

# Jacaranda Economics & Business Alive 10

## Australian Curriculum eBookPLUS

Authors: Simon Phelan | Matt Richardson | Benjamin Rood



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# Chapter 1: Economic performance

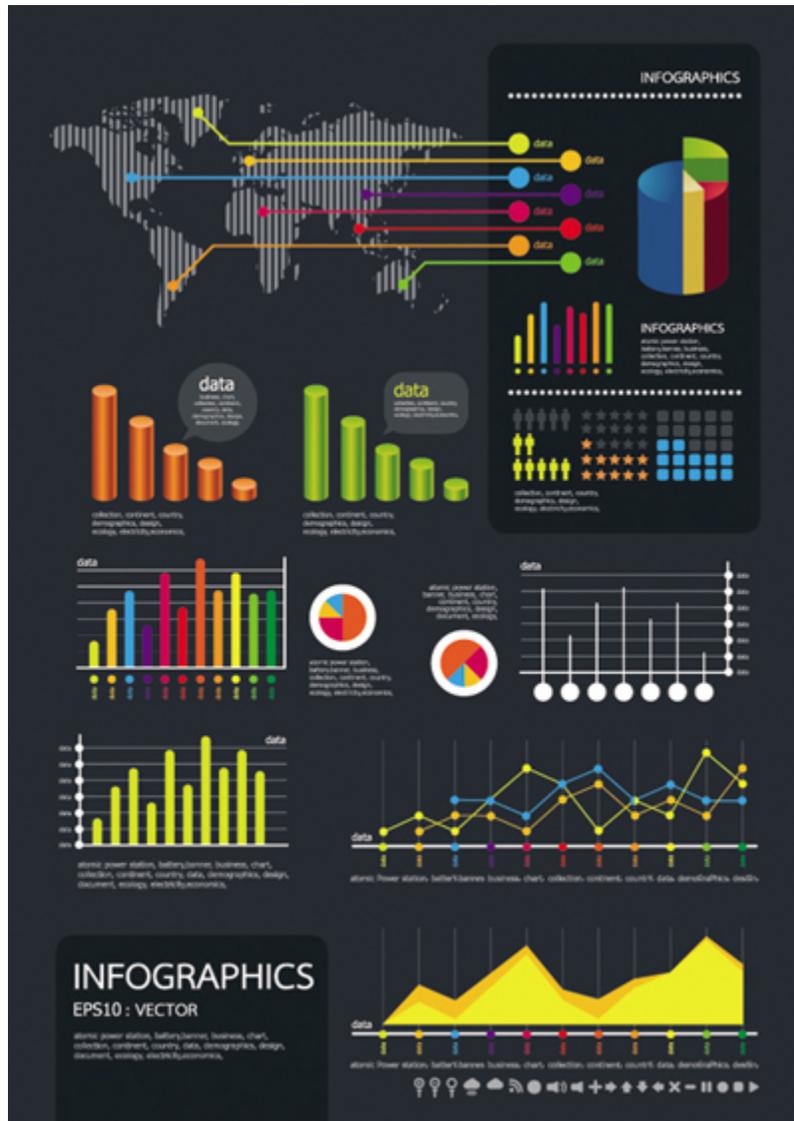
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# 1

## Economic performance



# 1.1 Overview

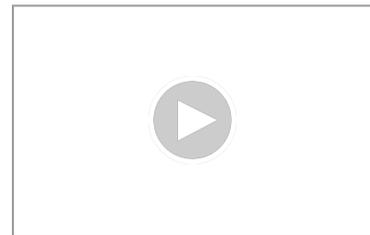
## 1.1.1 Measuring economic performance

### on Resources



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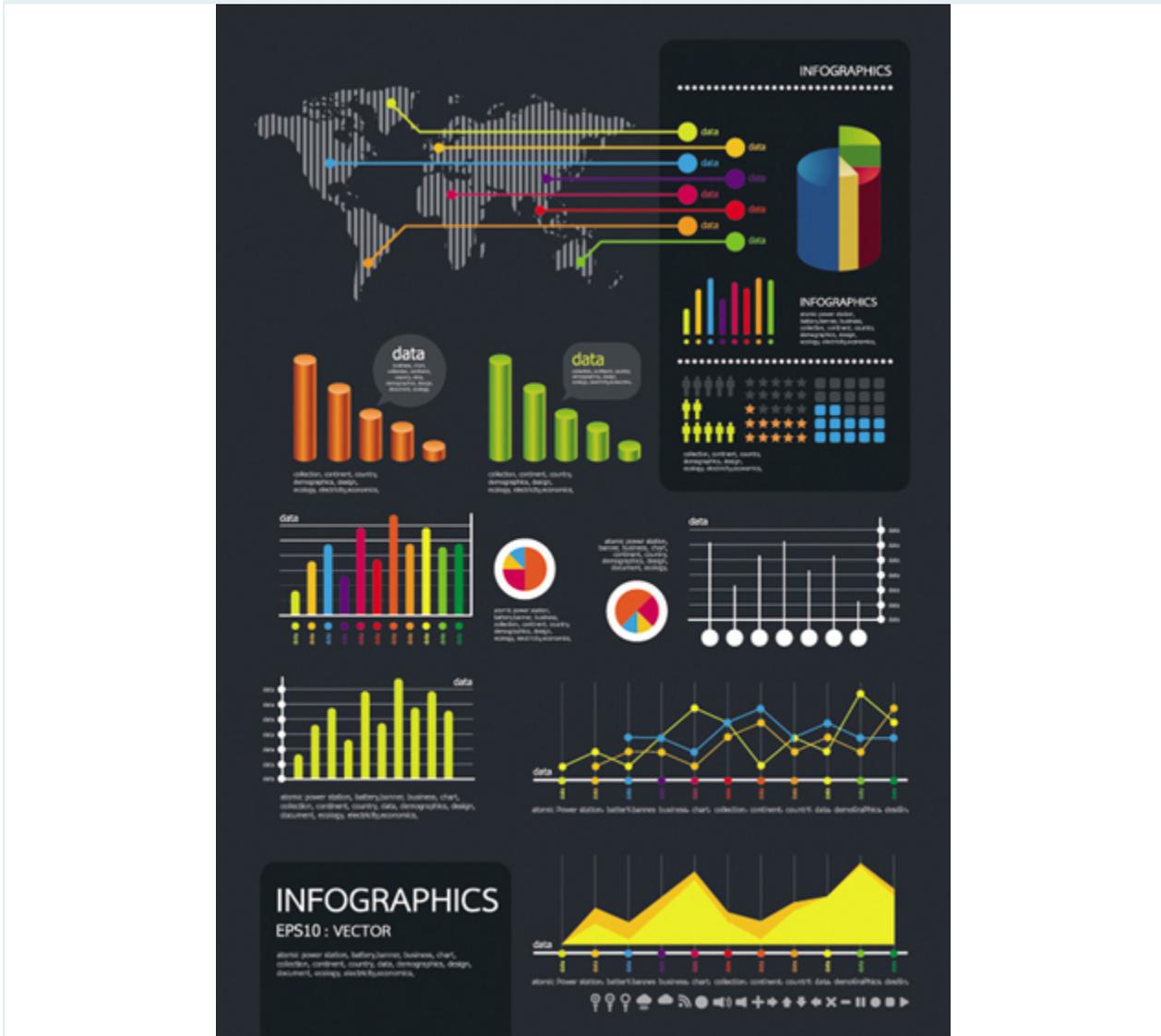


As you have probably learned through earlier studies of economics, it is important that an economy satisfies as many of the needs and wants of its citizens as possible. It does this by providing a structure — such as a market — that enables buyers and sellers to meet and exchange goods and services.

You have probably also learned that not all citizens of society have the same level of access to these goods and services. The ability to earn an income, family background, health, education and luck are some factors that influence a person's ability to satisfy their needs and wants.

The numbers of people who are unable to access a minimum level of goods and services are often used as a measure of how well an economy is performing. Information gathered about an economy's performance can be used to plan strategies that assist people to access those minimum levels of goods and services.

**FIGURE 1** All economies in the world measure their economic performance.



The information obtained by measuring the performance of an economy directs government policy. This chapter will discuss some of the key areas for performance assessment, many of which should be familiar to you as they are often discussed by the media.

## Learning objectives

Students will investigate:

- the indicators of economic performance and how Australia's economy is performing.

## STARTER QUESTIONS

1. What is an economy?
2. What do citizens want from their economy?
3. What is the role of a market in an economy?
4. Why should an economy measure its performance?

# 1.2 Economic growth and Australia's economy

## 1.2.1 Economic growth = increased volume of goods and services

Every day you use goods and services. Think of the things you use on a daily basis: bread for breakfast, a bus or train service to get to school, pens and paper to complete homework, and electricity for charging your laptop and mobile phone. And you will need all of these goods and services again tomorrow.

The need for an economy to produce goods and services to replace the ones that have been used or **consumed** is one of the main reasons why economies must grow each year. Other reasons why economies must grow include population growth — which requires additional goods and services — and the desire to continually improve the quality of products. Imagine if producers never improved telecommunication: mobile phones and the internet would not have been invented. **Economic growth** is defined as real growth in the volume (value) of goods and services produced by an economy over a period of time.

**FIGURE 1** Economic growth leads to employment and infrastructure growth.



Measuring economic growth is important as it is linked to many other aspects of the economy and to its ability to satisfy the needs and wants of consumers.

## 1.2.2 Measuring economic growth

Economic growth occurs when an economy increases the volume of goods and services produced over a period of time. The most commonly used general measure of this is the annual rate of growth in real Gross Domestic Product (GDP). GDP represents the total market value of final goods and services produced by a country over a period of time. This figure is adjusted to remove the effects of any inflation existing within the economy over the same time period.

**FIGURE 2** Consumer goods must be continually produced to replace the ones that have been consumed.



The most common means of measuring GDP is by using the Aggregate Demand (or Aggregate Expenditure) method shown in the following interactivity.

## Aggregate Demand method of measuring GDP

$$\text{Aggregate Demand} = C + I + G1 + G2 + X - M$$

### **Private sector consumption expenditure (C):**

Spending by individuals, households and businesses on goods and services to satisfy immediate needs and wants such as food, clothing and household items

### **Private sector investment expenditure (I):**

Spending by individuals, households and businesses on the accumulation of capital goods (for future use) used to produce other goods and services such as computers, houses, factories and machinery

### **Government sector consumption expenditure (G1):**

Spending by all levels of government on goods and services to satisfy immediate needs and wants such as spending on the day-to-day running costs of government departments

### **Government sector investment expenditure (G2):**

Spending by all levels of government on the accumulation of capital goods used to produce other goods such as roads, hospitals and schools

### **Expenditure on exports (X):**

Spending by households, businesses and governments overseas on goods and services produced in Australia

### **Expenditure on imports (M):**

Expenditure by Australian individuals, households, businesses and governments on goods and services produced overseas

It is generally considered acceptable for the rate of increase in GDP to be between 3 per cent and 4 per cent per year. This rate allows for an increase in population, the replacement of goods and services that have been consumed, improvements and new products.

Anything less than 3 per cent is considered slow growth and suggests the economy is not keeping up with the demand for goods and services.

A figure above 4 per cent is often considered to be too high; in other words, the economy is growing too quickly and the rate of growth will not be **sustainable**. A sustained rate of growth means the economy is able to maintain that level over a significant period.

### 1.2.3 Australia's recent performance

Figure 3 charts Australia's rate of economic growth, as measured by changes in real GDP, from 2013 to 2016.



Changes to Australia's GDP growth rate are published **quarterly** so the annual rate of GDP growth must be drawn from the quarterly figures provided. For example, the annual growth rate of 2.8 per cent for 2015, shown in Figure 4, is calculated by summing the rate for each quarter of 2015 shown in Figure 3.

**FIGURE 4** Australia's annual GDP growth rate, 2012–15

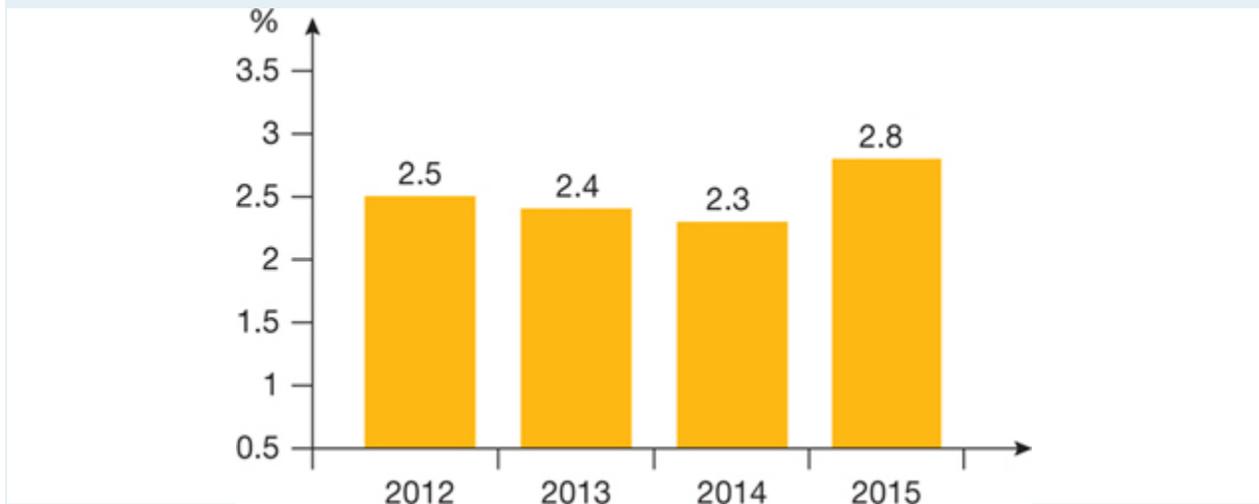


Figure 4 shows that each year from 2012 to 2015 Australia's growth rate fluctuated but remained below the rate of 4 per cent (the figure identified as too high). The goal of achieving a rate of growth of between 3 per cent and 4 per cent, however, was not reached.

Australia's performance in the first quarter of 2016 saw a **seasonally adjusted** increase in GDP of 1.1 per cent. This was the largest quarterly increase since the first quarter increase of 2012. Growth was driven by net exports, private consumption expenditure and private investment. Demand within the mining and agriculture, forestry and fishing industries was the main driver for the economy during the March quarter, with mining up 6.2 per cent and agriculture, forestry and fishing up 2.5 per cent.

## 1.2.4 International comparison

It is useful to compare Australia's economic performance with that of other countries. The United States is often considered to be the world's biggest economy and Australia's performance is regularly compared to its performance.

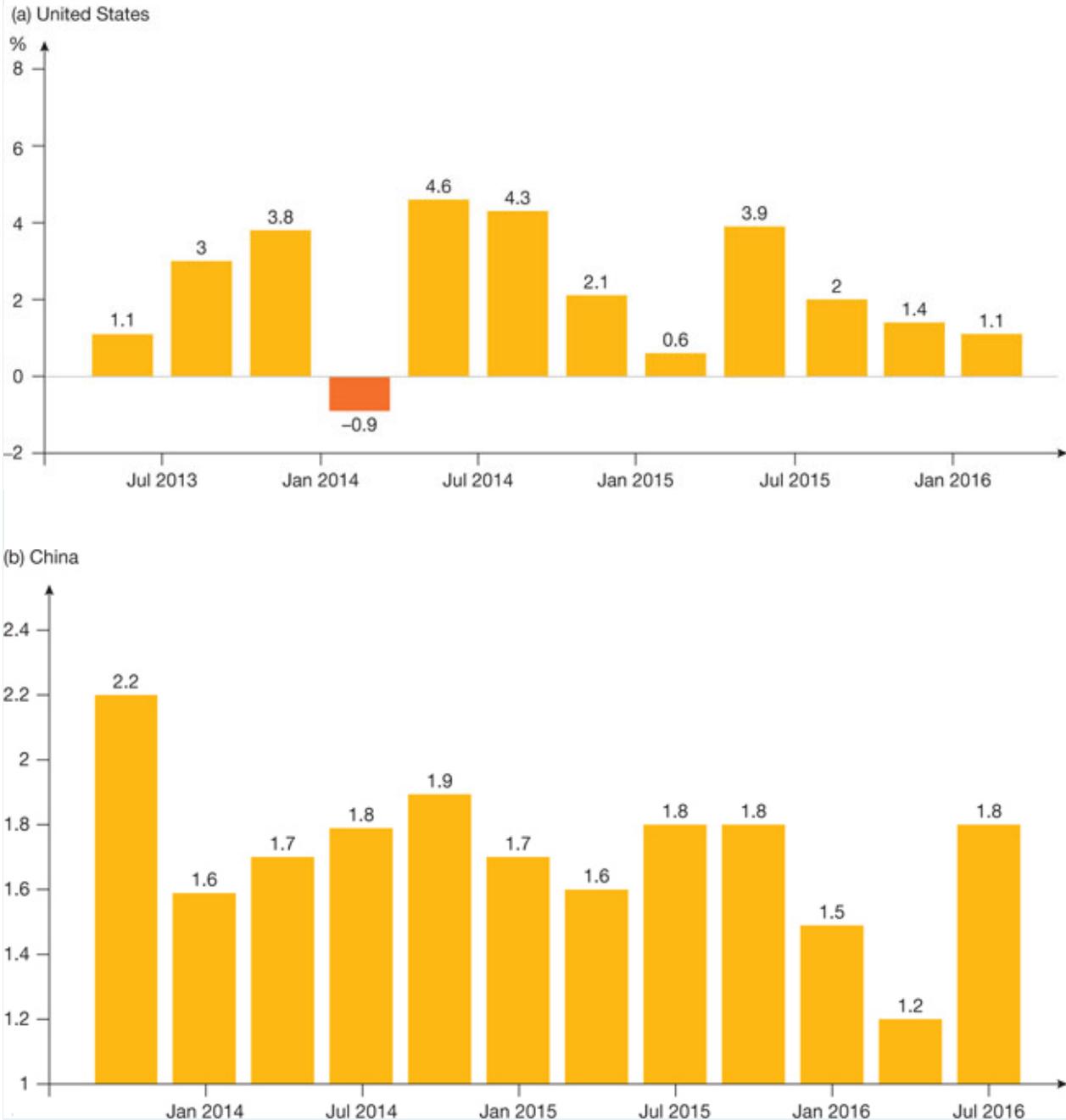
China is an important trading partner for Australia and changes in its growth can lead to a change in our growth. China buys large quantities of our mineral exports, so a decline in China's growth will have a negative impact on our mining sector and hence our growth.

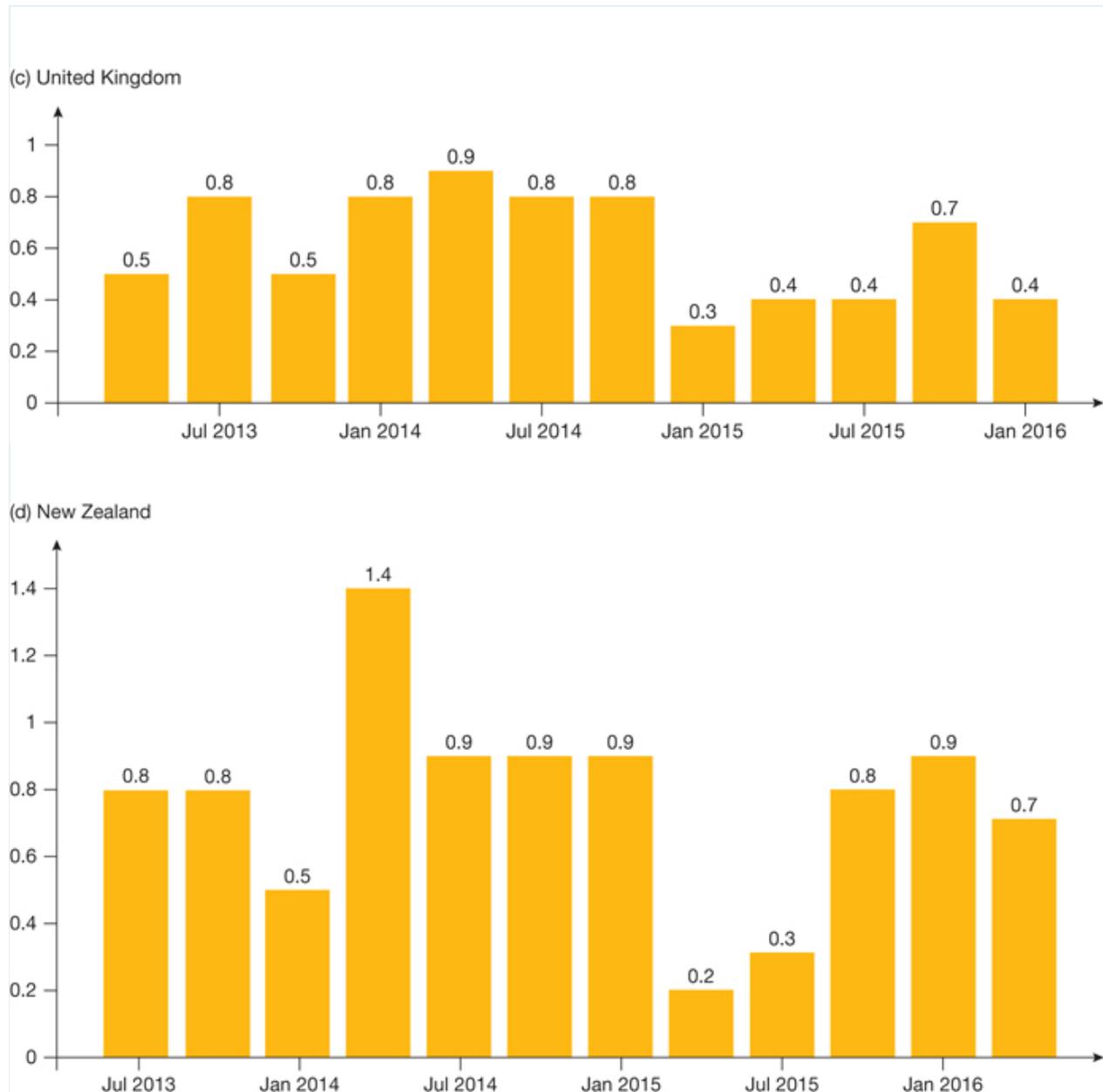
Australia has historic ties to the United Kingdom. It is still one of our major trading partners and its economy is one of the main ones in Europe.

Finally, New Zealand is our closest neighbour and trading partner. The ties between the two countries are strong and New Zealand's economy often mirrors changes in our economy.

The graphs in Figure 5 show the growth rates of those four economies.

**FIGURE 5** Growth rates of other economies, 2013–16: (a) the United States, (b) China, (c) the United Kingdom and (d) New Zealand





## 1.2.5 Limitations of measuring economic growth

While tracking changes in our GDP is the main means of measuring our economic growth, there are limitations to this form of measurement. Some of these limitations are:

- GDP doesn't include non-market production
- GDP doesn't provide information about the distribution of production
- GDP doesn't consider the impact of production on the environment
- GDP involves some 'guesstimates' of production.

Let's look at each of these limitations.

## GDP doesn't include non-market production

If someone carries out jobs around their own home that could be done by a paid worker they are contributing to economic growth, but this contribution is not included because it can't be measured. For example, when someone paints their own home, the Australian Bureau of Statistics can't put a value on the work done, so this is not included in the official GDP figures.

## GDP doesn't provide information about the distribution of production

GDP only measures changes in the quantity of goods and services produced but there is no information regarding who receives this increased number of goods and services. If the increased production is not shared equally among the citizens of the economy, it can be argued that the economy hasn't really 'grown'.

## GDP doesn't consider the impact of production on the environment

Increased production can mean increased pollution, quicker deterioration of the environment, depletion of non-renewable resources and increased climate change. These effects are referred to as **negative externalities** as they are considered negative outcomes of production. These externalities will all negatively impact our national wealth in the future.

## GDP involves some 'guesstimates' of production

The value of some non-marketed (not sold) production making up GDP has to be 'guesstimated', leading to inaccuracies. For example, estimations are made for the part of a farmer's production that is consumed on the farm, as is the annual value of accommodation provided by houses occupied by their owners. This leads to inaccuracies in Australia's GDP figures.

## 1.2 ACTIVITIES

### REMEMBER

1. Define economic growth.
2. Provide one reason why an economy needs to grow each year.

## EXPLAIN

3. Explain why it is important for an economy to measure its performance in terms of economic growth.
4. Explain two limitations of using GDP as a measure of a country's economic growth.

## DISCOVER

5. Use the **Australia GDP growth rate** weblink in your Resources section to help you answer the following questions.
  - a. What was the percentage change in Australia's GDP in the most recent quarter?
  - b. Provide a summary of the reasons for the growth rate identified above.
6. Select two other countries that are important to Australia. For each one:
  - a. explain why it is important to Australia
  - b. calculate its economic growth rate using the figures provided.

### Resources



Explore more with this weblink: [Australia GDP growth rate](#)

# 1.3 Employment trends and Australia's economy

## 1.3.1 The importance of reducing unemployment

As a student, you are constantly asked to think about your future and what you want to do when you finish school. While this may not necessarily be your immediate goal, eventually you will hope to gain employment. Employment enables us to earn an **income** so we can purchase the goods and services we need and want. In the workplace we can form relationships, and often our friendship groups later in life include our work colleagues. Employment also enables us to feel good about ourselves as we are contributing to society, being productive and interacting with others.

**FIGURE 1** Unemployed people have to rely on the government and welfare for their income.



However, not everyone is always able to find employment, and sometimes circumstances arise that lead to a person losing their job. Unemployment is a situation where people who are willing and able to work are unable to find employment. The government recognises that there will always be some level of unemployment, but tries to reduce it. It sets a target or goal of maintaining the rate of unemployment at about 5 per cent of the workforce, or at a level where cyclical unemployment is avoided. We will talk about cyclical unemployment later in this chapter; it refers to unemployment caused by cyclical or regular decreases in the level of economic activity.

Let's first look at how unemployment is measured and what the causes of unemployment are.

### 1.3.2 Measuring unemployment

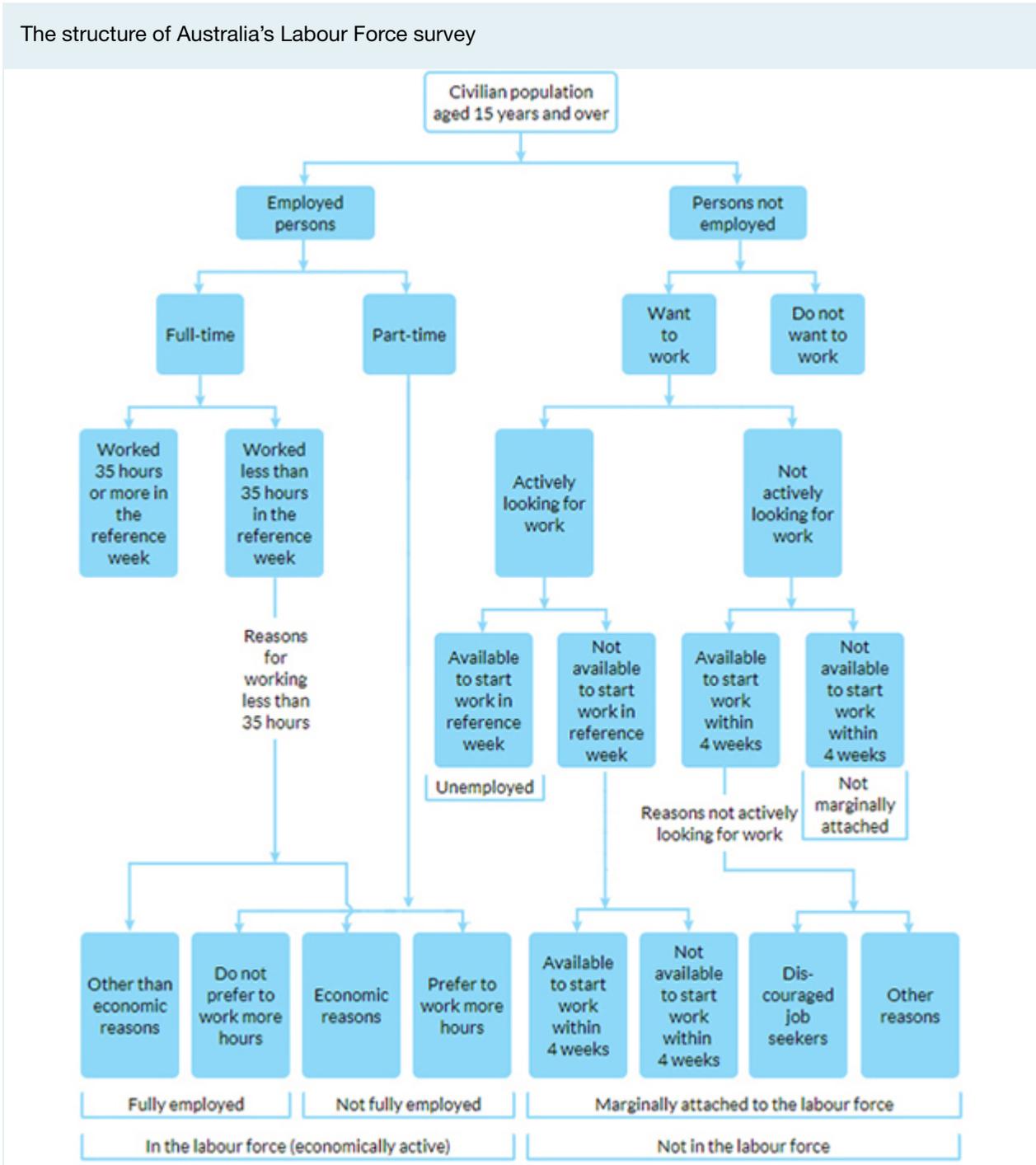
In Australia, the unemployment rate is measured using the Labour Force Survey.

**FIGURE 2** As part of the Labour Force Survey individuals are interviewed to determine their work status.



The Labour Force Survey is conducted monthly and involves about 32 per cent of the civilian population aged 15 years and over. This survey sample is selected from around the country. As shown in the following interactivity, people in the labour force are classified and measured according to their labour force status.

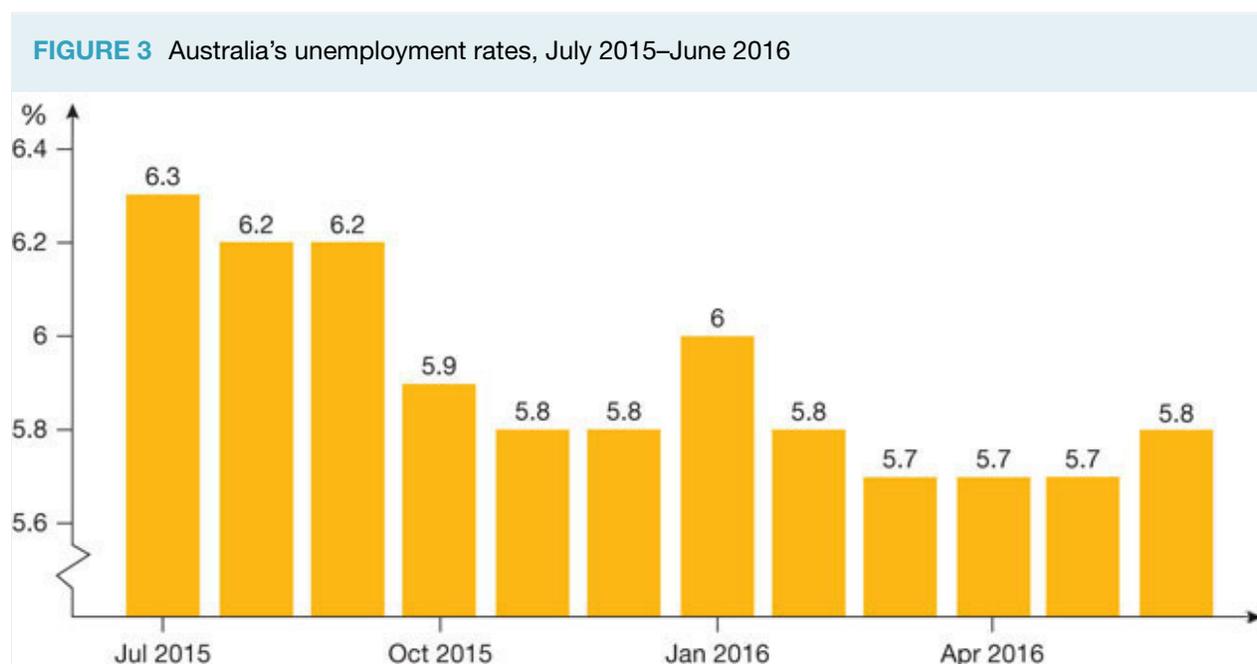
The structure of Australia's Labour Force survey



The Australian Bureau of Statistics (ABS) defines the labour force as people who are older than 15 years and who are able and willing to work. This definition includes people who are classified as employed — that is, they work full time (usually more than 35 hours per week) or part time (more than one hour per week); work for payment or profit; are self-employed; work in a family business; or have a job but are prevented from working due to illness, strikes, holidays or other similar situations in the survey week.

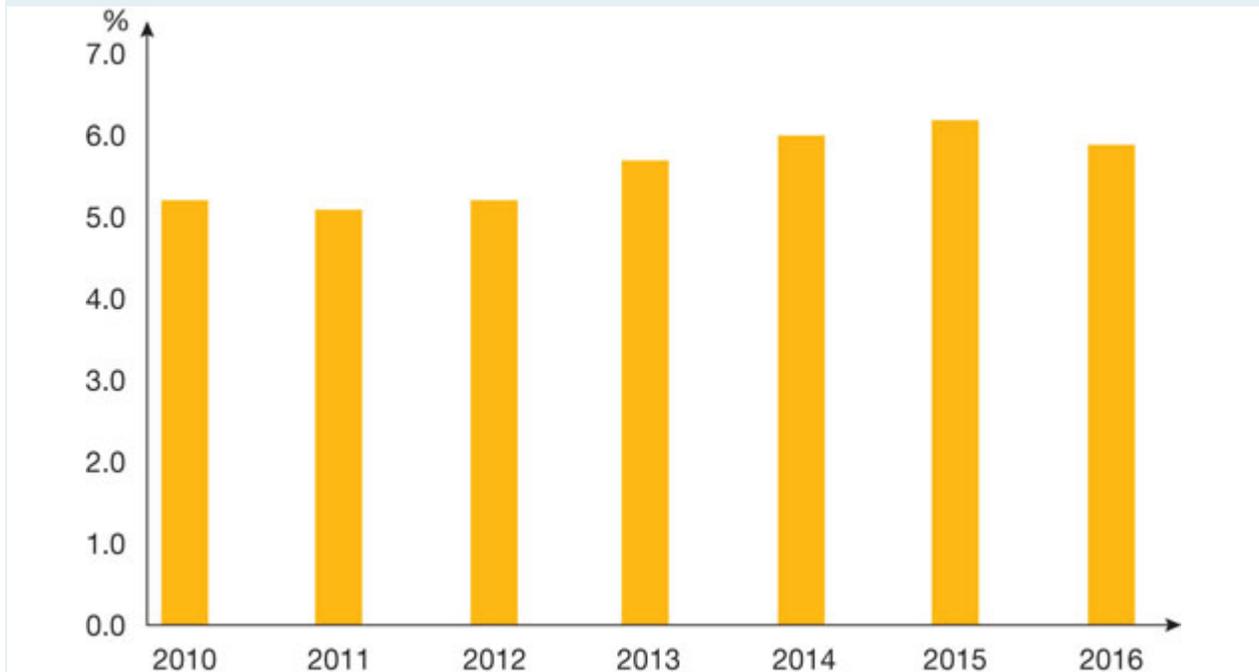
The definition also includes people who are unemployed — that is, those who do not have a paid job but who are actively looking for work by completing job applications and/or registering with Centrelink as a job seeker, either on a full-time or part-time basis, in the week prior to the survey. It also includes those who were able and willing to start employment in the week prior to the survey week or are waiting to resume a job after being laid off or stood down without pay. This group of people is expressed as a percentage of the total labour force, and this percentage is called the unemployment rate.

Australia's unemployment rate fluctuated over the 12 months to July 2016, but an overall downward trend is evident.



We can see in Figure 4 that in the years leading up to 2016, the annual rate of unemployment exceeded 5 per cent.

**FIGURE 4** Australia's unemployment rates, 2010–16

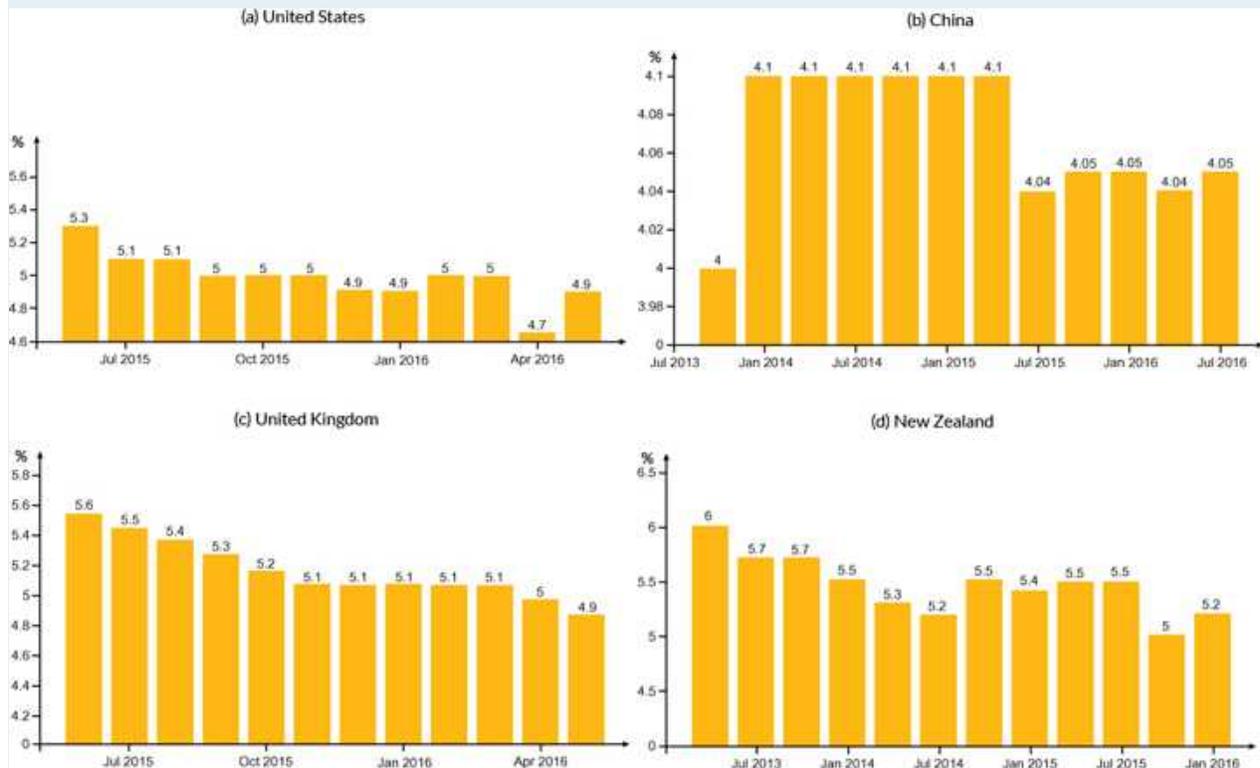


### 1.3.3 International comparison

As with economic growth, it is worthwhile comparing Australia's employment performance with that of some of Australia's trading partners.

The graphs in the following interactivity show the recent unemployment rates of the United States, China, the United Kingdom and New Zealand.

## International comparison of unemployment rates



### 1.3.4 Causes of unemployment

When examining our unemployment rate it is important to understand the causes of unemployment and the various types of unemployment that exist. It is possible to identify four key types of unemployment:

- cyclical unemployment
- structural unemployment
- seasonal unemployment
- frictional unemployment.

#### Cyclical unemployment

Cyclical unemployment occurs when the level of spending in the economy falls. When consumers or businesses feel pessimistic about the economy they tend to save rather than spend. This leads to reduced spending, reduced production and hence a reduced need for labour. If the pessimism persists the economy can move into a period of negative growth. Two consecutive quarters of negative growth is referred to as a **recession** and this can cause further negativity about the state of the economy.

Cyclical unemployment can also occur because of a reduction in consumer incomes, higher interest rates leading to less money available for spending, poor economic conditions overseas among our trading partners, and a decrease in government spending to reduce budget deficits and debt.

## Structural unemployment

Structural unemployment occurs as a result of changes in the way goods and services are produced. Generally, this takes place when production methods change, leading to a mismatch of skills; that is, the skills currently in use are outdated and are not transferrable to the new production methods. This causes job losses, often due to changes in technology. Another cause of structural unemployment is outsourcing. This is when one section or department of a business is closed and its work is done overseas.

**FIGURE 5** Structural unemployment can be caused by the outsourcing of jobs such as call centre operators.



## Seasonal unemployment

Seasonal unemployment results from the termination of jobs at the same time each year due to the regular change in seasons. Common examples of these types of jobs include fruit-picking, tourism, working for holiday operators, sheep shearing and working in the ski fields.

**FIGURE 6** Fruit picking is one example of a seasonal job.



## Frictional unemployment

Frictional unemployment occurs when people are unemployed between finishing one job and starting another. This is common in the building trades and in some areas of rural industry.

### 1.3.5 Effects of unemployment

Unemployment has a number of negative effects on the economy, society and individuals. Let's look at three of these effects:

- deteriorating living standards
- decreased national production
- changed government budget position.

## Deteriorating living standards

When an individual becomes unemployed, their living standard is likely to deteriorate considerably because the average wage of \$ 1499 per week (as at November 2015) is replaced by an average unemployment benefit of \$ 264 per week (as at March 2016). This results in less spending on goods and services, and reduced savings as individuals readjust their spending patterns.

A reduced income can place stress on families and relationships as it often means cutting back on spending on such things as children's activities or family social outings. Unemployed people often develop a feeling of personal failure associated with the loss of status and friends. Knockbacks from unsuccessful job applications reinforce this feeling and individuals may lose their skills and possibly their work ethic if they are out of work for long periods.

## Decreased national production

When some of a nation's resources are not used or are lying idle, the economy does not produce at its optimum or productive capacity. Fewer goods and services are available and national output, or GDP, is lower than its potential level, causing lower material living standards.

## Changed government budget position

Unemployment negatively affects government revenue and government payments. On the one hand, unemployment lowers the number of income earners, thereby reducing government tax revenues. At the same time, unemployment also raises government spending on welfare benefits, leaving fewer resources for other areas of need such as health, education and infrastructure.

### DISCUSSION

Unemployment benefits are paid to job seekers to provide a minimum adequate standard of living to people who are temporarily out of the workforce. As of June 2016, the Newstart Allowance for a single person aged 22 or over with no children is a maximum of \$ 527.60 per fortnight. Do you think this is about right, or should it be a higher or lower figure?

## 1.3 ACTIVITIES

### REMEMBER

1. Define unemployment.
2. Describe what is meant by the labour force and outline who is considered part of the labour force.

### EXPLAIN

3. Explain two main types of unemployment.
4. Explain how the trend in Australia's unemployment rate may have affected the Australian economy over the past four years.
5. Explain how unemployment may affect an individual.

### DISCOVER

6. Use the **Australia unemployment rate** weblink in your Resources section to help you answer the following questions.
  - a. What is the current rate of unemployment in Australia?
  - b. Explain the trend in unemployment over the period shown.
7. Use the **Australia youth unemployment rate** weblink in your Resources section to help you answer the following questions.
  - a. What do you understand by the term 'youth unemployment'?
  - b. According to the graph, what is the current rate of youth unemployment in Australia?
  - c. Outline the effect of unemployment on young people.

### Resources



**Explore more with this weblink:** Australia unemployment rate

**Explore more with this weblink:** Australia youth unemployment rate

# 1.4 Inflation rates and Australia's economy

## 1.4.1 Getting value for our money

As consumers, we are constantly looking for value for money; that is, for good-quality goods and services at reasonable prices. When the price of a good or service increases, we are naturally concerned because this represents a decrease in the value we are getting for our money for that particular good or service.

**FIGURE 1** Inflation causes the value of money to fall.



When the price of a good or service increases, we think of this as inflation. However, inflation is more than just the price of a good or service increasing. **Inflation** occurs when there is an increase in the general level of prices across the economy.

## 1.4.2 Measuring inflation

Inflation in Australia is traditionally measured by calculating the Consumer Price Index (CPI). This index is calculated every quarter by the Australian Bureau of Statistics (ABS). The CPI measures the average change in retail price of a basket of local and imported goods and services that represent a high proportion of expenditure by metropolitan households.

**FIGURE 2** The ABS regularly conducts a survey of prices to calculate inflation.



This basket of goods and services is referred to as the **regimen** and it includes only those items considered important to Australian households. The regimen comprises more than 80 000 items, which can be grouped into the following 11 categories:

- food
- clothing and footwear
- housing
- household contents and services
- transportation
- recreation

- financial and insurance services
- communication
- alcohol and tobacco
- health
- education.

Once the items are selected, they are weighted. Next, the relative importance of each item to the overall household budget is determined and a weighting is applied. Weighting is based on the frequency of purchase and the relative cost of the item.

With the regimen and categories determined, prices for the goods and services included are surveyed at a range of representative retail outlets such as supermarkets, fast-food shops, chemists, department stores and service providers. Prices are only surveyed at these outlets in the eight capital cities of Australia. These prices are then compared to the prices of the same items in what is termed a 'base year' to determine the change in price.

### 1.4.3 Causes of inflation

There are generally considered to be two main types of inflation:

- *demand-side factors*. These factors cause an increase in demand that exceeds the current level of goods and services.
- *supply-side factors*. These factors lead to an increase in the cost of producing goods and services.

#### Demand-side factors

Demand-side factors are those factors that influence the level of spending or demand in the economy. If there is too much demand chasing too few Australian-made goods and services, the economy is operating ahead of productive capacity. This can lead to shortages of goods and services because businesses cannot produce more goods and services or access the resources needed to produce additional goods and services. As a result, the general price level will rise. This is called **demand inflation** and it generally occurs when the economy is going through a period of strong growth and employment. A good way to think of this is as buyers at an auction who compete for only one property: the highest bidder will win the auction.

This excessive demand can result from a variety of factors, including:

- *an increase in consumer optimism about the future*. Consumers are encouraged to spend more money because they don't see a need to save for 'a rainy day'.
- *an increase in business confidence*. This can lead businesses to spend and invest in new assets, hire more employees or replace old equipment.
- *an increase in income*. If consumers have a higher income — either through wage increases determined by the government or through a reduction in income tax imposed by the government — they are likely to increase their spending on goods and services.

- *an increase in our exports.* If the economies of our major trading partners are performing well and they are experiencing good economic growth, they may increase their demand for our goods and services.

Demand inflation occurs periodically in our economy, as every economy goes through cycles. It is the Australian government's role to manage these cycles and the effect of demand inflation on the economy.

## Supply-side factors

The supply of goods and services is the task of suppliers or producers. In producing goods and services for sale, producers and suppliers may experience an increase in their costs. When costs increase, some producers and suppliers may choose to absorb the cost increase themselves and operate with a smaller **mark-up**. However, not all businesses do this, choosing instead to pass on this increased cost to consumers in the form of higher prices. This is known as **cost inflation**.

The most common supply-side causes of cost inflation include:

- *an increase in wages paid to employees.* Wages are often the main cost for a producer and rising wages represent a large cost increase, which is passed on to consumers.
- *an increase in interest rates.* This raises the producer's cost of finance and borrowing. These costs are usually passed on to consumers.
- *an increase in government taxes, oil prices and prices for utilities (such as electricity, gas and water services).* These costs are outside the control of the producer and are also usually passed on to consumers.
- *an increase in the cost of raw materials.* One-off supply-side shocks due to a one-off event can cause this. An example may be a severe storm that negatively affects the yield of a crop, such as Cyclone Larry, which hit Queensland in 2006 and wiped out much of the banana crop for that year. The price of bananas and banana-based products rose as the supply had decreased.
- *Australia's trading partners experiencing a period of inflation.* Many component parts are imported so if our trading partners are experiencing inflation, that inflation may be passed on to Australian producers and suppliers, who then pass the cost on to consumers.

**FIGURE 3** Cyclone Larry, which hit Queensland in 2006, wiped out much of the supply of bananas, causing banana prices to rise dramatically.



The Australian government has worked hard to minimise the incidence of cost inflation by making significant changes to the way some industries are organised and structured.

**tariffs** means that imported goods and services have become cheaper and Australian producers have had to cut costs to remain competitive. This has led to lower prices in some industries, such as the motor-vehicle industry.

The government has also opened up some industries to increased competition. Industries such as gas and electricity were previously dominated by one provider. By allowing more competition there has been a lowering of prices as these new providers seek to gain customers.

#### 1.4.4 Effects of inflation

Inflation is considered to be an unfavourable occurrence for an economy. Inflation makes it difficult for the government to achieve any of its other economic objectives and it can negatively impact on the living standards of consumers. This happens because, among other things, inflation:

- *causes local producers to lose out to overseas competitors.* Inflation raises the price of goods and services produced locally. This hurts Australian producers who wish to compete internationally as the prices they sell their products for cannot compete with the lower overseas prices. This inability to compete can cause business closures, resulting in higher rates of structural unemployment.
- *undermines economic growth.* Inflation erodes consumer and business confidence as consumers stop spending and producers stop investing in productive assets when prices are rising. This can reduce the level of spending, negatively impacting the rate of economic growth.
- *changes the allocation of resources.* When inflation occurs, people with excess income often invest in what is referred to as unproductive resources; that is, resources such as shares and property, which generally increase in value at a faster rate than inflation. So, instead of being used to purchase productive resources that generate goods and services, this money goes into resources that only produce an income for those wealthy enough to invest.
- *affects income distribution.* Inflation can reduce the purchasing power of the dollar and negatively impact on income distribution. People on a fixed wage are not able to increase their income to cope with price increases, so their purchasing power declines.

**FIGURE 4** Inflation in Zimbabwe saw its government produce a 100 trillion dollar banknote.



### 1.4.5 Australia's inflation rate

The Australian government has set a target for inflation of 2 to 3 per cent over the course of a business cycle. One business cycle is a period of five to seven years, during which time it is expected that the economy will go through certain stages such as a peak or boom, an economic downturn, a trough and an expansionary phase.

Figure 5 charts Australia's inflation performance between 2013 and 2016.

**FIGURE 5** Australia's inflation performance, 2013–16

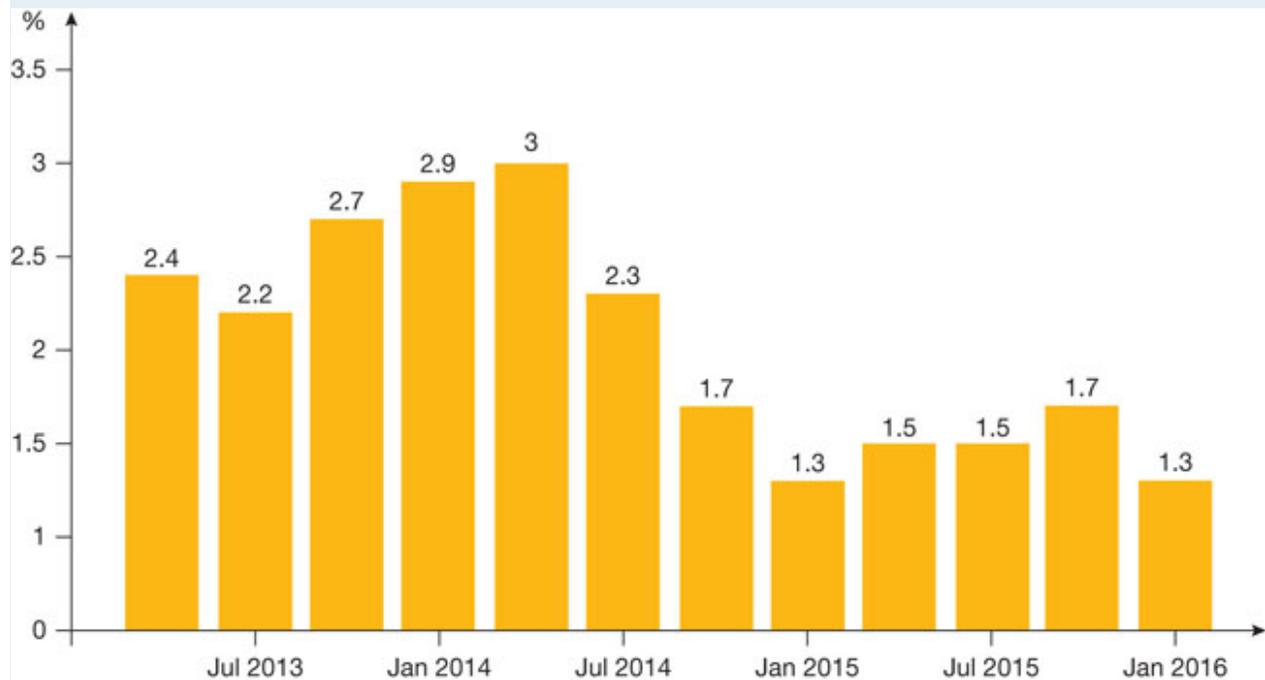


Figure 5 shows that Australia's inflation rate in the quarter from March to July 2014 reached 3 per cent, the upper limit of the target rate for inflation. This figure was the latest in a series of small rises over the previous year. The inflation rate then fell sharply. The government was able to achieve its target rate of inflation in the first year-and-a-half shown in figure 5, but the inflation rate has been below target since the end of 2014.

## 1.4 ACTIVITIES

### REMEMBER

1. What is meant by inflation?
2. What are the two types of inflation?

### EXPLAIN

3. Explain why inflation is bad for the economy. Identify some groups in society that would be negatively affected by high inflation and explain why you believe this to be so.

### THINK

4. How is inflation measured?

5. Can you identify any problems with the way inflation is calculated?

## DISCOVER

6. Prepare a list of all the items you have spent money on over the past week. Classify the items into the categories used by the ABS to calculate the CPI.
- Which category is most important to you?
  - What percentage of your spending belongs to each category?
  - Explain the item of expenditure that is most important to you. Is your spending reflected in your response?
  - Assuming your income remained constant, explain how a rise in prices of 5 per cent may impact your spending.

# 1.5 Sustainability indices and Australia's economy

## 1.5.1 Qualitative measures

Many measures of economic performance are quantitative; that is, they measure the dollar value or the percentage value change in an item. For example, unemployment measures the number of people unemployed as a percentage of the labour force. Inflation measures the percentage change in the price of goods and services.

**FIGURE 1** Deforestation is an issue for economies that wish to develop in a sustainable manner.



While these measures provide useful information, this is not the only information available or relevant to an economy. There is a range of qualitative measures that can be calculated and examined to measure the performance of our economy. Qualitative measures determine or measure the quality of our life and the economy. Let's examine three of these qualitative measures (or indices) now:

- the Genuine Progress Indicator (GPI)
- Measuring Australia's Progress (MAP)
- the Human Development Index (HDI).

## 1.5.2 Genuine Progress Indicator (GPI)

The GPI was developed in the late 1980s to measure the overall progress of an economy in achieving improved living standards. In simple terms, it calculates GDP but then makes both negative and positive adjustments to the values to reflect the good or bad effects on society's welfare of some types of activity and spending. Deductions from the figures are made to reflect costs such as:

- environmental damage due to pollution
- depletion of non-renewable energy resources such as coal and petrol
- reduced leisure time due to increased hours of work or travel times
- inequality in the distribution of income
- increased crime rates.

Some items that add to the GDP include:

- ongoing services provided by public infrastructure
- contributions made by the socially productive use of time, such as volunteer work and housework.

## 1.5.3 Measuring Australia's Progress (MAP)

MAP is a collection of measures published periodically by the ABS. It arose partly out of public interest in determining whether or not life in our country was getting better, and if so, whether this improvement could be sustained indefinitely.

There are four main categories of measures used by the ABS to compile this indicator. Table 1 summarises some of the key elements that make up each category of measure.

**TABLE 1** Measuring Australia's progress (MAP) — a summary of the concept's structure

**Key dimensions, specific headline and supplementary measures, and brief description of recent trends**

1. Individuals	2. The economy and economic resources	3. The environment	4. Living together
<ul style="list-style-type: none"> <li>● <i>Health</i>, including life expectancy, infant mortality, causes of death, burden of disease</li> <li>● <i>Education and training</i>, including participation and retention rates, qualifications, literacy</li> <li>● <i>Work</i>, including the unemployment rate, labour underutilisation rate and participation rate</li> <li>● <i>Culture and leisure</i>, including attendance at cultural and sporting events</li> </ul>	<ul style="list-style-type: none"> <li>● <i>National income</i>, including real GDP per capita, real disposable income per capita, real household consumption spending per head and saving as a percentage of GDP</li> <li>● <i>Economic hardship</i>, including the distribution of average real equivalised disposable household income by quintile</li> <li>● <i>National wealth</i>, including real assets and liabilities per capita, economically demonstrated natural resources per head, real net foreign debt and mean household net worth</li> </ul>	<ul style="list-style-type: none"> <li>● <i>The natural landscape</i>, including threatened species, weed problems, native forest area, water storage capacity, water diversions and river condition index</li> <li>● <i>The air and atmosphere</i>, including days of excess ozone levels, highest hour averages of sulfur dioxide concentrations, greenhouse gas emissions by sector, carbon dioxide concentrations</li> <li>● <i>Oceans and estuaries</i>, including visitors to the Great Barrier Reef, number of reported oil spills</li> </ul>	<ul style="list-style-type: none"> <li>● <i>Family, community and social cohesion</i>, including proportion of children with lone mother families, children without an employed parent, primary carers of the elderly, voluntary work, suicide and drug-induced death rates, participation in religious activities</li> <li>● <i>Crime</i>, including homicide rate, imprisonment rates, victims of personal and household crime</li> <li>● <i>Democracy, government and citizenship</i>, including proportion of overseas born eligible residents who are citizens, voter turnout, proportion of women in federal parliament and major listed companies</li> <li>● <i>Communication</i>, including computer ownership and internet access for households</li> <li>● <i>Transport</i>, including passenger vehicles per 1000 people, road facilities</li> </ul>

**Key dimensions, specific headline and supplementary measures, and brief description of recent trends**

1. Individuals	2. The economy and economic resources	3. The environment	4. Living together
	<ul style="list-style-type: none"> <li>● <i>Housing</i> (no specific indicator)</li> <li>● <i>Productivity</i>, including both labour and multifactor measures of efficiency, research and development as a percentage of GDP, and hours worked</li> <li>● <i>Competitiveness and openness</i>, including ratio of imports to GDP, real unit labour costs in production, foreign ownership and exchange rate</li> <li>● <i>Inflation</i>, including the CPI and other measures of prices</li> </ul>		
<p>All sets of statistics above suggest progress over the past five years.</p>	<p>There appears to have been overall progress in most of these areas but economic hardship and wealth were not</p>	<p>Data suggests regression for the environment in some areas and progress in others over the past five years.</p>	<p>Trends in this area are mixed, with some showing progress and others regression.</p>

## Key dimensions, specific headline and supplementary measures, and brief description of recent trends

1. Individuals	2. The economy and economic resources	3. The environment	4. Living together
	evenly distributed across society.		

### 1.5.4 Human Development Index (HDI)

The United Nations' Human Development Index is a measure that compares the wellbeing of people in different countries. It reflects and takes into account both positive indicators (such as long life expectancy at birth, educational attainment and average level of income per head per year) and negative ones (such as infant mortality and prevalence of child labour), combining these into a single statistical index number. When a country's index rises, it is a sign that there has been progress and living standards have increased. The main weaknesses of the HDI include the subjective nature of the indicators used to compile the index and the unreliability of the statistical data for some countries.

## 1.5 ACTIVITIES

### REMEMBER

1. What is meant by sustainability?
2. Why is it important to consider sustainability when measuring economic performance?

### THINK

3. Examine the three alternative measures provided. Use the internet to research each indicator in more detail and provide an outline as to which indicator is most suitable for measuring economic performance.

### DISCOVER

4. What things are important to you? Conduct a survey of the class to ascertain the three most important things for each member of the class. Using this information provide an explanation of what we should measure to determine our progress in terms of economic performance.

# 1.6 Other indicators of economic performance and Australia's economy

As we have already discovered, both **quantitative indicators** (such as unemployment) and **qualitative indicators** (such as the HDI) are useful in providing information about the performance of the economy. By using a combination of quantitative and qualitative indicators, we are able to get a clearer understanding of the state of the economy.

In addition to those already mentioned, there are a range of other indicators that give us information about how the performance of the economy is impacting on the quality of people's lives. Three examples that will be examined in this section are:

- the Business Confidence Index
- the Liveability Ranking
- the World Happiness Report.

## 1.6.1 The Business Confidence Index

Imagine you had a casual job and the hours that you worked changed significantly each week. One week you may work 18 hours and the next week you may only work 4. This uncertainty about your working hours may affect your confidence as a consumer. You may decide to save your money rather than spend it, just in case you don't work many hours in the next week.

Businesses are no different. They make decisions based on how confident they are in the performance of the economy. When businesses are confident that the economy is performing well, they are more likely to borrow money to invest and expand, increase their levels of production and hire more staff. Of course, when business confidence is down, the reverse occurs.

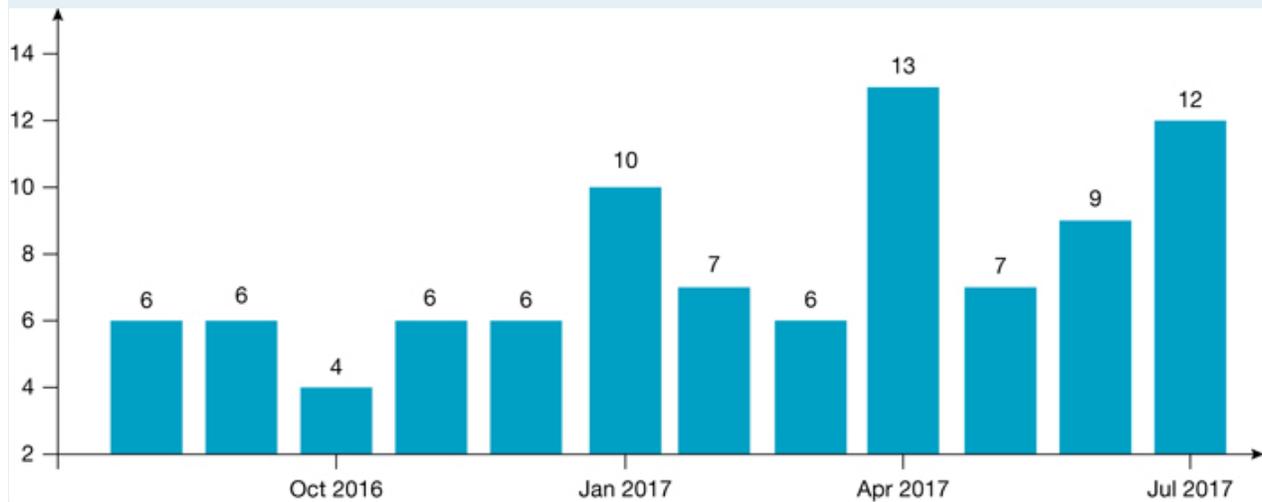
**FIGURE 1** When business confidence in the economy is high, more employees are hired.



Consumer confidence and business confidence are measured by a number of different organisations. National Australia Bank (NAB) produces a monthly report based on a survey of more than 600 businesses.

Trading Economics produce a website that provides a range of economic indicators for over 190 countries.

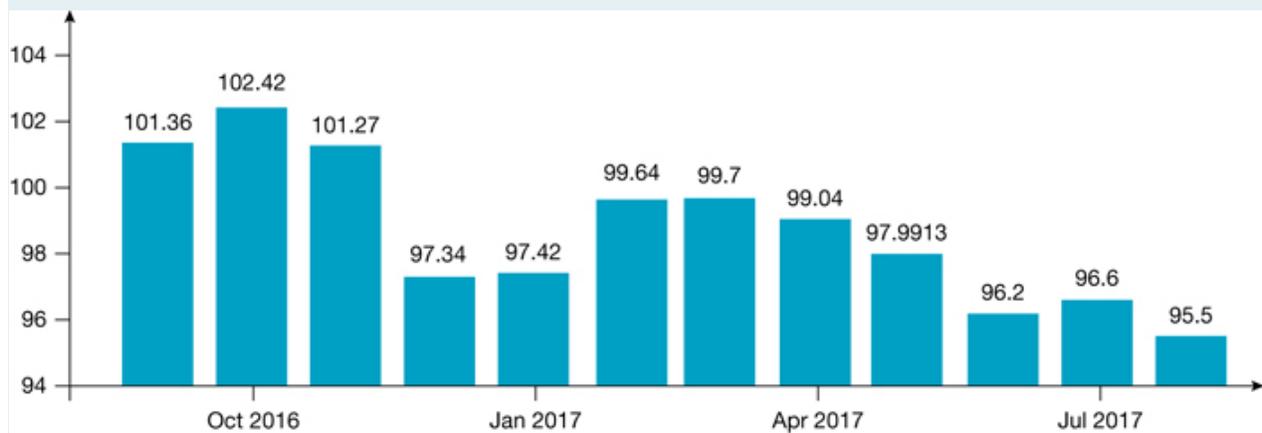
**FIGURE 2** Australian business confidence for August 2016 to July 2017



**Source:** Trading Economics

As figure 2 shows, business confidence can change quickly. Business confidence is often linked to consumer confidence (see figure 3). In general it would seem that the two indicators are linked — if consumers are confident then businesses are also confident about the future. The latest figures seem to refute that assertion so other factors need to be considered.

**FIGURE 3** Australian consumer confidence for September 2016 to August 2017



**Source:** Trading Economics

Business confidence may be positive because overseas demand is growing (exports are in demand), interest rates may be falling or steady, the government may have introduced laws favourable to businesses or a change of government may have occurred.

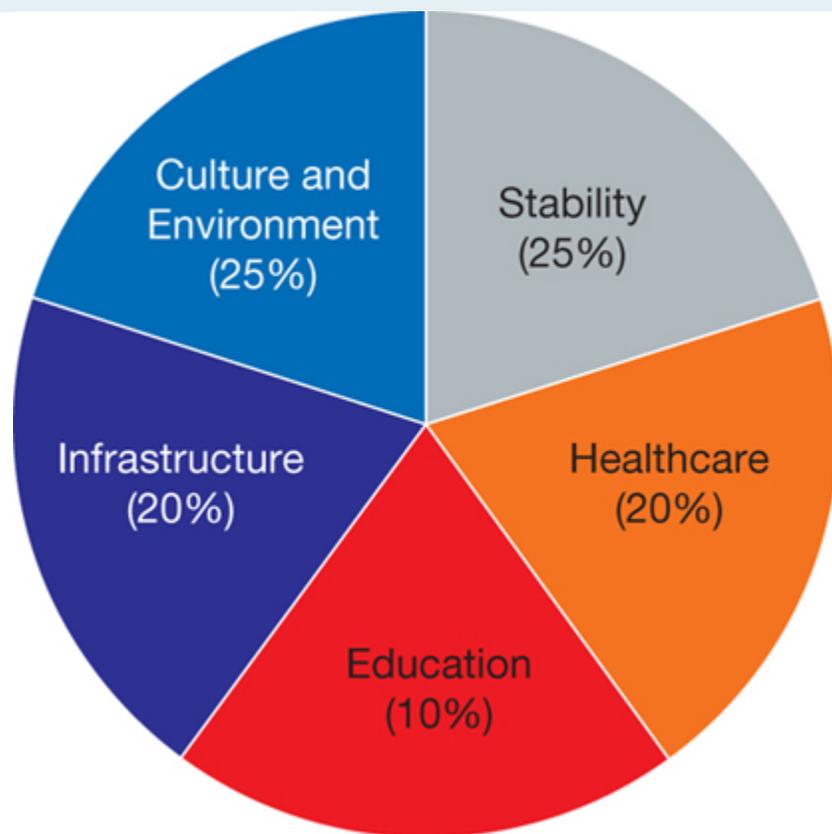
Confidence can also vary between industries, and at different points in time businesses in certain industries may feel more confident than others. For example, predictions of a bumper season of snow will boost the confidence of ski resort owners, and the staging of the 2018 Commonwealth Games on the Gold Coast should boost the confidence of local businesses.

Use the link below to find more up-to-date data on business confidence. <https://tradingeconomics.com/australia/business-confidence>

## 1.6.2 Liveability Ranking

While economic indicators are very important, it is also necessary to consider if the benefits of a strong economy are improving our quality of life. A number of indicators such as the Liveability Ranking have been developed to try to measure this. The Liveability Ranking considers a wide range of factors (outlined in figure 4) to determine which cities are the most desirable to live in.

**FIGURE 4** The major categories used to determine the Liveability Ranking (and the weighting of each)



The 2016 *Liveability Ranking Report* surveyed 140 cities using the criteria set out in figure 3. Overall, the report identified a range of factors that had contributed to changing 'liveability' in cities throughout the world. In particular, civil unrest, acts of terror and violence have reduced stability throughout the world and caused many cities to become less 'liveable'. Cities such as Tripoli (Libya), Kiev (Ukraine) and Damascus (Syria) all became less liveable, largely owing to conflict.

**FIGURE 5** In 2016, Melbourne topped the list of the world's most liveable cities.



### 1.6.3 The World Happiness Report

What use is a strong and productive economy if people are not happy? If an economy is strong because people spend the majority of their lives working with little time to enjoy themselves or see their family and friends, is it really of any benefit? The main aim of having a strong national economy is to ensure that people can benefit from it and enjoy a higher standard of living.

**FIGURE 6** The main aim of having a strong economy is to ensure that people can benefit from it and enjoy a higher standard of living.



The World Happiness Report is a survey that was first conducted in 2012. It collects data on more than 150 countries and ranks them based on the level of happiness of their citizens. Increasingly, governments are interested in 'happiness' data because it not only tells them about the performance of the economy, but also the benefits that people derive from the performance of the economy.

**FIGURE 7** The World Happiness Report ranks more than 150 countries based on their level of happiness.

## WORLD HAPPINESS REPORT



**Source:** *World Happiness Report*, 2016.

Some of the major areas used to calculate the ranking in the World Happiness Report are:

- Gross Domestic Product (GDP) per capita
- social support
- healthy life expectancy
- freedom of life choices
- generosity
- perceptions of corruption.

**FIGURE 8** The top 10 and bottom 10 countries according to the *World Happiness Report, 2016*

Top 10 Countries		Bottom 10 Countries	
Ranks	Country	Ranks	Country
1	Denmark	1	Burundi
2	Switzerland	2	Syria
3	Iceland	3	Togo
4	Norway	4	Afghanistan
5	Finland	5	Benin
6	Canada	6	Rwanda
7	Netherlands	7	Guinea
8	New Zealand	8	Liberia
9	Australia	9	Tanzania
10	Sweden	10	Madagascar

## DISCUSSION

Happiness is usually reported as the primary goal in individuals' lives; however, many people believe there is much more to a rewarding life than just seeking happiness. What else do you think people should pursue in life?

## 1.6 ACTIVITIES

### REMEMBER

1. Identify one international and one domestic factor that may influence business confidence.
2. What are the five major categories used to determine the liveability ranking?
3. According to the 2016 World Happiness Report, what are the:
  - a. three happiest countries?
  - b. three least happy countries?

### EXPLAIN

4. Explain why business confidence may vary between industry sectors.
5. Explain why the World Happiness Report is a useful indicator for governments.

### THINK

6. Imagine the Australian Government has asked you to design a new index or indicator that provides information about the economy and standard of living in Australia. What would you call your index/indicator and how would it be calculated?

### DISCOVER

7. Choose ONE country that is not in the top 10 or bottom 10 of the World Happiness Report, 2016. For your chosen country, undertake research in relation to:
  - Gross Domestic Product (GDP) per capita
  - Social support
  - Healthy life expectancy
  - Freedom of life choices
  - Generosity
  - Perceptions of corruption

Use your research to predict where your chosen country would be ranked on the World Happiness Report for 2016. Check to see how close your estimated ranking was with the actual ranking for your country on the report.

# 1.7 SkillBuilder: Calculating inflation

## 1.7.1 Tell me

Calculating the inflation rate for Australia involves collecting data about changes in the prices of goods and services. This information is not readily available and requires time to collect and the ability to conduct surveys at regular intervals.

However, on a smaller scale it is possible to monitor and record the changes in price of a single product. For our purposes we will look at calculating changes in the price of petrol.

Calculating changes in the price of petrol over a period of time can give an insight into how inflation is calculated and the effect the change in price may have on other areas of the economy.

## 1.7.2 Show me

Identify a two-week period and a location you pass regularly where the price of petrol can be observed on a daily basis.

Each day for the two-week period record the price at your chosen service station of:

- unleaded petrol
- premium petrol
- diesel
- LP gas.

(If there is more than one location available, select one and use that same location each day.)

Record the date and time you visit the location and then record the price advertised for each of the four products listed above.

*Note:* When recording the price per litre ensure the price is the 'actual' price and not the price available to customers using discount offers or supermarket docketts.

Once you have collected this information, calculate the percentage change in price for each product each day. Use this calculation formula:

$$\% \text{ increase on day 2} = \frac{\text{price day 2} - \text{price day 1}}{\text{price day 1}} \times \frac{100}{1}$$

At the end of the survey period, calculate the overall inflation rate for the four products using this formula:

$$\% \text{ increase over the period} = \frac{\text{price on last day} - \text{price on day 1}}{\text{price day 1}} \times \frac{100}{1}$$

### 1.7.3 Let me do it

#### 1.7 ACTIVITIES

Write a report outlining the inflation rates for the four types of fuel and then explain how the change in price of these may impact upon individuals, families and other businesses. Comment on the reliability of the data collected. What could be done to make the data more reliable?

## 1.8 Review

### 1.8.1 Summary

Assessing the performance of an economy is important because it enables the economy to evaluate how it is performing its role as 'manager'. It also enables the economy to assess the wellbeing of its citizens.

There are a number of key areas where it is important and possible to measure economic performance:

- economic growth
- unemployment
- inflation.

Each of these indicators has a means of measurement and it is important to understand how they are measured and the effects these problems have on our living standards — both material and non-material.

Sustainability indices and other indicators of economic performance also provide a lot of information about the economy. Some examples of these include: the Human Development Index (HDI), the Genuine Progress Indicator (GPI) and the World Happiness Report.

## 1.8.2 Your turn

### 1.8 ACTIVITIES

Prepare a report comparing Australia's economic performance in the key areas of economic growth, unemployment and inflation against one other country not already examined (India, as a growing economy of importance to Australia, is an example).

In your report, the following questions should be addressed.

1. Provide a summary of what your report is aiming to show. Include a definition of the indicators you will discuss and an explanation of how they are calculated.
2. Provide a statement outlining why the country selected for comparison was chosen; that is, their importance to Australia.
3. Provide a brief summary of the performance of both economies over the period shown in terms of the measures identified.
4. Provide a comparison between the two economies. Which economy has performed better? Provide reasons for your assertion.
5. Outline the effects that the trends in the indicators may have had on the people living in the economy.
6. Investigate the Human Development Index for each country and answer questions a, b and c.
  - a. Which country has performed better?
  - b. Does the ranking on the HDI match the results identified above using the more traditional measures?
  - c. Which areas are of concern to each country?

### **on** Resources



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# Chapter 2: Living standards

## Contents

- 2.1 Overview
- 2.2 Living standards related to economic performance
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# 2

## Living standards



## 2.1 Overview

### 2.1.1 Material and non-material living standards

#### **on** Resources



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**Watch this eLesson:** Some of the goods and services we buy can negatively impact on our non-material living standards.

Searchlight ID: eles-2436

You have probably heard the phrase 'standard of living' (or 'living standards') before, but do you know what it means? Most people would say that living standards refers to how 'well off' they are or how much they own or are worth. To some extent these concepts are linked to the concept of living standards, but there is much more to it. The first thing to note is that there are two types of living standards: material living standards and non-material living standards.

**FIGURE 1** Living standards can be measured by our access to goods and services.



## What are living standards?

**Living standards** refers to how well off a nation or country is overall. The most common types of living standards are the material (or economic) living standards. Material living standards relate to the level of economic wellbeing, influenced by annual levels of Gross Domestic Product (GDP) **per capita**, incomes, and consumption of goods and services.

**FIGURE 2** Material living standards refers to the number of goods and services we can afford to buy.



The second type of living standard is referred to as non-material living standards. Non-material living standards are value-based elements of human wellbeing that are not connected to material possessions. They affect the quality of our daily lives. Elements of non-material living standards include our level of personal happiness and self-fulfilment, the crime and death rates, the absence of pollution, and political freedom. Many of these are difficult to measure precisely.

These two living standards also affect each other in compatible and conflicting ways. For instance, increased economic living standards may cause a decline in our non-material living standards. Increased production could cause more pollution, longer hours of work and stress. Alternatively, efforts to reduce environmental damage, such as introducing a carbon tax, may slow the growth of some industries and the economy, increase costs to consumers and undermine material living standards.

In this chapter we will more closely examine the different types of living standards, how they are measured and how Australia has performed in terms of improving the living standards of Australians.

## Learning objectives

Students will investigate:

- the links between economic performance and living standards, and how and why variations exist within and between economies.

## STARTER QUESTIONS

1. What is meant by living standards?
2. Identify the two types of living standards.
3. Why do you think it is important to measure changes in living standards?
4. Which element of living standards is more important to you? Explain your answer.

# 2.2 Living standards related to economic performance

## 2.2.1 Getting the balance right

Economies measure their economic performance to determine how well the economy is providing for its citizens. Measures such as unemployment rates, inflation rates and the rate of economic growth, however, do not provide information about living standards.

**FIGURE 1** Living standards can be improved by economic growth.



Changes in the performance of an economy as measured by indicators such as inflation and unemployment rates and the rate of economic growth can have an impact on both material and non-material living standards. As such it is important that the government — which is responsible for managing economic performance — takes changes to living standards into consideration when implementing policies and strategies to improve economic performance.

As we will see, this can require a delicate balance in policy implementation as some policies may improve material living standards but may negatively impact non-material living standards, and vice versa.

Let's examine the link between the indicators of economic performance and material and non-material living standards.

## 2.2.2 Living standards and economic growth

Improvements in material living standards are most often measured by changes in Gross Domestic Product (GDP), the same measure used to calculate the economic growth rate of an economy. The difference in the calculation is that the value of GDP is then divided by the number of people in the economy (GDP per capita). This measure aims to calculate the value of goods and services each member of the economy has access to. If there is an increase in the value of GDP per capita, it is assumed that the material living standards of each individual in the economy have improved. However, this is not always the case.

**FIGURE 2** Material and non-material living standards can be improved by owning your own home.



## Strong and sustainable economic growth

It is expected that economic growth will be both strong and sustainable. Strong economic growth is defined as a growth rate of between 3 per cent and 4 per cent on average. At this rate of economic growth, goals such as low inflation, full employment and external stability should be achievable. However, a higher rate of growth — such as 5 per cent, for example — would lead to economic problems, and living standards would ultimately suffer. At a rate of 5 per cent per year, the pace of the economy would be pressed beyond its productive capacity. The producers of goods and services would not be able to keep up with the demand. This would cause cost and demand inflation due to general shortages of resources and of finished goods and services. It would also cause spending on imports to grow quickly.

However, an economic growth rate of less than 2 per cent per year would also see the government's economic goals endangered. The unemployment rate would rise since there would not be enough jobs and incomes created for a growing labour force. Higher unemployment would lead to poverty and falling material living standards because living standards suffer unless economic growth takes place at the right speed.

Growth should also be sustainable. Sustainable refers to the rate at which Australia's economy can grow its production of goods and services without jeopardising the living standards of future generations. The obvious problem in this context is that our demand for non-renewable natural resources (water, minerals, forests, oceans and air) is creating very serious environmental problems such as pollution, global warming, resource depletion and loss of biodiversity. For example, clearing old growth forests and land, discharging waste into our waterways and the atmosphere, building in sensitive areas, building more freeways, and encouraging excessive consumerism may maximise our short-term living standards and lifestyles, but what future will our children have? Will they be able to enjoy the same material and non-material living standards as we do? So, in this sense, the rate of economic growth is only sustainable in the long term if it does not deplete non-renewable resources, degrade the environment and reduce the ability of future generations to meet their needs and wants. In some ways, a trade-off exists between economic growth and some aspects of current and future living standards.

### DISCUSSION

As mentioned above, many non-renewable natural resources are being used up to maintain our current living standards. Should tighter restrictions be placed on using these resources even if it means that economic growth will be damaged as a result?

## on Resources



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### 2.2.3 The weaknesses of GDP per capita as a measure of living standards

An increase in the value of goods and services produced per year divided by the number of people in the economy does not necessarily mean that people are better off or that their standard of living has improved. There are a number of things to consider when using GDP per capita as a measure of living standards.

#### GDP per capita is an average

GDP per capita gives only a rough idea about average material living standards, provided there is also a fairly even distribution of the goods and services produced, and provided the extra production makes people happier. There is no evidence to suggest that an increase in GDP is shared equally among the people in the economy. These are assumptions that can make rises in GDP per capita quite meaningless.

**FIGURE 3** An increase in GDP doesn't necessarily mean a reduction in poverty rates.



## GDP per capita assumes improvements in living standards

It is assumed that an increase in GDP per capita results in better employment opportunities, an increased life expectancy, increased consumer choice, improved provision of government services, and better health and education services. These improvements should help to raise both material and non-material living standards. However, there is no information that tells us whether these improved GDP figures and employment figures have resulted from people working longer hours or from machinery and computers being introduced to replace labour in performing some jobs.

These factors can reduce our leisure time and perhaps the quality of family life, as well as resulting in increased unemployment and an increased need for welfare.

## GDP per capita doesn't measure the environmental impact

Pollution and environmental damage, resource depletion, stress, urban problems, overcrowding and possible increases in crime and divorce rates are not measured by GDP per capita, yet they have a significant impact on our living standards. Money spent on dealing with crime, legal fees involved in family divorce and the costs of dealing with pollution are actually recorded as additions to GDP's value. GDP does not distinguish between good economic activity and bad activity or negative externalities.

### 2.2 ACTIVITIES

#### REMEMBER

1. Define economic growth.
2. Define GDP per capita.
3. Distinguish between strong and sustainable economic growth.

#### EXPLAIN

4. Explain why economic growth may be considered a good measure of living standards.
5. Explain why GDP per capita may not be considered an appropriate measure of living standards.
6. Explain what is shown in the graph in figure 5.

## DISCOVER

7. Use the internet to research two countries that are important to Australia. Then answer the following questions.
  - a. Identify their GDP per capita.
  - b. Which country has the higher level of GDP per capita?
  - c. Which country showed the greater increase in GDP per capita over the period 2010 to 2014?
  - d. Explain why that country may or may not have higher living standards than the other country.

### Resources



**Explore more with this weblink:** [Australia GDP annual growth rate](#)

## 2.3 Variations in economic performance

### 2.3.1 Economic performance can impact living standards

As discussed in chapter 1, it is important for an economy to measure its performance. The government sets goals for the economy and in setting these goals it is necessary to determine whether they have been achieved. Some of the government's main economic goals are:

- *low inflation levels*: a 2-to-3-per-cent increase in the CPI per year
- *strong and sustainable economic growth*: a 3-to-4-per-cent increase in GDP per year
- *full employment*: a 5-per-cent unemployment rate
- **equity** in the distribution of income and wealth
- **external stability** through a reduced trade deficit and decreasing levels of foreign debt.

**FIGURE 1** Changes in economic performance can impact living standards.



If the economy is not able to achieve these goals — either through exceeding its targets or, in some cases, under-achieving in terms of targets — there will be an impact on both material and non-material living standards.

It is important for the economy and the public to understand how living standards can be affected if these goals are not met. The government's intention to achieve these goals will influence government policies in the future. Let's examine the impact on material and non-material living standards of not achieving some of these goals.

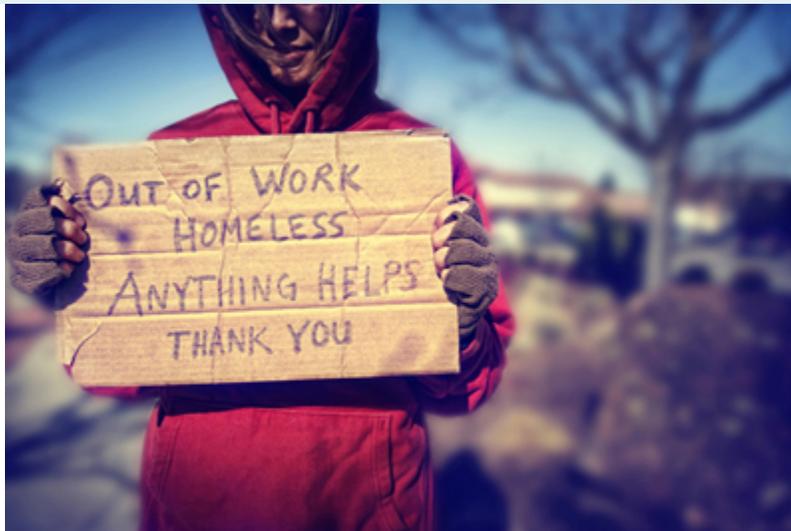
## 2.3.2 Living standards and unemployment

Unemployment is when a person who is willing and able to work is unable to find paid employment. This can happen when a person who has been employed loses their job due to a downturn in the economy, technological developments (which can render jobs redundant) or seasonal changes (where jobs disappear for a period of time). In these circumstances an unemployed person's living standards can be reduced long term. This is because:

- they are no longer earning an income. Having to rely on government welfare payments means their income decreases.
- they use their savings to assist them in maintaining spending habits in the short term. Unemployed people may use their savings to pay for necessities until they find a new job.
- as the length of time they are unemployed increases, their savings evaporate and spending on goods and services decreases
- financial stress increases as they become disheartened about finding another job. This stress can manifest itself in health and family problems.

The end result is that the material and non-material living standards of unemployed people deteriorate if they remain unemployed for an extended period of time.

**FIGURE 2** Unemployment can have devastating effects on individuals and society.





**Explore more with this weblink:** [Australia youth unemployment rate](#)

### 2.3.3 Living standards and inflation

Inflation is when there is an increase in the general level of prices. A high inflation rate (more than 3 per cent) is seen as unfavourable because it generally has adverse effects on the achievement of other government goals, ultimately eroding the living standards of Australians.

#### Inability of Australian businesses to compete with overseas producers

Inflation causes Australian producers to raise their prices to cover costs. This reduces their ability to compete internationally, which leads to reduced profits, slowing business expansion and even business closures. Unemployment inevitably increases as a result, leading to negative impacts on living standards.

Inflation may also encourage the import of cheaper goods and services from countries that may not have been affected by inflation. This can put further pressure on local businesses, which cannot compete with these imported goods and services.

#### Inflation impacts confidence in the economy

When inflation increases, consumers become less willing to purchase goods and services because they believe they are getting less value for their money. Their confidence in the economy declines as their purchasing power declines. In addition, interest rates usually go up during times of high inflation because the government tries to stop the excessive spending that may have caused inflation in the first place. However, higher interest rates can further undermine confidence and slow household consumption because consumers are obliged to cover higher loan repayments. So, decreased spending and increased financial stress reduce consumers' living standards.

## Inflation distorts how resources are used

Those people who own the resources in our economy — the land, labour and capital — are always using or allocating those resources to areas where they are most likely to maximise the income and return on their investment. Ideally, the economy would like resources to be used to produce goods and services for consumption or expansion. However, inflation tends to cause the prices of shares, property and some other assets to rise faster than the inflation rate. This can cause resource owners to direct their resources into those areas so they can maximise their returns and improve their living standards. The end result is that resources may be moved away from productive long-term options such as investment in plant and equipment. As a result, resource allocation is distorted, long-term sustainable economic growth is slowed and living standards fall.

## Inflation affects income distribution

The impact of inflation on individuals can differ according to their power in the market, the industry they work in or their financial situation. Some of these individuals will discover that:

- *they become poorer because their incomes do not keep up with rising prices.* Fixed income earners such as retirees, those on welfare or those unable to gain wage increases will find that their spending power falls, as do their material living standards.
- *their incomes rise as interest rates and share returns rise.* People who can access wage increases or can afford to invest in shares, property or term deposits will find that they can maintain or increase their purchasing power and enjoy better living standards.
- *their incomes and living standards fall.* As noted earlier, exporters suffer because they become less competitive internationally.
- *interest rates on their variable home loans rise.* This causes repayments to rise and take up a higher proportion of their family income. They have to reduce their consumption of other goods and services, thus undermining their living standards.
- *they may become unemployed due to inflation.* This causes confidence to fall, spending to decline and businesses to close. Unemployed people often lose income and suffer deteriorating material and non-material living standards.

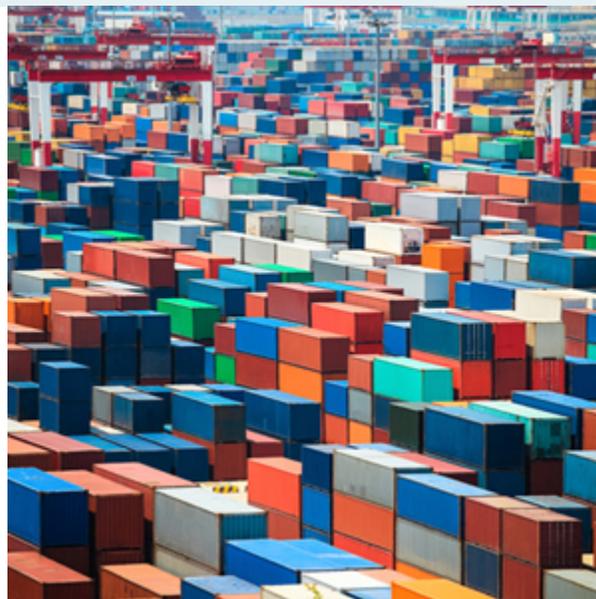
**FIGURE 3** Inflation can erode the purchasing power of our currency.



## 2.3.4 International trade and living standards

International trade involves the export of goods and services from Australia to other countries and the import of goods and services from other countries into Australia. Ideally, the government would like our exports to equal our imports. However, this is usually not the case and Australia generally has a trade deficit; that is, our imports exceed our exports. This situation can lead to **foreign debt**, which has to be repaid by future generations.

**FIGURE 4** Trade can work to both improve and reduce living standards.



Exports currently represent about twenty per cent of spending on Australian-made goods and services. This means a lot of employment and income is tied to exports. If Australia can increase its exports, more people will be employed, generating more incomes, resulting in an improvement of our material living standards.

If this could be matched with lower imports, economic growth would be stimulated, boosting the creation of jobs and incomes and, once again, leading to improved material living standards.

In contrast, circumstances that lead to lower exports and higher imports will have the opposite effect on economic activity, employment growth and hence living standards.

Alternatively, a change in our trade balance can have a negative effect on our non-material standards. Higher exports may create more jobs and incomes, but this can cause inflation, negatively impacting the living standards of some members of society. At the same time, an increase in the production of exports can lead to:

- increased working hours and decreased leisure time for workers in export industries
- depletion of non-renewable resources as the increased production needs to be fuelled by resources
- increased pollution and environmental damage caused by increased production.

Lower exports and higher imports also negatively impact our non-material living standards. If the trade imbalance leads to a foreign debt, that debt must be repaid at some point. Much of this debt is owed by the government and the government will repay it using revenue derived from the taxes paid by consumers and income earners. The higher the debt, the greater the proportion of tax receipts used to repay the debt — tax receipts that could be better used domestically to build roads, on schools and to provide welfare and health care. If these areas, of government spending are neglected, there is increased pressure on existing services causing stress to workers in those areas and for those who rely on those services for support. This can worsen non-material living standards.

## Foreign ownership in Australia

Australian laws allow people and companies from overseas to purchase assets in Australia. Foreigners are allowed to:

- buy shares in Australian companies
- buy houses and land
- invest money into Australian banks and finance companies.

Foreign investors buy into Australian companies, property and shares because of the opportunity to earn additional income, generally because the interest rates in Australia are higher than those offered in their home country.

The level of foreign ownership in the Australian economy can be an issue. There are positives and negatives to the current level of foreign ownership.

## Positive impacts of foreign ownership in Australia

The Australian economy can benefit from foreign investment because it:

- *increases the sources of finance for Australian businesses.* Businesses need investors to fund growth and expansion, and for the development of new ideas and products. As a small country, we often lack the funds to undertake all the necessary investment. Foreign funding helps some of these projects begin.
- *invests in projects in Australia, creating jobs and improving infrastructure.* The reduced unemployment levels lead to increased living standards as fewer people are relying on government handouts.
- *increases employment.* This means our government receives more tax revenue, enabling it to spend additional money on health and education, which in turn improves our non-material living standards.

## Negative impacts of foreign ownership in Australia

The Australian economy can also suffer as a result of foreign investment in our economy because:

- *money invested in Australia must eventually be repaid, usually with interest.* Money flowing out of the economy means less money circulating in our economy and creating jobs. As a result economic growth can slow.
- *more money is deposited into Australian banks.* This can lead to higher interest rates on borrowings as the banks must pay interest to foreign investors.
- *foreign ownership of shares can place some businesses under foreign control.* This means decisions can be made overseas and some profits may go overseas, resulting in less money being spent in Australia.
- *foreign ownership of land and houses can increase the prices of these assets.* This makes it more difficult for Australians to buy their own home. To do so, they may have to move further away from the city, increasing travel times, congestion and stress within families.

## 2.3 ACTIVITIES

### REMEMBER

1. Explain why we measure economic performance.
2. Outline three key areas of economic performance that are measured by the government.
3. For each area identified in question 2, outline the measure used to assess performance.

### EXPLAIN

4. Explain why the measures identified in question 2 may not be good indicators of living standards.
5. Explain what is meant by distribution of income and why this is an important indicator of living standards.

## DISCOVER

6. Use the **Australia youth unemployment rate** weblink in your Resources section to help you answer the following questions.
  - a. Explain the trend in youth unemployment.
  - b. According to the graph, explain the effect of the trend on the living standards of young people. In particular, explain the possible impact on non-material living standards.
  - c. Explain why material living standards may not be as important to younger Australians.

# 2.4 Measuring living standards

## 2.4.1 Alternative ways to measure living standards

GDP is the total value of goods and services produced by the economy in a given period (usually a year). By calculating GDP per capita (per head of population) we can use this figure as a measure of changes to living standards. If this figure rises, it can be argued that living standards have risen because we all have more goods and services.

However, GDP has limitations as a measure of living standards because some production is not included, no measure is taken of the quality of changes considered, and GDP provides no information on how the goods and services are distributed. In addition, non-material living standards are not accounted for.

Factors to consider when determining living standards



There are alternative measures that can be used to better measure living standards.

## 2.4.2 Genuine Progress Indicator (GPI)

The GPI index of overall living standards or progress evolved in the 1980s from a measure called the index of sustainable economic welfare. It is similar in some ways to GDP in that it uses some of the same consumption data involved in calculating GDP, but it then makes both negative and positive adjustments to some of the values calculated. The changes are designed to reflect the positive or negative effects on society and our living standards of certain types of activity and spending.

Negative adjustments are made to consider the impact on living standards of activities such as:

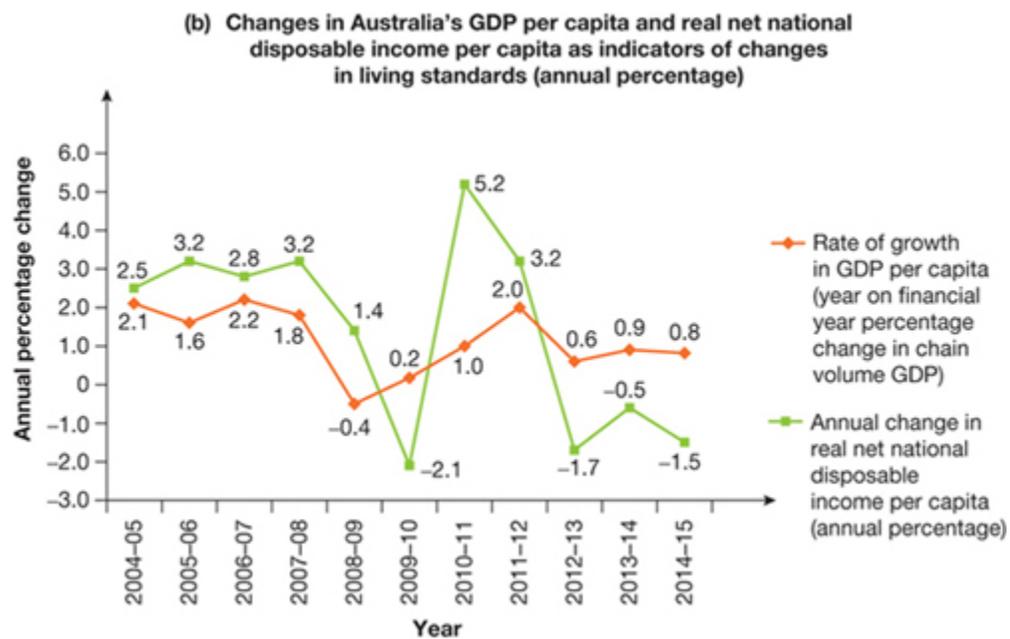
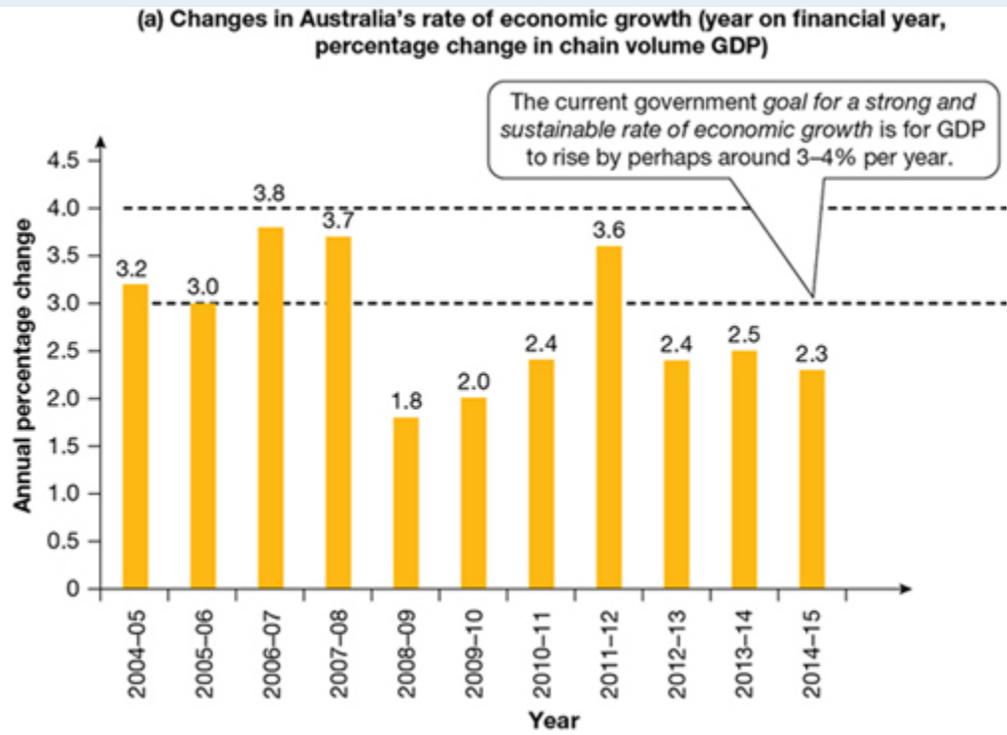
- environmental damage due to air, noise and water pollution, the loss of wetlands, farmlands and forest-road accidents
- depletion of non-renewable energy resources
- reduced leisure time due to increased hours of work
- inequality in the distribution of income
- dependence on foreign debt to finance consumption
- expenditure on items referred to as 'defensive' such as spending on repairs and medical expenses following road accidents and spending on security monitoring needed to maintain our lifestyle
- increased crime, which reduces the benefits gained by present and future generations.

Positive adjustments are then made to consider the impact on living standards of activities such as:

- the ongoing services provided by consumer durable household items and public infrastructure with relatively long life spans. An example would be the benefit to society of a new cross-city freeway which would reduce travel times and congestion for many years
- contributions derived from performing housework, parenting, completing unpaid community voluntary work and other socially productive uses of time.

Supporters of the measure argue that these adjustments make the statistics a far better indicator of the sustainable level of economic welfare or living standards than simply using GDP.

**FIGURE 1** Trends in Australia's annual rate of economic growth and indicators of changes in the living standards of Australians





**Explore more with this weblink:** The Genuine Progress Indicator

## 2.4.3 Human Development Index (HDI)

The United Nations' Human Development Index (HDI) is a measure that compares the wellbeing of people in different countries. It is a composite statistic of positive and negative indicators. These indicators are combined into a single statistical index number. When a country's index rises, it means there has been progress and living standards have increased.

### CALCULATING THE HDI

The HDI is calculated using the following three indices:

1. A long and healthy life: Life Expectancy at birth: Life Expectancy Index (LEI) =  $\frac{LE - 20}{82.3 - 20}$
2. Education Index: Mean Years of Schooling Index and Expected Years of Schooling Index:

$$\text{Education Index (EI)} = \frac{\sqrt{\text{MYSI} \cdot \text{EYSI}}}{0.951}$$

a. Mean Years of Schooling Index (MYSI) =  $\frac{\text{MYS}}{13.2}$

b. Expected Years of Schooling Index (EYSI) =  $\frac{\text{EYS}}{20.6}$

3. A decent standard of living: Gross National Income per capita (\$US)

$$\text{Income Index (II)} = \frac{\ln(\text{GNIPC}) - \ln(100)}{\ln(75\,000) - \ln(100)}$$

Finally, the HDI is the geometric mean of the previous three normalised indices:

$$\text{HDI} = \sqrt[3]{\text{LEI} \cdot \text{EI} \cdot \text{II}}$$

LE: life expectancy at birth

MYS: mean years of schooling (years that a 25-year-old person or older has spent in school)

EYS: expected years of schooling (years that a 5-year-old child will spend in education over their lifetime)

GNI per capita: gross national income at purchasing power parity per capita

In 2014 Australia was ranked second in the HDI with an index of 0.935, an increase of 0.002 from 2013.

The two main weaknesses of the HDI are the subjective nature of indicators used to compile the index and the unreliability of the statistical data for some countries.

## 2.4.4 Quality-of-life index

The quality-of-life index is a measure calculated by a private organisation that attempts to measure which country will provide the best opportunity for a healthy, safe and prosperous life in the future. It is based on a method that links subjective life-satisfaction surveys and objective determinants of the quality of life across countries.

The index was calculated in 2013 for 80 countries and territories using ten quality-of-life factors along with forecasts of future GDP per capita to determine a nation's score.

The ten quality-of-life factors are:

- material wellbeing as measured by GDP per capita
- life expectancy at birth
- the quality of family life based primarily on divorce rates
- the state of political freedoms
- job security as measured by the unemployment rate
- climate, measured by two variables: the average deviation of minimum and maximum monthly temperatures from 14 degrees Celsius; and the number of months in the year with less than 30 millimetres of rainfall
- personal physical security ratings based primarily on recorded homicide rates and ratings for risk of crime and terrorism
- the quality of community life, based on membership in social organisations
- governance, measured by ratings for corruption in public office
- gender equality, measured by the share of seats in parliament held by women.

In 2013 Australia was ranked second with a score of 8.18 out of 10. Switzerland ranked first with a score of 8.22 and Norway was third with a score of 8.09. Norway ranked first in the HDI calculated in 2014.

## 2.4.5 Other indicators

A range of other indicators are used by some countries to measure the changes in living standards of society. These include:

- the Green Gross Domestic Product (green GDP)
- the Happy Planet Index (HPI).

### Green Gross Domestic Product

The green GDP is an index of economic growth with the environmental consequences of that growth factored into a country's conventional GDP. The green GDP places a price/cost on the loss of biodiversity, environmental damage and climate change. When calculating the green GDP the net natural capital consumption — including resource depletion, environmental degradation, and protective and restorative environmental initiatives — is subtracted from the traditional GDP.

### Happy Planet Index

The HPI is an index designed to measure human wellbeing and environmental impact. It was introduced by the New Economics Foundation (NEF) in July 2006, which aimed to give progressively higher scores to nations with lower ecological footprints. It was developed in response to the belief that measures such as GDP and HDI were seen as not taking sustainability into account.

The index is made up of three components:

- experienced wellbeing
- life expectancy
- ecological footprint.

In 2012, 151 countries were surveyed, with some 'poor' countries scoring high due to their low ecological footprint and high life expectancy. Australia ranked seventy-sixth, with a score of 42.0 (up from a ranking of 102 in 2009), while Norway ranked twenty-ninth.

## 2.4 ACTIVITIES

### REMEMBER

1. Identify a traditional measure of living standards.
2. Outline three limitations of the measure identified in question 1.

## EXPLAIN

3. Explain why other forms of measurement are necessary.

## THINK

4. 'When measuring living standards, material living standards are more important than non-material living standards.' Write a response, either agreeing or disagreeing with this statement.

## DISCOVER

5. The Australian Genuine Progress Indicator comprises 25 individual indicators.
  - a. Prepare a list of these 25 indicators.
  - b. Rank the indicators in order of importance to you.
  - c. Compare your ranking with those of the rest of the class and determine what the class believes are the most important indicators to consider when measuring living standards.
  - d. Select two indicators and summarise what is meant by each of them.

# 2.5 Wealth distribution

## 2.5.1 What is wealth?

Much of the discussion about material living standards relates to the ability of consumers to purchase goods and services. In order to purchase goods and services, consumers require an income. One aspect of improving living standards that has not yet been discussed is **wealth**.

**FIGURE 1** Money is an indicator of income, but not necessarily of wealth.



Wealth can be used to generate income in addition to the income earned through wages and salaries. Wealth is often inherited or handed on from one generation to the next and enables people already considered wealthy to build further wealth. As a result, wealth is unevenly distributed among members of society.

There are a number of ways that the distribution of wealth, as well as income, can be measured and used to assess the living standards of people in the community.

## 2.5.2 Measuring wealth

There are three main methods used for measuring the distribution of wealth within an economy:

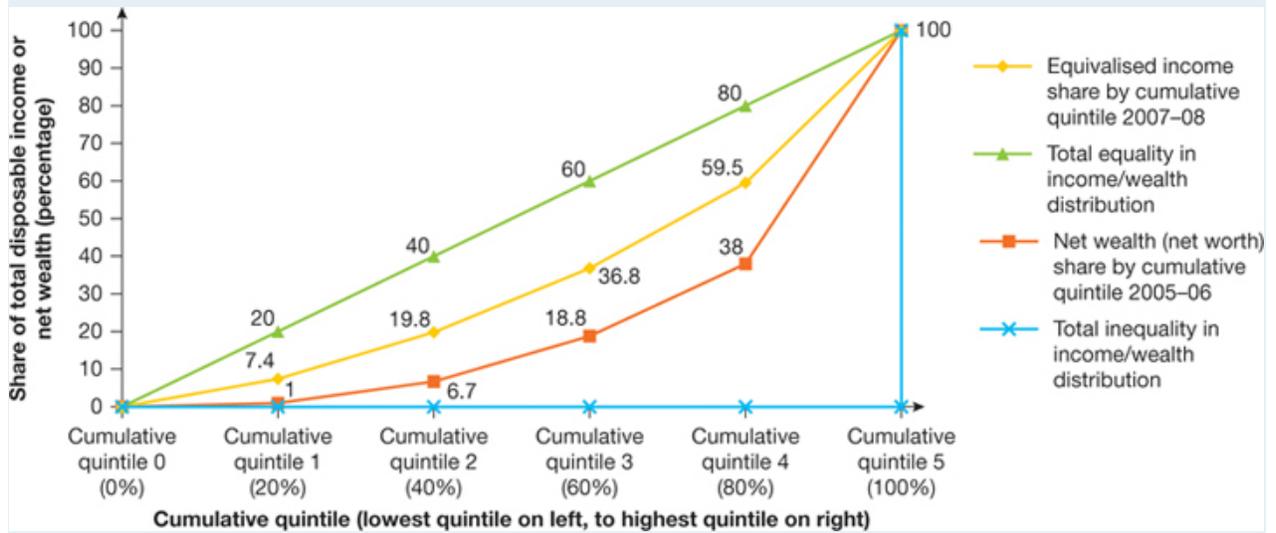
- the calculation of net worth
- the Gini coefficient (using the Lorenz curve)
- the Henderson Poverty Line.

### The ABS measure of net worth

The most up-to-date set of government statistics showing the distribution of Australian wealth is the 2005–06 estimate of the distribution of Australian wealth, which is called 'net worth'. Net worth is the excess of assets owned by households over their liabilities. Net worth data shows the percentage share of total net worth by **quintile**. From this data, a Lorenz curve can be drawn and a Gini coefficient determined. Perfect equality in wealth distribution is when the coefficient is at 0, while perfect inequality is when the coefficient is at 1.

Figure 2 shows Australian data for net worth (and income distribution) and the associated Lorenz curves and Gini coefficients.

**FIGURE 2** Australia's distribution of equivalised disposable income (2007–08) and wealth (net worth 2005–06) by quintile share (percentage)



Quintile	Cumulative quintile 0 (0 %)	Cumulative quintile 1 (20 %)	Cumulative quintile 2 (40 %)	Cumulative quintile 3 (60 %)	Cumulative quintile 4 (80 %)	Cumulative quintile 5 (100 %)	Gini coefficient
Equivalised income share by cumulative quintile 2007–08	0.0	7.4	19.8	36.8	59.5	100.0	0.331
Wealth (net worth) share by cumulative quintile 2005–06	0.0	1.0	6.7	18.8	38.0	100.0	0.630*
Total equality in income/wealth distribution	0.0	20.0	40.0	60.0	80.0	100.0	0.0
Total inequality in income/wealth distribution	0.0	0.0	0.0	0.0	0.0	100.0	1.0

\*Estimate only

## The Lorenz curve and the Gini coefficient

The ABS regularly conducts a survey of household incomes to determine the distribution by quintile (see Figure 2). The data gathered can be used to draw a Lorenz curve. The Lorenz curve shows the cumulative proportion of **equivalised disposable income** received by each successive group from quintile 1 (the poorest group) through to quintile 5 (the richest group). These points are plotted to form a Lorenz curve, which shows the pattern of income distribution or wealth distribution.

The Lorenz curve shows a line of absolute equality where each quintile earns 20 per cent of income and wealth. Lorenz curves show how divergent the actual equality is from the absolute. The more divergent the Lorenz curve is from the line of absolute equality, the more inequitable the distribution is. In Figure 2 we can see that the poorest 20 per cent of the population earn 7.4 per cent of the income and hold 1 per cent of the wealth in the economy while the richest 20 per cent earn 40.5 per cent of the income and own 62 per cent of the wealth. (This is found by looking at the difference in income and wealth shares of the bottom 80 per cent of income earners—59.5 per cent of income and 38 per cent of wealth—and 100 per cent.)

Using the Lorenz curve, the ABS calculates the Gini coefficient — a number between 0.00 and 1.00. From Figure 2 we can see that in 2007–08 the Gini coefficient for income was 0.331, while the Gini coefficient for net worth in 2005–06 was much higher at an estimated 0.63.

Essentially, the Gini coefficient is calculated using the Lorenz diagram. It involves measuring the area between the diagonal line of absolute equality and the actual Lorenz curve. The resulting figure is then expressed as a proportion of the total triangular area below the diagonal. Gini coefficient figures collected over a number of years can also be compared to determine trends in the distribution of either income or wealth.

## The Henderson Poverty Line

Poverty lines are income levels designated for various types of income earners. If the income of a person or family/household is less than the poverty line applicable to it, then the person or family/household is considered to be in poverty. The first such poverty line was developed in 1973 by Professor Ronald Henderson. He determined that in 1973 a family unit of two adults and two dependent children needed the benchmark income of \$ 62.70 per week to be above the poverty line. This figure is adjusted regularly and in June 2013 the figure was \$ 712.99 per week.

### 2.5 ACTIVITIES

#### REMEMBER

1. What is meant by the term 'wealth'?
2. How is wealth different from income?

#### THINK

3. Why do you think the distribution of wealth is harder to calculate than the distribution of income?
4. What do you think is meant by the phrase, 'The rich get richer and the poor get poorer'?

## DISCOVER

5. As a class activity, play Monopoly. As you play in groups of four, keep a record of the money you earn.
  - a. How much money did you start with?
  - b. How much money did you earn by working (passing GO)?
  - c. How much money did you earn from owning property?
  - d. Did you earn any other income? If yes, from what source?
  - e. What were your costs?
  - f. At the end of the game, calculate your wealth.  
Measure the total wealth in the class and calculate your own Lorenz curve.

# 2.6 SkillBuilder: Sustainable Development Goals

## 2.6.1 Tell me

The United Nations' Millennium Development Goals



The United Nations has recognised that improving living standards should be a global concern. As such, they developed the Millennium Development Goals. The Millennium Development Goals (MDGs) were eight international development goals that were established following the Millennium Summit of the United Nations in 2000. All 189 United Nations member states at the time committed to help achieve the following Millennium Development Goals by 2015:

1. To eradicate extreme poverty and hunger
2. To achieve universal primary education
3. To promote gender equality and empower women
4. To reduce child mortality
5. To improve maternal health
6. To combat HIV/AIDS, malaria, and other diseases
7. To ensure environmental sustainability
8. To develop a global partnership for development

Each goal had specific targets and dates for achieving those targets. Post-2015, the United Nations wanted to continue the momentum created by the setting of these goals so they worked with member countries to set and adopt a set of goals to end poverty, protect the planet, and ensure prosperity for all. These goals are part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years.

## 2.6.2 Show me

The 17 Sustainable Development Goals are an expansion from the original 8 Millennium Development Goals. Each goal has specific targets and dates for achieving those targets. The goals are:



A summary of the Sustainable Development Goals are:

## Goal 1: No poverty

Extreme poverty rates have been cut by more than half since 1990. While this is a remarkable achievement, one in five people in developing regions still live on less than \$ 1.25 a day, and there are millions more who make little more than this daily amount, plus many people risk slipping back into poverty.

Poverty is more than the lack of income and resources to ensure a sustainable livelihood. Its manifestations include hunger and malnutrition, limited access to education and other basic services, social discrimination and exclusion as well as the lack of participation in decision-making. Economic growth must be inclusive to provide sustainable jobs and promote equality.

## Goal 2: Zero hunger

If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centred rural development and protecting the environment.

Right now, our soils, freshwater, oceans, forests and biodiversity are being rapidly degraded. Climate change is putting even more pressure on the resources we depend on, increasing risks associated with disasters such as droughts and floods. Many rural women and men can no longer make ends meet on their land, forcing them to migrate to cities in search of opportunities.

A profound change of the global food and agriculture system is needed if we are to nourish today's 795 million hungry and the additional 2 billion people expected by 2050.

The food and agriculture sector offers key solutions for development, and is central for hunger and poverty eradication.

## Goal 3: Good health and well-being

Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues

## Goal 4: Quality education

Obtaining a quality education is the foundation to improving people's lives and sustainable development. Major progress has been made towards increasing access to education at all levels and increasing enrolment rates in schools particularly for women and girls. Basic literacy skills have improved tremendously, yet bolder efforts are needed to make even greater strides for achieving universal education goals. For example, the world has achieved equality in primary education between girls and boys, but few countries have achieved that target at all levels of education.

## Goal 5: Gender equality

Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

Providing women and girls with equal access to education, health care, decent work, and representation in political and economic decision-making processes will fuel sustainable economies and benefit societies and humanity at large.

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## Goal 6: Clean water and sanitation

Clean, accessible water for all is an essential part of the world we want to live in. There is sufficient fresh water on the planet to achieve this. But due to bad economics or poor infrastructure, every year millions of people, most of them children, die from diseases associated with inadequate water supply, sanitation and hygiene.

Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. Drought afflicts some of the world's poorest countries, worsening hunger and malnutrition.

## Goal 7: Affordable and clean energy

Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential.

Sustainable energy is opportunity – it transforms lives, economies and the planet.

## Goal 8: Decent work and economic growth

A continued lack of decent work opportunities, insufficient investments and under-consumption lead to an erosion of the basic social contract underlying democratic societies: that all must share in progress. . The creation of quality jobs will remain a major challenge for almost all economies well beyond 2015.

Sustainable economic growth will require societies to create the conditions that allow people to have quality jobs that stimulate the economy while not harming the environment. Job opportunities and decent working conditions are also required for the whole working age population.

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## Goal 9: Industry, innovation and infrastructure

Investments in infrastructure – transport, irrigation, energy and information and communication technology – are crucial to achieving sustainable development and empowering communities in many countries. It has long been recognized that growth in productivity and incomes, and improvements in health and education outcomes require investment in infrastructure.

Inclusive and sustainable industrial development is the primary source of income generation, allows for rapid and sustained increases in living standards for all people, and provides the technological solutions to environmentally sound industrialization.

Technological progress is the foundation of efforts to achieve environmental objectives, such as increased resource and energy-efficiency. Without technology and innovation, industrialization will not happen, and without industrialization, development will not happen.

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## Goal 10: Reduced inequalities

While income inequality between countries may have been reduced, inequality within countries has risen. There is growing consensus that economic growth is not sufficient to reduce poverty if it is not inclusive and if it does not involve the three dimensions of sustainable development – economic, social and environmental.

To reduce inequality, policies should be universal in principle paying attention to the needs of disadvantaged and marginalized populations.

## Goal 11: Sustainable cities and communities

Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically.

However, many challenges exist to maintaining cities in a way that continues to create jobs and prosperity while not straining land and resources. Common urban challenges include congestion, lack of funds to provide basic services, a shortage of adequate housing and declining infrastructure.

## Goal 12: Responsible consumption and production

Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty. Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

## Goal 13: Climate action

Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

People are experiencing the significant impacts of climate change, which include changing weather patterns, rising sea level, and more extreme weather events. The greenhouse gas emissions from human activities are driving climate change and continue to rise. They are now at their highest levels in history. Without action, the world's average surface temperature is projected to rise over the 21st century and is likely to surpass 3 degrees Celsius this century-with some areas of the world expected to warm even more. The poorest and most vulnerable people are being affected the most.

Affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies. The pace of change is quickening as more people are turning to renewable energy and a range of other measures that will reduce emissions and increase adaptation efforts.

## Goal 14: Life below water

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind.

Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation.

Careful management of this essential global resource is a key feature of a sustainable future.

## Goal 15: Life on land

Forests cover 30 per cent of the Earth's surface and in addition to providing food security and shelter, forests are key to combating climate change, protecting biodiversity and the homes of the indigenous population. Thirteen million hectares of forests are being lost every year while the persistent degradation of drylands has led to the desertification of 3.6 billion hectares.

Deforestation and desertification – caused by human activities and climate change – pose major challenges to sustainable development and have affected the lives and livelihoods of millions of people in the fight against poverty. Efforts are being made to manage forests and combat desertification.

## Goal 16: Peace, justice and strong institutions

This goal endorses the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all, and building effective, accountable institutions at all levels.

## Goal 17: Partnerships for the goals

A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level.

Urgent action is needed to mobilize, redirect and unlock the transformative power of trillions of dollars of private resources to deliver on sustainable development objectives. Long-term investments, including foreign direct investment, are needed in critical sectors, especially in developing countries. These include sustainable energy, infrastructure and transport, as well as information and communications technologies. The public sector will need to set a clear direction. Review and monitoring frameworks, regulations and incentive structures that enable such investments must be retooled to attract investments and reinforce sustainable development. National oversight mechanisms such as supreme audit institutions and oversight functions by legislatures should be strengthened.

### 2.6.3 Let me do it

#### 2.6 ACTIVITIES

Use the **Sustainable Development Goals** link, select three of the 17 goals. Prepare a summary of each of the three selected goals and the state specific targets to be met by 2030 (note: using the 'Why it matters' and the 'Facts and figures' tab).

## on Resources



**Explore more with this weblink:** Sustainable Development Goals

# 2.7 Review

## 2.7.1 Summary

In this chapter we have examined living standards and their importance to individuals and families. We made a distinction between the two different types of living standards: material and non-material.

Material living standards refers to the acquisition of material goods and services while non-material living standards refers to the qualitative elements of human wellbeing, which influence the part of our living standards unconnected with material possessions.

How an economy performs in terms of achieving its economic goals will impact the living standards of the citizens of that country. Achieving full employment, low inflation, strong economic growth and external stability through balanced trade will work to improve our living standards. Whether the achievement of these goals will result in an improvement in both types of living standards is an issue for discussion.

At the same time, non-achievement of these goals can also have an impact on the living standards of citizens.

As part of this chapter we also examined how the United Nations has become involved in improving the living standards of the citizens of the world through the Millennium Development Goals.

## 2.7.2 Your turn

### 2.7 ACTIVITIES

Consider what is important to you now and consider what might be important to you in the future. At your age, you may think being 25 is far away. Being 50 years old is even further away and not something you would normally think about.

#### Write your own personal development goals

1. Prepare a list of the goals you would like to achieve by the time you are 25 and then prepare another list of the goals you would like to achieve by the time you are 50 and then 75.
2. Once complete, examine your goals and summarise how they differ at each age. In your response, consider which of the goals are material and which are non-material.
3. Include a summary of how you will measure the achievement of your goals. Share your personal development goals and summary with your classmates.
4. Finally, what do you think your parents would write if they were to complete this task?

#### Resources



**Try out this interactivity:** [Living standards crossword](#)

Searchlight ID: [int-5537](#)

# Chapter 3: Government management of the economy

## Contents

- 3.1 Overview
- 3.2 Macro-economic policy options
- 3.3 Micro-economic policy options
- 3.4 Direct government intervention in the market
- 3.5 Supporting growth in the Asia–Pacific region
- 3.6 SkillBuilder: Preparing a budget
- 3.7 Review

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# 3

## Government management of the economy



# 3.1 Overview

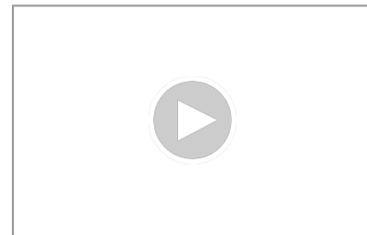
## 3.1.1 Management of the economy

### **on** Resources



**Watch this eLesson:** [Government management of the economy](#)

Searchlight ID: [eles-2383](#)



We have already seen in chapters 1 and 2 that the government sets goals for the performance of the economy and measures how well the economy has worked in achieving those goals. We have examined the impact on the economy and its citizens if these goals are not met and how the government is keen for these goals to be achieved.

**FIGURE 1** The role of managing the economy rests with the government. Sometimes its attempt at managing the economy conflicts with community ideals.



In this chapter we will discuss what society or the government can do if economic performance is not acceptable or the economy is not achieving any of the goals that have been set.

### 3.1.2 Why manage the economy?

It is the role of the government to implement **policies** in an effort to change the behaviour of individuals and businesses, and even overseas consumers, to achieve the goals of the economy. Policies can be directed at the economy as a whole — referred to as **macroeconomic** policies — or they can be directed at small sectors of the economy — referred to as **microeconomic** policies.

In addition to this, the policies introduced by the government can be directed at the demand side of the economy; that is, they are designed to influence the level of demand in the economy. These are policies that reduce or increase the level of spending on goods and services in the economy.

Alternatively, policies can be directed at influencing the supply side of the economy; that is, they aim to increase or decrease the supply of goods and services into the economy and/or the types of goods and services supplied.

It is possible that some of the policy measures put in place may conflict with each other. It is also possible that some policy measures will be unpopular or that some of them will not have the desired effect. What is important to remember is that management of the economy is a key factor during elections, and often during election campaigns each political party will make claims about the economy. These claims refer to how the economy has been managed to date and how it could be managed better or couldn't be managed better.

Understanding how these policies operate and what they aim to achieve is important in understanding how our economy is performing and enables people to make informed decisions economically and politically.

## Learning objectives

Students will investigate:

- the ways that governments manage economic performance to improve living standards.

### STARTER QUESTIONS

1. What is meant by a 'policy'?
2. Why do governments have to implement economic policies?
3. Identify the two types of policies that a government could implement.
4. A policy can be a demand-side policy or a supply-side policy. What do these terms mean?
5. In your opinion, how well do you think the government is currently managing the economy?

# 3.2 Macro-economic policy options

## 3.2.1 The bigger picture

**Macroeconomics** refers to the branch of economics that involves the level of expenditure (the amount) or aggregate demand (total demand for goods and services in an economy). It involves looking at the general influences on national spending, national output, national income, employment and overall material living standards. It emphasises the need for some degree of government involvement and manipulation of aggregate demand and economic activity demand-side policies.

**FIGURE 1** The budget is delivered to parliament annually by the treasurer.



Macroeconomic policies involve two key areas of influence by the government: budgetary/fiscal policy and monetary policy. Each of these policy areas attempts to manipulate the level of demand and spending in the economy to achieve the economic goals of the government. Let's examine each of these policies.

### 3.2.2 Budgetary/fiscal policy

**Budgetary policy** (also called **fiscal policy**) is a government economic policy that involves altering the level of government spending and government receipts. Each year the government prepares its **budget**, which outlines its priorities for the coming year and, in some cases, for the years ahead. The budget is a document outlining where the government plans on receiving money from (receipts) and where it intends to spend that money (expenditure).

**FIGURE 2** Budgets can negatively impact on some members of society.



The difference between the receipts of the government and the expenditure by the government is known as the budget outcome. There are three possible budget outcomes:

- *budget deficit*, where the level of government receipts is less than the level of government expenditure
- *budget surplus*, where the level of government receipts is greater than the level of government expenditure
- *balanced budget*, where the level of government receipts equals the level of government expenditure. This is a rare event and the government usually aims for a fiscal balance, where the value of budget deficits equals the value of budget surpluses over the business-cycle period (seven years).

To better understand how the government uses the budget to achieve its economic goals, it is important to understand the two components of the budget: budget receipts and budget spending.

## Government budget receipts

Budget receipts are the government's incoming receipts of money that pay for budget spending. The most common form of government receipt is **taxation**. There are generally considered to be two types of taxes:

- *Direct taxes* are those that refer to levies imposed directly onto the incomes of individuals and companies.
- *Indirect taxes* are those placed on the sale of goods and services and added onto the price of items.

A third type of government receipt is non-tax revenue; that is, receipts from a source other than taxation, such as asset sales, interest, the repayment of HECS debts by university students and profits from government business enterprises such as Australia Post.

## Direct taxes

Examples of direct taxes include:

- *personal income tax*. This is a direct tax paid by individuals who earn incomes in the form of wages, salaries, rent, interest and dividends. For most people, income tax is deducted by their employer from their pay packet before they are paid (pay-as-you-go or PAYG). However, for self-employed individuals, a different system exists for estimating income and tax that must be paid.
- *capital gains tax (CGT)*. This tax is levied on the real profits made from the sale of capital assets such as land and shares purchased after 1985.
- *the Medicare levy*. This direct tax is designed to provide medical insurance to help cover the basic costs of family healthcare. It is normally levied at a rate of 2 per cent of personal taxable incomes.
- *withholding tax*. This is applied to individuals who fail to register their tax file number when receiving income such as dividends and interest. It is currently levied at the top tax rate of 47 per cent (including the Medicare levy).
- *company tax*. This is a flat or proportional tax levied directly on business profits. In 2015–16, the tax rate was 30 per cent of company profits. In the 2016 budget this tax was proposed to be cut to 25% by 2020.
- *fringe benefits tax (FBT)*. This represents a direct tax paid by firms on the value of 'perks' provided to employees, such as a company-provided car or house. It is currently levied at 47 per cent of the taxable benefit.
- *superannuation fund tax*. This tax is levied at 15 per cent of most contributions as well as on the interest from fund investments. People aged over 60 can currently withdraw their super tax-free.
- *petroleum resource rent tax (PRRT)*. This is levied at 40 per cent of the profits made from petroleum operations.

## Indirect taxes

Examples of indirect taxes include:

- *excise duty*. This is an indirect tax imposed on selected, locally produced goods such as petrol, LPG, beer, spirits, wine and tobacco. It is a flat percentage added to the cost of the product. For example, the excise on unleaded petrol is about 30 per cent of the price of each litre sold. The precise rates applied are adjusted twice a year and are generally linked to changes in the Consumer Price Index.

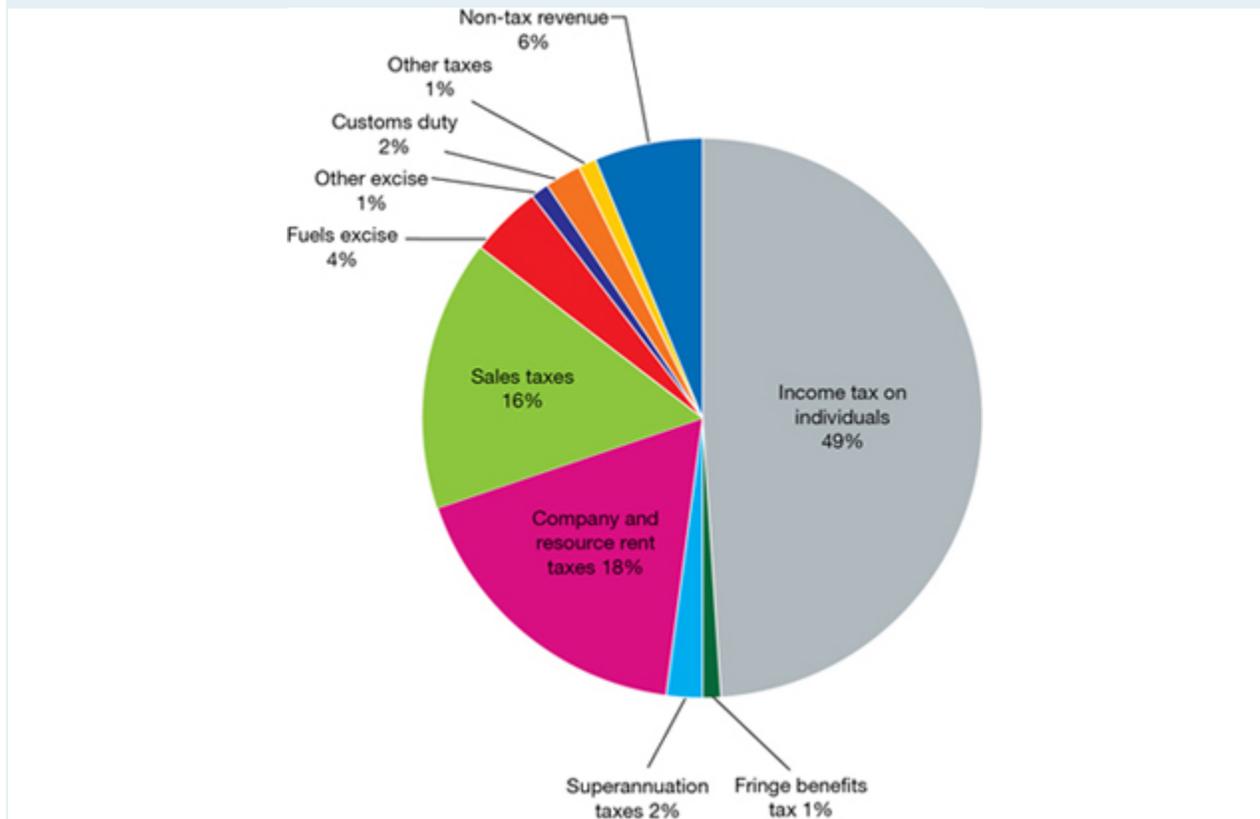
**FIGURE 3** The tax on petrol provides the government with a significant source of revenue.



- *customs duties*. These are taxes levied on certain imported goods to raise revenue and protect local producers from foreign competition. Since the 1970s governments have had a policy of reducing tariffs to increase competition in Australia and to reduce prices for consumers.
- *goods and services tax (GST)*. This tax was introduced in July 2000. It is a broad-based, indirect tax levied at the rate of 10 per cent on many goods and services in the economy.

Figure 4 summarises the sources of government revenue in 2015–16. Income tax on individuals is easily the main source of receipts, followed by revenues from company and resource rent taxes.

**FIGURE 4** Sources of government budget revenue for 2015–16



## Government budget spending

Budget spending is how the government uses the receipts it collects to provide certain goods and services for the community. Government spending is designed to affect the incomes of consumers, the level of demand and economic activity in the economy, inflation, trade and living standards. Government budget spending is allocated mainly to:

- *social security and welfare*. These payments go to the neediest groups in society including the unemployed, aged pensioners and people with disabilities. The main aim is to redistribute income, thereby helping to reduce poverty and improve general living standards.

**FIGURE 5** A part of government spending goes to the provision of welfare.

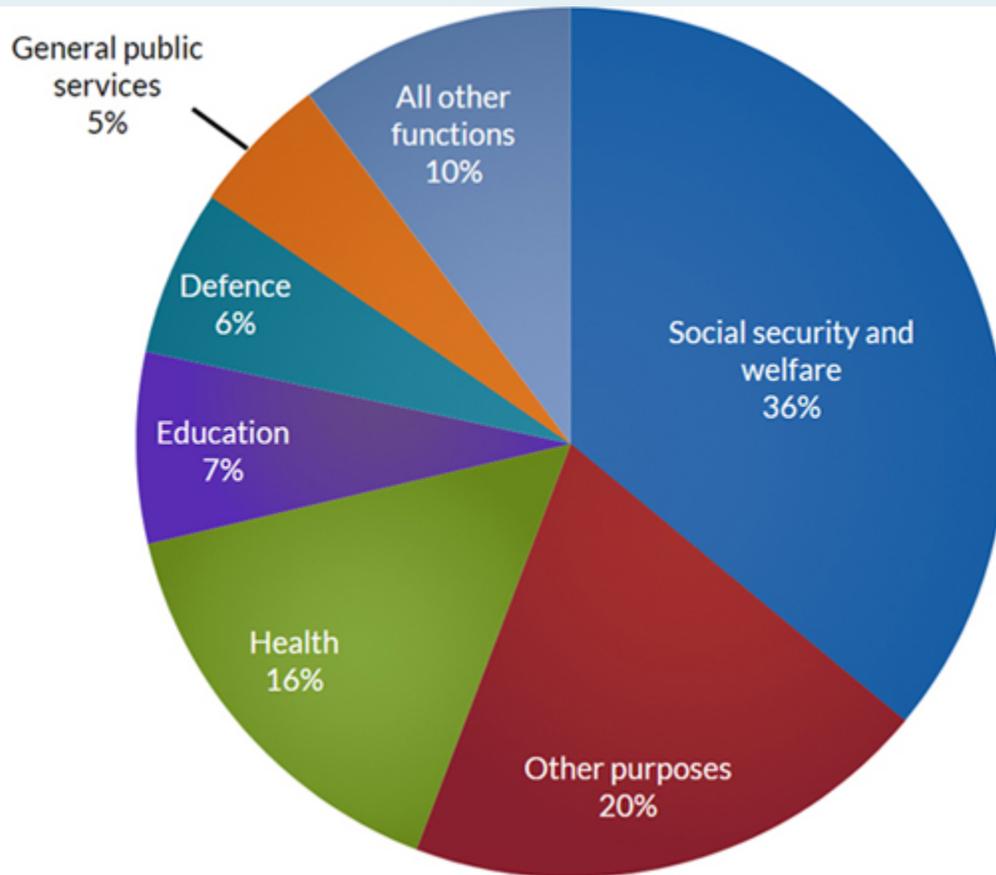


- *health*. This involves providing medical attention to consumers, paying wages and salaries of hospital staff, and outlays on building and furnishing hospitals.
- *defence*. This money is used for the payment of staff and day-to-day running expenses for the armed services, which includes payments for peacekeeping activities.
- *education*. Public education is provided by paying staff at universities, supporting state and non-government schools; vocational education and training; and building programs.
- *transport and communications*. This involves spending on government infrastructure such as roads, shipping, aviation and rail services.
- *housing and community amenities*. This includes spending on public housing and the First Home Owner Grant.
- *public-debt interest*. This is the cost to the government of paying interest on its debts or borrowings. Much of the debt incurred by the government comes from having to finance a budget deficit.
- *net payments to other governments*. These are federal payments to state and local governments to enable them to provide community services including public education, health, housing and transport.

Other areas to which government budget spending is allocated include mining, manufacturing and construction, other economic affairs, agriculture, forestry and fishing, recreation and culture, public order and safety, and fuel and energy.

The following interactivity shows the relative importance of the government's main areas of spending in 2015–16.

Allocation of government spending for 2015–16



### Impact of the budget outcome

When the government delivers its budget it has an outcome in mind.

Budget deficits are designed to be expansionary; they encourage spending through tax reductions and increased government spending. It is expected that the increase in spending by the government and by consumers (due to lower taxation payments) will lead to increased economic growth and consequently increased living standards.

Budget surpluses are designed to be contractionary; they discourage spending through tax increases and decreased government spending. It is expected that the decrease in spending by the government and by consumers (due to higher taxation payments) will lead to a slowing of the economy.

### 3.2.3 Monetary policy

In addition to altering the level of spending in the economy through taxation and direct government spending, the government can also manage the economy through monetary policy.

**Monetary policy** is a policy operated by the Reserve Bank of Australia (RBA) that seeks to manage the level of spending in the economy. It involves controlling the money in the economy and the rate at which money flows around the economy. The primary instrument of monetary policy is the manipulation of interest rates to alter the cost, availability and demand for borrowing money. Because interest rates have the capacity to alter the level of spending in the economy, they can help to achieve the government's goals of low inflation, strong and sustainable economic growth and full employment, ultimately improving Australia's living standards. Monetary policy operates without the approval of parliament and can be altered quickly through changes to the cash rate by the Reserve Bank of Australia at its monthly meetings.

**FIGURE 6** The Reserve Bank of Australia is responsible for managing the amount of money in the economy.



RESERVE BANK  
OF  
AUSTRALIA

The RBA has three means of influencing the flow of money, which affects how money is spent in the economy. These are:

- *changing interest rates*: it does this through market operations
- *influencing the exchange rate*: it achieves this by buying and selling Australian dollars
- *persuasion*: it uses its influence to achieve the desired direction of lending activities.

## Changing interest rates

Interest rates represent the cost of borrowing money. Whenever you borrow money you are required to repay that money, generally with interest. There is a price for borrowing money and that price can change. An increase in the price of borrowing money will generally see a decrease in the demand for money. The opposite is also true.

**FIGURE 7** Interest rates are the cost of borrowing money.



The official price of borrowing money is called the **cash rate**. The cash rate is the interest rate that applies to a specialised market called the short-term money market. This cash rate depends on the overall deposits of cash in the short-term money market, which, in turn, is controlled by the RBA through its market operations. Market operations involve the Reserve Bank of Australia either buying back or selling second-hand government bonds through the short-term money market. Whether the cash rate rises or falls depends on the Reserve Bank of Australia's decision to either buy back or sell these bonds.

### Increasing interest rates — a contractionary stance

If the Reserve Bank of Australia (RBA) wanted to slow inflation, it would encourage interest rates to rise. This would discourage borrowing and spending. How would this happen? First, the RBA would announce a rise in the cash rate target at its monthly meeting (held on the first Tuesday of each month) and provide the reasons for its decision. This sends a signal to the economy of the direction in which the RBA believes the economy is heading. It would then set out to achieve this target by selling government bonds in the short-term money market. Financial institutions such as banks — which are keen to make a profit — would enter the short-term money market and buy these bonds because they are selling at a lower price with an attractive rate of interest. This creates a situation where financial institutions earn a better return, increasing their profits. The RBA achieves its aim as money is withdrawn from the market leaving less money available for borrowing and interest rates — the cost of borrowing — rise as there is a reduced supply. Financial institutions buying these bonds would then transfer deposits to the RBA to pay for the bonds. This directly reduces deposits or the supply of cash held by financial institutions.

The opposite is true if the Reserve Bank wishes to lower interest rates to stimulate demand. Buying back bonds from the banks and other financial institutions provides additional funds for the banks to lend, which would lower interest rates and encourage borrowing from consumers.

Higher interest rates make borrowing more expensive because the amount of interest to be repaid increases. Borrowing would mean a greater percentage of a person's income is required to repay debt — and that's money that could otherwise be used to buy goods and services. This is particularly true for home loans. Due to the high amounts borrowed, interest-rate rises can mean more income is needed to maintain repayments on home loans, increasing the financial stress on families. At the extreme end, it can lead to **mortgage** defaults and families losing their homes.

**FIGURE 8** Higher interest rates can lead to mortgage defaults, causing families to lose their homes.



At a time when interest rates on borrowings are higher, interest rates on deposits will also be higher. This is good for people with excess cash, who may choose to deposit their money in a bank account and earn interest on it rather than spending this excess cash.

Overall, spending falls, aggregate demand falls and economic growth slows down. The negative impact can be a decline in material living standards as consumers have less access to goods and services. Unemployment can also result from decreased spending, leading to negative effects on non-material living standards through financial stress, marriage breakdowns and increased bankruptcies.

## Influencing the exchange rate

The exchange rate is the price at which the Australian dollar is traded against other currencies. When the Australian dollar appreciates in value, our currency is able to buy more of another currency. In effect, this means imported goods and services become cheaper as fewer Australian dollars are needed to buy the same quantity of imports.

The RBA can influence the value of the exchange rate by entering the foreign exchange market and buying or selling Australian dollars. If the RBA wanted to increase the level of economic activity and employment it would sell Australian dollars, increasing the supply and lowering the price. Imports would become more expensive and consumers would switch to locally produced goods and services. The opposite is also true.

While influencing the exchange rate is an instrument of monetary policy, it is seldom used now and is generally reserved for times when the Australian dollar is changing erratically.

## Persuasion

Persuasion is a strategy used by the RBA to talk up or down the level of borrowing, spending and economic activity. As a result of this, consumers and investors react and change their level of spending and borrowing. Statements by the RBA that suggest the economy is performing well will see an increase in consumer and business confidence and therefore an increase in the level of economic activity.

### 3.2 ACTIVITIES

#### REMEMBER

1. Explain what is meant by the term 'budget'.
2. What are the two main possible budget outcomes?
3. What is a 'cash rate'?
4. What is meant by 'interest rates'?

#### EXPLAIN

5. Explain how a smaller budget deficit may affect economic growth and spending in the economy.
6. Explain the difference between a direct tax and an indirect tax.
7. Explain how monetary policy works.

#### DISCOVER

8. Use the **Historical budget and net financial worth data** and **Detailed economic forecasts** weblinks in your Resources section to help you answer the following questions.
  - a. Identify the projected budget outcome for the next year.
  - b. Graph the budget outcome for the past ten years and the predicted outcome for the next four years.
  - c. Summarise the trend in the budget outcome over the period shown.
  - d. Identify the predicted performance of the Australian economy in terms of unemployment and the CPI.

#### Resources



**Explore more with this weblink:** Historical budget and net financial worth data

**Explore more with this weblink:** Detailed economic forecasts

# 3.3 Micro-economic policy options

## 3.3.1 The smaller picture

**Microeconomics** involves examining the operation of the smaller fragments or units making up the whole economy, such as a particular business, an industry or a specific market or small sector of the economy.

**FIGURE 1** Microeconomics involves attempting to improve productivity.



Microeconomic policies involve government actions to assist industries or markets with improving their productivity to make them more competitive and to improve outcomes for consumers through lower prices, greater choice and increased employment opportunities. All of these outcomes should lead to an improvement in the living standards of Australians. This is generally known as microeconomic reform. In recent years the microeconomic reform policy has centred around four main areas:

- trade liberalisation
- labour market reforms
- market deregulation
- the national reform agenda.

In addition to these areas, microeconomic policies have also been specifically directed at small areas of the economy such as:

- immigration
- the environment.

Let's look at these areas in more detail.

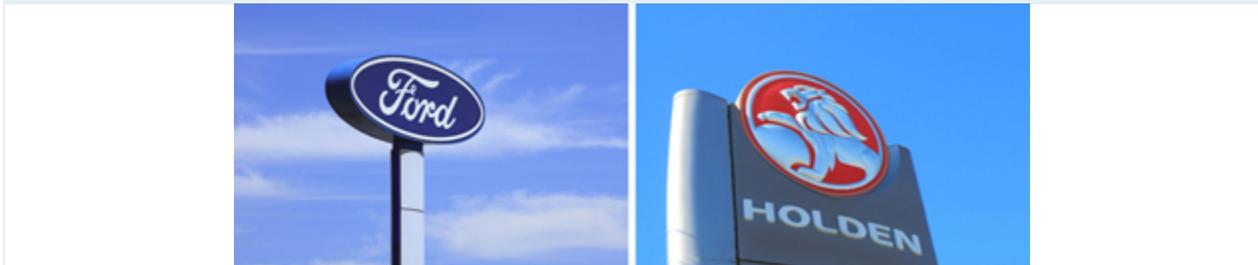
### 3.3.2 Trade liberalisation

Trade between nations has often been subject to protection from governments. The imposition of tariffs and **quotas** and the provision of **subsidies** have all worked to protect local industries from overseas competitors.

Tariffs are a tax on imports that raise the price of those imported goods, making the locally produced goods more price competitive. Quotas are a limit on the number of goods allowed into Australia. This meant at some point locally produced goods had to be purchased as there were no imports available to purchase. Subsidies were an amount given to local producers to help them lower their price and compete with imports.

Trade liberalisation works to reduce these protection mechanisms, making it necessary for local businesses to improve their productivity so they can lower their costs and improve their ability to compete with overseas products on a level playing field. The result should be reduced prices for locally made goods and services so consumers benefit from choice options and lower prices. This enables more goods and services to be purchased and so material living standards are raised.

**FIGURE 2** Trade liberalisation has had some negative effects on Australian manufacturers, particularly in the motor-vehicle industry.

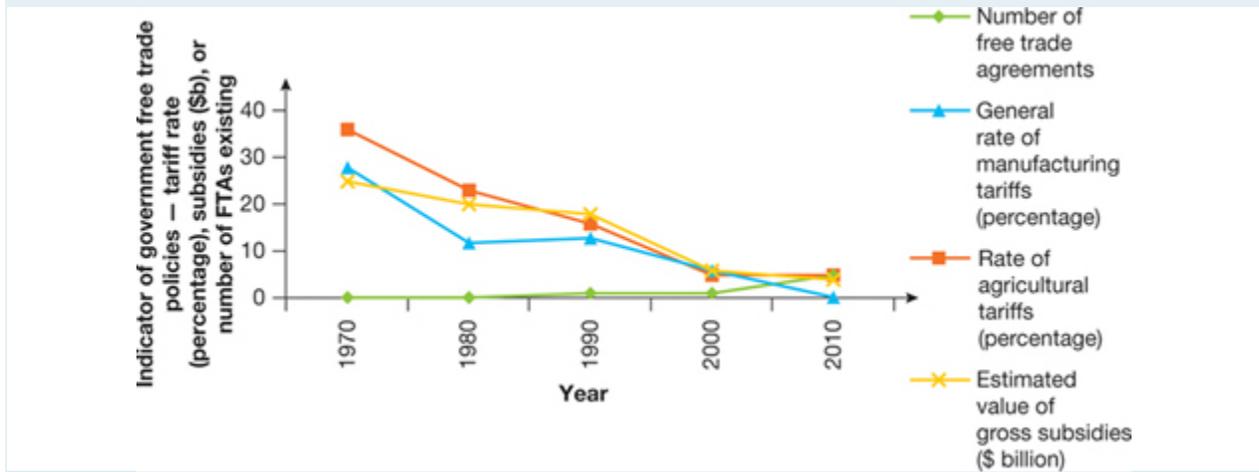


Trade liberalisation operates through:

- cutting tariffs
- reducing subsidies
- abolishing import quotas
- increasing the number of bilateral free-trade agreements.

Figure 3 summarises changes made to Australia's level of protectionism since 1970.

**FIGURE 3** Indicators of the Australian government’s adoption of trade liberalisation measures between 1970 and 2010



Year	1970	1980	1990	2000	2010
Number of free-trade agreements	0	0	1	1	5
General rate of manufacturing tariffs (percentage)	36	23	16	5	5
Rate of agricultural tariffs (percentage)	28	12	13	6	0
Estimated value or gross subsidies (\$ billion)	25	20	18	6	4

Reducing the level of protection has had some negative impacts. Industries where local manufacturers were unable to significantly change have ceased to operate, causing unemployment (the motor-vehicle industry is an example). The rise in unemployment has negative impacts on non-material living standards because stress, financial pressures, mortgage defaults and marriage breakdowns often result.

### 3.3.3 Labour market reforms

The **labour market** is the market where wage levels and working conditions such as hours of work, leave and terms of dismissal are determined. Over the past 20 years various governments have introduced major microeconomic reforms by reducing their control over wages and wage determination. In tandem with trade liberalisation, these policies were aimed at lifting labour efficiency (a higher level of GDP per hour worked), keeping labour costs down and increasing our productive capacity.

This was done by way of a shift from the centralised wage system to a system involving greater deregulation of wages based on collective bargaining or individual workplace agreements. In most cases this created a situation where wages were linked to efficiency and determined at the workplace level, rather than by the government. Since 2010 more than 85 per cent of workers have been covered by enterprise bargaining or other arrangements.

**FIGURE 4** Labour market reforms have resulted in many employees signing individual contracts with their employers.



The deregulation of the labour market enabled some workers to access wage increases as a result of their increased productivity. This benefited both employer and employee as increased productivity meant lower costs and improved competitiveness. Wage increases could then be sourced from improved profits.

Improved competitiveness can also lead to increased employment levels and improved material living standards. On the other hand, non-material living standards may fall because increasing productivity usually means working more hours.

### 3.3.4 Market deregulation

**Deregulation** is the removal of unnecessary government controls, restrictions and supervision in various areas of the economy. In Australia this has seen progressive changes to key markets such as telecommunications, airlines, ports, shipping, primary produce and retail. Because economists believe that markets allocate resources most efficiently, a deregulated market should lead to lower prices due to stronger competition.

**FIGURE 5** Market deregulation has led to increased competition in markets previously dominated by one company.



Market deregulation is seen as an important area of government microeconomic reform because it is a way of promoting many government economic goals including:

- *lower cost inflation* through lower prices due to competition between firms
- *strong and sustainable economic growth* through increased spending on goods and services due to lower prices (meaning higher demand)
- *higher employment in the long term* because new businesses will open in markets previously blocked, creating new jobs
- *external stability* through increased exports and less reliance on imports as locally produced goods become price competitive.

The end result is that both material and non-material living standards will improve over time as the new competitors establish a share of the market.

### 3.3.5 National reform agenda

Microeconomic reform in Australia is currently undertaken as part of a national reform agenda designed to improve the lives of all Australians. From 1995 to 2005, reform occurred under the National Competition Policy (NCP), a broad collection of microeconomic reform measures designed to strengthen the level of competition and efficiency in markets. Strong competition results in greater efficiency, lower costs of production, cheaper prices and better quality of service and product.

In 1995, as part of the NCP reforms, the Australian Competition and Consumer Commission (ACCC) was established to help prevent powerful companies from artificially raising prices to exploit consumers. The ACCC now enforces the *Competition and Consumer Act 2010*, under which a number of anti-competitive practices are illegal, including the following:

- *price fixing*. This is when firms collaborate to set common or similar prices that are higher than normal.
- *exclusive dealing*. This occurs when companies refuse to supply their products or services to one or more firms.
- *collusive bidding*. This is when supposedly competing firms that are submitting a tender or quote for the completion of works or to supply goods or services meet secretly beforehand to agree whose tender should be most attractive, cheapest and likely to win the contract.
- *predatory pricing*. This is when dominant firms conduct a price war involving big cuts in selling prices with the intention of driving rival firms bankrupt, then later enjoying the market without competition.
- *market zoning*. This happens when competing firms in a region divide the market into zones, areas or regions within which they agree not to compete with each other over prices.

**FIGURE 6** Firms should be able to compete on a level playing field without one firm getting an unfair advantage because of its size or power.



In 2006, the Council of Australian Governments, which represents all of the State and Territory governments and the federal government, adopted a national reform agenda to continue competition and regulatory reform.

## on Resources



**Explore more with this weblink:** Anti-competitive behaviour

### 3.3.6 Immigration policy

Australia's immigration policy has been used as an approach to managing the number and composition of migrants coming to Australia from overseas. In other words, apart from important humanitarian and family considerations, the federal government's current immigration program tries to attract young and suitably skilled people who are likely to make a very valuable and ongoing economic contribution to the labour force and the Australian economy.

**FIGURE 7** Skilled migrants can improve the productivity of local businesses.



By prioritising skilled persons as the majority of our yearly immigration intake, Australia is able to fill vacancies in industries where local skills are lacking. This can result in improved productivity, leading to expansion in those industries as they increase their profits.

These migrants also assist in improving non-material living standards as they further develop our multicultural society, bringing elements of their culture to Australia.

It can be argued, however, that if money was spent on training within Australia, we could fill these skill vacancies with people who are currently unemployed, raising their incomes and living standards.

### 3.3.7 Environmental policy

Environmental policy refers to specific policies created by the government to improve the quality of our environment and move away from traditional power generation methods by promoting industries that offer an alternative. Some measures introduced include:

- a government scheme that provides rebates for households that install domestic water tanks to collect rainwater and cut down on water usage from dams
- a government scheme that provides rebates for households that install insulation in their homes to reduce power bills
- a government scheme that provides rebates to households that install solar panels to provide their household with solar power and possibly return unused energy into the power grid, reducing reliance on fossil-fuel generated power
- the creation of the Renewable Energy Target (RET) scheme whereby 23.5 per cent of Australia's electricity will come from renewable energy sources by 2020
- the signing of the Kyoto agreement in 2008 to commit Australia to reduce emissions
- the imposition of a carbon tax (repealed in 2014).

**FIGURE 8** Our environmental policy has led to the creation of a number of new industries.



These policies, among others, aimed to create new industries and provide a cleaner environment for future generations — a means of improving our non-material living standards. They also create jobs in new industries and make it important for traditional energy providers to become more efficient to remain competitive.

### 3.3 ACTIVITIES

#### REMEMBER

1. Define the term 'microeconomic reform'.
2. Outline two key areas of government microeconomic policy.

#### EXPLAIN

3. Explain how one microeconomic reform can assist the government in achieving one economic objective.
4. Using your parents as a resource, complete the following table identifying the sole provider of a service during the 1980s and compare it with the range of providers available today. The first one has been completed for you.
5. Define what is meant by 'environmental policies', listing two important examples of such measures.
6. How can our immigration policy work to improve both material and non-material living standards?

#### DISCOVER

7. Use the **Anti-competitive behaviour** weblink in your Resources section to help you answer the following question. Describe two anti-competitive behaviours businesses may not engage in.

## 3.4 Direct government intervention in the market

### 3.4.1 Reasons for government intervention

So far we have identified the economic goals of the government, how it measures its performance in relation to those goals and the impact that achieving or not achieving those goals has on the living standards of Australians.

Setting economic goals and implementing policies to achieve them is one key way the government is actively involved in the economy. However, the government also intervenes in other areas.

The reasons governments directly intervene in the market are:

- to stabilise the economy
- to reallocate resources
- to distribute income.

**FIGURE 1** The government plays an important role in the market.



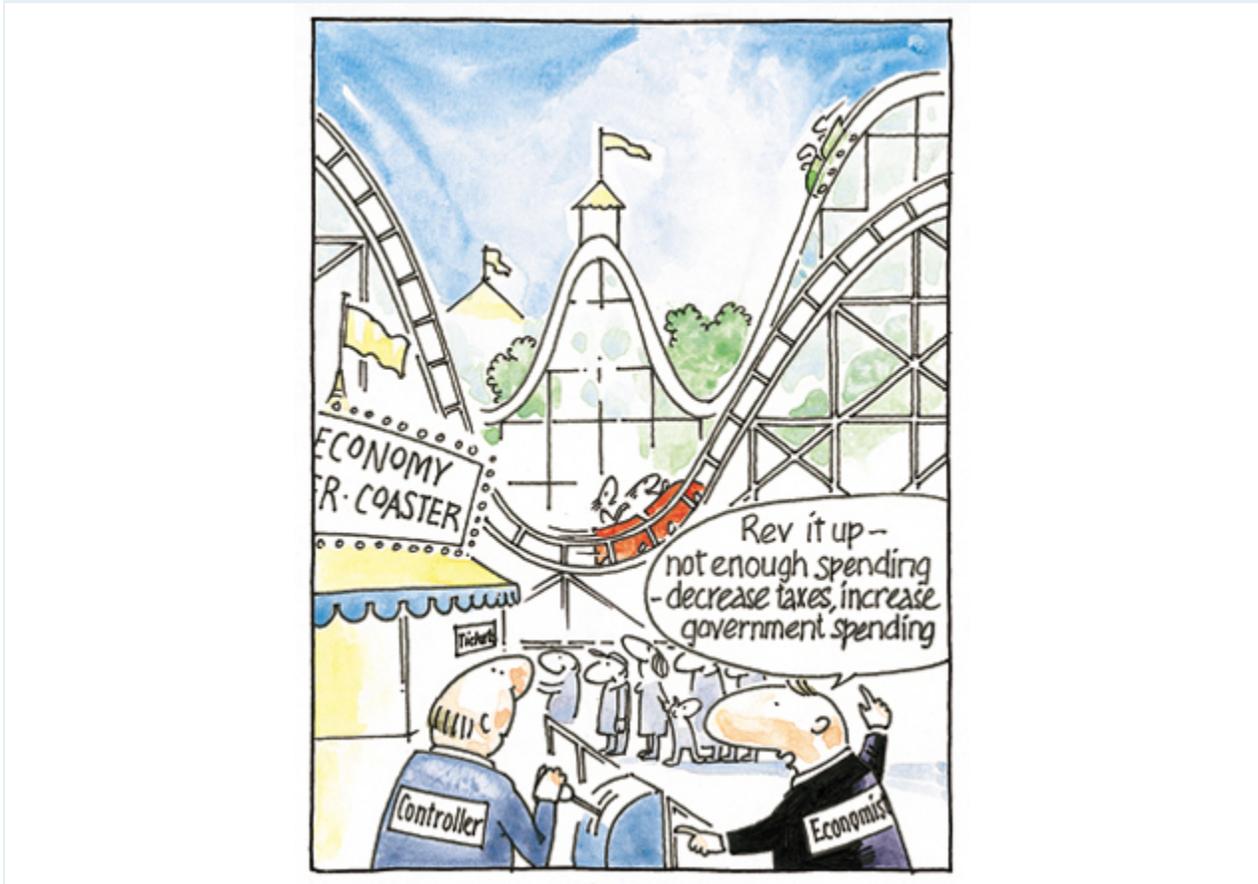
### 3.4.2 Stabilisation of the economy

The level of economic activity involves the overall pace or speed at which the economy is performing and production is growing. The speed at which this occurs can affect:

- *inflation*. If the economy is moving too quickly, inflation will result as demand will pull prices upwards.
- *unemployment*. If the economy is moving too slowly, demand will fall and businesses may be forced to lay off workers or close down, leading to rising unemployment.

If the economy is unregulated, it can be very unstable and it can sometimes experience large and sudden changes to production and activity. It is the government's job to directly intervene in the market to stabilise the level of economic activity. As we have seen, the government does this through the implementation of budgetary, monetary and microeconomic reform policies.

**FIGURE 2** The government is responsible for stabilising the economy to ensure economic goals are met and living standards are maintained.



### 3.4.3 Reallocation of resources

If left to itself, a market can be a very efficient allocator of resources. This is because the owners of those resources are always seeking to maximise their profits and incomes. They do this by producing only those goods and services that are likely to deliver the most profit because they are the most in demand. However, this is not always the case and it is possible to identify a number of circumstances where the market does not use resources efficiently; for example:

- *the market may produce socially undesirable items.* Some products are deemed to be undesirable but can be profitable for those who produce them. However, the government does not want these goods to be produced at all, or to be produced in the quantities they currently are. The production or provision of illegal drugs, gambling, guns and pollution often has negative effects on families' and communities' living standards so the government tries to reallocate resources away from the production and provision of such goods and services.

**FIGURE 3** The government helps stop the production of certain illegal products such as drugs.



- *the market may not produce enough socially desirable goods and services.* The government intervenes to ensure an adequate supply of these products. The private sector may under-produce these goods because they are expensive to produce and it is difficult to make a profit from them. Such items include products related to health care, education, public housing and public transport.
- *the government may intervene to provide goods that the private sector won't supply.* These are services such as defence, public toilets and street lighting, which are not profitable because it is not possible to make users pay for such services.
- *the government may, in some instances, intervene to allocate resources.* These resources may be used for producing goods and services that compete with the private sector to ensure the product is available to everyone, not just to those who can afford it. One example is the ABC (Australian Broadcasting Corporation). This company initially provided television and radio services to all Australians because commercial television channels (7, 9 and 10) did not provide a service to remote areas. The same applied to telephone services through Telecom (now Telstra) and banking services (the Commonwealth Bank was originally established to compete with private banks before it was privatised).

### 3.4.4 Distribution of income

In a market economy, people earn an income according to the demand and supply of the labour they offer. Some people earn high incomes and some earn low incomes. We also know that because of changes in the level of economic activity some people lose their jobs and spend some time earning no income.

The private sector does not provide for people who don't, can't or are limited in their ability to earn an income. In these circumstances the government intervenes to provide these people with a minimum level of income through welfare payments.

Modern Australia (and society in general) recognises that it has an obligation to look after the more vulnerable in our society and that those who can most afford to should carry the majority of the burden for providing for these vulnerable people. As a result, the following government measures are used to redistribute income and provide support to some groups in society.

**FIGURE 4** The government uses taxation and its budget to ensure a minimum level of income for all Australians.



- *Welfare benefits.* The government provides direct payments through its welfare system to vulnerable Australians. Unemployment benefits are the most visible payment made, but the government also makes welfare payments to aged pensioners, disabled people, veterans and indigenous Australians. The government also makes payments to certain groups for various reasons from time to time. Examples include:
  1. *the First Home Owner Grant.* This helps young people move into their first home and out of renting or public housing.
  2. *an extra Family Tax Benefit payment.* This is an extra amount for eligible families when a child is born. It helps with the cost of raising children.
- *Progressive taxes.* Income tax is applied progressively. Higher income earners pay a larger percentage of their income in tax than low-income earners. The money collected from this taxation can be used to pay for welfare benefits to those in need and to provide necessary government services such as health care, education and housing. Taxation rates change periodically according to government policy and aims for the economy.
- *Provision of essential services.* The government does not only pay money directly to underprivileged people. It also redistributes income by providing services to low-income earners, giving them benefits such as health care, public education, concession travel cards for school children and rental assistance.

- *Compulsory superannuation.* To protect the future of Australians and reduce future reliance on government pensions, the government introduced a compulsory national superannuation scheme for all employees through a levy (currently 9.5 per cent of wages earned) on employers. The objective is for workers to be able to live off this superannuation and have less need for welfare when they retire.

## DISCUSSION

Income inequality has risen substantially in Australia over the past two decades, even with the current distribution-of-income methods in place. Do you think the Australian government should do more to try to reduce income inequality?

## 3.4 ACTIVITIES

### REMEMBER

1. What is a market?
2. Why might the market not provide all the necessary goods and services required by Australians?
3. In what areas does the government intervene?

### EXPLAIN

4. Explain why the government needs to allocate resources.
5. Explain why the government needs to redistribute income.

### DISCOVER

6. Use the **Individual income tax rates** weblink in your Resources section to help you answer the following question.

Calculate how much income tax a person would pay if they earned the following amounts per year:

- a. \$26 000
  - b. \$76 000
  - c. \$136 000
  - d. \$246 000
7. A second tax system is a proportional system where every person pays the same percentage of tax. Using the incomes in question 6, calculate the amount of tax each person would pay if the tax rate were 25 per cent.
  8. Explain which tax system (from questions 6 and 7) is fairer.

# 3.5 Supporting growth in the Asia–Pacific region

## 3.5.1 Introduction

The Australian government intervenes in our market to benefit and care for our citizens. However, this is not the only area in which it intervenes. As a member of the Asia–Pacific region and a leading economic power in that area, Australia intervenes to assist other countries in the region improve their economic performance.

It is important for Australia to do this as we export to many of these countries, import from them, our citizens use them as holiday destinations and we hope that their citizens will holiday here. As such, their economic development is linked to our economic prosperity, and vice versa.

There are a number of ways that Australia supports economic growth in this region.

## 3.5.2 APEC

One key way that Australia is involved in the region is through membership of the Asia–Pacific Economic Cooperation (APEC). APEC is a forum for facilitating economic growth, cooperation, trade and investment between the countries in the Asia–Pacific region.

APEC has 21 members — referred to as ‘member economies’ — which account for approximately forty per cent of the world’s population, approximately fifty-five per cent of the world’s GDP and about forty-four per cent of world trade. The member economies are Australia; Brunei Darussalam; Canada; Chile; Hong Kong; Indonesia; Japan; Malaysia; Mexico; New Zealand; Papua New Guinea; People’s Republic of China; Peru; The Republic of Korea; The Republic of the Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; The United States of America; and Vietnam.

APEC is not as formal as other world organisations (such as the World Trade Organization (WTO) or the United Nations), but rather it is a group of countries that agrees to cooperate on the basis of consensus and so any commitments made are undertaken on a voluntary basis. It prides itself on open dialogue and equal respect for the views of all participants.

APEC was established in 1989 and has worked to reduce tariffs and other trade barriers across the Asia–Pacific region, creating efficient domestic economies and increasing exports. APEC members recognise that free trade and investment helps economies to grow, creates jobs and provides greater opportunities for international trade and investment. Free trade helps to lower the costs of production and therefore reduces the prices of goods and services — a direct benefit to all.

## on Resources



Explore more with this weblink: [APEC](#)

### 3.5.3 Foreign aid

In addition to being a member of APEC, Australia provides direct aid to many countries in the Asia–Pacific region. **Foreign aid** represents the transfer of money and other types of assistance by governments to developing, or ‘poor’, economies. The aim of foreign aid is to assist these poor countries with improving their living standards. It aims to break the cycle of poverty, raise per-capita incomes and improve the quality of daily life. Often it does this by raising the funds available for investment in social and economic infrastructure, lifting efficiency and accelerating productive capacity.

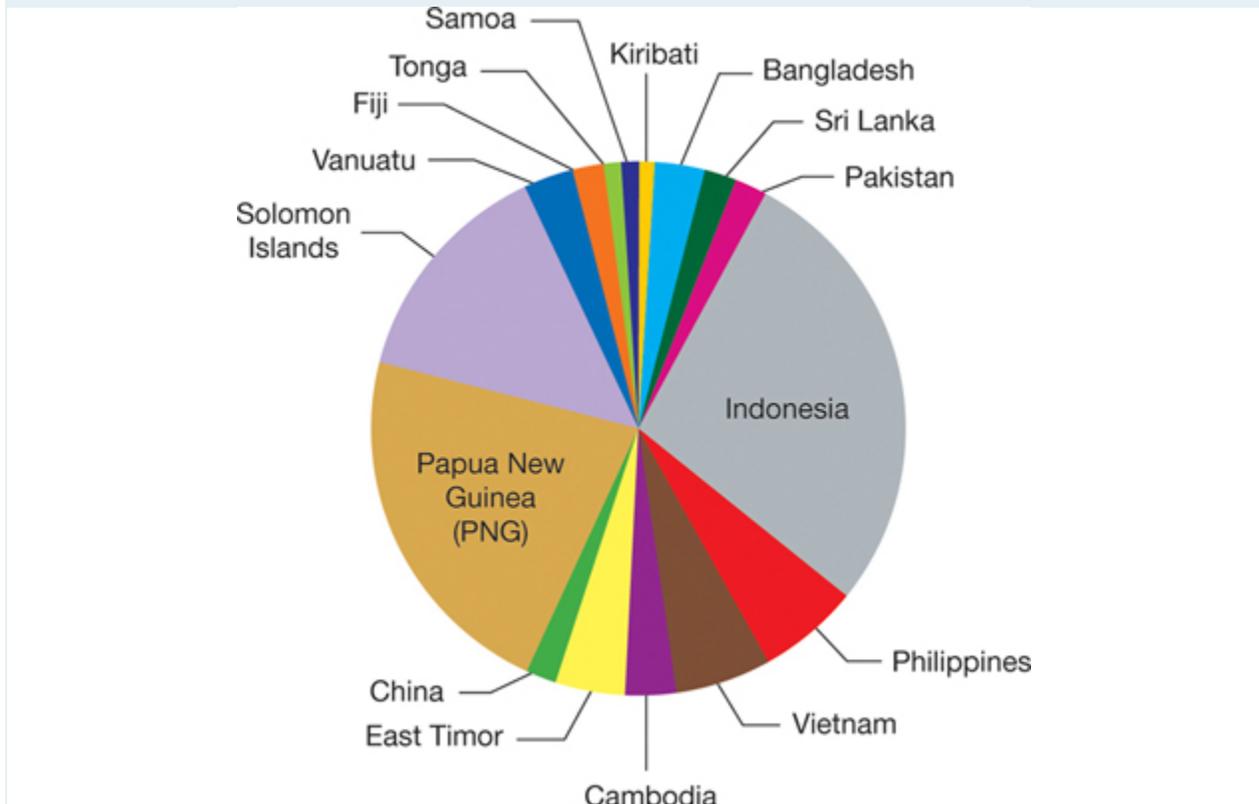
**FIGURE 1** Foreign aid is an important component of Australia’s contribution to the Asia–Pacific region.



There are generally three types of foreign aid:

- *loans*. Money is loaned out to poor countries to assist them in building infrastructure and developing industries. Loans should be repaid and the rate of interest varies according to the reason for the loan and any special conditions that may have been attached.
- *grants*. Donations of cash that do not need to be repaid. Often this type of aid is critical for providing immediate help after disasters such as famines, floods, earthquakes, wars or tsunamis.
- *technical and other assistance*. Scientific, economic, educational, technical, industrial or agricultural personnel are provided to advise on matters relating to economic development.

**FIGURE 2** A snapshot of foreign aid donated by the Australian Government, 2007–08



### 3.5.4 Charities and non-governmental support

Australia as a country provides aid and support to other countries in its region. Australians as individual citizens are also known for contributing to the development of poorer economies by providing aid privately.

Much of this aid is funnelled through charity or aid organisations such as Oxfam, World Vision and the Red Cross.

## 3.5 ACTIVITIES

### REMEMBER

1. What does 'APEC' stand for?
2. Why is it the government's responsibility to assist developing countries?

### THINK

3. Why do you think associations such as APEC are needed?
4. 'Assisting other countries makes us a better global citizen and can improve our own living standards.'
  - a. Discuss this statement as a group and provide a response on behalf of your group.
  - b. Present the response to the class in a multimedia format.

### DISCOVER

5. Use the **APEC** weblink in your Resources section to help you answer the following question. Go to the 'Topics' tab on the home page and click on one of the topics listed. Write a summary of what APEC is doing in that area and outline how this can improve the conditions in the Asia-Pacific region.

# 3.6 SkillBuilder: Preparing a budget

## 3.6.1 Tell me

A budget is defined as a plan for the future. The government plans for the future of the economy on an annual basis by preparing and releasing its budget each May. The budget establishes the sources of the government's expected revenues or receipts; that is, the amount of money it is expecting to receive and from where that money will be sourced. It also establishes where (location) and in which areas of the economy the money will be spent.

**FIGURE 1** A budget can be used to assist with finances and planning.



The government is not the only group that prepares a budget. Many businesses prepare budgets to provide information about their future and to assist them in deciding on a course of action.

Many families also prepare budgets to enable them to better plan for a holiday or a new car, or in preparation for one member of the family to give up work to start a family.

It is not uncommon for teenagers to prepare a budget when they start working part time and want to save to buy a car.

### 3.6.2 Show me

Consider what is important to you now and consider what might be important to you in the future. At your age, you may think being 25 is far away. Being 50 years old is even further away and not something you would normally think about.

#### Write your own personal development goals

1. Prepare a list of the goals you would like to achieve by the time you are 25 and then prepare another list of the goals you would like to achieve by the time you are 50 and then 75.
2. Once complete, examine your goals and summarise how they differ at each age. In your response, consider which of the goals are material and which are non-material.
3. Include a summary of how you will measure the achievement of your goals. Share your personal development goals and summary with your classmates.
4. Finally, what do you think your parents would write if they were to complete this task?

### 3.6.3 Let me do it

## 3.6 ACTIVITIES

Analyse your budget.

1. Did you receive more than you expected?
2. Did you spend more than you expected?
3. Calculate the percentage contribution to your total receipts for each area of receipts.
4. Calculate the percentage contribution to your total spending for each area of expenditure.
5. If you were to adjust your spending, in which area would you be most able to reduce your spending?
6. If you were to adjust your spending, in which area would you be least able to reduce your spending? Why?
7. What could you do to increase your receipts?

Compare your results with those of your classmates. There is no need to share dollar amounts. Use the percentages and the analysis to explain your financial situation.

## 3.7 Review

### 3.7.1 Summary

In this chapter we examined how the government is involved in assisting the economy to achieve the economic goals we examined in chapters 1 and 2. By adopting macroeconomic and microeconomic policies it aims to keep inflation under control, minimise unemployment, create a sustainable level of economic growth and keep our trade situation balanced.

Policies are strategies the government implements to achieve these goals. Encouraging spending by lowering taxes and interest rates can lead to employment and economic growth. This can also lead to inflation if microeconomic policies aren't introduced to raise productive capacity.

Just as the government has economic goals and has those goals measured and assessed, so do you. You have goals for your life and goals for your education. You are also regularly assessed on the achievement of those goals through:

- assessment tasks

- tests
- assignments
- examinations
- reports
- parent-teacher interviews.

You should also be considering strategies you can implement to improve your performance. For example:

- arriving for class on time
- bringing all materials to class
- completing homework on time
- revising your work.

Prioritising what you do to achieve your objectives is not easy — there is only so much time in a day. The same applies to the government budget — there is only so much money available to spend.

## 3.7.2 Your turn

### 3.7 ACTIVITIES

1. Identify where the government receives its revenue from.
2. Using the categories of expenditure shown, allocate revenue to the various areas of spending.
3. Compare your allocation of money to what the treasurer has allocated. Write a report justifying your allocation of the revenue you received.
4. Compare your 'budget' with the budgets prepared by your classmates.
  - What did you notice?
  - Are there any areas of spending that you all agree are more important than others? Why?
  - Which area(s) did the class find less important?

### Resources



**Explore more with this weblink:** Revenue and spending

**Try out this interactivity:** [Government management of the economy crossword](#)

Searchlight ID: [int-5538](#)

# Chapter 4: Influencing consumers

## Contents

- 4.1 Overview
- 4.2 Business influences on consumer decisions
- 4.3 Consumer choice, attitude and preference
- 4.4 Making major purchases
- 4.5 SkillBuilder: Choosing a mobile phone plan
- 4.6 Review

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# 4

## Influencing consumers



# 4.1 Overview

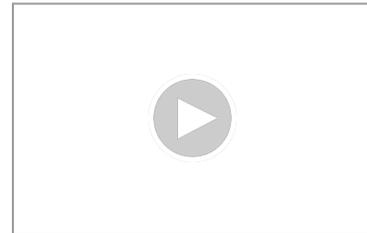
## 4.1.1 Business–consumer relationships

### on Resources



**Watch this eLesson:** [The relationship between businesses and consumers](#)

Searchlight ID: [eles-2384](#)



Your senses tell you that your target is close by. You can smell it; you can hear it breathing across the hot savannah air. With great stealth, you move forward to a vantage point, attuned to the slightest warning signs of the dangers that surround you. After hours of waiting and staring through your telescopic sight, you finally get the perfect shot of your prey. With your trigger finger ready, you hold your breath, aim and take the shot you've been waiting for — the shot that will win you the job as a *National Geographic* photographer!

Many traps and dangers exist in the financial 'jungle' for both hunters (businesses) and game (consumers). These dangers are even more significant for the unaware and inexperienced. Businesses often 'hunt' consumers, using tactics that can be ethical and, at times, unethical. Consumers have to be conscious of these tactics before short-term and long-term financial decisions and choices are made.

Businesses also need to be wary of dangers. In the evolving global economy, there is an increasing number of hunters in the jungle. Only the strongest and most savvy businesses will survive in this competitive environment. For these reasons, it is crucial that both businesses and consumers understand the financial jungle in which they exist. This includes being aware of the movement of money, budgets, marketing tactics and product pricing, and being familiar with investing money and purchasing goods. This chapter will guide you through the financial jungle, identifying and explaining the most important aspects of the business–consumer relationship.

**FIGURE 1** The financial 'jungle' has many traps and dangers.



## Learning objectives

Students will investigate:

- the factors that influence major consumer and financial decisions and the short- and long-term consequences of these decisions.

## STARTER QUESTIONS

1. Explain how businesses and companies can be seen as 'hunters' and how consumers can be seen as 'prey'.
2. List three short-term and three long-term consequences of purchasing a product.
3. When purchasing products, what do you consider more: short-term or long-term consequences?
4. What dangers are there for businesses in the marketplace?
5. Who do you think has the most influence over the marketplace: businesses or consumers?

# 4.2 Business influences on consumer decisions

## 4.2.1 The power of advertising

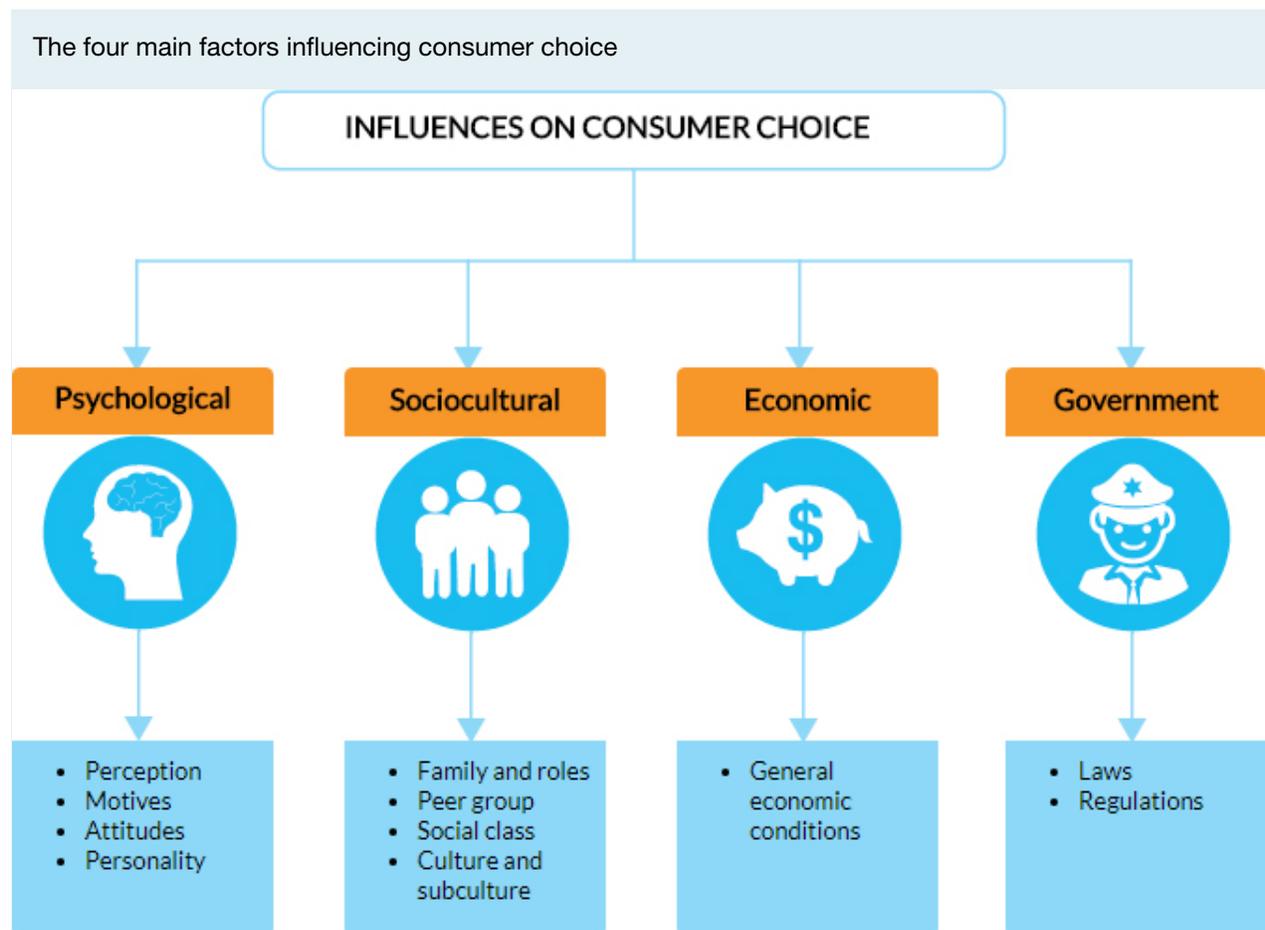
**FIGURE 1** Which soft drink do you think of when you see this advertisement?



Advertising has incredible power and influence over our lives and the consumer decisions we make. Be honest: when you saw Figure 1, which soft drink did you think of? Ask your classmates as well. If you said Coca-Cola, this advertising campaign was successful. The image was indeed part of a campaign run by global soft-drink giant Coca-Cola. Besides the shape of the silhouette, there is nothing to suggest this is an advertisement for Coca-Cola. There are no colours and there are no logos. Yet your mind instantly thinks of Coca-Cola's product. This advertisement is only successful because of previous marketing campaigns run by the company. For more than 100 years, Coca-Cola has dominated the soft-drink market. The company's creative and distinctive marketing strategies have been a key reason for its market position. Let's examine why businesses need to consider consumer behaviour before they develop marketing strategies.

## 4.2.2 Factors influencing consumer decisions

Four main factors influence consumer purchasing decisions.



### Psychological influences

Four main **psychological factors** influence consumer choice.

1. *Perception.* As individuals, we often act on our perceptions of reality rather than reality itself. Consequently, marketers are extremely aware that they must create a positive or favourable perception of their product in the mind of the consumer. Consumers will not normally purchase a product that they perceive as being of poor quality or inferior to similar brands.
2. *Motives.* The main **motives** that influence consumer choice include comfort, health, safety, ambition, taste, pleasure, fear, amusement, cleanliness and the approval of others. As it does with a consumer's perception of the product, so advertising also attempts to influence an individual's motives to choose a product.
3. *Attitude.* **Consumer attitude** towards a business and its products generally influences the success or failure of the business's marketing strategy.
4. *Personality.* To some extent, **personality** influences the types and brands of product that a person buys.

## Sociocultural influences

There are four main **sociocultural influences** that affect consumer choice:

1. *Family and roles.* All of us occupy different roles within the family and groups in the wider community. These roles influence buying behaviour. Although women's roles are changing, market research shows that most women still make buying decisions related to, for example, healthcare products, food and laundry supplies.
2. *Peer groups.* A consumer's buying behaviour may change to be more in line with that person's **peer group**, beliefs and attitudes.
3. *Social class.* In our society, the factors generally used to classify people are education, occupation and income. Social class, therefore, influences the type, quality and quantity of products that a consumer buys.
4. *Culture and subculture.* **Culture** influences buying behaviour because it infiltrates all that we do in our everyday life. It determines what people wear, what and how they eat, and where and how they live. Subcultures differentiate themselves from a larger culture to which they belong (for example, goths are a subculture).

**FIGURE 2** Buying behaviour may change to be more in line with peer group beliefs and attitudes.



## Economic influences

Economic forces have an enormous impact on consumers' willingness and ability to spend. During an economic boom, for example, consumers are willing to spend because they feel secure about their jobs and source of income. During a recession, consumer spending falls to a very low level.

## Government influences

Governments use a number of economic policy measures to influence the level of economic activity. These policies directly or indirectly influence consumers' spending habits.

Of more direct and immediate impact is the influence of government regulations. Laws dealing with misleading and deceptive advertising, for example, protect consumers and influence business practices.

### 4.2.3 What is marketing?

Marketing is more than selling a product. It is the whole process of providing goods and services to satisfy the needs and wants of consumers at the right place and time, using the right promotions. A catchy definition of marketing is 'the right product, in the right place, at the right time, at the right price'. This is sometimes called the 4Ps: Product, Price, Place and Promotion.

**FIGURE 3** The 4 Ps of marketing



Successful marketing needs to involve the following elements:

- *research*: gathering information from potential consumers about their wants and needs
- *publicity*: providing information about a new product or service
- *promotions*: assisting the launch of products and services (for example, events)

- *advertising*: promoting new behaviours (for example, anti-litter, Quit campaign, road safety programs)
- *evaluation*: finding out the success of the product or campaign.

The following extract is a set of guidelines for marketing a new product written by successful entrepreneur Janine Allis, who founded Boost Juice.

## ADVICE FROM JANINE FOR ALL BUSINESS PEOPLE

1. Surround yourself with people who have done it before because you will save on mistakes and every mistake costs money.
2. Put a promise to the brand.
3. Question whether your company name tells people what you do.
4. Your company name should be something you are passionate about.
5. Your brand should crystallise your message.
6. Clearly identify and promote to your target market. Changing a brand name is costly and can bring angst and heartache.
7. Take what you've got but update it to reflect growth and expansion.

**FIGURE 4** Boost Juice founder Janine Allis



**FIGURE 5** Marketing is not necessarily about selling something for a profit. For example, you can run a marketing campaign for a free concert, a cake stall or a sausage sizzle.



Everyone in a business needs to know the business's plan, so that all departments work towards achieving the business's objectives. Such a plan is referred to as an *integrated* marketing plan.

There is no one set format for developing a marketing plan. Each plan will reflect the individual characteristics of the business. However, all marketing plans should have two features in common:

- They should be realistic, given the business's present situation.
- They should be achievable within the business's resources and budgets.

## Target markets

Entrepreneurs aim their products at target markets. These market segments may be determined by age, gender, income, occupation, education or geographical location. Marketing analysts break down target markets further to show how the types of products and brands purchased reflect the personality and lifestyle of the user (psychographic segmentation). Through market research such as surveys and telephone marketing, information about products and users is gathered. Feedback may reveal information about brand loyalty, or how memorable a brand or advertisement is.

### DISCUSSION

Brand loyalty is when customers favour one company's brand of goods (or services) over a competing brand; for example, you may know someone who will purchase only an Apple iPhone as their smart phone. Are there both advantages and disadvantages to being loyal to brands?

## 4.2 ACTIVITIES

### REMEMBER

1. List four factors influencing consumer behaviour and give an example of each.
2. Define each of the following terms:
  - a. market research
  - b. marketing campaign
  - c. market segments.

### EXPLAIN

3. Explain how perception and motive influence consumer buying behaviour. Distinguish between the sociocultural and psychological factors that influence consumer choice.
4. How do peer groups influence buying behaviour?

## THINK

5. Name some of your own peer groups and suggest how they influence your buying decisions.

## DISCOVER

6. Collect a number of print advertisements from a magazine. Suggest the psychological and/or sociocultural influence to which each advertisement is appealing.

# 4.3 Consumer choice, attitude and preference

## 4.3.1 The influence of consumers on businesses

Consumers wield incredible power. As the purchase of products drives the marketplace, businesses find themselves at the mercy of consumer behaviour. If consumers stop buying particular products, the consequences can be serious and widespread. Businesses and retail distributors, as well as the manufacturers of components, can lose money when consumers change their purchasing behaviours. For this reason, businesses and retailers must also keep their consumers in mind. Let's investigate how consumers can hold companies responsible for their activities.

### Resources



**Watch this eLesson:** [Thousands of customers wait in line outside the Apple Store in Chicago](#)  
Searchlight ID: [eles-2438](#)

## 4.3.2 Consumer choices

As we have just learned, the marketplace is a highly competitive environment. Businesses and vendors go to extraordinary lengths to win and keep customers. For this reason, it is crucial that consumers and the choices they make are protected. There are several organisations in Australia that serve this role. The independent organisation CHOICE is one example. Founded in 1959, CHOICE began as a magazine published by the Australian Consumers' Association (ACA). The magazine, as well as the organisation behind it, aims to help consumers make wise purchasing decisions. CHOICE was also founded to protect consumers against substandard products and services. Now including an extensive web-based service, CHOICE provides comprehensive product tests and reviews. Consumers can use these services to research products and compare brands. By using organisations such as CHOICE, consumers are able to make educated and informed purchasing decisions.

**FIGURE 1** CHOICE tests and reviews products to help consumers make wise purchasing decisions.



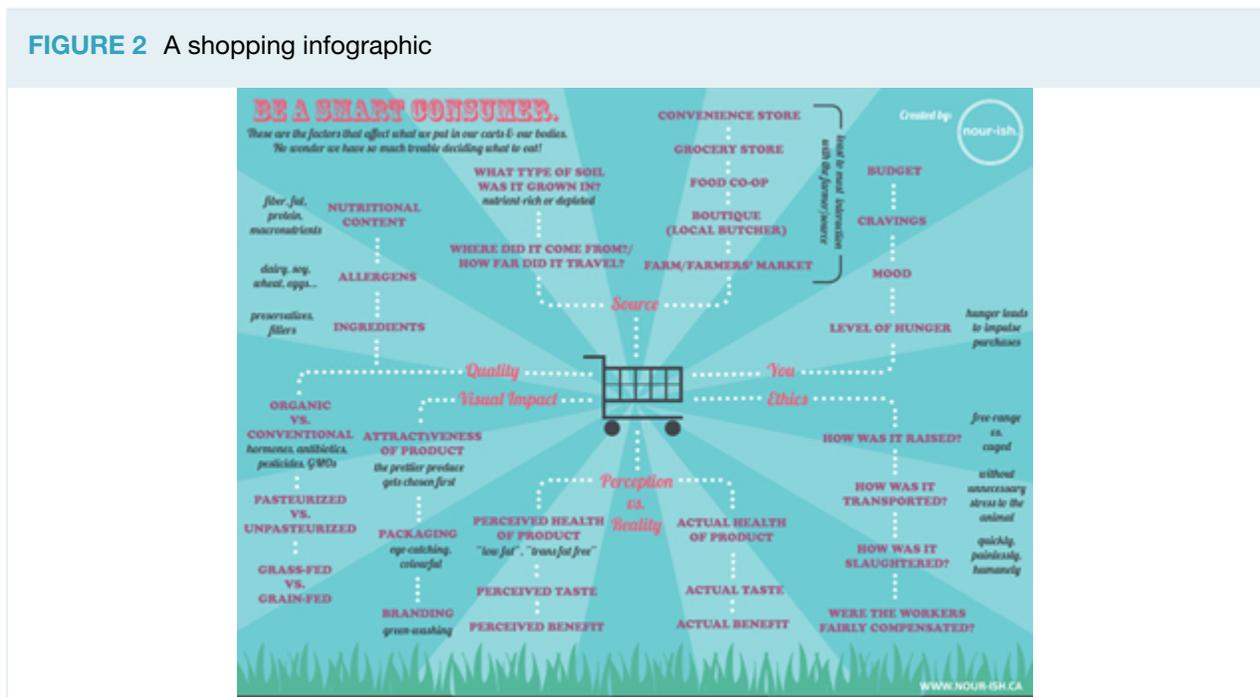
*Note:* Reproduced with permission from CHOICE.

The Australian Competition and Consumer Commission (ACCC) is another organisation that helps protect the rights of consumers. Although the ACCC is a federal government body, it operates independently of any political **bias**. Its role is to regulate and oversee business operations while protecting the rights of the consumer. The ACCC monitors and regulates competitive marketplaces, ensuring that businesses operate with fair and reasonable economic conduct (including the setting of prices). The ACCC also provides consumers with independently researched product information. The ACCC often holds its own investigations into work and product standards, publishing its findings for the public to read. Each state and territory of Australia also has a consumer affairs department. These state government bodies fulfil several roles for the ACCC and are avenues through which consumers can exercise their rights.

### 4.3.3 Ethical and environmental consumerism

Consumers have the ability to hold businesses accountable for their ethical and environmental practices. By demanding proper business behaviour, consumers have the power to influence the standards that businesses must meet. Businesses that violate these ethical or environmental standards can find themselves the target of awareness campaigns or even **boycotts**. It is in the best interest of a business to learn and understand the concerns of its customers in order to avoid any such action. In fact, business can often gain customers by promoting ethical behaviour and positive environmental activities. The booming bottled water industry provides many examples of the effects of **ethical consumerism**. The following case studies explain the potential negative and positive impacts of consumer behaviour on businesses.

**FIGURE 2** A shopping infographic



## CASE STUDY

### FIJI Water

One of the world's most popular brands of bottled water, FIJI Water is also the small island nation's major foreign export. An incredible 10 per cent of Fiji's total export income is generated from the bottled water industry. What makes this statistic hard to swallow is the fact that 53 per cent of Fijians lack access to clean drinking water. The location of the company's main processing plant also diverts water away from local communities, dramatically lowering agricultural production as well as causing environmental damage. These and other criticisms are published on Shop ethical! (go to the **Shop ethical!** weblink in your Resources section), an Australian-based website for ethical consumers. In an effort to present consumers with balanced information, this website also promotes any positive activities undertaken by the companies in question. Companies such as FIJI Water suffer from negative attention when consumers make ethical decisions. In the billion-dollar bottled water industry, this can result in a serious loss of revenue.

**FIGURE 3** Bottles at a bottled water factory



## CASE STUDY

### Thank You Water

At the other end of the bottled water spectrum is Australian company Thank You Water. The founders of this company saw both a problem and an opportunity with the world's growing preference for bottled water. With the money earned from its water sales, the Thank You group funds safe water projects across Australia and the world. By actively promoting its ethical business activities, Thank You Water has quickly become one of Australia's most popular brands of bottled water. In four years, Thank You Water increased its bottle production from 40 000 (per year) in 2008 to 320 000 (per year) in 2013. In this way, the company was able to use the consumers' preference for ethical and positive environmental action to its favour.

**FIGURE 4** Australian company Thank You Water uses profits from bottled-water sales to fund safe water projects.



## 4.3 ACTIVITIES

### REMEMBER

1. How and when did CHOICE Australia begin?
2. List the services that CHOICE provides for consumers.
3. Which branch of government controls the ACCC?

### EXPLAIN

4. What is the role of the ACCC?
5. How does the ACCC differ from CHOICE Australia?

### THINK

6. Consumers are charged a small fee for some of the services provided by CHOICE (including research reports into products). Do you believe it is fair and reasonable for CHOICE to charge consumers? Explain your position.
7. Do you believe it is practical to be an ethical consumer? What are some of the difficulties ethical consumers may encounter?

## Resources



**Watch this eLesson:** Consumer outrage over appalling treatment of chickens kept in tiny cages has forced some businesses to improve conditions for chickens by giving them space to 'free range'

Searchlight ID: [eles-2439](#)



**Explore more with this weblink:** Shop ethical!

# 4.4 Making major purchases

## 4.4.1 Consumer choices

People often vividly remember their first car. Perhaps it was a rusty but reliable bomb handed down from your grandmother to your older brother and now to you. Or maybe it was your dream car: the one you had worked towards owning since your first shift at the fish-and-chip shop. Whatever the case, owning your first car is a significant milestone in your life. Now that you are only a few years away from that milestone, you need to start making some decisions. Do you spend a small amount of money on that rusty bomb and hope it doesn't need repairs? Do you pour all your savings into one large purchase? Or do you take out a loan in order to afford that car you've always wanted?

Buying a car is not the only challenging, long-term financial decision that you will be faced with. Let's identify and evaluate the consumer choices that surround major purchases.

**FIGURE 1** A car is probably the first major purchase you will make in your life.



## 4.4.2 Choosing a car

Before making a major purchase such as a car, you need to decide exactly what you want. You would be foolish to go out and buy the first car that attracts your eye. Instead, you need to determine what kind of car you want. The size of the car you buy will depend on your needs — your lifestyle and your purpose for buying the car. You may want a small car (to help you save on petrol costs and to best suit your limited garage space) or a station wagon (in which you can easily transport your surfboard each weekend). As well as the size and look of the car, you also need to consider its age, condition and fuel efficiency. One last consideration is whether the car you *want* is the car you *need*. Is it worth spending money on a new car or are you better off buying your grandmother's old bomb? You need to weigh up all these options before making your choice.

**FIGURE 2** What sort of car would suit you best?



## How safe is your car?

Once you have a car in mind, the next step is to conduct proper research. Websites such as RedBook and Carsales (go to the **RedBook** and **Carsales** weblinks in your Resources section) contain detailed statistics on new and used cars. You can search these sites for your preferred car and find lists of previous sales, safety records and other useful information. Another valuable website to investigate is How safe is your car? (go to the **How safe is your car?** weblink in your Resources section). Developed and maintained by the Transport Accident Commission (TAC), this site provides independent car safety information. If you purchase a used car, the seller is required by law to obtain a **roadworthy certificate**. This document is proof that the car meets the necessary mechanical and safety standards. You can possibly save hundreds of dollars by avoiding a bad car purchase (commonly known as 'buying a lemon'). To this end, motoring organisations such as the RACV and NRMA, and some insurance companies, provide pre-purchase, pre-selling and end-of-warranty inspections on new and used cars, as well as independent valuations and owners' reports. These services can inform you of the history and condition of the car and whether it has been in an accident. This helps you make an informed purchase — you know what you are buying. Your last choice in these initial stages of purchasing a car is perhaps your most important one — deciding how you will pay for it.

**FIGURE 3** Safety should be a major consideration when buying a car.



## DISCUSSION

All new cars sold in Australia have to meet specified minimum safety standards, with a result being that newer cars perform significantly better than older cars in accidents. Should there be increased safety standards for second-hand cars to bring them in line with the new-car safety standards?

## on Resources



Explore more with this weblink: RedBook



Explore more with this weblink: Carsales



Explore more with this weblink: How safe is your car?

### 4.4.3 The costs of car ownership

There are a number of costs that you need to consider when buying a car. First, there is the purchase price of the car. Before taking delivery of the car, you will also be required to pay **stamp duty** and dealer charges (if it is a new car). If you buy the car second-hand, you will need to re-register the car in your name and pay the relevant charges. Next there are ancillary costs, which are essential for all car owners. Purchasing car insurance can be expensive, but it provides a safeguard in the event of an accident. Comprehensive car insurance protects you no matter who is at fault. 'Third-party' insurance is compulsory and protects others if you are at fault, and protects you if others are at fault. If you cause an accident while driving an uninsured car, the damage to your car and other cars could cost tens of thousands of dollars.

**FIGURE 4** Only comprehensive car insurance protects you regardless of who is at fault.



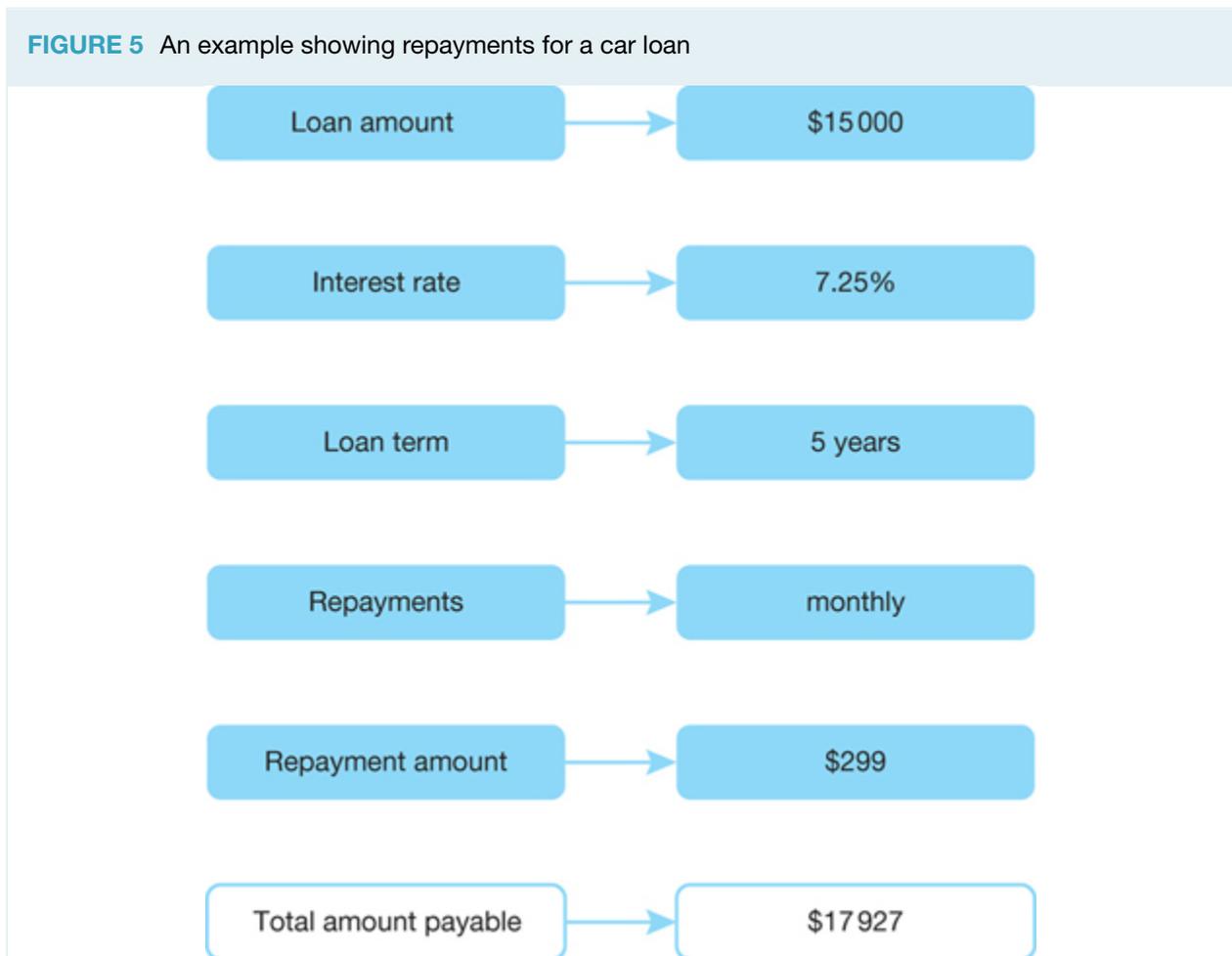
Joining an emergency road-side assistance provider is another cost for car owners. While joining these services is not essential, they can help you out of a lot of troublesome situations. There is also the cost of any permanent additions you may want (for example, a sound system, tinted windows, alloy wheels). The extent of these additions is a strictly personal choice but can add significant costs to car ownership. Finally, you need to consider that your car will never be worth as much as it was the day you bought it. As your car gets older, it depreciates in value. The rate of depreciation increases as newer models with better technology are produced.

## Loans

If you do not have enough money to purchase a car outright you can take out a **loan**. This involves borrowing a sum of money from a bank or other financial institution. Let's say the car you want costs \$20 000 and you only have \$5000. A bank can lend you the remaining amount so that you can afford your car. Over the course of an agreed period of time (usually between one and five years), you are required to pay the money back to the bank or lender. This is done by making periodic repayments, which include a percentage of interest. It is through these interest payments that lenders make their money. Interest is the amount paid by a borrower to a lender for the privilege of borrowing money. A fixed or variable interest rate is usually agreed upon at the beginning of the loan. For example, a lender could offer a rate of 7.25 per cent.

Figure 5 applies this rate to the example discussed above.

**FIGURE 5** An example showing repayments for a car loan



As you can see in Figure 5, there is nearly \$3000 difference between the original loan amount and the total amount payable. This means that the lending organisation makes a considerable profit from each loan agreement it signs. On a \$15 000 car loan, a bank would only make a relatively small amount of money. Yet on a \$500 000 home loan (at 5.5 per cent interest over 30 years), a bank would make more than \$500 000 in interest. Profit from interest payments is one of the main sources of revenue for banks and lending organisations.

#### 4.4.4 Making the right decision

Purchasing your first car is a milestone that you'll remember for the rest of your life. When you make any major purchase, it is important that you consider both short-term and long-term consequences. Spending only \$2000 on your grandmother's old car may seem like the most cost-effective option at the time. However, older cars can often be more expensive to run. They lack modern fuel efficiency technology and can be expensive to repair. Although you may spend more initially on a newer car, the long-term costs can often turn out to be more manageable. Whatever your decision, it is crucial that you conduct proper research on the car itself and the method of payment you choose to purchase that memorable first car.

### 4.4 ACTIVITIES

#### REMEMBER

1. List the options you should consider when deciding what kind of car to buy.
2. Before a used car is sold, what tests does it need to have?
3. List the costs involved with car ownership. Choose three of these costs and describe them in more detail.

#### EXPLAIN

4. Explain what is meant by 'stamp-duty'.
5. How do banks make money from car loans?
6. What is the difference between comprehensive and third-party car insurance?

#### EXPLORE

7. Use the steps outlined above to choose your ideal first car.  
Conduct proper research using the **RedBook** and **Carsales** weblinks in your Resources section to complete the table below.

# 4.5 SkillBuilder: Choosing a mobile phone plan

## 4.5.1 Tell me

Do you have a pre-paid mobile or do you pay a bill at the end of every month? Do you have free calls after 8 pm and can you send as many text messages as you want? How many megabytes of data are you allowed to download and is social media included? You need to consider all these questions and more when you choose a mobile phone plan.

In this SkillBuilder, you will find out what mobile phone plans are and how you can select the one that best suits your needs. You will also find out how to compare the myriad options offered by the various telecommunications providers that operate in Australia.

## 4.5.2 Show me

Mobile phones are usually purchased through telecommunications providers. Companies such as Telstra, Optus and Vodafone sell phone handsets as well as contract agreements known as 'plans'. Although some people choose to purchase their mobile phones outright, the majority of Australian consumers sign up to either a pre-paid or post-paid mobile phone plan. Usually included in the plan are essential mobile phone functions such as calls, text messages, multimedia messaging, data charges and voicemail. Tailored plans are often available that enable consumers to choose a plan which suits their specific needs. For example, as business owners tend to make the majority of their phone calls during the day, business plans offer a lower charge for calls made during business hours. Mobile phones can also provide portable internet access when used as personal 'hotspots'. Before purchasing a phone and signing up to a plan, it is important to compare mobile phone providers and the options they offer to consumers.

### 4.5.3 Let me do it

#### 4.5 ACTIVITIES

Construct a comparison table like the one shown below. You can either use the headings provided, or you can alter this table to suit your own search parameters. Use online information or call the company directly to obtain the information you need. As mobile phone providers offer a huge range of products, it is best to narrow your search before you begin this phase. A good way to do this is to choose one specific brand and model of phone to research. There are also many different mobile phone providers in Australia, so it will be easier if you limit your search by investigating only some of the following companies:

- Telstra
- Optus
- Vodafone
- Virgin Mobile
- Dodo
- iiNet
- Amaysim.

There are several websites that will find information for you and even compare plans for selected mobile phone providers.

Go to the **Mobile phone providers 1**, **Mobile phone providers 2** and **Mobile phone providers 3** weblinks in your Resources section to find information on pricing of mobile phone plans from three different telecommunications companies.

Phone provider	Length of contract (months)	Calls included (\$)	Min. monthly charge (\$)	Data included (MB)	Additional data costs (\$ per MB)	Flagfall	SMS costs (c)	MMS costs (c)
Telstra								
Optus								
Vodafone								
Virgin Mobile								

Once you have completed the summary table above, you must *evaluate the costs and benefits of the different alternatives*. To do this, complete the following activities:

1. Complete a cost-benefit analysis for each of the mobile phone plans that you researched. Use a table like the one below to help you.

Phone provider	Costs	Benefits
Telstra		
Optus		
Vodafone		
Virgin Mobile		

2. In light of your own needs as a mobile phone user, rank the providers from most suitable to least suitable.
3. Write a one-paragraph response that justifies your decision.

## on Resources



**Explore more with this weblink:** Mobile phone providers 1

**Explore more with this weblink:** Mobile phone providers 2

**Explore more with this weblink:** Mobile phone providers 3

# 4.6 Review

## 4.6.1 Summary

The decisions consumers make can affect not only their own lives but also the viability of businesses and markets. As consumers are the driving force of all economic markets, the choices they make are crucial. As such, businesses and companies go to considerable lengths to understand consumer attitudes and desires. Marketing campaigns are designed specifically with these attitudes in mind. Consumers need to be aware of the various strategies employed by businesses. Although most businesses and companies act within strict ethical boundaries, there are many examples of unethical behaviour. In order to avoid this, consumers should conduct thorough research on companies and the products they offer. This research should also include the short-term and long-term consequences of potential purchases. This extends from small, seemingly insignificant purchases to more important ones such as a car or a house. To summarise:

- Consumers base their decisions on a number of important economic and social factors.
- Businesses and companies study consumer decisions to develop effective marketing strategies.
- Short-term and long-term consequences need to be considered before making purchases.

## 4.6.2 Your turn

You will need to use the **Shop ethical!** weblink in your Resources section to answer the following questions.

### 4.6 ACTIVITIES

Choose an issue that you wish to investigate further.

1. Summarise the key points of your chosen issue.

2. Choose one company connected to your chosen issue that has a bad track record and discuss its poor activity.
3. Choose one company connected to your chosen issue that has a good track record and discuss the positive role it plays.
4. Suggest what could be done to raise awareness of your chosen issue.

## **on** Resources



**Explore more with this weblink:** [Shop ethical!](#)

# Chapter 5: Improving business productivity

## Contents

- 5.1 Overview
- 5.2 Managing operations and improving productivity
- 5.3 Improving productivity through human resource management
- 5.4 Ethics, social responsibility and the triple bottom line
- 5.5 Responding to variations in economic conditions
- 5.6 SkillBuilder: Analysing a business case study
- 5.7 Review

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# 5 Improving business productivity



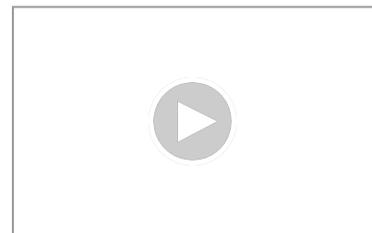
## 5.1 Overview

### 5.1.1 Business productivity

#### on Resources



**Watch this eLesson:** [Improving business productivity](#)  
Searchlight ID: [eles-2385](#)



One of the main objectives of a business is to improve the efficiency of its operations and **productivity**. Productivity measures the amount of **output** compared to the amount of **input** that goes into production. By improving productivity, businesses can be more competitive as they produce products at lower costs than competitors. Productivity can be improved by reducing the number of inputs required to obtain the same level of output or an increased output. Alternatively, productivity can be improved if inputs remain the same but output increases, therefore obtaining more from the inputs.

There are many strategies that businesses can use to improve productivity. We will explore these strategies in this chapter.

**FIGURE 1** Car manufacturers can improve productivity by reducing the number of inputs required to obtain the same number of cars, or more cars. Alternatively, they can improve productivity if inputs remain the same but the number of cars produced increases, resulting in more cars from the inputs.



## Learning objectives

Students will investigate:

- the ways businesses respond to changing economic conditions and improve productivity through organisational management and workforce management.

## STARTER QUESTIONS

1. What is productivity?
2. Why is productivity important for a business?
3. Explain in your own words how a business can improve productivity.
4. Identify some strategies that a business might implement to improve productivity.
5. What might happen to a business that cannot improve productivity?

# 5.2 Managing operations and improving productivity

## 5.2.1 Operations

**Operations** is the area of a business responsible for making the business's product, whether it is manufacturing goods or providing a service. Operations oversees the transformation of inputs — including the materials, equipment and labour used in the process of production — into output; that is, the finished product. Operations can influence improvements in productivity because it involves capital investment, investment in applications of technology and the use of materials management strategies such as just-in-time inventory systems.

**FIGURE 1** Operations is responsible for turning inputs into goods (such as these bottles of soft drink) or services.



## 5.2.2 Capital investment

Capital investment involves putting financial resources into physical resources such as machinery, equipment and facilities. These investments are essential for a business to be able to provide goods and services to customers. Investing in **capital** can improve productivity. For example, building a modern assembly line in a factory will reduce costs and the use of labour while producing more products, which increases the productivity of the business's capital. An investment in capital also increases the productivity of labour and other resources employed by a business.

## CASE STUDY

### Fortescue invests in gas conversions and automation

Fortescue Metals Group, an Australian iron-ore company, announced in 2014 that it was planning to improve efficiency by converting its operations to gas and introducing more automated trucks. The company said that utilising local gas could halve its annual operating costs.

'It is very much focused on driving efficiency and productivity of our business,' said Fortescue chief executive officer Nev Power. He explained that the process would comprise a switchover of Fortescue's power stations to gas, as well as a progressive changeover from diesel to gas throughout the company's mining fleet. This would involve the replacement of existing trucks by buying new trucks that run on gas, as well as the conversion of existing equipment.

**FIGURE 2** Fortescue Metals Group chief executive officer Nev Power announced plans to convert the company's operations to gas and introduce more automated trucks.



## on Resources



Explore more with this weblink: [FM magazine](#)

### 5.2.3 Investment in technology applications

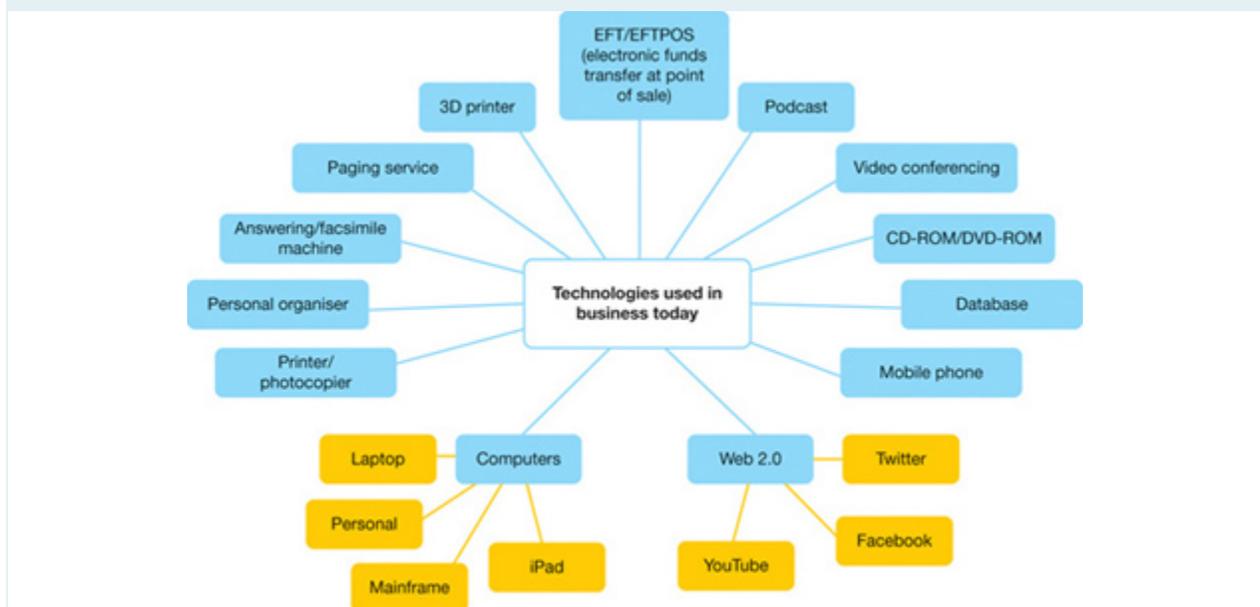
Investment in **technology** is another way businesses can improve productivity. Regardless of whether they are manufacturing a good or producing a service, businesses can use technology to speed up or shorten processes and maximise the use of resources. Using technology means production can take place using less labour or fewer materials.

Technology also enables businesses to drive **innovation**. New technology can support a business in designing or developing new products or processes. It can also be used to actually produce new or improved products or as part of a new innovative process.

## Office technology

Office and communication technologies such as the ones in Figure 3 have enabled new markets to open up because businesses can now reach more customers around the world. Developments in business technologies have created the opportunity for workers to complete a greater range of tasks in less time. Many office technologies also enable employees to work from locations outside the business.

**FIGURE 3** Technologies used by businesses today



## Customer relationship management

Customer relationship management (CRM) refers to the systems that businesses have introduced to maintain customer contact. CRM applications can be used to improve productivity by storing information about existing and potential customers.

This information can be entered and retrieved by employees from different areas in the business, including the sales, marketing and operations departments. In this way, the business can improve customer service because services can be provided directly to customers. This reduces costs and improves productivity.

**FIGURE 4** Customer relationship management is used to learn about and store information regarding customers' needs and behaviours.



## Robotics

**Robotics** is a special form of technology capable of complex tasks. Robots are often used in manufacturing, on assembly lines, in engineering or in research where a programmable machine capable of doing several different tasks is required. They are capable of performing tasks with greater precision and accuracy than any human worker can. Robots work without complaint and do not demand higher wages. They work in conditions that are often far too dangerous for employees. By performing tasks faster and with greater accuracy in places where humans often cannot, robots improve productivity.

**FIGURE 5** Robotics technology is used in many areas of business, including manufacturing and packing.



## Computer-aided design

**Computer-aided design** (CAD) is software that generates two-dimensional or three-dimensional diagrams from a set of given input data (parameters). Once a design has been created it can be viewed from multiple angles, which assists both the designer and the end user to visualise the product. A lot of information can be obtained from the design. The costs of materials can be calculated and the time to complete the task of production can be determined, enabling the costs of the overall project to be quantified. In this way, CAD can improve productivity. If the cost is too high or if the design is too limited, the input parameters can be easily altered to reflect any new requirements. The normal drafting process can be very expensive, time consuming and less accurate. CAD can also be used to design the process that would be used to create the product in the shortest possible time using the least number of materials.

## CASE STUDY

### Innovative technologies

Bertalli's Alpine Breads Benalla bakery recently completed a \$450 000 expansion of its production line, with a \$75 000 grant from the Victorian government's regional growth fund. Bertalli's Alpine Breads supplies specialty breads to Coles, Woolworths and other independent stores in Victoria. An innovative new packaging machine, which replaced the traditional bread-loaf packaging with sealed clear packaging, extends the shelf life of the business's bread by up to 10 days. This means the business can now potentially supply a range of interstate markets including supermarkets, retail health food businesses and specialty food outlets.

Technology is not used only by businesses that manufacture goods. Businesses that produce services also use technology to improve productivity. Snap Laundromat in Brisbane has introduced an innovative new technology to its washing machines and dryers that enables customers to pay for and operate the laundry services with their smartphones. The founder of Snap Laundromat, Ian McFarlane, created a small network controller about the size of a cake of soap to go inside each machine.

The customer can either swipe a QR code on the machine or visit a website to create an account. Once the account has a balance, they can select a dryer or washing machine of their choice. Mr McFarlane said that customers, particularly young people and travellers, have been very quick to take up the new technology. He has started a new business, Eziwash, to make the controllers available to other laundromats. The use of this technology application means that customers can quickly and easily pay for their laundry service, particularly if they do not have cash, and could encourage more people to use the laundromat. Eventually the technology will have the ability to download customer data and to reward customers for their loyalty.

**FIGURE 6** Use of technology applications can make the customer experience simpler, quicker and more worthwhile.



## 5.2.4 Materials management

**Materials management** is concerned with managing the way materials are received and stored and making sure they are available to the operations process when required. Many businesses have large quantities of materials on hand to complete production. This is called stock, or **inventory**. Businesses hold large inventories to make sure they do not run out of materials. However, this can become a huge cost for a business because the stock has to be stored. Stock that takes up storage space for a long time can also result in the business missing opportunities to invest money in other places. In addition, materials can become unusable after a certain period of time. It is very important to manage materials effectively so that costs can be kept down.

### The 'just-in-time' inventory system

Some businesses use an inventory system called **just-in-time** (JIT). This system ensures that the correct materials arrive just as they are needed for production, which can reduce storage costs and reduce the risk of waste occurring in storage, thereby improving the business's productivity.

## CASE STUDY

### Just-in-time real estate

REA Group is a global online real-estate advertising company based in Melbourne that owns and operates property-advertising sites in Australia, including [www.realestate.com.au](http://www.realestate.com.au). The business has applied the just-in-time system to software development. Decisions are made based on having access to the right information at the right time. This supports its efforts to be focused on customers and their rapidly changing needs. The business avoids carrying out excessive planning or documentation because this is considered to be a waste. In this way, innovation and creativity are encouraged.

**FIGURE 7** REA Group uses the just-in-time system to access the right information about customer needs at the right time.



## 5.2 ACTIVITIES

### REMEMBER

1. What is operations management responsible for?
2. List four types of technology applications used by business to improve productivity.
3. Define the term 'innovation'.
4. What is the just-in-time inventory system?

## EXPLAIN

5. Describe how the following strategies can improve productivity:
  - a. capital investment
  - b. investment in technology applications
  - c. materials management.
  
6. Read the case study 'Fortescue invests in gas conversions and automation' and answer the following questions.
  - a. What type of capital is Fortescue investing in?
  - b. How will this investment improve productivity at Fortescue?
  
7. Read the case study 'Innovative technologies' and answer the following questions.
  - a. What innovative technology did Bertalli's Alpine Breads Benalla bakery introduce and how is it innovative?
  - b. In what way is the technology that Snap Laundromat introduced innovative?
  - c. How could Snap Laundromat's new technology be used to make the customer experience more worthwhile?
  
8. Read the case study 'Just-in-time real estate' and answer the following questions.
  - a. Explain how REA Group has applied just-in-time to software development.
  - b. In what way would this system improve productivity?

## DISCOVER

9. Use the **FM magazine** (Facility Management) weblink in your Resources section to find out how operations management can improve productivity. Search the website for articles relating to productivity and write a list of at least five ways that operations management can improve productivity.
10. Ask your teacher to invite an operations manager as a guest speaker to talk to your class about investment in capital, technology applications and materials management. Think of one or two questions you could ask if given the opportunity.
11. Outline what might happen to a business if it does not invest in capital or technology applications or make use of materials management strategies such as the just-in-time inventory system.

# 5.3 Improving productivity through human resource management

## 5.3.1 Human resource management

**Human resources** is the area of a business that is responsible for coordinating all the activities related to the employees of a business. It manages the relationship between the employer and employees. The strategies used by the human resource department, such as training and flexible workplace conditions, focus on improving the motivation of employees and meeting their expectations. By improving motivation, human resources can influence improvements in productivity.

## 5.3.2 Training

The aim of **training** is to improve the skills, abilities and knowledge of employees so they can perform their job more efficiently and effectively. Both new employees and existing employees require training, depending on their level of experience. By giving them the opportunity to develop their skills and increase their knowledge, employees are more likely to feel valued within the business. Well-trained staff are likely to be more motivated and perform their jobs more efficiently. This will result in improved productivity. Staff who are well-trained are also less likely to leave the business, which results in reduced costs.

Training can take many forms. Common methods of training include:

- *off-the-job training*. This takes place at a site away from the workplace. It may involve classroom activities, lectures and simulations.
- *on-the-job training*. This takes place at the workplace. It may involve coaching, hands-on training and job rotation (where workers move from one area of a business to another).
- *competency-based training*. This involves employees learning one competency and identifying areas where further training is required.

**FIGURE 1** Training is important for a business because it can improve the performance of employees, improve staff morale and productivity, and ultimately increase profit.



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## CASE STUDY

### Training at Tata Consultancy Services

Tata Consultancy Services (TCS) is a multinational information-technology services, consulting and business solutions company with its headquarters in India. Its services are offered across a number of sectors including banking and finance, retail, utilities, energy and telecommunications. TCS was recognised as a Top Employer Australia 2014 by the Top Employer Institute. Certification is awarded to the best employers around the world; that is, companies that demonstrate the highest standards of employee offerings. These employee offerings include primary and secondary benefits and working conditions, training and development, career development and culture management.

Deborah Hadwen, chief executive officer (CEO) of TCS Australia and New Zealand, says, 'We have a world-class talent management program that enables our employees to receive excellent career opportunities, training and benefits, positioned within an energetic working environment that delivers cutting-edge IT services and business solutions to leading enterprises across Australia'.

Training at TCS is delivered through many means. Internal social-networking sites provide a facility for training, online training is made available through video libraries and traditional classroom training, and virtual labs and video-sharing portals are also offered. TCS launched 'Knome', an internal social platform inspired by Facebook and Twitter, in 2012. This enables employees around the world to form communities so they can acquire and reuse learning and knowledge, collaborate, and discuss and develop solutions to business challenges.

Keeping employees' skills up to date is very important to TCS because its core business is technology, and technology is changing at an ever-increasing pace. One way the company remains in step with technology change is by using a co-innovation network, where it is aligned with academic institutions that partner with its research and development labs and software vendors. This gives the business early insight into what is happening in the market.

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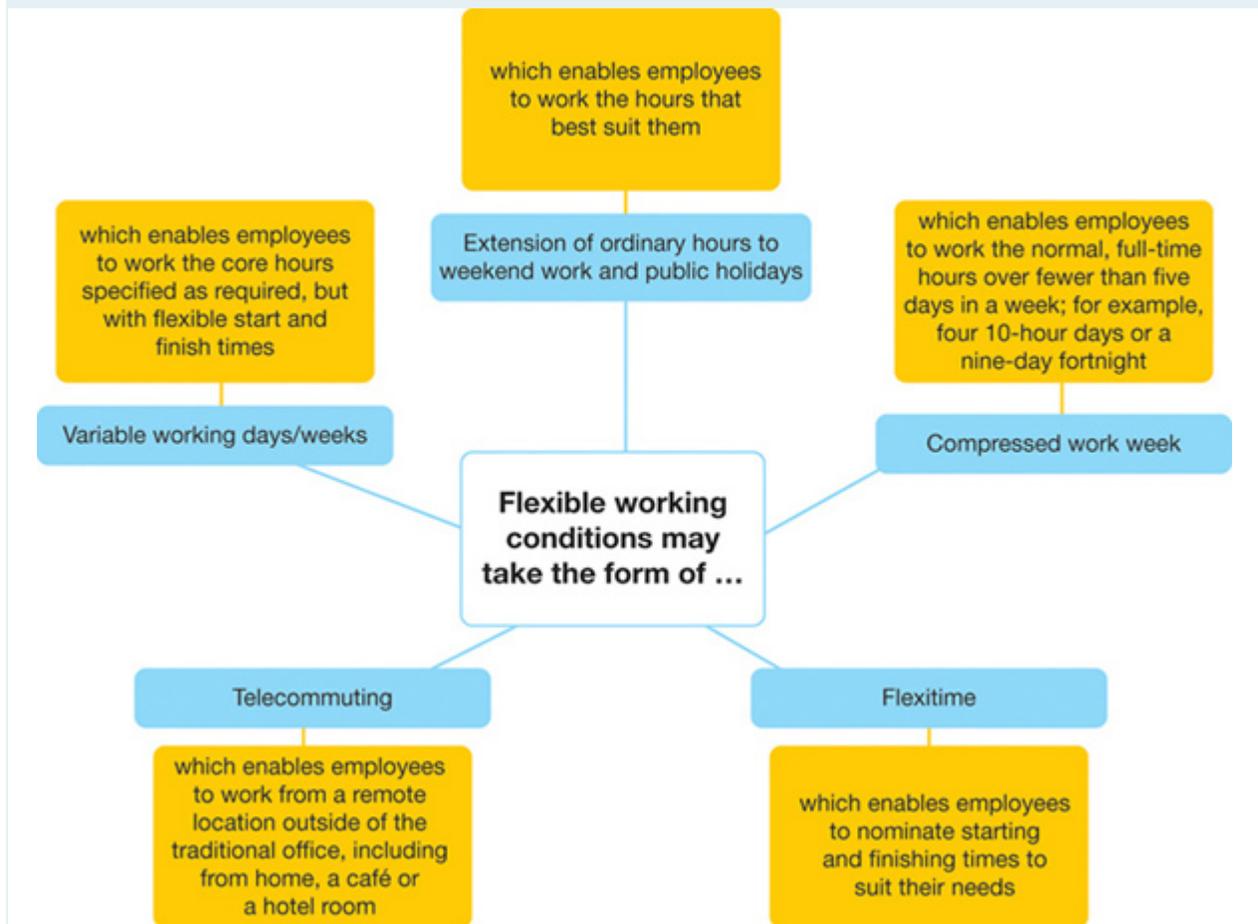
**FIGURE 2** Tata Consultancy Services makes use of the social-networking platform 'Knome', which enables employees to share learning and knowledge.



### 5.3.3 Flexible workplaces

**Flexible working conditions** help many employees achieve a better **work-life balance**. This means employees can achieve the right combination of time devoted to work, and time devoted to family and personal life. Many businesses actively seek to improve their employees' work-life balance to improve productivity. Flexible workplace conditions enable employers to attract and retain staff by facilitating flexible employment options to meet individual staff needs and to access a larger pool of employees. Businesses can provide flexible working conditions by varying the hours their employees work; varying where employees may work from; making leave entitlements available, including sick leave and long-service leave; or offering other arrangements such as childcare facilities. Some forms that flexible working conditions may take can be seen in Figure 3.

**FIGURE 3** There are many ways businesses can offer flexible working conditions.



Research suggests that flexible working conditions do improve productivity. A small-to-medium enterprise (SME) study in 2012 by workplace consultant Regus surveyed more than 16 000 senior business managers around the world. It found that four out of five Australian SMEs claim that flexible working practices are achieving higher levels of productivity. Sixty-nine per cent of SMEs recorded increased revenue and better performance results from flexible work compared to larger companies (61 per cent). William Willems, Regus Regional Vice President of South-East Asia, Australia and New Zealand says, 'As workforce expectations and demands continue to evolve, flexible work is becoming an attractive option for workers looking to achieve a better balance between work life and life'.

**FIGURE 4** Flexible working conditions enable employees to balance time devoted to work with time devoted to family and personal life as well as improve their productivity.



A 2013 report by accounting firm Ernst & Young outlined the potential for improved economic productivity if more businesses adopted flexible work policies. The study focused on women's workplace participation and discovered that women in flexible work waste less time (about eleven per cent less) than their colleagues, who waste 14.5 per cent of their time at work. The report, 'Untapped opportunity: the role of women in unlocking Australia's productivity potential' concluded that the productivity potential of women in the workforce is an untapped opportunity that businesses cannot afford to overlook.

## CASE STUDY

### Shell's flexible workplace

Shell Australia provides flexible working conditions for office roles wherever required and operationally possible. This means, for example, that employees may be able to 'telecommute' and work from home or start their working day earlier or later, depending on staffing needs. Shell attempts to provide a working environment where employees are able to balance their work and family commitments. For example, Shell offers an Employee Assistance Program, which is a professional, confidential counselling service for employees and their immediate family members.

Amber-Liza Guster, a senior commercial manager at Shell Australia and mother of two children, works three days a week with the possibility of working extra time when needed. 'In the team I work in we have three mums who work part-time and two dads who have flexible work arrangements,' she says. 'Across the industry I see different views and it comes primarily down to a company's beliefs of what value flexible arrangements bring to a business. To make flexible work arrangements successful there needs to be a commitment from the individual and the company.'

The human resources manager at Shell Australia, Helen Reid, says that more than half of Shell's workforce has taken advantage of the flexible work arrangements.

**FIGURE 5** Shell Australia provides flexible working conditions for its employees, including variable working days and the opportunity to telecommute.



## 5.3 ACTIVITIES

### REMEMBER

1. What is human resource management responsible for?
2. List two types of training.
3. Identify four ways that businesses can provide flexible workplaces.

### EXPLAIN

4. Describe how the following strategies can improve productivity:
  - a. training
  - b. flexible workplaces.
5. Read the case study 'Training at Tata Consultancy Services' and answer the following questions.
  - a. Identify some of the ways that TCS offers training to employees.
  - b. Outline the benefits to TCS and its employees of having training provided.

6. Read the case study 'Shell's flexible workplace' and answer the following questions.
  - a. List some of the ways Shell offers flexible working conditions.
  - b. How, do you think, does Shell benefit from offering Ms Guster flexible work arrangements?

## DISCOVER

7. Use the **Inside HR** weblink in your Resources section to find out how human resource management can improve productivity. Search the website for articles relating to productivity and write a list of at least five ways human resource management can improve productivity.
8. Ask your teacher to invite a human resource manager in as a guest speaker to speak to your class about training and flexible workplaces. Think of one or two questions you could ask if given the opportunity.

## PREDICT

9. Outline what might happen to a business if it does not use human resource management strategies such as offering training or flexible working conditions to staff.

### **on** Resources



**Explore more with this weblink:** Inside HR

## 5.4 Ethics, social responsibility and the triple bottom line

### 5.4.1 Ethical and social responsibility

Society expects businesses to act ethically and to be socially responsible. Businesses that incorporate ethical and socially responsible practices into their business activities experience positive reputations, leading to increased sales and profits. Employees will want to work for the business, reducing the costs of replacing staff and increasing productivity. By comparison, unethical behaviour, or a lack of social responsibility, can damage a business's reputation.

## 5.4.2 Ethical workplace practices

Ethics are standards that define what is acceptable and unacceptable behaviour. **Workplace ethics** are standards that apply to business, such as being honest in business dealings with others. Business people make decisions every day. In many decisions involving ethical questions, it can be difficult to give a definitive answer about what is acceptable and what is unacceptable. It often depends on the individual circumstances surrounding the situation. For example, what should a business do in the following situations?

- a loyal, long-serving employee cannot adapt to new technology
- confidential information about a competitor's pricing policy has been leaked by a disgruntled employee
- the business is asked for a cash payment to help hasten a decision about a tender contract.

### Honest and fair behaviour

Society expects businesses to be truthful in the way they communicate information and fair in the way they deal with people. Customers and suppliers expect to be dealt with honestly and fairly. If, for example, a business's advertising includes words such as 'special', 'sale', 'low fat' or 'light', customers would expect that the business was not being misleading or deceptive. Not only is false or misleading advertising unethical, it is also illegal. A business using these words in an attempt to knowingly mislead customers is engaging in unethical practices. Suppliers would expect that if a business has arranged for a delivery of certain items and promises to pay within a set period of time then, apart from exceptional circumstances, the business would honour its commitment to the supplier.

Employees also expect to be dealt with honestly and fairly. For instance, confidential information about employees should be kept secret; obligations to employees, such as fair pay, should be fulfilled; and harassment or discrimination should not occur. Occasionally, a business may become aware of an unethical business practice of one of its employees. This can place the business in a difficult position, especially if the employee is important to the successful operation of the business. At other times, some employees may place an employee in a difficult ethical position, such as when older employees decide to play a practical joke on a young apprentice. Sometimes, these 'practical jokes' get out of hand and may develop into a serious harassment or negligence case.

## Conflict of interest

**Conflict of interest** can occur when a person in a position of trust has competing personal or professional interests; for example, when gifts or payments are on offer. There is a fine line between what is regarded as a gift and what may become a bribe. Corruption undermines the integrity of the business and, if unchecked, infiltrates the workplace culture. Once a pattern of corruption takes hold and is perceived to be acceptable behaviour, it quickly becomes entrenched within the business. Changing the attitudes and practices of individuals within such a business is extremely difficult. What start off as small incidents to which most people turn a blind eye may develop into corruption on a grand scale. When such corrupt practices are eventually exposed, the business's image can be severely damaged.

### 5.4.3 Social responsibility

**Socially responsible management** involves the managers or owners of a business taking steps to ensure that the broader social welfare — including employees, customers, suppliers and the environment — is taken into consideration when conducting business dealings. Socially responsible management therefore involves ethics, because a business that is socially responsible will consider its impact on people and the environment rather than just making a profit. For example, Heinz Australia takes responsibility for its staff, customers, community and environment. It gives back to the community through community partnerships, fundraising and a volunteer program that provides employees with up to two paid days' leave each year to volunteer at registered charities or organisations. Heinz uses an environmental management system to track environmental targets and has plans for reducing greenhouse emissions and packaging materials.

### 5.4.4 Triple bottom line business planning

The traditional view of business is that it exists to produce products, earn a profit and provide employment. As society's expectations of acceptable business behaviour increase, socially aware business owners recognise the importance and necessity of planning sustainable business objectives; that is, focusing on financial outcomes while also being conscious of environmental and social performance. Many businesses today plan for the **triple bottom line**: financial (or economic), environmental and social performance. Businesses that take their social and ethical responsibilities seriously are often 'rewarded' with improved business performance.

**FIGURE 1** Triple bottom line business planning incorporates economic, environmental and social aspects.



## CASE STUDY

### The triple bottom line at Bulla

The Royal Agricultural Society (RAS) named Bulla Dairy Foods the best food producer for 2014. Bulla is an Australian dairy manufacturer that produces a range of chilled and frozen dairy products including cream, cottage cheese, yogurt, dairy desserts, ice cream and frozen yogurt. The company employs more than 450 people across its manufacturing sites, head office and distribution centre in Victoria.

Bulla was presented with the RAS President's Medal after its 35 per cent Thick Cup Cream won the champion cream award at the 2014 Sydney Royal Cheese and Dairy Produce Show and gained the medal nomination.

Robert Ryan, President of the RAS, congratulated Bulla on being named the 'best of the best' in Australian food and agricultural production. 'The President's Medal recognises Australian producers that create the highest quality products by sustainable means, which is an outstanding achievement,' he said.

Judges for the best food producer award inspected the company's processing sites and found that the company was very aware about its triple bottom line. Bulla has worked hard to reduce waste, landfill volumes and greenhouse gas emissions through its 'cogeneration' project. A wellbeing program offers staff health support, including fitness programs and nutrition boosts, such as a free weekly winter soup.

**FIGURE 2** Bulla Dairy Foods produces chilled and frozen dairy products while being aware of its triple bottom line.



### 5.4.5 The implications of ethical and socially responsible practices

The use of ethical practices and acting in a socially responsible manner can have negative implications for a business. For example, introducing policies and documentation related to ethics and social responsibility, such as codes of conduct and social reports, often involves a financial cost and can be time consuming. This can reduce a business's profit or inhibit employees from completing other tasks.

However, ethical and socially responsible practices can also bring significant benefits to a business. For example, adopting these practices can:

- *improve the reputation of the business.* This, in turn, can make the business more competitive as customers will be drawn to its products rather than those of competitors, bringing an increase in sales and profits
- *encourage employees to want to stay with the business.* This reduces staff turnover (the number of employees leaving the business) and increases productivity
- *improve the atmosphere of the workplace.* This increases motivation and productivity
- *attract potential employees to the business.* This can reduce the cost of recruitment and enable the business to acquire the most talented employees
- *increase investment in the business.* Many investors prefer to invest in businesses with integrity and responsible practices.

Ethical and socially responsible practices also have implications for the broader economy. These practices affect employment, wages and employment standards, environmental regulations and other legislation, products in the market, infrastructure, tax income and income distribution.

**FIGURE 3** A positive business reputation can be the difference between success and failure. Ethical and socially responsible practices can improve the reputation of a business.



## 5.4 ACTIVITIES

### REMEMBER

1. Define ethical management.
2. Suggest three ethical and three unethical workplace practices.
3. Define 'socially responsible management'.
4. Name the three aspects of the triple bottom line.

### EXPLAIN

5. Describe the possible implications of planning for the triple bottom line on the following:
  - a. the business
  - b. employees
  - c. competitors
  - d. the broader economy.
6. Refer to the case study 'The triple bottom line at Bulla' and outline how Bulla Dairy Foods has planned for the triple bottom line.

## DISCOVER

7. Use the **St James Ethics Centre** weblink in your Resources section to find out more about ethics.  
Search the website for articles relating to business ethics. Read one of the articles and write a list of at least five things you did not know about business ethics.
8. Use internet resources to find the website of a business and record the ethical or socially responsible practices it has introduced.
9. Ask your teacher to invite a manager as a guest speaker to talk to your class about ethics and social responsibility. Think of one or two questions you could ask if given the opportunity.

## PREDICT

10. What are some of the consequences of a business not acting in an ethical and socially responsible manner?

### Resources

 **Explore more with this weblink:** [St James Ethics Centre](#)

# 5.5 Responding to variations in economic conditions

## 5.5.1 Economic conditions

Australia's economic conditions have improved over the past two decades, with the country experiencing economic growth for more than 20 consecutive years. More recently, a resources boom has driven this growth, with mining investment as a proportion of GDP (the monetary value of all goods and services produced in Australia over a single year) quadrupling over the past decade. Businesses typically respond to conditions such as this by increasing capital investment and recruiting more employees, but they have also responded to these improving conditions in other ways, such as increasing their research and development funding to create innovative products; adjusting marketing strategies to expand their market share; and upskilling their workforce to improve productivity.

Resources investment is now expected to decline, resulting in a slowdown in the growth of Australia's living standards. Many economists expect that other areas of the economy, such as home building and mining exports, will drive future economic growth. Businesses in Australia will need to respond accordingly.

## 5.5.2 Increasing research and development expenditure

Businesses undertake **research and development** (R&D) in order to improve their knowledge, as well as to improve existing products or create new ones. **Invention** (developing something new) and innovation are at the heart of Australia's economy. Researchers and scientists undertaking R&D in businesses have produced many new products. Finding new ways to do things results in improved efficiency and increased productivity.

**FIGURE 1** Businesses invest millions of dollars in R&D in Australia each year. The main purpose of R&D is to discover and develop innovative products.



According to the Australian Bureau of Statistics, Australian businesses spent \$18.32 billion on R&D from 2011 to 2012, which is 2 per cent more — a significant increase of \$300 million — than the amount spent on R&D from 2010 to 2011. Cochlear, the global company that designs, manufactures and supplies cochlear implants — which enable people to hear — spent more than \$500 million on research and development between 2010 and 2014.

Federal and state governments support businesses in carrying out research and development via direct funding, grants and tax incentives. Using a number of means, the federal government provided approximately \$8.6 billion in funding to research and development in Australia in 2013. Funding is provided to universities, publicly funded research agencies such as the CSIRO, and businesses. Government support for businesses comes through the research and development tax incentive, which provides a tax offset to encourage businesses to engage in research and development.

## CASE STUDY

### Global Health invests in research and development

Global Health is an Australian company that develops and sells software applications for the health-care industry. To stay competitive, Global Health must invest in research and development. Its revenue is largely earned from the sale of software licences and annual subscriptions to overnight and day hospitals (referred to as the acute sector) and specialists, general practitioners, community health and allied health providers (referred to as the non-acute sector). One of its main products is an electronic medical record system called MasterCare.

Global Health invests approximately twenty per cent of its total revenue to research and development. Between 2013 and 2014, the company took advantage of an AusIndustry Research and Development Grant. AusIndustry is an area of the federal government that aims to help Australian businesses become more innovative and internationally competitive. The grant was for approximately \$413 000 and it increased Global Health's research and development spending by more than 33 per cent. This meant that it spent approximately \$1.1 million developing software that should benefit the business and its shareholders for years to come.

**FIGURE 2** Global Health uses research and development to produce innovative software that connects clinicians and patients.



### 5.5.3 Adjusting marketing strategies

The **marketing** department is the area of a business that is responsible for the marketing mix, often referred to as the 4 Ps (product, price, promotion and place). Marketing strategies undertaken by businesses arise through the marketing mix: developing the product, pricing, promoting and distributing products to present to potential customers. When facing improving economic conditions, businesses adjust these strategies to expand their **market share**.

Businesses focus on the following elements when adjusting their marketing campaign:

- *research*: gathering information from potential customers about their new wants and needs
- *product*: making changes to existing products or introducing new ones
- *price*: adjusting the price accordingly, based on customer demand and the need to make a profit
- *promotions*: providing information about the new product or launching the new products (for example, at events or through advertising)
- *place*: reviewing the methods used to distribute the product
- *evaluation*: finding out how successful a modified or new product or campaign is.

## CASE STUDY

### Bellamy's Australia changes its marketing strategy

Bellamy's Australia is a wholesale distributor of a range of organic food and formula products for infants. As a wholesale distributor, it sources its products from established dairy producers. The business started as a family-operated company in Tasmania in 2004. Bellamy's products are sold directly to retail customers through their website and are also sold in Coles, Woolworths, Chemist Warehouse, Costco and Big W stores. Select supermarkets in New Zealand, China, Singapore, Hong Kong, Malaysia and Vietnam also distribute the products.

The company has grown rapidly, with revenue growing on average 55 per cent every year since 2010, and it listed on the Australian sharemarket in 2014. In the early stages, print media was used to promote the product, but this strategy was not overly successful. Bellamy's then changed its marketing strategy to improving its shelf displays in stores and using social media to connect with new mothers. In Australia, Bellamy's has a presence on the two commonly used social media platforms, Facebook and Twitter. As it expands into China, it will need to use Sina Weibo and Weixin. Bellamy's has employed a mix of Chinese-Australians and local Chinese people to manage its China marketing team and also works with the Australian consultancy business ChinaSEO to help target Chinese customers with its web campaigns.

**FIGURE 3** Bellamy's Australia, a wholesale distributor of a range of organic food and formula products for infants, needed to adjust its marketing strategies after growing rapidly and moving into new markets.



### 5.5.4 Upskilling the workforce

It is vital that both managers and employees have skills that help them complete tasks effectively. **Upskilling** involves providing training and further education for a business's workforce so it can learn these additional skills. Employees who have appropriate skills are more likely to be productive and motivated.

The Organisation for Economic Co-operation and Development (OECD) collects and analyses data that assists governments around the world in understanding the level and distribution of skills among their adult populations as well as the use of skills in different contexts as part of its Programme for the International Assessment of Adult Competencies (PIAAC). The Australian Bureau of Statistics (ABS) released the PIAAC results in 2013. Developed with the support of the Australian Council for Educational Research (ACER), the study assessed people aged 15 and 74 years in 25 countries in terms of proficiency in literacy, numeracy and problem solving in a technology-rich environment.

According to experts from ACER, the fact that a large number of Australians have low literacy and numeracy skills has a negative impact on individuals, the economy and productivity. Mr David Tout, Senior Research Fellow at ACER and a member of the numeracy expert group for PIAAC, noted that Australia needs to lift its population's skill levels to ensure a healthy society and a robust economy. 'The twenty-first century requires its citizens and workers to have increasingly higher-level literacy and numeracy skills,' Mr Tout said.

## 5.5 ACTIVITIES

### REMEMBER

1. Briefly outline how Australia's economic conditions have improved over the past two decades.
2. Define the term 'market share'.
3. What is upskilling?

### EXPLAIN

4. Describe how the following strategies can support a business in responding to improving economic conditions:
  - a. increasing research and development expenditure
  - b. adjusting marketing strategies
  - c. upskilling the workforce.
5. Read the case study 'Global Health invests in research and development' and answer the following questions.
  - a. Approximately how much money does Global Health spend on research and development?
  - b. What innovative product does this research and development result in?
6. Read the case study 'Bellamy's Australia changes its marketing strategy' and answer the following questions.
  - a. How did Bellamy's Australia originally promote its products?
  - b. Why did Bellamy's change its marketing strategy?
  - c. What marketing strategy does Bellamy's use now?
  - d. Why will Bellamy's need to change its marketing strategy in China?
  - e. How might the changes to Bellamy's marketing strategy impact on its market share?

### DISCOVER

7. Use the **Business** weblink in your Resources section to find out more about research and development, marketing, and skills and training. Search the website for each strategy and use the table to record the information you find on the website under each appropriate heading.

### PREDICT

8. What might happen to a business that does not respond to improving economic conditions?

## THINK

9. In groups of three or four, plan and create a video presentation that is interesting and catchy and will help people understand the ways businesses respond to improving economic conditions. Use video editing programs and internet resources in your planning.

### Resources



Explore more with this weblink: [Business](#)

## 5.6 SkillBuilder: Analysing a business case study

### 5.6.1 Tell me

A business case study helps you understand business concepts. It is a real-life example that shows how businesses work and how business concepts apply to individual situations.

Business people use case studies to understand the strategies that other businesses have introduced and to identify which ones have succeeded or failed. When you have identified the elements of a case study, you will be able to better understand business concepts.

## CASE STUDY

### Using innovation to create a long-term competitive advantage

BlueScope is a manufacturer of steel and supplier of steel products to global building and construction markets. It operates in Australia, New Zealand, Asia and North America. BlueScope has used open innovation and research and development to create a competitive advantage.

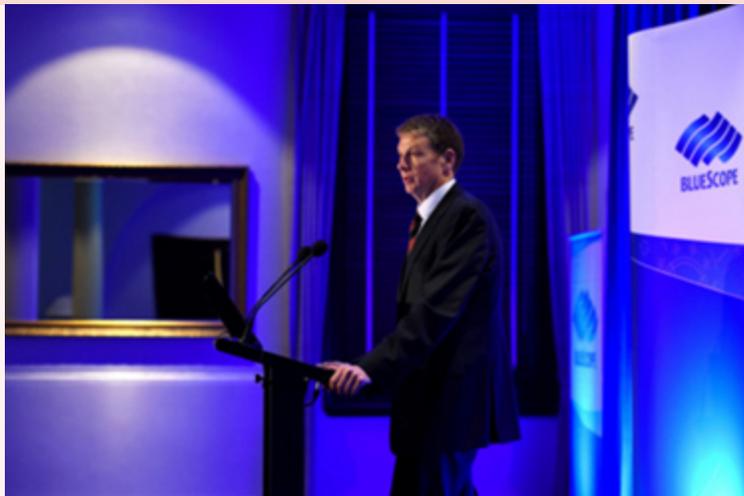
Working with several universities and industry partners, including BlueScope, the Australian Research Council (ARC) recently launched a steel research hub located at the University of Wollongong. The new facility brings scientists and researchers together from various steel manufacturers and research institutions to develop new technologies for the Australian market. A key focus of the steel research will be energy and sustainability, as well as more efficient building construction and solutions for harsh environments.

BlueScope has modified its products and changed the ways it interacts with customers, suppliers and competitors so that it is not just competing on price. The company strongly believes that by using innovation to create a competitive advantage, it will develop products that will allow it to keep manufacturing in Australia.

One of BlueScope's innovative new products is called Next Generation Zinalume. By combining magnesium with an aluminium, zinc and silicon coating, a unique protective barrier has been formed which makes steel more resistant to corrosion. Zinalume steel also has a smaller impact on the environment through a reduced use of zinc and aluminium.

Furthermore, BlueScope plans to transform its popular Colorbond product. A photovoltaic laminate will be added, resulting in a roof panel that can produce solar power. Panels will also transfer thermal energy in and out of buildings as required.

**FIGURE 1** BlueScope's managing director and CEO, Paul O'Malley. In the 2014 financial year, BlueScope achieved an EBIT (earnings before interest and tax) of almost \$250 million, a significant increase of 237 per cent on the previous year.



## 5.6.2 Show me

### Procedure

#### STEP 1

Read the case study twice — once to get a general idea of the content and the second time to focus on the key issues. As you read through the second time, identify the key issues. You could choose a different colour of highlighting for each key issue. You may also choose to make notes on the case study.

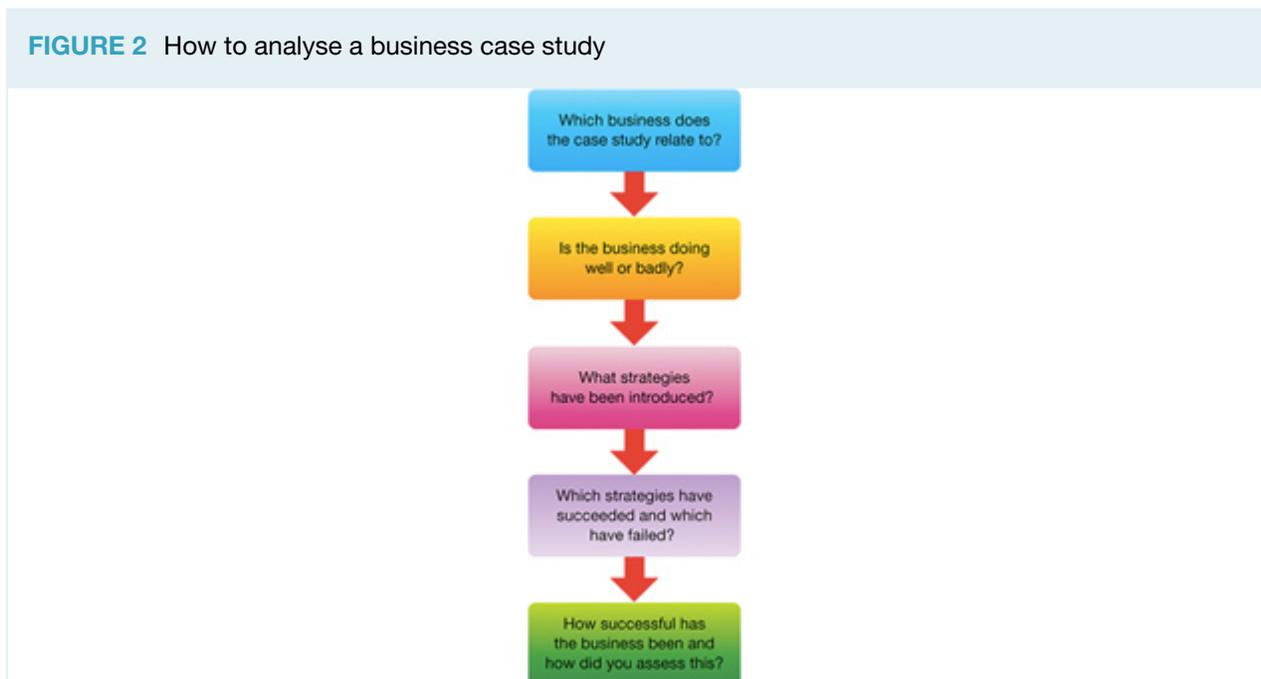
#### STEP 2

Identify and define important terms. Use a dictionary or the internet to find out what they mean.

#### STEP 3

Write your answers in dot points using the headings shown in the diagram in figure 2.

**FIGURE 2** How to analyse a business case study



## 5.6.3 Let me do it

### 5.6 ACTIVITIES

Read the case study 'BHP Billiton plans to lower costs and lift production of iron ore'. Use the steps in figure 2 to analyse the case study.

### CASE STUDY

#### BHP Billiton plans to lower costs and lift production of iron ore

BHP Billiton, the world's largest mining company, unveiled plans in 2014 to reduce costs and lift production at its Western Australian iron ore mines. It said that this would make it the world's lowest cost supplier to China.

The company announced that it would cut costs at Western Australia Iron Ore (WAIO) by at least 25 per cent and that it should be able to boost capacity by 65 million tonnes per year. BHP Billiton's iron ore president, Jimmy Wilson, said, 'We have already significantly cut the cost of production at WAIO and plan to go further.'

BHP Billiton has cut approximately 1000 jobs over the past two years during a major cost-cutting drive in its iron ore division. It is likely that there will be many more job losses as a consequence of this announcement. Improving the efficiency of the performance of its existing equipment and infrastructure will also help to reduce costs. BHP Billiton will undoubtedly make better use of its mining equipment and increase the use of autonomous (driverless) drills and trucks.

The price of iron ore has fallen by 40 per cent in recent years and there is currently an oversupply of the product. China's production of steel, which makes use of iron ore, is expected to increase. However, by reducing its own costs while increasing production, BHP Billiton puts pressure on prices and creates difficulties for smaller competitors such as Atlas Iron and BC Iron, which have high production costs. They find it difficult to continue to make a profit in these conditions. This is what gives BHP Billiton its competitive advantage. BHP Billiton can cope with an overabundance or oversupply of iron ore because it can reduce its costs.

Mr Wilson said, 'We believe we have some sustainable advantages and our aspiration is to be down the bottom end of that cost curve.'

**FIGURE 3** BHP Billiton's Mount Newman iron ore mine in Western Australia



## 5.7 Review

### 5.7.1 Summary

Improving productivity — the amount of output compared to the number of inputs — is one of the main objectives of a business. Businesses can improve productivity through operations management; for example, by making use of capital investment, investment in applications of technology and just-in-time inventory systems. Businesses can improve productivity through human resource management; for example, by making use of training and flexible workplaces. Society expects that businesses will act in an ethical and socially responsible manner. Businesses that do so and plan for the triple bottom line will experience positive reputations, leading to increased sales and profits. Businesses have responded to improving economic conditions by, for example, increasing their research and development funding to create innovative products, adjusting their marketing strategies to expand market share and upskilling their workforce to improve productivity. Other ways productivity can be enhanced include:

- by investing in new technological applications and capital, including equipment and facilities, as well as through the use of materials management strategies such as just-in-time inventory systems
- by using technology to drive and allow innovative responses
- by introducing workforce management strategies such as training and flexible workplace conditions to improve the productivity of workers
- by acting in an ethical and socially responsible manner; this will impact on employees, competitors and the broader economy
- by planning for the triple bottom line, thereby considering financial (or economic), environmental and social performance
- by increasing research and development funding to create innovative products, adjusting marketing strategies to expand market share and upskilling the workforce to improve productivity.

## 5.7.2 Your turn

Read the following case study and then answer the questions.

### CASE STUDY

#### Pops Dollarakis

Victor Dollarakis is the chief executive officer (CEO) of Pops Dollarakis, a global manufacturer of biscuits, crispbread and crackers. Its headquarters are in Sydney.

Mr Dollarakis has been reading a great deal about theories of management lately and is very interested in the ideas behind improving productivity in particular. Pops Dollarakis is considering the use of technology as a source of innovation. The business also realises that economic conditions are improving and is considering how it will respond accordingly. Mr Dollarakis comes to you, seeking your advice.

**FIGURE 1** Pops Dollarakis produces biscuits, crispbread and crackers, and like many businesses it must organise itself to improve productivity and respond to changing economic conditions.



## 5.7 ACTIVITIES

1. Describe the ways in which Pops Dollarakis might improve productivity.
2. Explain how the use of technology might support Pops Dollarakis in developing innovation.
3. Identify some ethical workplace practices and explain how these would impact on Pops Dollarakis.
4. Outline to Mr Dollarakis why it would also be worth considering planning for the triple bottom line and how it may benefit the business, its employees and the broader economy.
5. Explain to Mr Dollarakis some ways that the business might respond to improving economic conditions.

### Resources



**Try out this interactivity:** [Improving business productivity crossword](#)  
Searchlight ID: [int-5539](#)

# GLOSSARY

**bias** showing favouritism towards one entity over another

**blended marketing** a mix of internet and traditional marketing methods

**boycott** choosing to avoid the purchase of particular products or brands for ethical, moral or political reasons

**budget** a plan for the future; in economics it is a plan about the government's financial performance and framework for the coming financial year, and is estimated by calculating its expected revenues and expenditures

**budgetary policy** a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays

**capital** physical resources owned by a business and used in production, including factories, machinery and equipment

**cash rate** the official price of borrowing money; the interest rate that applies to the short-term money market

**competitive advantage** occurs when a business is able to produce and sell goods or services better than its competitors

**competitive market** a market where a large number of businesses compete with each other to satisfy the demands of a large number of customers

**Computer-aided design** software that enables a business to create, modify or design product possibilities from a series of input parameters

**Conflict of interest** a situation where a person takes advantage of circumstances or a piece of information for their own gain rather than for the business's interests

**consume** to purchase goods and services for direct use or ownership

**consumer attitude** a person's overall feeling about an object or activity

**corporate social responsibility** a duty for management to take into consideration the broader social welfare of the community, including its people and the environment, when making business decisions

**cost inflation** a sustained increase in the price of goods and services caused by producers passing on increased production costs to consumers

**culture** all the learnt values, beliefs, behaviours and traditions shared by a society

**demand inflation** price increases that result from an excess of demand over supply for the economy as a whole

**Demand** the amount of a particular good or service that a customer will want to purchase at a given price

**deregulation** the removal of unnecessary direct government controls, restrictions and supervision in various areas of the economy

**differentiation** making a product stand out by providing unique or superior value to customers in comparison with competitors' products

**economic growth** a measurement of the increase in a country's Gross Domestic Product (GDP)

**equivalised disposable income** the level of income from private sources (such as wages) and welfare after payment of personal income tax and special adjustments to reflect family circumstances (for example, the size and ages of a family)

**ethical consumerism** making a purchasing decision based on a company's values and behaviours

**equity** the quality of being fair or impartial

**external stability** a government goal where Australia is able to meet its financial obligations in its international trade and financial dealings

**fiscal policy** a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays

**Flexible working conditions** conditions that enable employees to balance work and family responsibilities more effectively

**Foreign aid** where a country or countries provide financial and other assistance to poorer nations

**foreign debt** the accumulation of debt owed by Australians to other countries or institutions overseas

**gender segregation** the division of males and females into separate groupings

**Generation Alpha** people born from 2010 onwards

**Generation X** people born between 1965 and 1979

**Generation Y** people born between 1980 and 1994

**Generation Z** people born between 1995 and 2009

**globalisation** the process of interacting with markets in other countries around the world, as part of an integrated global economic system

**human resource management** the process of managing the people who work within an organisation

**human resources** the area of a business that manages the relationship between the employer and employees, from acquiring to terminating staff

**income** the reward earned from supplying productive resources. Providing labour earns income in the form of wages or salaries

**industries** the way that different parts of the economy are grouped, for example, manufacturing, mining

**industry** the way that different parts of the economy are grouped, for example, manufacturing, mining

**inflation** a general rise in prices across all sectors of the economy

**innovation** adding a new product (which can be a good or a service) to an existing product line, or significantly improving an existing product or process

**input** the resources — including materials, equipment and labour — used in the process of production

**intended outcomes** the projected goals or objectives of a decision

**invention** the development of something new

**inventory** the goods and materials held as stock by a business

**just-in-time** an inventory system that ensures the correct materials arrive just as they are needed in the operations process

**labour market** the place, region or institution where buyers and sellers of labour negotiate wages

**living standards** how well off a nation is overall

**loan** the temporary lending of money, usually by a financial institution

**Macroeconomic** the branch of economics that emphasises the central role played by the level of expenditure or aggregate demand

**mark-up** a fixed percentage or dollar figure added to the cost price of goods and services to determine the selling price

**market share** the proportion of the total market that a business has, calculated by dividing a business's sales (from that market) by the total sales of all businesses in the market and expressing the result as a percentage

**marketing** the process of planning and executing the development, pricing, promotion and distribution of products to create exchanges that satisfy individual and organisational objectives

**Materials management** an operations strategy that manages the use, storage and delivery of materials to ensure the correct number of inputs is available to the operations system when required

**Microeconomic** the branch of economics that studies the smaller fragments or units making up the whole economy

**monetary policy** a major category of government aggregate demand management or macroeconomic policy. It is implemented by the Reserve Bank and is designed to influence the cost, availability and demand for credit and money

**mortgage** a loan used to finance the purchase of a house or property

**motives** the reasons why individuals do something

**negative externalities** a production outcome that was not intended and that negatively impacts our economy and/or society

**offshoring** the practice of relocating a business's processes from one country to another, to take advantage of lower costs

**open innovation** the use of internal and external ideas by a business to improve its processes or products

**operations** the area of a business that consists of all the activities engaged in producing goods and services

**output** the end result of a business's efforts; the good or service that is delivered or provided to a consumer

**outsourcing** reducing costs by transferring tasks normally completed by the business to outside suppliers

**peer group** a group of people with whom a person closely identifies, adopting their attitudes, values and beliefs

**per capita** per head of population

**personality** a collection of all the behaviours and characteristics that make up a person

**policies** strategies implemented to achieve a specific goal or objective

**primary production** the production of crops, livestock or other basic materials which may then be used by other branches of industry

**process innovation** when changes and improvements are made to the production process of a product or service

**product innovation** when a new product is created or an existing product is improved

**productivity** a measure of efficiency; the amount of output produced compared to the amount of input required in production

**profit margin** an indicator of the financial health of a business, expressed as a percentage, that measures the amount of profit that a business earns from the sales of its product

**profit** what remains after all business expenses have been deducted from the money that has been collected from selling goods and services

**psychological factors** influences within an individual that affect their buying behaviour

**qualitative indicators** subjective measures that cannot be counted and are difficult to verify

**quality** the degree of excellence of goods or services and their fitness for a stated purpose

**quantitative indicators** measurements of statistics and numbers that can be verified and are objective

**quarterly** every three months

**quaternary industry** service industries involved in the processing and transfer of information and knowledge, e.g. IT consultants, education services

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**quinary industry** domestic service providers, e.g. cleaning, childcare, home maintenance

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**quintile** a statistical value of a data set that represents 20 per cent of a given population

**quotas** quantity limits or targets for production or imports

**recession** a technical term referring to two consecutive quarters of negative growth in an economy

**regimen** a basket of goods and services whose prices are surveyed to calculate inflation

**research and development** activities undertaken to improve existing products or create new products

**restructure** to significantly modify the management or ownership structure of a company

**roadworthy certificate** official proof that a used car has been properly tested and is safe to operate and drive

**Robotics** highly specialised forms of technology that are capable of complex tasks

**seasonally adjusted** where statistics are averaged out over one year to take into account variations according to the time of year

**secondary industries** industry involved in the processing of primary resources to manufacture other goods

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**social media** the websites, platforms and applications that enable users to interact in virtual networks and communities and create, share or exchange information and ideas

**social report** a report outlining what a business has done, and is doing, to meet its corporate social responsibilities

**Socially responsible management** managing a business in such a way that the broader social welfare of the community, including its people and the environment, is taken into consideration when making business decisions

**sociocultural influences** forces exerted by other people that affect customer behaviour

**stamp duty** a compulsory fee (a percentage of the total purchase price) charged by state governments

**strategies** plans of action intended to achieve specific goals, usually over the longer term

**subsidies** a cash payment by the government designed to help producers compete by enabling them to sell their product at a lower price than would otherwise occur

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**sustainable** able to last or continue for a long time

**tariffs** taxes imposed on imported goods to make them more expensive

**taxation** a government levy or revenue measure that can be used as part of the budget to affect the level of prices, the growth rate and the distribution of income

**technology** the use of scientific knowledge to develop machinery, equipment and devices designed to solve business problems

**tertiary industry** industry that involves the provision of services to others, e.g. doctors, accountants, retailers

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**training** the process of teaching employees skills, abilities and knowledge

**triple bottom line** the economic, environmental and social performance of a business

**unintended outcomes** the unplanned or unexpected consequences of a decision

**Upskilling** the provision of training and further education to teach employees additional skills

**wealth** the stock of assets (such as property, capital and antiques) owned by an individual

**work-life balance** achieving the right amount of time between work and family/personal life

**workplace ethics** the application of moral standards to practices in the workplace