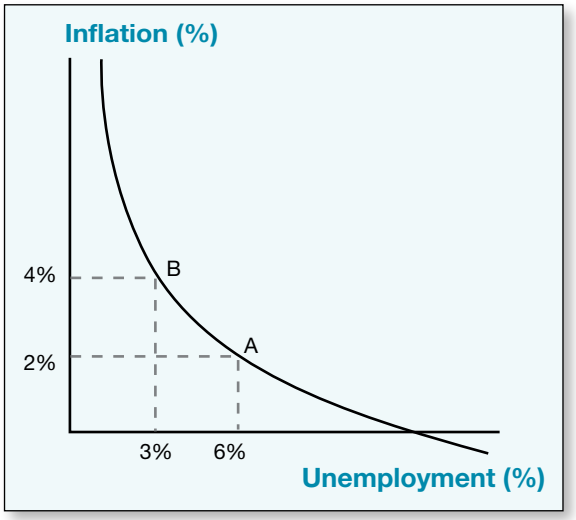


Figure B.7 – Phillips curve

In the 1970s, however, this relationship between unemployment and inflation broke down. (In reality, it never existed as neatly as the theory suggested). In Australia, as in many other industrialised nations, inflation levels increased and remained high even when the economy was stagnating and unemployment was high – a situation called **stagflation**. It was not clear whether governments should be loosening macroeconomic policies to reduce unemployment or tightening macroeconomic policies to combat rising inflation. At one level, the new crisis simply demonstrated that inflation has cost-push causes, such as the world oil price spikes of the time, as well as demand-pull causes, such as faster economic growth. However, the high rates of inflation and unemployment were such an intractable problem for governments that it prompted an entire rethink of the relationship between unemployment and inflation.

The outcome of this rethink was the **Long-run Phillips curve** (also called the Friedman-Phelps Expectations Augmented Phillips curve). This new curve was based on the inclusion of two long-term economic principles in the explanation of the relationship between inflation and unemployment: the natural rate of unemployment and inflationary expectations. The **natural rate theory** says that there will always be some level of frictional, structural, seasonal, and hard-core unemployment, U_n, that cannot be addressed through demand-management or macroeconomic policies. If a government uses expansionary macroeconomic policies to lift demand and reduce unemployment, it will result in an increase in wage levels and inflation. As workers become used to the higher level of inflation, they will begin to demand even higher wages, which, if granted, will see the unemployment rate return to its natural level. Their **inflationary expectations**, however, will remain high. As a result, in the "long-term" (defined here as the time it takes for workers' expectations of inflation to catch up to the new level), expansionary macroeconomic policy is not effective in reducing unemployment because unemployment is locked-in at the natural rate. The only long-term impact of expansionary policy is a permanently higher level of inflation.

Figure B.8 shows the Friedman-Phelps Expectations Augmented Phillips curve. The Long-Run Phillips curve is a vertical line at the natural rate of unemployment, U_n, which is equal to 5 per cent in this hypothetical economy. The economy starts on Short-Run Phillips curve P_1, at point A, with an unemployment rate of 5 per cent and 0 per cent inflation. If the government operates expansionary macroeconomic policy, such as through an increase in government spending, the economy will move to point B, with a lower rate of unemployment at 3 per cent, but higher rate of inflation at 2 per cent.

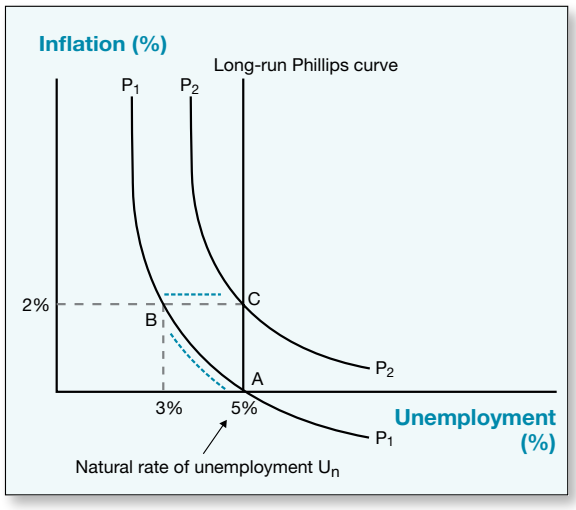


Figure B.8 – Friedman-Phelps Expectations Augmented Phillips curve

However, when workers realise inflation is now 2 per cent, they will demand higher wages to offset the increase in the cost of living. Businesses, realising that the prices of other goods have also risen by 2 per cent, and facing higher wage costs, are likely to cut back production and reduce their workforce. Unemployment will slowly creep back up to the natural rate, but inflationary expectations will remain high. The economy jumps from one Short-run Phillips curve to another – from P_1 to P_2. In the long term, the expansionary policies have simply raised inflation to 2 per cent with the same level of unemployment – that is, the economy will be at point C.

In theory, the processes outlined above can be reversed through the adoption of contractionary macroeconomic policies. Tight macroeconomic policies will move the economy downwards to the right along a Short-run Phillips curve. Inflation will fall and unemployment will rise. When the inflationary expectations of businesses and workers fall, the economy will gradually return to the natural level of unemployment, but with a lower level of inflation. The economy will have shifted onto a lower Short-run Phillips curve and move back to where it started. This would suggest that any damage done (to inflation) by short-term policies to expand the economy and reduce unemployment can be easily reversed.

However, macroeconomic policy experience has found that this is not the case. Contractionary economic policies, which raise the level of unemployment in the short term, also tend to increase the natural rate of unemployment. This phenomenon, called **hysteresis**, is where the cyclically unemployed lose their skills, job contacts and motivation while unemployed, and subsequently find it difficult to get a job even when economic conditions pick up (that is, they become structurally unemployed). In figure B.8, hysteresis would be shown by a **rightward shift** of the Long-run Phillips curve when unemployment is higher than the natural rate.

The analysis of the Friedman-Phelps Expectations Augmented Phillips curve has **profound implications for macroeconomic policy**:

1. Expansionary macroeconomic policy cannot reduce the level of unemployment in the long run.
2. Expansionary macroeconomic policy will only increase the level of inflation in the long run.
3. Contractionary macroeconomic policy may increase the level of unemployment in the long run through hysteresis.
4. The only way to reduce unemployment in the long run is through supply-side or microeconomic policies.
5. It is important to contain inflationary expectations.

This analysis led policymakers to give priority to reducing inflation, putting a higher priority on long-term measures to reduce unemployment.

Australia's policy mix reflects some of the lessons of the Friedman-Phelps Augmented Phillips curve. The most important macroeconomic policy, monetary policy (the setting of interest rates), is generally focused on fighting inflation first, and has an **inflation target band** to guide its policy decisions and which acts as an anchor for inflationary expectations. While it does not produce an estimate of the non-accelerating inflation rate of unemployment (NAIRU), the Reserve Bank watches very closely for any signs of excessive demand in the labour market when setting interest rates. The other macroeconomic policy, fiscal policy, plays a support role in managing aggregate demand during periods of slower economic growth such as in 2009 and 2010. Expansionary fiscal policy was also being used to create jobs and stop unemployment rising during the global recession, but generally, low unemployment is pursued through microeconomic policies such as training policies, reform of the tax and welfare systems, and promoting market forces in the economy.

B.4 Limitations of macroeconomic policy

In this section we look at three examples of the limitations of macroeconomic policy: how the success of expansionary fiscal policy may be limited by its impact on interest rates (the **crowding out effect**) and the current account deficit (the **twin deficits hypothesis**) and how the success of expansionary monetary policy may be limited by its impact on inflation (the **quantity theory of money**).

Crowding out effect

Expansionary fiscal policy occurs where the government increases spending or reduces taxation to boost aggregate demand and promote growth in the economy. The objective of this policy stance is to raise living standards and create jobs. Some economists, however, argue that increased public sector economic activity simply "crowds out" the private sector and cannot achieve its intended objectives.

In its most simple form, the "crowding out" theory says that if a government moves from a balanced budget to a deficit budget position, it will have to borrow money from the private sector. If there is a limited supply of borrowable funds, that is, savings, in the economy, then government borrowing will raise the demand for money and put upward pressure on interest rates. As interest rates rise, some businesses will not be able to borrow to fund their investment and expansion plans – that is, they will be crowded out. As a result, the move by the government to boost growth simply shifts activity from the private sector to the public sector, and leaves the economy with higher interest rates.

In modern, open economies like Australia, this version of the crowding out theory does not describe how the economy really works. Interest rates in Australia are indirectly set by the Reserve Bank independently of the level of government borrowing, and access to global capital markets generally means there is no shortage of borrowable funds.

However, this does not mean that government borrowing (fiscal policy) and interest rates (monetary policy) are unrelated. If a government was to shift from a contractionary fiscal stance to an expansionary fiscal stance at a time when economic growth was already high, it will add to demand pressure in markets for labour, for raw materials, and final goods and services. For example, if the government announces large tax cuts that people spend on renovating their houses, it will increase prices for building materials and wages for construction workers. If these pressures feed through into a higher overall inflation rate, the Reserve Bank may raise interest rates to defend its 2–3 per cent inflation target band. As interest rates rise, private sector business activity will contract as it is crowded out.

Some economists also point out that if government spending fuels inflation and interest rate rises, it will also attract foreign financial inflows. As the exchange rate appreciates, and the international competitiveness of exporters falls, the government may be crowding out private sector export activity.

Indirectly, therefore, fiscal policy and monetary policy are related. To the extent that there is a speed-limit on how fast the economy can grow each year, governments face a trade-off: increased public sector activity or a shift to expansionary fiscal policy may simply crowd out private sector activity. Note: if the government shifted fiscal policy to contractionary settings, it would put downward pressure on interest rates and encourage private sector activity (known as the "reverse crowding out effect").

In recent decades in Australia, the potential for a "crowding out effect" has been limited because the shifts in the stance of fiscal policy (measured by changes in the budget balance, as a percentage of GDP) were small. Where government spending has increased more rapidly, such as in 2009 and 2010, it has occurred when private sector activity has been weak and unemployment has been rising. Additionally, some government borrowings, such as for railway infrastructure, may encourage private sector activity, such as construction of homes near train stations. This is known as the "crowding in effect". And while potentially adding to activity and inflation in the short term, government investments in education, research and development and physical infrastructure also add to the economy's growth potential in the long term.

Twin deficits hypothesis

Another potential limitation on the effectiveness of expansionary fiscal policy in promoting economic growth and reducing unemployment is the twin deficits hypothesis. The twin deficits hypothesis says that budget deficits, used to stimulate the economy, cause current account deficit, and therefore should be minimised.

The hypothesis is derived from the equilibrium condition that injections equal leakages. By rearranging the injections and leakages equations, we see that the trade balance (X - M) must be equal to the savings-investment imbalance plus the budget balance. If one assumes that the savings-investment imbalance is not affected by the government's spending and revenue decisions (that is, is constant), then it can be shown that an increase in the budget deficit causes an increase in the trade deficit. (Although the theory is usually quoted as saying it will cause a current account deficit).

Injections = Leakages

$I + G + X = S + T + M$

$(X - M) = (S - I) + (T - G)$

Holding S – I constant,

$\triangle(T - G) = \triangle(X - M)$

Increase in budget deficit causes increase in current account deficit

"The fiscal balance measures the Australian Government's investment-saving balance. It measures in accrual terms the gap between government savings plus net capital transfers, and investment in non-financial assets. As such, it approximates the contribution of the Australian Government General Government Sector to the balance on the current account in the balance of payments."

– 2019–20 Budget Paper 1, Statement 10.

There are, however, limitations of this theory. First, it is based on an equilibrium economy. If the economy is not in equilibrium, the budget deficit and trade deficit do not have to be equal. Second, the savings-investment imbalance is not constant or unaffected by the budget balance. If the crowding out theory is true, an increase in the budget deficit will actually cause investment to fall relative to savings, potentially leaving the trade balance unchanged. Alternatively, if the government achieved a surplus, the resulting lower interest rates may simply increase the savings-investment imbalance and leave the trade balance unchanged. Evidence from the Australian economy over the past decade supports the view that the twin deficits hypothesis is not a very useful theory. In the late 1990s, the government argued that the primary reason for shifting the budget balance from deficit to surplus was to reduce the current account deficit. Yet even when modest surpluses were achieved, Australia's current account deficit grew larger. The government no longer uses fiscal policy to target a reduction in the current account deficit.

Quantity theory of money

Efforts to use expansionary monetary policy to increase the level of aggregate demand and reduce unemployment also face limitations. According to the quantity theory of money, expansionary monetary policy has no long-run impact on the level of economic activity and unemployment and instead only has the impact of increasing the level of inflation. Put another way, changes in the "money" side of the economy (the money supply and interest rates) do not have impacts on the "real" side of the economy (output and employment). Under this theory, revived in the 1970s by Milton Friedman (the same economist who developed the Friedman-Phelps Expectations Augmented Phillips curve), unemployment in the long term is fixed at the natural rate, with an associated fixed level of national output and income.

The quantity theory of money, much like the twin deficits hypothesis, relies on applying a range of principles and assumptions to an equation. The **equation of exchange** says that the money supply multiplied by the velocity of circulation (the volume of times of the money supply is used) must equal the total volume of goods and services purchased, multiplied by the price level. For example, if the money supply in Australia was $200 billion and it was used five times in a year, total transactions would equal $1 trillion, and this would be equal to the sum of the prices of all the goods and services produced in the economy over the same period (that is, GDP).

$MV = PT$

Where:

M = money supply P = price level

V = velocity of circulation T = volume of transactions

The quantity theory then makes **two assumptions**: that velocity of circulation is fixed and that the volume of transactions (that is, the output of goods and services) is fixed. If these assumptions are accurate, then any increase in the money supply (through a reduction in interest rates) will simply cause an increase in the price level.

The quantity theory of money was used by **monetarist economists** in the 1970s to argue that central banks should target the growth rate of the money supply to contain the level of inflation. After a brief use of monetary targeting in the

late 1970s and early 1980s, it was abandoned in Australia in 1985 because the targets were not achieved and inflation was not contained.

The main problem with the quantity theory is that the assumptions do not hold – that is, the velocity of circulation could be influenced by behavioural changes in consumers or businesses and not be constant, and factors that expand the productive capacity of the economy will increase the amount of output and transactions. Since the adoption of interest-rate setting monetary policy in Australia, the Reserve Bank does not even have direct control of a money supply measure that could be used to influence the level of inflation, making the theory even less useful.

The one lesson of the quantity theory of money that maintains relevance today is that it is not possible to use consistently expansionary monetary policy to achieve increases in output and employment. To the extent that the economy has a **speed limit determined by structural factors** such as technology levels, education levels, market flexibility, international competitiveness and efficiency, macroeconomic policy cannot keep the economy above this speed limit without adding to inflationary pressure. Long-term economic challenges require the government to implement successful microeconomic policies and invest in the long-term drivers of economic growth.

Modern Monetary Theory

Modern Monetary Theory (MMT) is a 'heterodox' (unconventional) economic theory focused on the relationship between the money supply and economic activity, but with very different conclusions. Its focus is explaining the financial conditions that have prevailed since the global financial crisis that began in 2008. While it is generally rejected by mainstream economists, its ideas have sparked debate about current economic conditions. The naming of MMT is credited to Australian economist Bill Mitchell (from the University of Newcastle), who gained increased public attention during the COVID-19 recession.

MMT asserts that because governments issue their own currency, they can never run out of money – after all, they can always just create more money. It argues that governments can spend as much as they like, funding it by 'printing money' – i.e. issuing bonds and paying for them by 'creating reserve assets'. While this approach has been associated with economic instability in past eras, the advocates of MMT argue that in recent years the private sector has demonstrated little reluctance about buying such bonds.

MMT argues that the one major limiting factor on government spending is the rate of inflation, which can rise with excessive creation of money. It advocates large-scale spending during severe downturns (such as in 2020) because in such situations, inflation is rarely a significant problem. In addition to increased spending on cash transfers and public services, MMT proposes a universal job guarantee that gives every person a government-funded job at the minimum wage.

Monetary policy would not be used to control levels of economic activity under an MMT framework, and interest rates would be set to zero. While taxes could be raised if fiscal policy needed to become contractionary, its advocates argue that taxes are not needed to balance government budgets. In fact, they say taxes are a tool to encourage citizens to earn income and conduct exchanges in the local currency. MMT economists argue that the solution to inflation in product or labour markets is measures such as competition policy, regulation or incomes policies, but not higher interest rates.

The limitation of MMT is that it has been developed in response to a specific and relatively short-term set of economic conditions. Its arguments are in many ways a more extreme version of a conventional view, that debt is affordable in a time of low inflation, low interest rates and weak demand. Its focus is what governments can do when economic activity and inflation levels are very low, and it does not propose new solutions to the historic problem that expanding the money supply creates inflation and economic instability. Its approach could also make labour markets more inefficient and currencies more unstable, and its relevance may be limited to the relatively unusual period of economic history of the early 21st century. But it has contributed to the economic debate, and shone a light on the way that conventional approaches have failed to restore economic to robust growth since the global financial crisis.

Glossary

A

Absolute poverty refers to the condition of people with the lowest living standards in the global economy, and is measured by an income level of less than US$1.90 per day. See also, *relative poverty*.

Advanced economies refers to high income, industrialised or developed economies. The group of advanced economies includes 35 economies across North America, Europe and the Asia-Pacific.

Aggregate demand refers to the total demand for goods and services within the economy. Components of aggregate demand are: consumption (C); investment (I); government spending (G); and net exports (X-M).

Aggregate supply refers to the total productive capacity of an economy, that is, the potential output when all factors of production are fully utilised.

Allocative efficiency refers to the economy's ability to shift resources to where they are most valued and can be used most efficiently. See also, *dynamic efficiency and technical efficiency*.

Appreciation is an increase in the value of an economy's currency in terms of another currency. See also, *depreciation*.

Arbitration is a dispute resolution process in which an industrial tribunal hands down a legally binding ruling to firms and employees. See also, *conciliation*.

ASEAN-Australia-New Zealand Free Trade Area (AANZFTA) is a regional trade agreement in effect from 2010.

ASEAN Free Trade Area (AFTA) is a regional free trade agreement signed in 1992 that now covers 10 South-east Asian economies: Singapore, Thailand, Malaysia, Philippines, Indonesia, Brunei, Vietnam, Laos, Myanmar, and Cambodia.

Asia Pacific Economic Cooperation (APEC) forum is a group of 21 Asia-Pacific economies including Australia that promotes free trade and economic integration.

Association of South-East Asian Nations (ASEAN) was established in 1967 to reduce regional tensions and to develop cooperative approaches in dealing with outside countries. Its members are: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

Australia-New Zealand Closer Economic Relations Trade Agreement (ANZCERTA) is a bilateral free trade agreement between Australia and New Zealand, which came into effect in 1983.

Australia-United States Free Trade Agreement (AUSFTA) is a bilateral free trade agreement between Australia and the United States, signed in 2004.

Australian Competition and Consumer Commission (ACCC) is Australia's competition watchdog whose role is to enforce the *Competition and Consumer Act 2010* and ensure that businesses do not engage in anti-competitive behaviour

Australian Council of Trade Unions (ACTU) is the peak trade union body in Australia, covering most trade unions.

Australian Industrial Relations Commission (AIRC) is the old name of the peak industrial tribunal at the federal level. It has been replaced by Fair Work Commission. See also, *industrial tribunals*.

Australian Prudential Regulation Authority (APRA) is the government body established to regulate all deposit-taking institutions, life and general insurance organisations and superannuation funds.

Australian Securities and Investments Commission (ASIC) is the government body with responsibility for corporate regulation, consumer protection and the oversight of financial service products.

Australian Trade Commission (Austrade) is a government organisation that assists Australian exporters to succeed in developing overseas markets.

Australian Workplace Agreements (AWAs) were a form of individual employment contracts between an employer and an individual employee that were phased out in 2013.

Automatic stabilisers are instruments inherent in the government's budget that counterbalance economic activity. In a boom period, they decrease economic activity and, in a recession, they increase economic activity. The most common examples are transfer payments and a progressive tax system.

Average propensity to consume (APC) is the proportion of total income that is spent on consumption. See also, *marginal propensity to consume*.

Average propensity to save (APS) is the proportion of total income that is not spent, but is saved for future consumption. See also, *marginal propensity to save*.

Average rate of tax is the proportion of total income earned that is paid in the form of a tax. See also, *marginal rate of tax*.

Awards establish the minimum wage and working conditions for employees depending on their industry, occupation or workplace. Restructured and streamlined awards are known as modern awards.

B

Balance of payments is the record of the transactions between Australia and the rest of the world during a given period, consisting of the current account and the capital and financial account.

Balanced budget is the budget outcome where the level of taxation revenue is equal to government spending.

Bandwagon effect refers to a situation where individuals desire a good or service because of its popularity, that is, where demand for a good or service increases as it gains more users.

Better off overall test (BOOT) is a test that enterprise agreements must pass in order to be approved under the *Fair Work Act*. It examines whether an employee is better off than they would be under the applicable industrial award.

Bilateral free trade agreement is an agreement between two economies to lower tariff levels and other trade barriers in order to encourage increased trade flows. See also, *multilateral free trade agreement* and *regional free trade agreement*.

Broad money is a measure of the money supply that consists of currency in circulation; all bank deposits, and deposits in non-bank financial intermediaries minus their holdings of bank deposits.

Brexit refers to the process of the United Kingdom ceasing to be a member of the European Union, following a 52–48 per cent vote of the British public in a referendum in June 2016.

Budget is the tool of the government for the exercise of fiscal policy. It shows the government's planned expenditure and revenue for the next financial year.

Budget deficit is a budget outcome where government spending is greater than revenue.

Budget surplus is a budget outcome where government spending is less than revenue.

Business cycle refers to fluctuations in the level of economic growth due to either domestic or international factors.

Business firm is an organisation involved in using entrepreneurial skills to combine factors of production to produce a good or service for sale..

C

Capital is the manufactured products used to produce goods and services, commonly described as "the produced means of production". See also, *labour*, *land*, *natural resources* and *enterprise*.

Capital and financial account records the borrowing, lending, sales and purchases of assets between Australia and the rest of the world. Financial inflow has the immediate effect of increasing the supply of foreign exchange to Australia while financial outflow reduces it.

Capital gains are the profits made by investors who sell their shares or assets at a price above the level that they originally paid for them.

Capital goods are items that have not been produced for immediate consumption but will be used for the production of other goods. See also, *consumer goods*.

Carbon tax is an environmental management policy where businesses must pay a price for each tonne of carbon dioxide emitted through energy or industrial production process. It is designed to discourage activities that contribute to climate change.

Cartel describes a situation in which individual firms have implicitly or explicitly agreed to restrict competition, such as through agreements to fix prices, segregate the market, or limit the quantity of goods produced.

Cash rate is the interest rate paid on overnight loans in the short-term money market. See also, *interest rates*.

Casualisation of work refers to the growth of casual employment (and the relative decline of full-time permanent jobs) as a proportion of the total workforce. See also, *underemployment*.

Centralised incomes policy is a system in which a government or industrial tribunal determines wages and working conditions for all employees, regardless of which firm they work for. See also, *decentralised incomes policy*.

Centrally planned economy is an economic system whereby government planners make economic decisions and there is little scope for individual choice to influence economic outcome. See also, *market economy* and *mixed economy*.

Ceteris paribus is the concept in economics that in order to understand the relationship between two factors, we need to analyse the impact of one factor on another factor while assuming nothing else changes. It is a Latin phrase that means "other things being equal" or assuming that everything else is held constant.

Circular flow of income is a model that describes how economic activity occurs between the different groups in an economy. Saving, taxation and spending on imports represent leakages from the circular flow, that is, they decrease the level of economic activity. Investment, government spending and export revenue represent injections into the circular flow, that is, they increase the level of economic activity.

China-Australia Free Trade Agreement (ChAFTA) is a bilateral free trade agreement signed in 2015 and is awaiting treaty processes before coming into force.

Clean float is an exchange rate system where the Reserve Bank does not intervene in foreign exchange markets to influence the value of the Australian dollar. See also, *dirty float* and *dirtying the float*.

Climate change is the impacts on the natural environment such as rising temperatures and sea levels caused by emissions of greenhouse gases such as carbon dioxide, nitrous oxide and methane.

COAG is the Council of Australian Governments, the body that brings together Commonwealth, state, territory, and local governments to work together on areas of shared responsibility such as health care, water management and business regulations.

Collective agreement is a workplace agreement that is negotiated between an employer and a group of employees, usually through a union. See also *enterprise bargaining*.

Collective bargaining (see *enterprise bargaining*)

Collective wants are wants of the whole community. This will depend on the preferences of the community as a whole and not individuals. In Australia, collective wants such as parks and libraries are most commonly provided by the government. See also, *public good*.

Collusion occurs when firms agree on a pricing or market sharing arrangement that reduces effective competition between them, and tends to inhibit the entry of competitors into the market.

Common Agricultural Policy is a scheme used by economies in the European Union to promote European farm production through export subsidies and restrictions on imports from economies outside the EU.

Comparative advantage is the economic principle that nations should specialise in the areas of production in which they have the lowest opportunity cost and trade with other nations, so as to maximise both nations' standards of living.

Competition is the pressure on business firms in a market economy to lower prices or improve the quality of output to increase their sales of goods and services to consumers. See also, *pure competition*.

Competitiveness (see *international competitiveness*)

Complement is a good that is used in conjunction with another good. For example, DVDs would be a complement of DVD players.

Conciliation is a dispute resolution process in which firms and employees meet to discuss their differences in the presence of a third party (such as from an industrial tribunal) who attempt to bring the parties to an agreement. See also *arbitration.*

Constitution (Australian) is the document that provides the overall framework for Australia's system of democratic government and the relationship between the Commonwealth (or federal) and state governments.

Consumer goods and services are items produced for the immediate satisfaction of individual and community needs and wants. See also, *capital goods*.

Consumer Price Index (CPI) is a measure of the movement in the prices of a basket of goods and services weighted according to their significance for the average Australian household. It is used to measure inflation in Australia. See also, *inflation*.

Consumer sovereignty refers to the manner in which consumers, collectively through market demand, determine what is produced and the quantity of production.

Consumption function is a graphical representation of the relationship between income and consumption for an individual or an economy. It is usually upward sloping with a gradient less than one, and with a positive y-intercept.

Contracting out (see *outsourcing*)

Contractionary policies are government policies that attempt to reduce economic activity. Contractionary fiscal policy would involve decreasing government spending or increasing taxation. Contractionary monetary policy would involve an increase in interest rates.

Convergence (see *international convergence*)

Corporatisation occurs when the government changes the rules around how government-owned businesses are operated so that they behave more like private sector businesses, independent from the government. See also, *privatisation*.

Cost-push inflation occurs when there is an increase in production costs (such as oil price increases or wage increases) that producers pass on in the form of higher prices thus raising the rate of inflation.

Council of Financial Regulators is a coordinating body for financial market regulation that provides for cooperation and collaboration among its four members – the Reserve Bank of Australia, the Australian Prudential Regulation Authority, the Australian Securities and Investments Commission, and the Australian Treasury.

Counter-cyclical policies are economic policies designed to smooth fluctuations in the business cycle. Macroeconomic policies such as fiscal policy and monetary policy are usually used as counter-cyclical policies.

Credit is loans to individuals, businesses and governments for spending on consumption and investment.

Crowding out effect occurs where government spending is financed through borrowing from the private sector, which puts upward pressure on interest rates and "crowds out" private sector investors that cannot borrow at the higher rates of interest.

Current account is the part of the balance of payments that shows the receipts and payments for trade in goods and services, as well as both primary and secondary income flows between Australia and the rest of the world in a given time period. These are non-reversible transactions.

Current account deficit (CAD) is recorded when the debits in the current account (imports and income payments to overseas) are greater than the credits (exports and income payments from overseas).

Cyclical unemployment refers to those persons that have become unemployed due to a downturn in the business cycle.

D

Debt servicing ratio is the proportion of export revenue that is used to make repayments on foreign debt, and is a common measure of the sustainability of Australia's foreign debt level.

Decentralised incomes policy is a system in which wages and working conditions are determined through negotiations between individual firms and their employees. See also, *centralised incomes policy*.

Demand is the quantity of a particular good or service that consumers are willing and able to purchase at various price levels, at a given point in time.

Demand-pull inflation occurs when aggregate demand or spending is growing while the economy is nearing its supply capacity, so that higher demand leads to higher prices rather than more output.

Depreciation (of capital) refers to the "wear and tear" that all capital goods experience, which causes their value to fall over time.

Depreciation is a decrease in the value of an economy's currency in terms of another currency. *See* also, *appreciation*.

Deregulation is the removal of government controls over an industry that is intended to make business more responsive to market forces.

Devaluation occurs when the government (or central bank) lowers the value of a currency that operates with a fixed exchange rate. See also, *revaluation*.

Developing economies are economies with a low level of material well-being and economic development, and which tend to have poor health and education standards, weak infrastructure and agriculture- based economies.

Diminishing marginal returns occur when a firm experiences a decline in additional output as it increases a factor of production (such as labour) while holding the amount of other factors of production constant.

Direct tax is a tax where the person upon whom a tax is levied must pay the tax because it cannot be passed onto someone else. For example, income tax. See also, *indirect tax*.

Dirty float is an exchange rate system where the value of the currency is mainly determined by demand and supply in foreign exchange markets, but the Reserve Bank occasionally intervenes to stabilise the value of the Australian dollar during periods of excessive volatility. See also, *clean float* and *dirtying the float*.

Dirtying the float is where the Reserve Bank buys and sells Australian dollars in foreign exchange markets to influence the value of the exchange rate. See also, *clean float* and *dirtying the float*.

Diseconomies of scale (see *internal diseconomies of scale* and *external diseconomies of scale*)

Distribution of income (see *income distribution*)

Diversification occurs when a firm enters a new industry that is not directly related to its existing business operations.

Dividends are the profit returns received by the shareholders (owners) of a business. See also, *profit*.

Division of labour (see *specialisation of labour*)

Domestic Market Operations are actions by the Reserve Bank in the short-term money market to buy and sell second hand Commonwealth Government Securities in order to influence the cash rate and the general level of interest rates. See also, *monetary policy*.

Dumping is the practice of exporting goods to a country at a price lower than their selling price in their country of origin.

Dutch disease is a term that refers to high commodity export prices driving up the value of the currency, making other parts of the economy less competitive, leading to a higher current account deficit and a greater dependence on commodities. The term was coined in 1977 by The Economist magazine to describe the impact of gas discoveries on the economy of the Netherlands.

Dynamic efficiency refers to the economy's ability to shift resources between industries in response to changing patterns of consumer demand. See also, *allocative efficiency*, *technical efficiency*.

E

Ecologically sustainable development involves conserving and enhancing the community's resources so that ecological processes and quality of life are maintained.

Economic cost (see *opportunity cost*)

Economic development is a broad measure of welfare in a nation that includes indicators of health, education and environmental quality as well as material living standards.

Economic growth occurs when there is a sustained increase in a country's productive capacity over time. This is commonly measured by the percentage increase in real Gross Domestic Product. See also, *Gross Domestic Product*.

Economic policy mix refers to the combination of macroeconomic (fiscal and monetary) and microeconomic policies used by the government to achieve its economic objectives.

Economic problem involves the question of how to satisfy unlimited wants with limited resources.

Economies of scale (see *internal economies of scale* and *external economies of scale*)

Efficiency (see *allocative efficiency*, *technical efficiency* and *dynamic efficiency*)

Elaborately transformed manufactures (ETMs) are technologically advanced and high value-added manufacturing products, such as motor cars, that generally command high prices on international markets. See also, *simply transformed manufactures*.

Elasticity (see *price elasticity of demand*, *price elasticity of supply*)

Elasticity of demand (see *price elasticity of demand*)

Elasticity of supply (see *price elasticity of supply*)

Emerging economies are economies experiencing the fastest rates of growth in the global economy with many undergoing rapid industrialisation. The group includes China, India, Brazil, Mexico, Egypt and Poland and many other economies across Asia, Latin America, Central and Eastern Europe, the Middle East and North Africa.

Emissions trading scheme is an environmental management policy where the government sets a cap on the amount of greenhouse gas emissions, requires companies to have a permit to emit gases, and allows permits to be traded between companies, providing an incentive to reduce emissions.

Employer associations are organisations that are formed to represent the interests of businesses, especially in industrial relations and in lobbying the government.

Enterprise involves the organisation of the other factors of production to produce goods and services. The entrepreneur makes the decisions and bares the risk of the business. The return for enterprise is profit. See also *land*, *natural resources*, *capital* and *labour*.

Enterprise bargaining refers to negotiations between employers and employees (or their representatives) about pay and work conditions at the level of the individual firm.

Environment is the totality of the physical environment in which human society lives, and includes the land, water, climate and plant and animal life.

Environmental management refers to actions to protect and enhance the natural environment, including protecting the quality of air, water and soil, preserving natural environments and biodiversity, ensuring the sustainable use of renewable and non-renewable resources, and minimising the negative environmental consequences of economic activity.

Equilibrium is achieved in an individual market when any consumer who is willing to pay the market price for a good or service is satisfied, and any producer who offers their goods or services at the market price is able to sell their produce. It occurs when quantity demanded is equal to quantity supplied, that is, when the market clears.

Equilibrium level of income refers to the level of income, output and employment at which the spending plans of the various sectors of the economy are identical to the aggregate production plans of the economy, that is, aggregate demand is identical to aggregate supply. Alternatively, it may be thought of as the level of aggregate income where total leakages from the economy are identical to the total injections into the economy.

Ethical decision-making is when business decisions about production methods, employment and other matters are made to improve outcomes for the broader society and the environment, and not simply to maximise profits for the firm.

European Union (EU) is an economic and political association of 28 European nations that has a single market for goods, services, finance and labour.

Eurozone refers to the monetary union of 19 countries of the European Union.

Excess capacity refers to the situation where a firm or economy is operating below maximum potential output.

This is due to unemployed or under-utilised resources, that is, the economy is producing inside its production possibility curve.

Exchange rates are the price of one currency in terms of another economy's currency.

Exchange settlement accounts are the funds held by banks with the Reserve Bank of Australia (RBA) in order to settle payments with other banks and the RBA.

Expansionary policies are policies that attempt to increase aggregate economic activity in the economy. Expansionary fiscal policy would involve increasing government spending or reducing taxation. Expansionary monetary policy would involve a reduction in the interest rates.

Exports are goods or services that are produced domestically and purchased by overseas consumers. See also, *imports*.

External diseconomies of scale are the disadvantages faced by a firm because of the growth of the industry in which the firm is operating, and are not the result of a firm changing its own scale of operations. See also, *internal diseconomies of scale*.

External economies of scale are the advantages that accrue to a firm because of the growth of the industry in which the firm is operating, and are not the result of the firm changing its own scale of operations. See also, *internal economies of scale*.

External stability is an aim of government policy that seeks to promote sustainability on the external accounts so that Australia can service its foreign liabilities in the medium to long run and avoid currency volatility.

Externalities are external costs and benefits that private agents in a market do not consider in their decision making process. For example, airlines and passengers do not consider aircraft noise when negotiating airfares. See also, *market failure*, *positive externality*, *negative externality*.

F

Factors of production are any resources that can be used in the production of goods and services. The four main types are natural resources (or land), capital, labour and enterprise.

Factor market is a market for any input into the production process, including land, labour, capital and enterprise. See also, *labour market* and *product market*.

Fair Work Commission is the government agency that regulates industrial relations in Australia. It combines the functions of an industrial tribunal (such as the Industrial Relations Commission) with a role of education and promotion of enterprise bargaining.

Fair Work Ombudsman is the government agency that investigates complaints and enforces compliance with Australia's workplace laws.

Financial aggregates are the Reserve Bank of Australia's three main indicators of the money supply – money base, M3 and broad money.

Fiscal policy is a macroeconomic policy that can influence resource allocation, redistribute income and reduce the fluctuations of the business cycle. Its instruments include government spending and taxation and the budget outcome.

Fixed exchange rate is when the value of the economy's currency is officially set by the government or the central bank.

Flexible peg is an exchange rate system where the currency's value is fixed at a pre-announced level, but it can be changed by the central bank in response to the forces of supply and demand in foreign exchange markets.

Floating exchange rate is when the value of a economy's currency is determined by the forces of demand and supply in foreign exchange markets.

Foreign debt refers to the total level of outstanding loans owed by Australian residents to overseas residents. See also, *foreign equity*, *foreign liabilities*, *net foreign debt*.

Foreign direct investment (FDI) refers to the movement of funds between economies for the purpose of establishing a new company or buying a substantial proportion of shares in an existing company (10 per cent or more). FDI is generally considered to be a long-term investment and the investor normally intends to play a role in the management of the business.

Foreign equity is the total value of Australian assets such as land, shares and companies in foreign ownership. See also, *foreign debt*, *foreign liabilities*, *net foreign equity*.

Foreign exchange market (or forex market) refers to the market in which currencies are traded.

Foreign liabilities are Australia's total financial obligations (foreign debt plus foreign equity) to the rest of the world. See also, *net foreign liabilities*.

Free riders refers to when groups or individuals benefit from a good or service without contributing to the cost of supplying the good or service. As a consequence, the good or service is likely to be under-supplied in relation to the total demand.

Free trade is a situation where there are no artificial barriers to trade imposed by governments for the purpose of shielding domestic producers from foreign competitors.

Frictional unemployment are those who are unemployed due to time lags involved in the transition between jobs.

Full employment occurs when it is no longer possible to achieve a sustained reduction in unemployment through stronger economic growth. See also, *natural rate of unemployment*.

Future Fund is a Commonwealth Government investment account that receives the proceeds of budget surpluses and asset sales and invests them in order to generate returns to meet the Commonwealth Government's future superannuation liabilities.

G

General Agreement on Tariffs and Trade (GATT) was a multilateral trade promotion process that began in 1947. The final round of GATT negotiations finished in 1993, and agreed to replace GATT with the World Trade Organisation in 1995. See also, *World Trade Organisation*.

Geographical mobility refers to the ability of labour to move between different locations to gain higher wages or improved employment opportunities.

Gini coefficient is a number between zero and one that measures the extent of income inequality in an economy. It is calculated by measuring the degree to which the lorenz curve deviates from the line of equality. See also, *Lorenz curve*.

Global economy refers to the sum of the interactions between the economies of individual countries that are now increasingly linked together into one larger economic system.

Global financial crisis describes the period of extreme volatility on world financial markets in 2008 and 2009 that caused the deepest recession in the world economy since the Great Depression of the 1930s.

Globalisation refers to the integration between different countries and economies and the increased impact of international influences on all aspects of life and economic activity.

Goods and Services Tax (GST) is a 10 per cent sales tax imposed on most goods and services in Australia.

Government Business Enterprises (GBEs) (*see public trading enterprises*)

Government expenditure is an injection in the circular flow of income. It includes all money that the government spends to provide services such as health and education.

Government procurement refers to the policies and procedures for purchasing goods and services for the use of the government and public trading enterprises.

Gross Domestic Product (GDP) is the total market value of all final goods and services produced in an economy over a period of time. See also, *economic growth*.

Gross National Income (GNI) is the total income earned by domestically owned factors of production over a period of time. See also, *gross domestic product*.

Gross World Product (GWP) refers to the sum of total output of goods and services by all economies in the world over a period of time.

Group of Seven (G7) refers to the seven largest industrialised nations who meet annually to discuss economic and political issues and wield tremendous influence over the global economy. Its members are the US, UK, France, Germany, Italy, Canada, and Japan.

Growth (see *economic growth*)

G20 is the group of the world's 20 largest economies. It was formed in 1999 and has played an increasingly important role in addressing the reform of the global financial system and macroeconomic coordination. It incorporates the G7 economies, plus the European Union, Argentina, Australia, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, South Korea and Turkey.

H

Hard-core unemployment refers to long-term unemployed people who may be considered unemployable by employers because of personal circumstances such as drug use or mental or physical disabilities.

Heavily Indebted Poor Countries (HIPCs) are a group of developing countries, mostly in Africa, that suffer extreme external debt sustainability problems.

Hidden unemployment refers to those people who can be considered unemployed but do not fit the official definition of unemployment and are thus not reflected in the unemployment statistics.

Horizontal integration occurs when a firm takes over another business involved in the same kind of production, that is, one of its competitors.

House of Representatives is the main chamber of the Australian Parliament. When a party coalition has a majority of votes in the House of Representatives it forms a government under a Prime Minister who is also one of the 150 members of the House of Representatives.

Household savings is the proportion of total household disposable income not spent on consumption.

Human capital is the economic concept that the supply of labour cannot be simply measured by the size of the labour force, but also by its quality, which can be increased through education and training.

Human Development Index (HDI) is a measure of economic development devised by the United Nations Development Program. It takes into account life expectancy at birth, levels of educational attainment and material living standards (as measured by Gross National Income per capita).

Hysteresis is the process whereby unemployment in the current period results in the persistence of unemployment in future periods as unemployed people can lose their skills, job contacts and motivation to work.

Imperfect competition is any market structure that is not a perfectly competitive market, which gives individual firms the ability to influence price levels.

Imported inflation occurs when there is an increase in the price of imports either due to inflation in the economies of our trading partners or because of a depreciation of the A$ which results in higher prices of consumer imports and imported inputs.

Imports are goods and services that are produced overseas and purchased by domestic consumers. See also, *exports*.

Income is the amount of money, or other benefits measured in money terms, which flow to individuals or households, usually for their contribution to the production process or as a direct payment from the government over a period of time.

Income distribution refers to the way in which a economy's income is spread among the members of different social and socio-economic groups.

Indirect tax is a tax that is levied on an aspect of economic activity other than a person or an organisation's income, such as sales tax. See also, *direct tax*.

Industrial dispute occurs when employers or employees take action to disrupt the production process in order to highlight a disagreement between employers and employees.

Industrial relations refers to the relationship between employers, employees, and their representatives. See also, *industrial relations system*. Also known as workplace relations

Industrial relations system involves the laws, institutions and processes established to manage relations between employers and employees. The structure of the industrial relations system determines the process of wage determination and conflict resolution in the Australian labour market. Also known as workplace relations system.

Industrial tribunals are government agencies that oversee the industrial relations system and attempt to prevent or resolve workplace conflict between employees (usually represented by unions) and employers (sometimes represented by employer associations). Fair Work Commission is the main industrial tribunal in Australia

Industry is the collection of firms involved in making a similar range of items that usually compete with each other, such as the financial services industry or the car industry.

Industry policy involves measures to support the development of key industries and increase the competitiveness of domestic industries against foreign competitors.

Inelastic demand (see *price elasticity of demand*)

Inelastic supply (see *price elasticity of supply*)

Infant industry argument refers to the argument that newly established or "infant" industries during the early years are not competitive with established industries in other countries and may need protection from overseas competition in order to survive.

Inflation is the sustained increase in the general level of prices over a period of time, usually one year. This is commonly measured by the percentage change in the Consumer Price Index (CPI).

Inflation targeting occurs when a central bank implements monetary policy with the aim of achieving a particular level of inflation. In Australia, the Reserve Bank has an inflation target of 2-3 per cent, on average, over the course of the economic cycle.

Inflationary expectations is where inflation may be perpetuated by the expectations of workers and firms that it will occur.

Infrastructure Australia is the expert national body that advises the Government on national infrastructure planning.

Injections into the circular flow model of income are those flows of money that increase aggregate income and the general level of economic activity. The three injections are investment, government spending and exports. See also, *leakages*.

Interest is the reward to the factor of production capital for its use in the production of goods and services. See also, *wages*, *profit* and *rent*.

Interest rate differential is the difference between two interest rates, either between two economies' interest rates or between a financial institution's borrowing and lending interest rates.

Interest rates are the cost of borrowing money expressed as a percentage of the total amount borrowed.

Intermediate goods are semi-finished goods that are transformed into higher-value goods before sale to consumers (for example, steel is an intermediate good in the production of motor vehicles). See also, *capital goods* and *consumer goods and services*.

Internal diseconomies of scale are the cost disadvantages (specifically, the increase in marginal costs per unit) faced by a firm as a result of the firm expanding its scale of operations beyond a certain point. Its output level is above the technical optimum. See also, *external diseconomies of scale*.

Internal economies of scale are the cost saving advantages that result from a firm expanding its scale of operations. They occur when a firm's output level is below the technical optimum. See also, *external economies of scale*.

International business cycle refers to fluctuations in the level of economic activity in the global economy over time.

International competitiveness refers to the ability of an economy's exports to compete on global markets. An economy may be competitive by selling products of a higher quality or a lower price than its competitors.

International convergence refers to the increasing similarity of economic conditions in different economies during the globalisation era, in terms of economic systems, performance and structure, and living standards.

International division of labour is how the tasks in the production process are allocated to different people in different countries around the world.

International Monetary Fund (IMF) is an international agency that consists of 189 members and oversees the stability of the global financial system. The major functions of the IMF are to ensure stability of exchange rates, exchange rate adjustment and convertibility.

Investment is any current expenditure where the benefits will be obtained in the future. Most typically, this injection will involve the purchase of capital goods or the build up of stock or inventory.

J

J-curve effect is an economic concept that suggests that a depreciation of a currency will lead to a short-term deterioration of Australia's trade balance (as exporters receive lower revenue for a given quantity of exports and import spending rises for a given quantity of imports) and a long- term improvement in the trade balance as exports become more competitive and imports less competitive, so that export volumes rise and import volumes fall.

Jobactive is the federally-funded network of employment services agencies, providing employers with recruitment assistance and helping job seekers find work.

K

Korea-Australia Free Trade Agreement (KAFTA) is a bilateral free trade agreement between Australia and Korea signed in 2014.

Kyoto Protocol is an agreement signed by 187 nations since 1997 designed to lower emissions of carbon dioxide and other greenhouse gas emissions in order to combat global warming.

L

Labour is human effort, both physical and mental, used to produce goods and services. The return for labour is wages. See also *land*, *capital* and *enterprise*.

Labour force consists of all the employed and unemployed persons in the country at any given time. Also known as the workforce.

Labour force participation rate (LFPR) (see *participation rate*)

Labour on-costs (see *on-costs*)

Labour market is where individuals seeking employment interact with employers who want to obtain the most appropriate labour skills for their production process.

Labour market policies are microeconomic policies that are aimed at influencing the operation and outcomes in the labour market, including industrial relations policies that regulate the process of wage determination as well as training, education and job-placement programs to assist the unemployed.

Labour productivity refers to the quantity of output produced in a production process per unit of labour per unit of time. See also, *multifactor productivity*.

Land is the natural resources used to produce goods and services. The return for land is rent. See also, *capital*, *land* and *enterprise*.

Leakages are the items that remove money from the circular flow of income, decreasing aggregate income and the general level of economic activity. The three leakages are savings, taxation and imports. See also, *injections*.

Least Developed Countries (LDCs) are those economies that suffer from low living standards (as measured by GDP per capita levels less than around US$900 per year) and longer term impediments to economic development.

Liquidity is the ease with which a financial asset can be transformed into cash so it can be used as a medium of exchange.

Local content rules specify that goods must contain a minimum percentage of locally made parts to qualify for trade protection assistance.

Long-term unemployment refers to a person being unemployed for a period of one year or longer.

Lorenz curve is a graphical representation of income distribution, plotting the cumulative increase in population against the cumulative increase in income. See also, *Gini coefficient*.

M3 is a measure of the money supply that consists of all currency in circulation, bank deposits with the Reserve Bank and private sector deposits in banks.

Macroeconomic policies are policies that affect the economy as a whole with the aim of minimising fluctuations in the business cycle. Also referred to as demand management or counter-cyclical policies.

Malaysia-Australia Free Trade Agreement (MAFTA) is a bilateral free trade agreement between Australia and Malaysia signed in 2012.

Managed exchange rate is an exchange rate system where the value of the currency is determined or substantially influenced by central bank intervention in the foreign exchange market, but where the level of exchange is not held at a permanently fixed level.

Marginal propensity to consume (MPC) is the proportion of each extra dollar of earned income that is spent on consumption. See also, *average propensity to consume*.

Marginal propensity to save (MPS) is the proportion of each extra dollar of earned income that is not spent, but saved for future consumption. See also, *average propensity to save*.

Marginal rate of tax is the proportion of each extra dollar earned that must be paid in tax. See also, *average rate of tax*.

Market clearing occurs when there is equilibrium in the market, that is, when the demand and supply curves intersect, when quantity demanded equals quantity supplied and there is no tendency for change.

Market economy is an economic system whereby all major economic decisions are made by individuals and private firms, which are both motivated by self-interest, without government intervention. See also, *centrally planned economy* and *mixed economy*.

Market equilibrium (see *equilibrium*)

Market failure occurs when the price mechanism takes into account private benefits and costs of production to consumers and producers, but it fails to take into account indirect costs such as damage to the environment.

Market learning (also known as learning by doing) is where a business becomes more efficient at producing a particular good or service as it gains more experience producing that good or service. This will shift the business's average cost curve downwards and shift its supply curve to the right.

Merit goods are goods that are not produced in sufficient quantity by the private sector because private individuals do not place sufficient value on those goods, that is, they involve positive externalities that are not fully enjoyed by the individual consumer. Merit goods include education and health care.

Microeconomic policies are policies that are aimed at individual industries, seeking to increase aggregate supply by improving the efficiency and productivity of producers.

Migration is the movement of people between countries on a permanent or long-term basis, usually for 12 months or longer.

Microeconomics is concerned with the study of economics at the level of individual economic actors or sectors of industry.

Mixed economy is an economic system where the decisions concerning production and distribution are made by a combination of market forces and government decisions. See also, *market economy* and *centrally planned economy*.

Mobility of labour (see *geographical mobility*, *occupational mobility*)

Monetary aggregates (see *financial aggregates*)

Monetary policy is a macroeconomic policy that aims to influence the cost and supply of money in the economy in order to influence economic outcomes such as economic growth and inflation. The Reserve Bank of Australia (RBA) administers monetary policy by influencing the level of interest rates.

Monetary union is where two or more countries share a common currency.

Money is the medium of exchange in most modern economies.

Money base is a measure of the money supply that consists of all currency in circulation and all bank deposits with the Reserve Bank.

Money wage (see *nominal wage*)

Money supply is the total amount of funds in an economy that can be used as a medium of exchange, a measure of value, a store of value and a method of deferred payment. The Reserve Bank's measure of the money supply is M3.

Monopolistic competition is a market structure where there are many sellers producing differentiated products, and there are no significant barriers to entry. This is not the same as monopoly.

Monopoly describes an industry where there is only one seller producing a unique product. There are high barriers to entry, so the monopolist has market power and can determine price or output (but not both). See also, *natural monopoly*.

Multifactor productivity refers to the quantity of output produced in a production process per combined input of labour and capital per unit of time. See also, *labour productivity*.

Multilateral free trade agreement is an agreement between a number of countries, usually in a region, to lower tariff levels and other forms of protection in order to encourage increased trade flows. See also, *bilateral free trade agreement* and *regional free trade agreement*.

Multinational corporations are firms that sell and produce goods or services in more than one country. See also, *transnational corporations*.

Multiplier is the greater than proportional increase in national income resulting from an increase in aggregate demand.

N

National Broadband Network is the optical fibre telecommunications system being built and operated by a company that is owned by the Commonwealth Government.

National competition policy is an agreement between Australia's Commonwealth and State Governments signed in 1995 to encourage microeconomic reform throughout the Australian economy.

National saving is the proportion of national income not spent by consumers, firms or the government.

Natural monopoly is a market situation where only one operator can operate efficiently in an industry, usually because of extremely high barriers to entry, for example, the capital cost of a railway network.

Natural rate of unemployment refers to the level of unemployment at which there is no cyclical unemployment, that is, where the economy is at full employment. See also, *full employment*, *non-accelerating inflation rate of unemployment (NAIRU)*.

Natural resources include all the resources provided by nature that are used in the production process. These are often simply referred to as "land". The reward (return) to the owners of natural resources is called rent. See also, *land*, *capital*, *labour*, *enterprise*.

Necessities (see *needs*)

Needs are individual desires for the basic necessities of life, such as food and shelter.

Negative externality is an unintended negative outcome of an economic activity whose cost is not reflected in the operation of the price mechanism. See also, *positive externality*.

Net errors and omissions is the entry on the balance of payments that ensures that the sum of the current account and the capital and financial account equals zero.

Net foreign debt refers to the level of outstanding loans owed by Australian residents to overseas residents minus the level of outstanding loans owed by overseas residents to Australian residents. See also, *foreign debt*.

Net foreign equity is the value of Australian assets such as land, shares and companies in foreign ownership minus the value of foreign assets in Australian ownership. See also, *foreign equity*.

Net foreign liabilities are equal to Australia's financial obligations (foreign debt plus foreign equity) to the rest of the world minus the rest of the world's financial obligations to Australia. See also, *net foreign debt* and *net foreign equity*.

Net primary income is a component on the current account of the balance of payments calculated by subtracting primary income debits from income credits. Primary income debits include interest payments, dividends and rent paid by Australians on foreign liabilities, while income credits consist of similar payments by foreigners to Australians.

Net secondary transfers is a component of the current account that includes all transactions in which products or financial services are provided without a specific good or service being provided in return. This includes items such as aid to developing nations.

Newly industrialised countries (NICs) refers to economies that experience rapid economic growth in national output over an extended period, some of which now have living standards which are similar to advanced industrialised countries.

No disadvantage test is a requirement applied to workplace agreements to ensure that employees are not made worse off under an agreement than under their applicable award. This test is now known as the Better off Overall Test (BOOT).

Nominal wage is the pay received by employees in dollar terms for their contribution to the production process, not adjusted for inflation. See also, *real wage*.

Non-accelerating inflation rate of unemployment (NAIRU) refers to the level of unemployment at which there is no cyclical unemployment, that is, where the economy is at full employment. See also, *natural rate of unemployment*.

Non-excludable goods are goods or services whose consumption cannot be restricted to those willing to pay for them, such as clean air and national defence. The private sector is generally unwilling to provide non-excludable goods because individuals may not pay for using them. See also, *free riders*, *public good*.

Non-renewable resources are inputs to production where the stock of the resource is reduced in the process of production and consumption, for example, petroleum and coal. See also, *renewable resources*.

Non-rival goods are goods and services whose consumption by one individual does not reduce the ability of other individuals to also consume the good or service. See also, *public good*.

North American Free Trade Agreement (NAFTA) is a free trade agreement between the United States, Canada and Mexico that has been in effect since 1994.

Non-wage outcomes are the benefits that many employees receive in addition to their ordinary and overtime payments, such as sick leave, superannuation, a company car, study leave or arrangements for employees to work from home for part of the week.

O

Occupational mobility refers to the ability of labour to move between different occupations to gain higher wages or improved employment opportunities.

Okun's Law explains the relationship between unemployment and economic growth, showing that to reduce unemployment, the annual rate of economic growth must exceed the sum of percentage growth in productivity *plus* increase in the size of the labour force in any one year.

Oligopoly describes a market structure consisting of a few large firms producing slightly differentiated products. There are significant barriers to entry and each firm engages in non-price competition.

On-costs are the additional costs to business of employing labour (beyond their wage rates) such as sick leave and workers' compensation.

Open Market Operations (see *Domestic Market Operations*)

Opportunity cost represents the alternative use of resources. Often referred to as the "real" cost, it represents the cost of satisfying one want over an alternative want. This is also known as economic cost.

Organisation for Economic Cooperation and Development (OECD) is an organisation of 36 developed countries that seeks to promote economic growth and free markets amongst its members.

Outsourcing occurs when an organisation pays another business to perform a function that it does not regard as a core part of its business focus. Also known as sub-contracting or contracting out.

Outlay method (see *total outlay method*)

Participation rate refers to the percentage of the population, aged 15 and over, in the labour force, that is either employed or unemployed.

Perfect competition (see *pure competition*)

Perfectly elastic demand is where consumers demand an infinite quantity of a good or service at a particular price but nothing at all at a price above this. This situation can be represented by a horizontal demand curve.

Perfectly elastic supply is where producers are willing to supply an infinite quantity of a good or service at a particular price but nothing at all at a price below this. This situation can be represented by a horizontal supply curve.

Perfectly inelastic demand is where consumers are willing to pay any price in order to obtain a given quantity of a good or service. This situation can be represented by a vertical demand curve.

Perfectly inelastic supply is where producers are willing to supply a given quantity of a good or service regardless of price. This situation can be represented by a vertical supply curve.

Phillips curve is a graphical representation of the theory that the economy faces a trade-off between low levels of inflation and low levels of unemployment.

Policy mix (see *economic policy mix*)

Pollution occurs when the natural environment is degraded in some way, such as by harmful chemical substances, noise or untreated rubbish.

Portfolio investment refers to the short-term movement of funds between economies for loans or the purchase of small share holdings (less than 10 per cent of the total value of a company).

Positive externality is an unintended positive outcome of an economic activity whose value is not reflected in the operation of the price mechanism. See also, *negative externality*.

Poverty (see *absolute poverty*, *relative poverty*)

Precautionary motive is the demand for money for the purposes of unpredictable circumstances and emergencies for which people need to have liquid assets such as cash.

Price ceiling is a maximum price set by the government for which a good, service or factor of production can be sold, usually resulting in market disequilibrium as market demand will be greater than market supply.

Price discrimination is when a firm sells the same good or service in different markets (or to different consumers) at different price levels.

Price floor is a minimum price set by the government for which a good, service or factor of production can be sold, usually resulting in market disequilibrium as market supply will be greater than market demand.

Price elasticity of demand measures the responsiveness of quantity demanded to a change in price. It is calculated as the percentage change in quantity demanded divided by the percentage change in price.

Price elasticity of supply measures the responsiveness of quantity supplied to a change in price. It is calculated as the percentage change in quantity supplied divided by the percentage change in price.

Price mechanism is the process by which the forces of supply and demand interact to determine the market price at which goods and services are sold and the quantity produced.

Price stability is a goal of government economic policy seeking to restrain the growth rate of the general price level, essentially meaning low inflation.

Prices and incomes policy is a government macro-economic policy that seeks to control the growth rate of prices and/or wages and expand employment by imposing restraints on wages growth.

Primary financial markets are markets in which firms raise funds by selling financial assets, such as shares or debentures, to investors.

Private good is a good that is temporarily or permanently used up when someone consumes it and is easy to exclude people who are unwilling to pay for its benefits. See also, *public good*.

Private sector refers to those sectors of the economy that concern private individuals, that is, the household, the firm and the financial sector.

Privatisation occurs when the government sells public trading enterprises to the private sector. See also, *corporatisation*.

Product differentiation is when firms try to make their good or service look different from competitors (such as through packaging or product image) to increase brand loyalty and give the firm some degree of price setting power.

Product market is the interaction of demand for and supply of the outputs of production, that is, goods and services.

Production possibility frontier is a graphical representation of all the possible combinations of the production of two goods and services (or two types of goods and services) that the economy can produce at any given time.

Productivity refers to the quantity of goods and services the economy can produce with a given amount of inputs such as capital and labour. See also, *labour productivity* and *multifactor productivity*.

Profit is the return to the factor of production enterprise for its role in the production of goods and services. See also, *interest*, *rent* and *wages*.

Profit motive refers to the process by which a business seeks to maximise profit by using the lowest cost combination of resources and charging the highest possible price.

Progressive tax system is a tax system where higher income earners pay proportionally more tax. As income increases, the average rate of tax increases.

Proportional tax system is a tax system where all income earners pay proportionally the same amount of tax. The average rate of tax remains constant as income rises.

Protection refers to government policies that give domestic producers an artificial advantage over foreign competitors, such as tariffs on imported goods.

Public company is an entity whose shares are traded freely on the share market, and are not subject to any restrictions on being transferred to other parties.

Public good is an item that private firms are unwilling to supply as they are not available to restrict usage and benefits to those willing to pay for the good. Because of this, governments should provide these goods. See also, *private good*.

Public sector refers to the parts of the economy that are owned or controlled by the government. It includes all tiers of the government as well as government business enterprises.

Public sector goods are goods and services provided by the government such as train services and hospitals. See also, *public good*.

Public Trading Enterprises (PTEs) are businesses owned and managed by a government at either the Commonwealth or state level.

Purchasing power parity (PPP) states that exchange rates should adjust to equalise the price of identical goods and services in different economies throughout the world.

Pure competition describes the theoretical market structure where there are many buyers and sellers. They each sell a homogeneous product and there are no barriers to entry into the industry. They are price takers, as individually they have no power to influence price.

Q

Quality of life refers to the overall well-being of individuals within a country according to their material living standards and a range of other indicators such as education levels, environmental quality and health standards. See also, *standards of living*.

Quantitative easing involves a central bank creating new money electronically, and then injecting it into the money supply through buying assets, usually government bonds, from investors such as fund managers and banks. By increasing liquidity and lowering interest rates, quantitative easing aims to increase borrowing and stimulate economic activity in the private sector.

Quotas refer to restrictions on the amounts or values of various kinds of goods that may be imported.

R

Real Gross Domestic Product is the total value of all final goods and services produced in an economy over a period of time, adjusted for changes in the general price level.

Real cost (see *opportunity cost*)

Real wage is a measure of the actual purchasing power of money wages (that is, adjusting nominal wages for the effects of inflation). See also, *nominal wage*.

Recession is the stage of the business cycle where there is decreasing economic activity, defined as two consecutive quarters (six months) of negative economic growth, that is, a fall in GDP.

Regional business cycles are fluctuations in the level of economic activity in a geographical region of the global economy over time.

Regional free trade agreement is a multilateral agreement between three or more economies within a geographic region to lower tariff levels and other forms of protection in order to encourage increased trade flows. See also, *bilateral free trade agreement* and *multilateral free trade agreement*.

Regressive tax system is a tax system where lower income earners pay proportionally more tax. As income increases, the average rate of tax falls.

Regulation is the collection of government rules and institutions that influence the operation of markets and the participants in markets.

Relative poverty refers to those whose standards of living is substantially lower than the average for the economy as a whole, and is often defined as a level of income below 30 per cent of average earnings. See also, *absolute poverty*.

Renewable Energy Target (RET) is the policy to increase Australia's production of electricity from renewable energy such as solar, wind, and geothermal energy to 33,000 gigawatt hours per year by 2020.

Renewable resources are inputs into the production process that reproduce themselves, ensuring that present consumption of these resources does not necessarily reduce the ability of future generations to consume these resources in the future, for example, timber. See also, *non-renewable resources*.

Rent is the return to the factor of production natural resources (land) for its use in the production of goods and services. It does not just include rent from property but all income rewards derived from the productive use of natural resources. See also, *wages*, *interest* and *profit*.

Reserve assets refers to holdings of foreign currency and gold held by the Reserve Bank to use in foreign exchange markets in order to influence the value of the Australian dollar.

Reserve Bank of Australia (RBA) is Australia's central bank. Its main roles are to conduct monetary policy and oversee the stability of the financial system.

Returns to production are the payments made to factors of production to compensate for their use. The returns to production include: wages to labour, rent on land, interest on capital and profit on enterprise.

Revaluation occurs when the government, or central bank, increases the value of a currency that operates with a fixed exchange rate. See also, *devaluation*.

S

Salary (see *wages*)

Satisficing behaviour is the idea that firms will attempt to pursue a satisfactory level in all goals (profit maximisation, sales maximisation etc.) rather than maximising any single goal.

Savings represents the amount of disposable income that is not spent on consumption. Savings is a leakage from the circular flow of income, which is necessary to fund investment. The reward for savings is interest.

Seasonal unemployment affects those persons unemployed due to the seasonal nature of their work. Their jobs are only available at certain times of the year such as fruit picking or being a shopping centre Santa Claus.

Secondary financial markets are markets in which investors trade financial assets, such as shares or debentures, with other investors.

Share is a type of financial asset that provides an individual with ownership over part of a business or company.

Share market is a market for the sale of equity interests in companies.

Simply transformed manufactures (STMs) are low-value added manufacturing goods that generally command low prices on international markets, such as socks and singlets. See also, *elaborately transformed manufactures*.

Singapore-Australia Free Trade Agreement (SAFTA) is a bilateral free trade agreement between Australia and Singapore that was signed in 2003.

Snob effect refers to a situation where individuals desire a good or service because of its exclusivity, that is, where demand for a good or service decreases as it gains more users.

Social welfare payments are payments from the government to assist people with basic costs of living. A number of terms are commonly used for transfer payments including: transfer payments, government benefits, social security, income support and Centrelink payments.

Specialisation occurs when an economy concentrates on producing a particular set of goods or services in which it has a comparative advantage.

Specialisation of labour occurs when the volume of production is large enough for workers to concentrate on a particular stage of the production process.

Speculators are investors who buy or sell financial assets with the aim of making profits from short-term price movements. They are often criticised for creating excessive volatility in financial markets.

Stagflation occurs when the rate of inflation and the rate of unemployment rise simultaneously.

Standards of living refers to the material wellbeing of individuals within a country, usually measured by Gross National Income (GNI) per capita. See also *quality of life*.

Structural change involves changes in the patterns of production that reflect changes in technology, consumer demand, global competitiveness and other factors. It results in some products, processes and even industries disappearing, while others emerge

Structural unemployment describes those persons unemployed because of a mismatch between their skills and those skills demanded by employers. This occurs due to factors such as technological change and rapid changes in consumer demand, where labour skills cannot adapt quickly enough to such changes.

Stock exchange is an organisation that provides facilities for investors to trade shares and other financial assets. See also, *share market*.

Sub-contracting (see *outsourcing*)

Subsidies are cash payments from the government to businesses to encourage production of a good or service and influence the allocation of resources in an economy. Subsidies are often granted to businesses to help them compete with overseas produced goods and services.

Substitute is a good that consumers may choose to buy in place of another good, such as butter and margarine or tea and coffee.

Superannuation is a form of saving that individuals cannot access until they reach retirement age.

Supply is the quantity of a good or service that all firms in a particular industry are willing and able to offer for sale at different price levels, at a given point in time.

T

Tariffs are taxes on imported goods imposed for the purpose of protecting Australian industries.

Tax (see *taxation*)

Tax base is the items that are taxed by the government, such as income, wealth or consumption.

Tax-free threshold refers to the level of income below which income tax is not payable.

Taxation is a leakage from the circular flow model of income. It refers to the amount of revenue that the government obtains from different sectors and activities in the economy.

Technical efficiency is the ability of an economy to achieve the maximum level of output for a given quantity of inputs. See also, *allocative efficiency* and *dynamic efficiency*.

Technical optimum is the most efficient level of production for a firm. At this point, average costs of production are at their lowest possible level.

Technology transfer occurs when falling global barriers to trade and financial flows allow developing economies to access more advanced technology from overseas.

Terms of trade measures the relative movements in the prices of a economy's imports and exports over a period of time. The terms of trade index is calculated as export price index divided by import price index multiplied by 100.

Thailand-Australia Free Trade Agreement (TAFTA) is a bilateral free trade agreement between Australia and Thailand signed in 2003.

Total outlay method is a way to calculate the price elasticity of demand by looking at the effect of changes in price on the revenue earned by the producer. If price and revenue move in the same direction, demand is inelastic; if price and revenue move in the opposite direction, demand is elastic; and if revenue remains unchanged in response to a price change, demand is unit elastic.

Trade bloc occurs when a number of countries join together in a formal preferential trading agreement to the exclusion of other countries.

Trade liberalisation is the process of reducing tariffs, subsidies and other barriers to trade in order to encourage increased linkages between economies.

Trade union is an organisation that represents the interests of workers, primarily by seeking to improve their wages and working conditions.

Trade Weighted Index (TWI) is a measure of the value of the Australian dollar against a basket of foreign currencies of major trading partners. These currencies are weighted according to their significance to Australia's trade flows.

Tragedy of the commons refers to a situation where the failure of the market to assign costs to individuals leads to an overuse of resources such as the natural environment, which have no single owner.

Transactions motive is the demand for money for day-to-day purchases for which people need to use money.

Transfer payments (see *social welfare payments*).

Transatlantic Trade and Investment Partnership (TTIP) is a possible trade agreement between the United States and the European Union that has been under negotiation since 2013 and by 2016.

Transition Economies are former socialist economies that are now becoming market economies, and are concentrated in Central and Eastern Europe and Asia.

Transmission mechanism explains how changes in the stance of monetary policy pass through the economy to influence economic objectives such as inflation and economic growth.

Transnational Corporations (TNCs) are global companies that dominate global product and factor markets. TNCs have production facilities in at least two countries and are owned by residents of at least two countries.

Treasury is the Australian Government department responsible for developing fiscal policy through the Federal Budget, and advising the government on financial stability issues.

U

Underemployment refers to those persons who are working less than full time (and therefore not unemployed) but would like to work more hours.

Underlying inflation is a measure of the increase in the general price level that removes the effect of one-off or volatile price movements.

Unemployment refers to a situation where individuals want to work but are unable to find a job, and as a result labour resources in an economy are not utilised.

Unemployment rate is the number of people officially unemployed as a percentage of the labour force.

Union (see *trade union*)

Unit elasticity of demand is where a change in price causes a proportional change in quantity demanded such that total spending by consumers on a good remains unchanged.

United Nations is a global organisation of 193 member states established in 1945 with a broad agenda covering the global economy, international security, the environment, poverty and development, international law, and global health issues.

Utility is the satisfaction or pleasure that individuals derive from the consumption of goods and services.

V

Valuation effect is where an appreciation (or depreciation) of the currency causes an immediate decrease (or increase) in the Australian dollar value of foreign debt.

Voluntary export restraints are agreements to restrict the number of exports to another country in exchange for a similar concession from the other nation.

W

Wages are the return to the factor of production labour for its use in the production of goods and services. These not only include wages but also salaries, fees, commissions and other earnings. See also, *interest*, *profit*, *rent*.

Wants are material desires of individuals that provide some pleasure when they are satisfied. This will depend on personal preferences. Wants are said to be unlimited. See also, *collective wants*.

Wage Price Index is a measure of growth in hourly rates of pay that is released quarterly by the Australian Bureau of Statistics. It is regarded as the most reliable indicator of underlying wage growth as the index is not affected by changes in bonuses or the quality or quantity of work.

Wealth is the value of the stock of assets held by individuals at a point in time.

Wealth effect occurs when an increase in the price of assets such as property and shares leads to an increase in consumption. This occurs because rising asset prices make the owners of these assets feel wealthier and so more willing to spend a greater a proportion of their income.

Welfare (see *utility*, *social welfare payments*)

Workable competition is the government's objective to achieve the maximum level of competition within an industry that is compatible with the market structure and specific conditions of the industry, that is, a situation where all markets are contestable.

Workforce (see *labour force*).

Workforce participation rate (see *participation rate*)

World Bank is a financial institution owned by 188 member countries that assists poorer nations with economic development through loans (often at little or no interest rates) to fund investment and reduce poverty. See also, *Heavily Indebted Poor Countries (HIPCs)*.

World Trade Organisation (WTO) is an organisation of 164 member countries that implements and advances global trade agreements and resolves trade disputes between nations.

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