

# Global interdependence

## Introduction

This chapter will enable students to understand:

- the linkages between economies, including trade, investment, tourism and immigration;
- the patterns and trends in global trade;
- the determinants of international competitiveness;
- the concept, and extent, of globalisation; and
- the economic effects of globalisation.

We live in an increasingly smaller and more integrated world. Rapid advances in communications and transport have increased access to all corners of the globe. It is now cheaper and quicker to fly to every major city in the world. Computers and the Internet have enabled people to instantly access the world wide web for information, for downloading documents, music and video files and for purchasing goods and services. Australian firms and households are constantly involved in economic transactions with other economies. Some examples include Australian firms exporting coal, iron ore, and education services. Consumers purchase cars from Japan, computers from China, iPads from the United States and coffee from Brazil. Australia is also a major recipient of foreign investment. The world has effectively become a global market with the spread and growth of multinational corporations (MNCs). The global financial crisis of 2008 provides a timely reminder of how important global markets have become, not just for goods and services, but for financial capital.

Globalisation has certainly become one of the important buzzwords this decade with different meanings to different people. Globalisation refers to the freer movement of goods, services, investment, ideas and people around the world. It implies the opening up of international borders to the flow of trade, workers, tourists and investment. As a result of globalisation the world has become more integrated and more interdependent. Some people see globalisation as a kind of 'McDonaldisation' - the spread and triumph of American brands such as Coca Cola and Starbucks. For economists, globalisation means the triumph of free trade and competitive markets over protection and restricted markets.

Globalisation is transforming development. The World Trade Organisation (WTO) believes that the recent rise of the developing world is the most significant economic event of our time - eclipsing even the rise of the newly industrialising countries after the Second World War. Why has the developing world achieved economic lift-off? It is evident that the most important reason is its integration into the world economy. Globalisation has enabled the developing world new access to markets, technology and investment. The WTO has identified four new trends that have affected the relationship between trade and development since the start of the millennium. The four trends are:

- the economic growth of many developing countries
- the growing integration of global production through supply chains
- the higher prices for agricultural goods and natural resources, and
- increasing interdependence of the world economy, which causes shocks to reverberate more quickly and globally.

The process of globalisation or 'internationalisation' is not a new one - it has been occurring for centuries. What is new however, is the speed at which it is now taking place. Globalisation is not without controversy - it has important economic and social effects which fosters much debate. It has become fashionable to blame globalisation for many of the world's problems. Critics hold it responsible for everything from poverty and inequality to environmental pollution. In this chapter we examine some of the important economic issues associated with globalisation.

### **Linkages between economies**

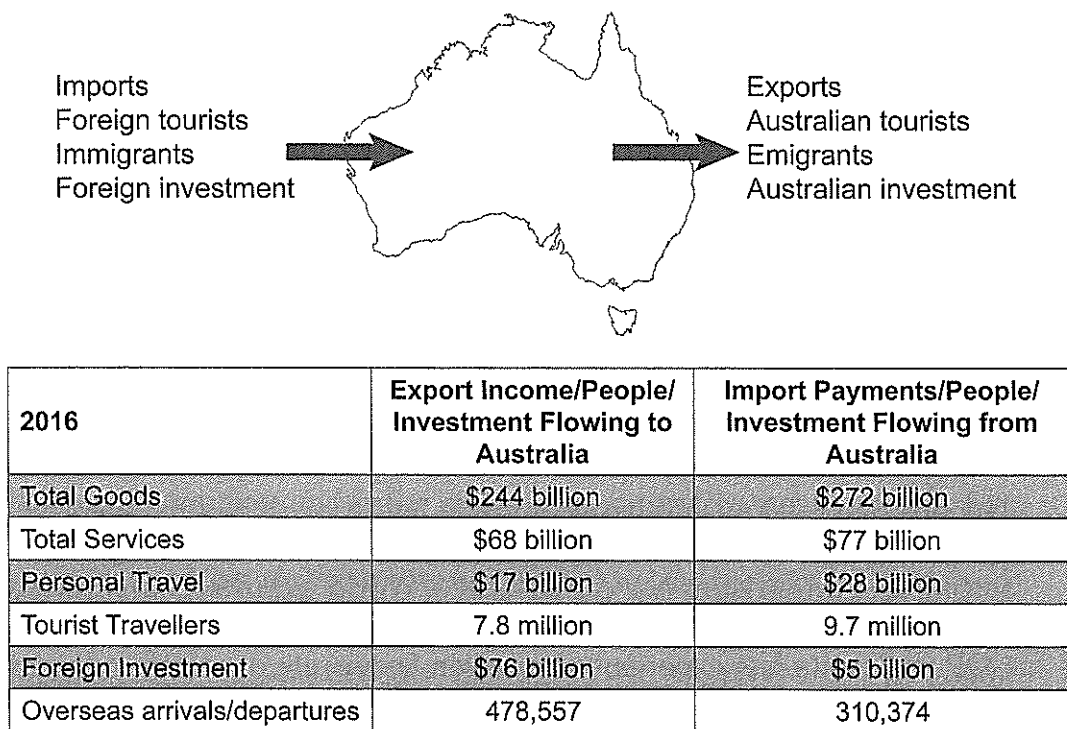
When people think of global markets they tend to just think about international trade in goods and services - exports and imports. But economies are linked by more than just trade - there are movements in financial capital (foreign investment) and movements in people such as tourists, workers and immigrants. Figure 1.1 shows some of Australia's important links with the global economy. Exports contribute around 20 per cent of Australia's GDP and around 22 per cent of Australian workers are directly involved in trade-related activities. Australia is a major exporter of resources to the

world, including iron ore, coal, natural gas, gold and bauxite. At the same time, Australia imports large quantities of capital goods, machinery, motor vehicles and consumer goods. Just think how dependent you are on other countries for many goods we take for granted - the clothes you wear, your watch, your mobile phone, the coffee you drink, your TV set, your laptop, your iPad, the bicycle you ride and probably the family car. All of these are imported goods, some of which may have used Australian resources in their manufacture.

International tourism has grown in importance due to improvements in transport and communications and ranks fourth (after fuels, chemicals and automotive products) in global exports. Tourism now accounts for 30 per cent of the world's exports of commercial services. It is interesting to note that tourism is the main source of foreign exchange for one-third of developing countries and one-half of less developed countries (LDCs). Tourism has also become an important industry in Australia. Overseas tourists (personal travel services) coming to Australia is the 5th ranked export, while Australian tourists travelling to overseas destinations is Australia's highest ranked import.

The Australian economy has throughout its history relied on foreign investment to supplement its domestic savings to help fund its economic development. The recent mining boom would not have been possible without foreign investment. Net inflows of foreign investment in Australia were valued at \$75.6 billion in 2015, while net outflows of Australian investment

Figure 1.1 Australia's links with the global economy



abroad were valued at \$5.1 billion. The importance of foreign investment cannot be underestimated - foreign net flows accounted for nearly one fifth of Australia's total investment requirements during 2015. Australia is also a multicultural nation. Immigration has been an important source of skilled labour and has helped to boost Australia's population growth. Twenty-eight per cent of Australia's population were born overseas. The world economy has become more integrated than it ever was through improvements in communications, transport and the application of the internet.

Australia is an outward-looking country that is strongly engaged with the rest of the world. Australia has a number of globally significant industries:

- agricultural products - top 15 exporter in the world;
- international tourism - 11th largest in the world;
- fuels and mining - in the top four exporters in the world;
- foreign students - 3rd largest in the world; and
- investment fund assets - 3rd largest in the world

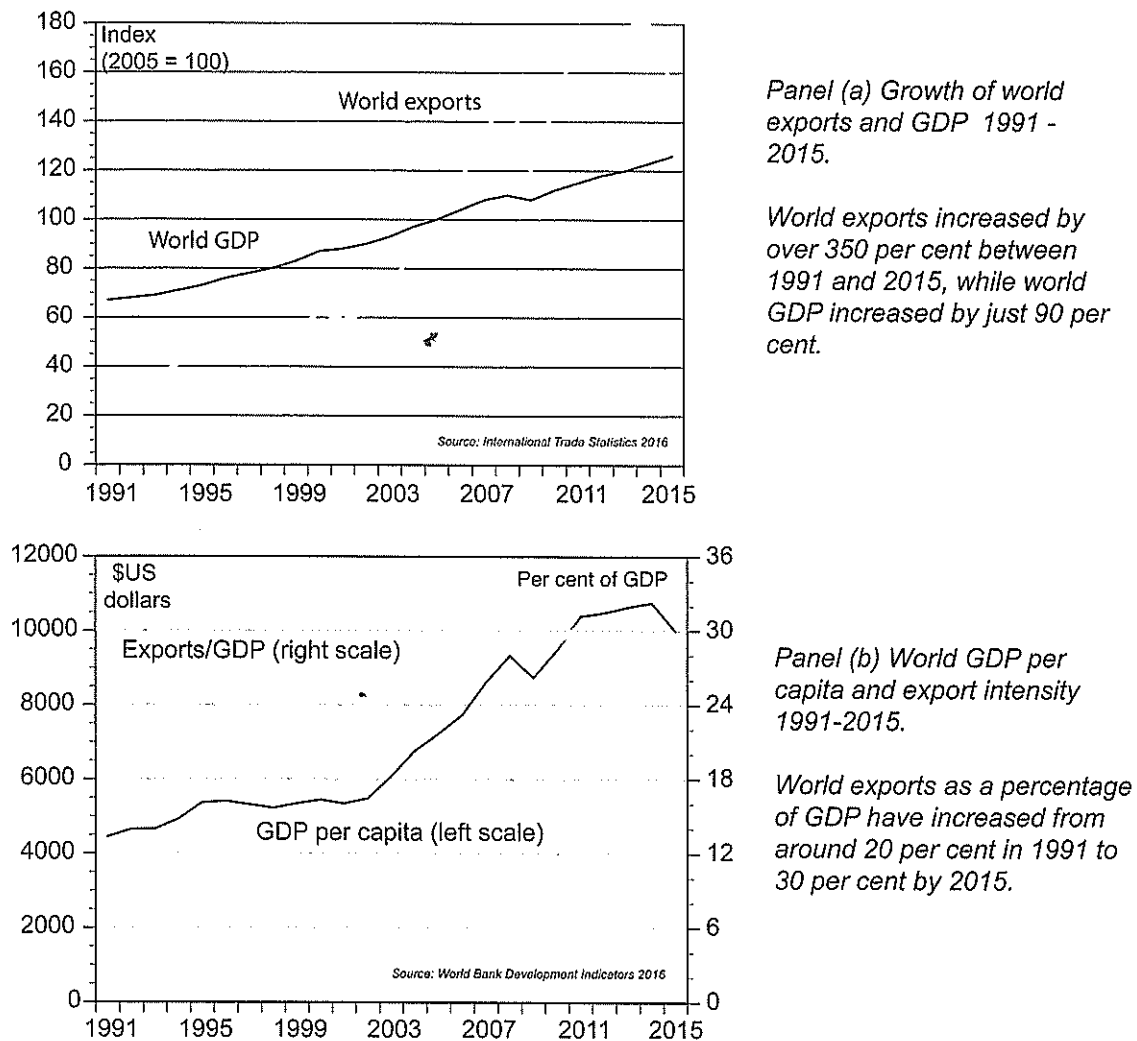
Australia also plays an active role in a wide variety of global and regional groups. Some of these include:

- The United Nations (UN);
- The World Trade Organisation (WTO);
- Group of 20 major economies (G20);
- Association of South East Asian Nations (ASEAN);
- Asia Pacific Economic Cooperation (APEC); and
- Organisation for Economic Co-operation and Development (OECD)

### Patterns and trends in global trade

One of the key features of the second half of the 20th century has been the rapid growth of world trade. Panel (a) of figure 1.2 illustrates the growth of global exports and GDP since 1991 measured as an index. What this shows is that world exports increased by over 350 per cent between 1991 and 2015, while world GDP increased by just 90 per cent. This illustrates the spectacular pace of globalisation over the past few decades. Notice the surge in world exports after 2002 in the wake of rapid industrialisation in developing countries, particularly China. China joined the World Trade Organisation in 2002 and in the space of a decade became the world's leading exporter. Notice also the adverse impact of the GFC on world trade in 2009.

The positive relationship between trade and growth is illustrated by panel (b). This graph shows that a rising share of world trade in GDP has been accompanied by rising per capita GDP. World exports as a percentage of GDP have increased from around 20 per cent in 1991 to 30 per cent by 2015. GDP per capita has experienced an even faster rate of increase - more than



**Figure 1.2 Global trade and GDP**

doubling over this period. Economists believe that increased trade intensity is an important catalyst for higher real incomes and living standards.

Why has world trade grown so fast? It is partly due to the success of world organisations such as the World Trade Organisation (WTO), the International Monetary Fund (IMF) and the World Bank in promoting the liberalisation of world trade. It is also due to improvements in transport and communication which has drastically lowered the costs of international commerce. Trade is seen as an 'engine of growth'. Specialisation and exchange is the cornerstone of all modern economies and is the catalyst for raising living standards. For most economies, including Australia, trade as a proportion of GDP has been increasing. Economies are becoming more open to trade and investment and as a result, economic growth and living standards have accelerated.

International trade can be broadly distinguished between trade in goods (merchandise) and services. The bulk of international trade concerns

physical goods (78 per cent), while services account for a much lower share (22 per cent). This makes sense given that goods are generally easier to trade than services. Many services are in fact non-tradable. For example, it is not possible to export a haircut or a restaurant meal. World trade in goods has increased dramatically over the last decade, rising from less than US\$10 trillion in 2004 to more than US\$16.5 trillion in 2015. Trade in services has more than doubled between 2004 and 2015 - from just above US\$2 trillion to US\$4.7 trillion.

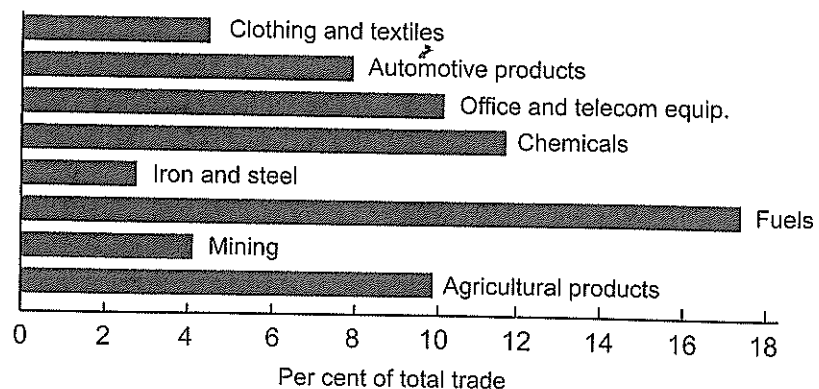
World Exports 2015	
Agriculture	10%
Fuels & Mining	13%
Manufactures	55%
Services	22%

Merchandise is divided into three main categories: agriculture, mining and fuels, and manufactured goods. Trade in manufactured goods dominates global trade accounting for 70 per cent of total merchandise trade. Figure 1.3 shows some of the major merchandise product groups exported in the world. Fuels (16%) and chemicals (11%) are the largest categories. Trade in services comprises transport, travel and commercial services. Commercial services includes categories such as insurance, telecommunications, financial services and construction and accounts for half of all services trade. Tourism in fact, ranks third as an export category after fuels and chemicals and ahead of food and automotive products. In many developing countries, tourism ranks as the first export sector.

Not surprisingly, the countries that dominate world trade are the largest economies - China, the United States, and Germany. These three countries account for 30 per cent of world merchandise exports. China is the world's largest exporter, while the United States is the largest importer. The three largest exporters of commercial services are the United States, United Kingdom and Germany. Figure 1.4 provides a breakdown of world exports by region between 1983 and 2015. The most notable change is the rapid emergence of China - from 1 per cent of world exports in 1983, to 14 per cent in 2015. At the same, Japan's relative importance has slipped, its share of world exports halving over this period.

**Figure 1.3 World merchandise exports by major product group**

Merchandise is divided into three main categories: agriculture, mining and fuels, and manufactured goods. Fuels and chemicals dominate merchandise trade.



Source: International Trade Statistics 2015

World Exports by Region & Selected Country				
Region/Country	1983	1993	2003	2015
North America	16.8	17.9	15.8	14.4
United States	11.2	12.6	9.8	9.4
Canada	4.2	3.9	3.7	2.6
South and Central America	4.5	3.0	3.0	3.4
Europe	43.5	45.3	45.9	37.3
Germany	9.2	10.3	10.2	8.3
Netherlands	3.5	3.8	4.0	3.5
France	5.2	6.0	5.3	3.2
United Kingdom	5.0	4.9	4.1	2.9
Africa	4.5	2.5	2.4	2.4
Middle East	6.7	3.5	4.1	5.3
Asia	19.1	26.0	26.1	34.2
China	1.2	2.5	5.9	14.2
Japan	8.0	9.8	6.4	3.9
India	0.5	0.6	0.8	1.7
Australia & NZ	1.4	1.4	1.2	1.4

*World trade is dominated by the largest economies - China, the United States and Germany. These three countries account for nearly one third of world exports. China has emerged rapidly to become the world's largest exporter - from 1 per cent of world exports in 1983 to 14 per cent in 2015. Europe is still the dominant region for exports, but will soon be overtaken by Asia.*

Source: International Trade Statistics 2016

**Figure 1.4 World exports by region and country**

While Europe is still the dominant region for exports, accounting for 37 per cent, Asia's share has increased significantly over the period, from 19 per cent in 1983 to 34 per cent in 2015.

Remember that it is individuals (both firms and households) that engage in trade, not countries. Why do people trade? Because it is advantageous. Trade enables people to consume a greater variety of goods and services and a greater quantity. Trade results in lower prices for consumers and higher prices for producers. Everyone gains when they engage in trade. When a country exports its goods and services, domestic producers gain from higher prices and greater production. When a country imports, domestic consumers gain from lower prices and greater consumption. Cross border trade is no different than trade in a local market, with one exception. Most countries have their own currency and so an exchange rate needs to be established before trade can take place.

There are a number of factors that affect economic transactions between different economies. These are listed below, and some will be examined in more detail in subsequent chapters:

- the exchange rate - movements in the exchange rate affect the price of exports and imports. For example, if the Australian dollar (\$A or AUD) falls in value (a depreciation), Australia's exports become cheaper to overseas buyers, while imports increase in price to Australian buyers.
- world economic growth - Australia's exports are dependent on foreign demand. Increased economic growth in foreign countries will increase

the demand for Australia's exports. China and Japan, for example, are our most important customers for our mineral and energy resources. If their economies grow, then the demand for our resources increases.

- domestic economic growth - Australia's imports are determined by domestic economic activity. Higher economic activity in Australia raises domestic income which increases demand for imported consumer goods and services while increased investment will increase capital goods imports.
- relative inflation rates - if Australia's inflation rate is greater than our trading partners it will reduce the competitiveness of domestic goods and increase the competitiveness of foreign goods
- relative interest rates (the interest rate differential) - if interest rates in Australia are relatively higher than other economies, especially the United States then financial capital will flow into the Australian economy.
- productivity & cost efficiency - the cost efficiency of domestic firms relative to foreign firms will determine their success in the global market. Productivity improves cost efficiency by increasing output per worker.

## International competitiveness

International competitiveness has become a popular term with the advent of globalisation. The OECD defines a nation's competitiveness as 'the degree to which a country can produce goods and services which meet the test of

### **Global Value Chains - today, most goods and a growing share of services are "made in the world"**

*World trade, investment and production are increasingly organised around global value chains (GVCs). A value chain is the full range of activities that firms engage in to bring a product to the market, from conception to final use. Such activities range from design, production, marketing, logistics and distribution to support to the final customer. They may be performed by the same firm or shared among several firms. The growth of GVCs has increased the interconnectedness of economies. It has been estimated that more than half of world trade in goods and services takes place within GVCs.*

*The tendency of countries to specialise in particular stages of a good's production (known as vertical specialisation), has created new trade opportunities, especially for small developing countries. As a result, world trade in intermediate goods, capital goods and services has grown with the rise of vertical specialisation. The expansion of the operations of multinational enterprises (MNEs) through foreign direct investment (FDI) has been a major driver of the growth of GVCs. Participation in GVCs contributes to economic growth through the gains that firms achieve from specialisation and improved productivity (access to new technology and knowledge).*

Source: OECD *Interconnected Economies*



international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term'. This definition highlights the importance of being able to compete in international markets.

There are several organisations that produce annual competitiveness reports:

- the World Economic Forum (WEF) and
- the International Institute for Management Development (IMD)

For more than three decades, the World Economic Forum's annual Global Competitiveness Reports have studied and benchmarked the many factors underpinning national competitiveness. This organisation defines competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country. What are the key determinants that drive productivity and competitiveness? From the early days of economics, Adam Smith emphasised the importance of specialisation and division of labour. Economists believed that investment in physical capital and infrastructure was crucial to the growth process, while new growth theory focuses on the role of education and training and technological progress. The WEF base their competitiveness index on what they call the 'twelve pillars of competitiveness'. These are listed in the box on the following page. This is a fairly comprehensive list of key factors that promote efficient resource allocation, productivity, innovation and long term growth. A key criticism of the WEF's index is that it is compiled from an opinion based survey rather than on actual hard economic data.

The IMD is a top-ranked global business school based in Switzerland which also publishes an annual world competitiveness ranking. IMD defines competitiveness in terms of the ability of nations to create and maintain an environment which sustains the competitiveness of enterprises. The IMD competitiveness report is arguably a more accurate and reputable measure than the survey based index produced by the WEF. The IMD focuses on four main factors that are seen as the drivers of competitiveness:

- economic performance - domestic economy, international trade, inflation & unemployment
- government efficiency - public finance, fiscal policy, business legislation, institutional framework
- business efficiency - productivity, labour market, finance, management practices
- infrastructure - basic infrastructure, technological infrastructure, health, education

Notice that these factors are not that dissimilar to the '12 pillars of competitiveness' and are a simpler and better way to think about the determinants of competitiveness. Notice also that both the government and the private sector are important in determining a country's international competitiveness. Figure 1.5 compares the rankings of each organisation's competitiveness report for 2016. It is not surprising that nine of the top

### The 12 Pillars of Competitiveness

The WEF base their competitiveness index on what they call the 'twelve pillars of competitiveness':

1. Institutions: the legal and administrative framework within which individuals, firms, and governments interact
2. Infrastructure: extensive and efficient infrastructure such as a well-developed transport and communications network and efficient electricity supplies
3. Macroeconomic stability: low inflation, low unemployment
4. Health and primary education: primary education is the foundation for all subsequent training; Investment in the provision of health services is critical to maintain an active & fit workforce
5. Higher education and training: increases the quality of the workforce
6. Goods market efficiency: competitive markets lower costs and promote improvements in productivity
7. Labour market efficiency: labour market flexibility enables workers to shift from one economic activity to another rapidly at low cost
8. Efficient financial markets: economies require sophisticated financial markets that can make capital available for private-sector investment
9. Technological readiness: information and communication technology (ICT) access and usage are key factors affecting a countries' overall technological readiness
10. Market size: large markets allow firms to exploit economies of scale.
11. Business sophistication: the quality of a country's business networks and supporting industries
12. Technological innovation: requires sufficient investment in research and development (R&D)

twelve ranked countries are common to both lists: Switzerland, United States, Singapore, Hong Kong, Sweden, the Netherlands, Germany, Denmark and Norway. Australia was ranked 17th by IMD and 22nd by the WEF. What is also interesting is the close correlation with the GDP per capita ranking.

Australia's international competitiveness affects our international trade and hence our national production, employment and income. A fall in our competitiveness implies that goods and services produced in Australia have difficulty finding buyers in both foreign and domestic markets. Competitiveness matters because it can affect a country's standard of living. The ultimate economic objective for any country is to improve the economic welfare or living standard of its inhabitants. Improving competitiveness implies that a country can increase its national income. The competitiveness of a country's goods and services depends on a large number of factors, but some of the key economic determinants are

- changes in labour productivity due to factors such as technology, education & training;

Ranking	WEF Global Competitiveness Index	IMD World Competitiveness Yearbook	GDP per capita (\$US) 2015
1	Switzerland	Hong Kong	Luxembourg
2	Singapore	Switzerland	Switzerland
3	United States	United States	Norway
4	Netherlands	Singapore	Qatar
5	Germany	Sweden	Australia
6	Sweden	Denmark	United States
7	United Kingdom	Ireland	Singapore
8	Japan	Netherlands	Denmark
9	Hong Kong	Norway	Ireland
10	Finland	Canada	Sweden
11	Norway	Luxembourg	Iceland
12	Denmark	Germany	Netherlands
	(Australia 22nd)	(Australia 17th)	

**Figure 1.5 International competitiveness rankings, 2016**

- changes in a country's price level (inflation) relative to its trading partners;
- changes in a country's wages relative to its trading partners; and
- changes in the exchange rate.

Most statistical indicators of international competitiveness try to reflect these changes by using price measures. Two of the more commonly used measures are a nation's real unit labour costs and the value of its exchange rate. Real unit labour costs reflect changes in a country's wages relative to its productivity. Productivity measures how much output can be produced from a given input, such as labour. It is usually measured by dividing total production (GDP) by number of hours worked. An increase in productivity will increase competitiveness. Real unit labour costs will fall if either productivity rises or if wage costs fall. This will cause an increase in competitiveness. To compare the value of Australia's exchange rate with other countries it is important to use a trade weighted exchange rate rather than a single rate such as the US dollar. Australia's trade-weighted index (TWI) measures the change in the value of the Australian dollar relative to our major trading partners. The real TWI takes into account changes in Australia's inflation rate relative to trading partners. If the real TWI falls (a depreciation) then this implies an improvement in competitiveness since the price of Australia's exports to overseas buyers will fall.

Figure 1.6 shows changes in Australia's real unit labour costs and the real TWI since 2002. Between 2002 and 2009 real unit labour costs declined by around 6 per cent which had a positive effect on Australia's international competitiveness. Between 2009 and 2016 the RULC index remained fairly

Australia's international competitiveness improves if either the real Trade Weighted Index (TWI) falls and/or if real unit labour costs fall.

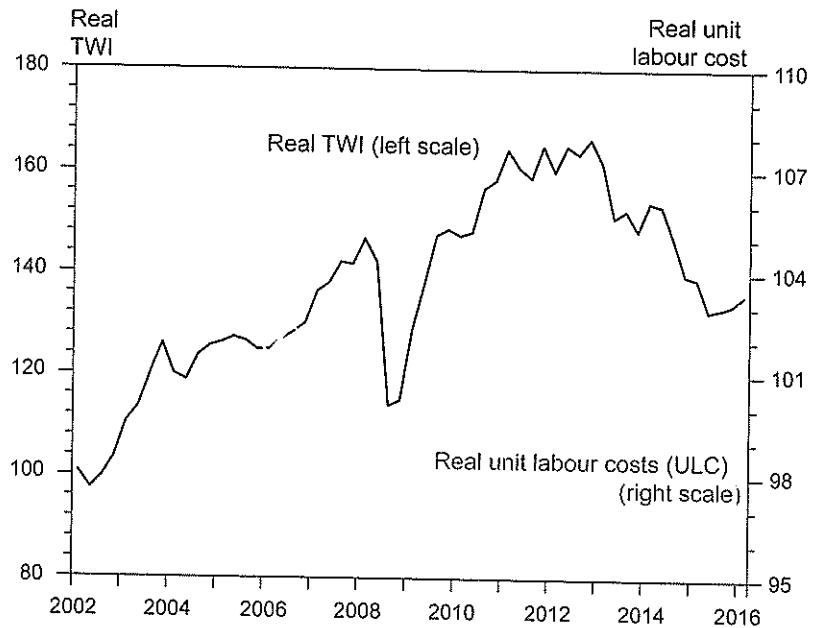


Figure 1.6 Measures of international competitiveness

flat. The real TWI experienced a strong appreciation from 2002 to 2013 - increasing by 65 per cent. This was due to the mining boom and the increased demand for Australian commodities (esp. iron ore and coal) by China. An appreciation reduces the competitiveness of Australia's exports by increasing their price to foreign buyers. In 2009 there was a sharp depreciation in the real TWI due to the global financial crisis. But this was a minor hiccup, with the real TWI increasing again quickly to reach its post float high in 2013. The mining boom came to a sudden end in 2013, commodity prices fell drastically and the real exchange rate fell from its 'dizzy' heights. Between 2013 and 2016, the real TWI depreciated by around 20 per cent, boosting the competitiveness of the traded goods sector.

A number of novel indexes have been developed to help compare the relative cost of goods in different economies. These indexes select a uniform product that is sold in most countries and converts the local price into a standard currency such as the US dollar. Examples include the 'Big Mac' index (McDonalds hamburger), the 'iPad' index (Apple). These indexes are useful in determining whether an exchange rate is under or overvalued. The most famous of these is the Economist Magazine's Big Mac index, which is represented in figure 1.7 (based on prices in July 2016).

*PPP - the exchange rate will adjust so that an identical good in two different countries has the same price when expressed in the same currency*

According to the Purchasing Power Parity (PPP) theory, the same product should sell for the same price in different countries, once converted to a common exchange rate. The first column of figure 1.7 lists the price of a Big Mac in local currency. Dividing this price by the actual exchange rate in the second column gives the price in US dollars, which is

Country	Big Mac in local currency	Exchange rate (\$1US) July 2016	Big Mac in \$US	Implied PPP of \$US	% Over or Under Valued
Australia	A\$5.75	1.34	4.30	1.14	-15
Britain	£2.99	0.76	3.94	0.59	-22
Canada	C\$6.00	1.30	4.60	1.19	-9
China	Yn18.6	6.68	2.79	3.69	-45
Euro Area	€3.82	0.91	4.21	0.76	-17
Indonesia	R31,000	13112	2.36	6151	-53
Japan	¥ 370	106.73	3.47	73.41	-31
Malaysia	Myr 8.00	4.03	1.99	1.59	-61
New Zealand	NZ\$6.00	1.42	4.22	1.19	-16
Singapore	S\$5.45	1.36	4.01	1.08	-21
South Africa	Rd30.00	14.27	2.10	5.95	-58
Sweden	Kr 44.94	8.59	5.23	8.92	4
Switzerland	Fr 6.50	0.99	6.59	1.29	30
Thailand	Bt 119	34.97	3.40	23.61	-32
United States	\$5.04	1.00	5.04	-	-

According to the purchasing power parity (PPP) theory, the same product should sell for the same price in different countries. This table shows a wide disparity in the price of a Big Mac measured in US dollars - from \$1.99 in Malaysia to \$6.59 in Switzerland.

Figure 1.7 The 'Big Mac' index

shown in the third column. For example, in Australia a Big Mac sells for A\$5.75 which equals US\$4.30. In July 2016 the exchange rate was \$1US = A\$1.34 or \$A1 = \$US0.75. The table shows the wide disparity in the price of a Big Mac measured in US dollars - from \$1.99 in Malaysia (less than half the US price) to \$6.59 in Switzerland.

We can use the data to derive some interesting results. If we divide the actual Australian price of the Big Mac (\$5.75) by the US price (\$5.04) we get the implied PPP exchange rate. This suggests that US\$1 should equal A\$1.14 or equivalently A\$1 should equal US\$0.88. This suggests that Australia's exchange rate in July 2016 was undervalued by 15 per cent. When you compare actual exchange rates in the table with the implied PPP rate, you will see that most currencies are trading well below their implied value, meaning that they are either over or undervalued. For example a 'Big Mac' in Malaysia is 61 per cent cheaper than in the US while in Switzerland it is 30 per cent more expensive. It is important to remember that PPP is meant to be a long term indicator showing where currencies might trend in the future.

Why do the prices in the Big Mac index vary so widely once converted into a common currency? It is basically due to differences in the costs of producing a Big Mac across countries. Prices will reflect the cost of key inputs such as raw materials and wages. Real wages are determined by labour productivity. A country that is relatively more productive at producing tradable goods will have higher wages for workers in that sector. This will drive up prices and wages in the non-tradable sector, including the fast food industry. This

is why the price of a Big Mac is higher in countries such as Australia, Canada and Europe and lower in China, Indonesia and South Africa.

A better guide to show purchasing power parity would be to compare the prices of a good which did not reflect differences in input costs, for example a uniform product such as the Apple iPad or Apple iPhone. The official price for an iPad Air2 in Australia in November 2016 was A\$569 while in the United States the price was \$399. The implied PPP of the US dollar is 1.43 (569/399) which suggests that the implied exchange rate of the Australian dollar should be US\$0.70. The actual exchange rate was A\$1 = \$US0.75, which suggests that the Australian dollar is overvalued by around 7 per cent. What if we compare the prices of the iPhone 7. In the United States it sells for US\$649, while in Australia it sells for \$1079. This implies that A\$1 should equal US\$0.60! The iPhone index suggests that the Australian dollar is overvalued by 25 per cent. Purchasing power parity theory would suggest that the Australian dollar should therefore depreciate over time. Check what happens to the \$A during 2017 to see if the theory is valid.

## Globalisation

Globalisation is one of the defining trends of the 21st century. It is discussed everywhere from political and business circles to the ordinary person in the street. The term globalisation generally refers to the opening of international borders to the flows of trade, investment, immigration, information and technology. The many, substantial benefits of globalisation include higher average incomes, greater innovation, richer cultural exchanges and improved standards of living around the world. Globalisation is often wrongly blamed for many of the world's problems including climate change, world poverty and environmental degradation. But this is a myth reported by those who are opposed to change and progress. What is an undeniable fact, is that globalisation has been responsible for creating unprecedented prosperity. The evidence for globalisation is seen in the ever expanding trade in goods and services, foreign investment and people. It has been propelled by cheaper and faster transportation, more innovative information technology, fewer or lower trade barriers, and better economic management. Joseph Stiglitz, an economist and winner of the Nobel Prize defines globalisation as:

*'the closer integration of the countries and peoples of the world brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders.'*

There are many indicators that illustrate how goods, capital, and people have become more globalised:

- the value of exports (goods and services) as a percentage of world GDP increased from 20 percent in 1990 to 29 percent in 2015;
- since 1990, inflows of foreign direct investment have increased by a factor of nine - increasing from US\$196bn in 1990 to US\$1780bn in 2015.

- the number of internet subscribers per 100 people has increased from 0.4 in 2000 to 11.3 in 2015;
- the number of mobile phone subscriptions per 100 people has increased from 12.1 in 2000 to 99 in 2015 (a factor of 8); and
- the number of international tourist arrivals has tripled between 1990 and 2015.

The key measures of globalisation that most economists focus on are trade in goods and services and financial capital flows. Trade has been the 'engine of globalisation'. Since 1990, the volume of world trade has grown at twice the rate compared with the growth of world GDP. The most commonly used measure of a country's trade openness is the ratio of a country's trade to GDP. This ratio, has on average, increased quite markedly across all groups of economies, including both developed and developing countries. It represents a quick and simple measure of a country's level of integration with the rest of the world. Research has shown that those economies that increase their trade openness over time experience faster rates of economic growth. Between 1990 and 2015, world exports as a proportion of GDP have increased from 20 per cent to 29 per cent. Notice the dramatic increase in trade intensity for countries such as Thailand, Vietnam and Korea. For many countries of East Asia, trade has been the pathway to achieve rapid economic

Figure 1.8 Indicators of globalisation

Indicators	1980	1990	2000	2015
<b>A. Economic:</b>				
Exports of goods and services (% GDP)	19.9	19.6	25.7	29.1
High income countries % GDP	20.2	19.8	25.4	30.5
Low income countries % GDP	13.8	12.4	17.8	20.4
Inward FDI net inflows, \$US billions	51	196	1319	1780
High income countries, \$US billions	44	175	1176	1109
Low income countries, \$US billions	0.4	0.6	2	15
<b>B. Social</b>				
Fixed Broadband Subscribers, per 100 people	..	..	0.4	11.3
High income countries, per 100 people	..	..	1.4	33.0
Low income countries, per 100 people	..	..	..	0.3
Mobile Phones, per 100 people	..	0.1	12.1	99
High income countries, per 100 people	..	1.0	43.7	124
Low income countries, per 100 people	..	0.0	0.3	60
International Tourist Arrivals, millions	278	434	674	1186
Advanced economies, millions	194	296	421	653
Emerging economies, millions	83	139	256	533

Sources: World Bank; UNWTO

Exports as % of GDP		
	1990	2015
World	20	29
Australia	15	20
China	16	22
Thailand	34	69
Vietnam	36	90
Korea	26	46

development. Exposure to trade provides the incentive to improve productivity and cost competitiveness.

The second main indicator of globalisation is the growth in foreign direct investment. Trade in financial capital is a more recent phenomenon than trade in goods and services. This is because international financial transactions were relatively regulated in most economies until the 1990s. The opening up of domestic economies to foreign direct investment is an important part of

modern globalisation and has seen the significant growth in the role of the multinational firm. Multinationals are now accounting for an ever larger share of global trade.

Many people think that globalisation is a relatively recent phenomenon. The two modern waves of globalisation occurred over the past 150 years. The earlier wave began around the middle of the nineteenth century and ended with the beginning of World War I (1870 - 1913). This wave of international integration was fueled by colonial expansion and the onset of the industrial revolution. The second wave of globalisation began after the Second World War and extended to the present day (1950 - present). Both episodes were characterised by strong growth in trade and living standards (GDP per capita).

The period of history between these waves was a period of economic upheaval with the World Wars and the Great Depression of 1930. This was an era of anti-globalisation, during which countries pursued protectionist policies which slowed world growth and development. Some analysts believe that the period since the 1980s could be interpreted as the start of a new golden age of globalisation, after the setbacks from the OPEC oil shocks and the Vietnam War. This 'third' wave coincides with a number of important global events - the end of the Cold War (the collapse of Communism); the birth of the internet and the creation of the World Trade Organisation (WTO). The result is that in the past 30 years the pace and scale of globalisation has accelerated.

### ***Causes of globalisation***

There have been a number of important drivers or causes of the current era of globalisation. The first has been the liberalisation of markets to the flow of goods, services and investment. This process began after World War II with the establishment of a number of United Nations organisations, including the GATT, the International Monetary Fund (IMF) and the World Bank. Chief of these was the GATT - the General Agreement on Tariffs and Trade. This was set up in 1947 with the aim of reducing barriers to trade to increase general living standards and promote full employment. Originally, the GATT was supposed to become a full international organization like the World Bank, called the International Trade Organization. However it



**International agencies fostering globalisation**

*The World Trade Organisation (WTO) - the successor or 'son of GATT' was established in 1995 and is the only international organization dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible. It does this by administering trade agreements, acting as a forum for trade negotiations and settling trade disputes.*

*The International Monetary Fund (IMF) - is an organization of 186 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world. The IMF was established at the end of World War II with the responsibility of overseeing the international monetary system to ensure exchange rate stability and encouraging members to eliminate exchange restrictions that hinder trade.*

*The World Bank (the International Bank for Reconstruction and Development) - was also established in 1944 with the purpose of reducing world poverty by promoting global economic development. It does this by providing low or no interest loans and grants for economic and social development projects to developing countries that have limited access to international credit markets.*

remained an agreement until it was superseded by the WTO in 1995. Since 1990 world tariff rates have fallen from an average of 29 per cent to below 8 per cent. Today average tariff rates are around 5 per cent in high income economies and 10 per cent in developing countries. Regional trading groups (or trading blocs) such as the European Union, NAFTA and ASEAN have also flourished in recent decades and have encouraged the expansion of free trade by reducing or eliminating trade barriers.

A second key factor driving recent globalisation has been technology. Advances in transport and communication have resulted in 'the death of distance'. Transport costs and travel time have been drastically cut helping to boost the volume of merchandise trade and increase tourist travel to record numbers. Advances in information technology and the internet have enabled the growth of trade in services. Many services that were once thought of as non-tradable are now being outsourced to countries such as India - business services such as accounting, marketing and IT support. India has now become the world's leading exporter of IT services.

Multinational corporations have also played an important role in promoting globalisation. Multinational corporations (MNCs) are very large firms with headquarters in one country and subsidiaries in one or more other countries. These firms establish production and/or retail and distribution facilities in other countries. Think of major global firms such as General Electric, Apple, Nike and Microsoft from the United States, Shell and Vodafone from the United Kingdom, Toyota and Sony from Japan, Samsung from Korea, Nestle from Switzerland and Volkswagen from Germany. Even Australia has several MNCs, including BHP and Rio Tinto. Over the last 40 years, the number and size of multinational corporations has increased dramatically.

In 1970, there were just 7,000 MNCs, whilst today there are over 100,000 parent companies operating with around 900,000 subsidiaries or affiliates in almost all industries and countries in the world. These companies play an increasingly major role in the world economy. Multinational corporations account for around a quarter of global GDP.

Why do multinational firms expand into foreign markets? Basically to increase their sales, market share and profits. To increase sales to a foreign market a firm has a choice of either exporting to the foreign location or establishing a subsidiary through foreign direct investment. Foreign direct investment (FDI) occurs when a firm in one economy acquires at least 10 per cent ownership of a foreign firm. Foreign direct investment has become an important link in the process of globalisation. In developed economies, FDI tends to be associated with mergers and acquisitions of foreign companies. In developing economies FDI is more associated with the construction of new facilities and is known as 'greenfield' investment.

### ***The effects of globalisation***

Globalisation has become a controversial issue. On one side are the economic rationalists who argue that globalisation will improve economic welfare. On the other side are the critics who argue that globalisation while creating benefits for some, imposes costs on poorer economies and on disadvantaged workers. They argue that globalisation is simply making the rich richer and the poor poorer. First let's focus on the arguments against globalisation. Meetings of the WTO and other global groups such as the G20 are often plagued by violent demonstrations against free trade. Globalisation is seen as favouring the richer, developed nations of the world at the expense of the less developed countries. Global poverty has not been reduced and income inequality around the world appears to have increased. Anti-globalisers argue that free trade results in job losses in less competitive economies. By erecting barriers to trade such as tariffs, local jobs can be protected against unfair foreign competition. Free trade is also seen as leading to greater environmental damage due to increased industrialisation. Some argue that globalisation destroys cultural diversity with local markets being overrun by global brands. The recent increase in global financial flows is also seen as the cause of financial crises in many developing economies.

How do the advocates of globalisation respond to the critics? Most economists understand the economic case for free trade and see the modern form of globalisation as part of this process. The case for trade was put succinctly by the WTO Director General Mike Moore. He regards trade as an important ingredient to improved living standards:

*"Trade works its wonders in many ways. Higher exports pay for goods and services that are more cheaply priced abroad. The need to compete in world markets forces companies to become more efficient. And exporting firms provide good, high paying jobs...Imports too bring many benefits. Cheaper food and*

Arguments for	Arguments against
It provides access to a wider variety of goods and services	It results in higher unemployment among low-skilled workers
it lowers prices	It entrenches the use of child labour
It provides more and better-paying jobs	It lowers wages
It increases competition & efficiency	it destroys local cultures
It reduces global poverty	It worsens poverty
It increases economic growth	It erodes democracy
It increases overall living standards	It is unfair to developing countries
It has enabled developing economies to access foreign investment	Volatile capital flows have destabilised developing economies
It increases multiculturalism	It increases environmental damage

**Figure 1.9 Effects of globalisation**

*clothing for working families. Cheaper and better cars and electronic goods. Cheaper inputs to make businesses more competitive. And last but not least, new technologies and greater competition, both of which boost economic growth."*

There is substantial evidence that as countries 'globalise' their people benefit, in the form of access to a wider variety of goods and services, lower prices, more and better-paying jobs, improved health, and higher overall living standards. The evidence shows that over the past 30 years, as the number of countries engaging in globalisation has increased, the percentage of people living in extreme poverty (defined as living on less than \$1 per day) has been cut in half.

A core element of globalisation is the expansion of world trade through the elimination or reduction of trade barriers, such as import tariffs. Greater imports offer consumers a wider variety of goods at lower prices, while providing strong incentives for domestic industries to remain competitive. The East Asian miracle is testament to the success of export led growth. Producing for the world market promotes efficiency and enhances national competitiveness. Open economies lead to more jobs, higher wages and better standards of living. Greater openness can also attract foreign direct investment (FDI), which helps to boost domestic production and employment and is an important source of new technologies - thus promoting higher productivity. Foreign direct investment (FDI) is a key element in international economic integration. FDI creates direct, stable and long-lasting links between economies. It encourages the transfer of technology and know-how between countries, and is also an additional source of funding for investment

Globalisation unites people around the world by promoting a common culture. The more economically interdependent the world becomes, the more people will trade and communicate with one another. This leads to inherent stability and the

*"It has been said that arguing against globalisation is like arguing against the law of gravity." — former UN Secretary General Kofi Annan*

promotion of world peace. Notice that the most politically unstable and violent time of the 20th century was the period between 1914 and 1945. This was the period of 'protectionism' when globalisation went underground.

Free trade does create winners and losers. However the winners gain more than the losers, so that it is possible to compensate the losers and result in a net gain for the economy. It is a similar argument to the effects of technological change. Technology imposes costs on some sections of the community but also leads to net gains. Should the world stop the advance in technology? Of course not. Research carried out by the World Bank found that since 1980, globalisation has contributed to a reduction in poverty as well as a reduction in global income inequality. They found that in "globalising" countries in the developing world, income per person grew three-and-a-half times faster than in "non-globalising" countries, during the 1990s. In general, they concluded that "higher growth rates in globalising developing countries have translated into higher incomes for the poor."

It is prudent to conclude the discussion of the globalisation debate with a quote from one of the world's leading economists, and Nobel Prize winner, in the field of economic development, Amartya Sen:

*"Over thousands of years, globalisation has contributed to the progress of the world, through travel, trade, migration, spread of cultural influences, and dissemination of knowledge and understanding (including of science and technology). To have stopped globalisation would have done irreparable harm to the progress of humanity."*

### Worksheet 1

Read chapter 1 of *Investigating Macroeconomics* to answer these questions.

1. What are the key elements in the definition of globalisation?
2. Why do open economies grow faster?
3. Describe the main linkages between economies.
4. Why has world trade grown so fast?
5. Describe some of Australia's globally significant industries.
6. Why is merchandise trade much larger than trade in services?
7. Explain why there is a positive relationship between trade and economic growth.
8. What were the three largest categories of world exports in 2015?
9. Describe the main types of services that are traded.
10. Manufactured goods account for \_\_\_\_ % and services \_\_\_\_ % of world trade.
11. Which three countries are the world's leading exporters?
12. Explain why China has become the world's largest exporter.
13. Explain how a depreciation will affect a country's trade?
14. How does world economic growth impact on Australia's trade?
15. How will an increase in productivity affect Australia's trade?

**Extended responses**

*Each of the following questions should be answered in 2-3 pages of writing. Include diagrams and examples where appropriate. Pay attention to the allocation of marks when writing your answer.*

1. Explain the meaning and significance of the concept 'international competitiveness'. What factors are important in determining a country's competitiveness? [20 marks]
2.
  - a. Discuss the nature of globalisation and the factors that have facilitated globalisation. [10 marks]
  - b. Evaluate the arguments for and against globalisation. [10 marks]
3. Consider Stiglitz's definition of globalisation. What examples can you offer of "the closer integration of the countries and peoples of the world"? Why have the costs of transportation and communication come down so dramatically? What "artificial barriers" do you think Stiglitz is referring to? [20 marks]
4.
  - a. Describe the linkages between economies, including trade, investment, tourism and immigration [10 marks]
  - b. Discuss the economic effects of globalisation [10 marks]