Introduction

The pandemic of 2020 was a very sharp reminder of how we all live in an increasingly globalised 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, for streaming music and movies and for purchasing goods and services. But an interconnected world can also mean that an epidemic such as Covid-19 can quickly spread from one country to another.

Australian firms and households are constantly involved in economic transactions with other economies. Some examples include Australian firms exporting iron ore, coal and education services. Consumers purchase cars from Japan, computers from China, iPhones from the United States and coffee from Brazil. Australia has also been a major recipient of foreign investment. The world has effectively become a global market with the spread and growth of multinational corporations. Globalisation has certainly become one of the important buzzwords with different meanings to different people.

Globalisation can be defined as the process by which the world is becoming increasingly interconnected. It is characterised by the growth in trade and international investment, and by the rapid movement of information and people around the globe. It implies the opening up of international borders to the free movement of goods, services, workers, tourists and financial capital. 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 McDonalds, Coca Cola and Google.

The Coronavirus Pandemic

The pandemic of 2020 was a very sharp reminder of how we all live in an increasingly interconnected world. The rapid spread of the Coronavirus between and within countries had devastating social and economic effects on every single nation - both rich and poor. The world was plunged into its deepest economic contraction since the Great Depression of the 1930s.

To control the spread of the virus most countries imposed strict lockdowns causing many businesses to close and many people to lose their jobs. International and domestic borders were closed to prevent travellers from transmitting the virus. Countries such as Australia and New Zealand that were quick to impose restrictions on the movement of people as well as strict social distancing regulations had much greater success in containing the spread of the disease than countries such as the United States and Europe.

There have been previous pandemics before the era of globalisation such as the Spanish flu in 1918. That virus was estimated to infect about 500 million people or one-third of the world's population while the number of deaths was estimated to be at least 50 million worldwide. It is also important to remember that the benefit of a globalised community is that it enables a coordinated effort to develop and disseminate a vaccine more quickly than in a non-globalised world.

For economists, globalisation means the triumph of free trade and competitive markets over protection and restricted markets. It has arguably been the most important factor in raising the living standards of the world's population. Globalisation is also playing an important role in economic development. The World Trade Organisation (WTO) believes that the 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 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
- the increasing interdependence of the world economy, which causes shocks to reverberate more quickly and globally (e.g. the global financial crisis and the COVID-19 pandemic).

The process of globalisation or 'internationalisation' is not a new one - it has been occurring for centuries. Between 1980 and 2010, the pace of globalisation was at its most rapid, fuelled by advances in transport and communication. In the past decade, however, it has slowed significantly. 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 and even for the recent pandemic. 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 23 per cent of Australia's GDP and around 24 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 mobile phone, the coffee you drink, your TV set, your laptop and the family car. All of these are imported goods, some of which may have used Australian resources in their manufacture.

2020	Imports/Income/People/ Investment Flowing to Australia	Exports/Income/People/ Investment Flowing from Australia
Total Goods	$312 billion	$383 billion
Total Services	$87 billion	$94 billion
Income	$79 billion	$120 billion
Tourist Travellers (2019)	9.4 million	11.3 million
Foreign Investment	-$116 billion	$81 billion
Overseas arrivals/departures (2019)	844.000	550,000

Figure 1.1 Australia's links with the global economy

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. 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 mining and resources sector would not have been developed without foreign investment. Normally inflows of foreign investment into the Australian economy exceed outflows, however in 2020 the opposite scenario occurred. Australian investment into foreign economies was $81 billion, while foreign investors withdrew $116 billion from the Australian economy. Australia is also a multicultural nation. Immigration has been an important source of skilled labour and has helped to boost Australia's population growth. Around 30 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 - 4th largest exporter in the world
- travel services - 4th largest exporter in the world
- financial services - 9th largest exporter in the world
- investment fund assets - 3rd largest in the world

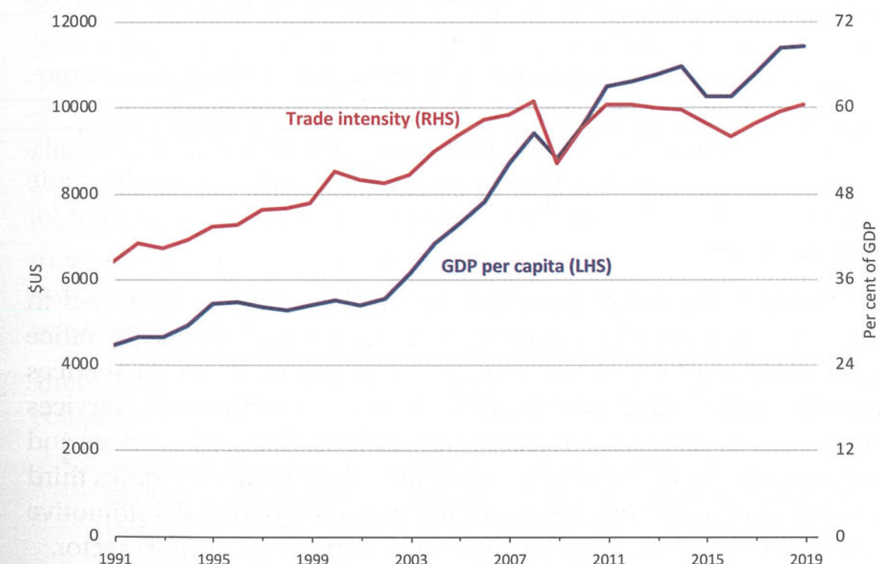
Australia also plays an active role in a wide variety of global and regional groups. Some of these include:

- 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)

Patterns and trends in global trade

One of the key features of the modern era has been the rapid growth of world trade. This was especially evident in the period before the global financial crisis (GFC) of 2009. China, for example, joined the World Trade Organisation in 2002 and in the space of a decade overtook the United states to become the world's leading exporter. Since the GFC the pace of globalisation has decelerated with a marked slowdown in world trade. In periods when global trade has slowed, world economic growth has also been relatively weak. The positive relationship between trade intensity and income is illustrated in figure 1.2.

Figure 1.2 World income and trade



There is a strong positive correlation between trade and GDP per capita. Trade plays a crucial role in driving economic growth, development and job creation around the world.

This graph shows that a rising share of world trade in GDP has been accompanied by rising per capita GDP. World trade (exports plus imports) as a percentage of GDP has increased from around 38 per cent in 1991 to 60 per cent by 2019. GDP per capita has experienced an even faster rate of increase - more than doubling over this period, from around $US4,500 in 1991 to approximately $US11,500 in 2019. Economists believe that increased trade intensity is an important catalyst for both higher economic growth and living standards.

Why did world trade experience rapid growth in the period following World War II? It was 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 was also due to improvements in transport and communication which drastically lowered the costs of international commerce. Trade has always been seen by economists as an 'engine of growth'. Specialisation and exchange is the cornerstone of all modern economies and is the key factor in raising living standards. For most economies, including Australia, trade as a proportion of GDP has been increasing over time. Economies are becoming more open to trade and investment and as a result, economic growth and living standards have increased. In the past decade, the pace of globalisation has slowed with many countries turning away from free trade and adopting more protectionist policies. The trade war between the United states and China has been a catalyst in slowing the pace of both global trade and economic activity. Weaker economic activity has also led to many countries adopting protectionist measures, such as tariffs as a means to stimulate domestic employment. This has had a negative impact on global trade.

International trade can be broadly distinguished between trade in goods (merchandise) and trade in services. The bulk of international trade concerns physical goods (76 per cent), while services account for a much lower share (24 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. But services trade, including financial, commercial and education services, is starting to accelerate. Merchandise trade is divided into three main categories: agriculture, mining and fuels, and manufactured goods. Trade in manufactured goods dominates world trade accounting for just over half of all trade flows. Mining and agriculture account for around 20 per cent of total trade.

World Exports 2019	
Manufacturing	53%
Fuels & Mining	12%
Agriculture	10%
Services	24%

Figure 1.3 shows some of the major merchandise product groups exported in the world. Important categories in manufactured exports are chemicals, office and telecommunications equipment and transport equipment. 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 major export sector.

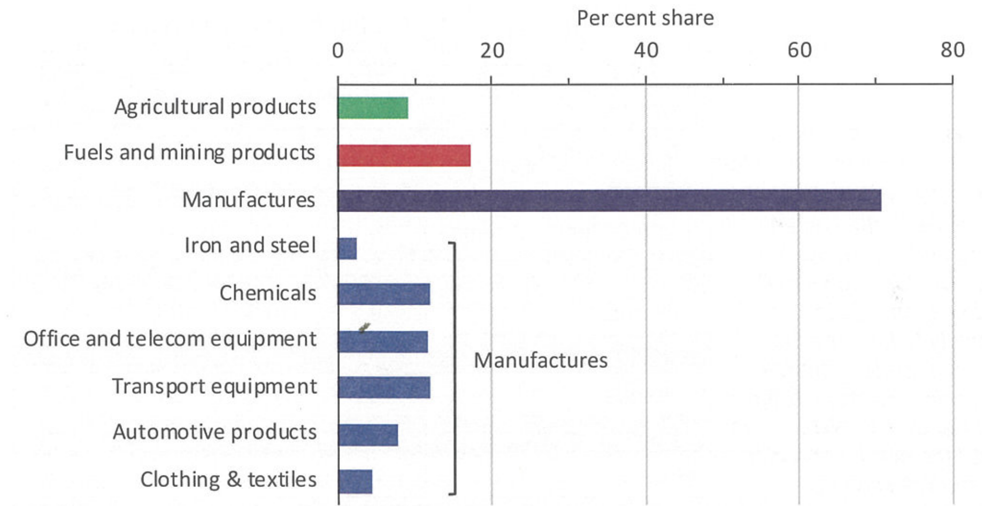


Figure 1.3 World merchandise exports by major product group

Not surprisingly, the countries that dominate world trade are the largest economies – the United States, China 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 2019. The most notable change is the rapid emergence of China - from 1 per cent of world exports in 1983, to 13 per cent in 2019. At the same, Japan's relative importance has slipped, its share of world exports halving over this period. While Europe is still the dominant region for exports, accounting for 38 per cent, Asia's share has increased significantly over the period, from 19 per cent in 1983 to 34 per cent in 2019.

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. 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 international trade can take place.

There are a number of factors that affect economic transactions between different economies:

- the exchange rate - movements in the exchange rate affect the price of exports and imports. For example, if the Australian dollar (AUD) falls in value (a depreciation), Australia's exports become cheaper to overseas buyers, while imports increase in price to Australian buyers;

World Exports by Region & Selected Country				
Region/Country	1983	1993	2003	2019
North America	16.8	17.9	15.8	13.9
United States	11.2	12.6	9.8	9.0
Canada	4.2	3.9	3.7	2.4
South & Central America	4.5	3.0	3.0	3.2
Europe	43.5	45.3	45.9	37.7
Germany	9.2	10.3	10.2	8.1
Netherlands	3.5	3.8	4.0	3.9
France	5.2	6.0	5.3	3.1
United Kingdom	5.0	4.9	4.1	2.5
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	34.0
China	1.2	2.5	5.9	13.6
Japan	8.0	9.8	6.4	3.8
India	0.5	0.6	0.8	1.8
Australia & NZ	1.4	1.4	1.2	1.6

International Trade Statistics 2020

orld trade is dominated by the rgest economies – the United ates, China and Germany. hese three countries account for)% of world exports. China has nerged rapidly to become the orld's largest exporter – from 1 er cent of world exports in 1983 nearly 14 per cent in 2019. urope is still the dominant region r exports, but will soon be vertaken by Asia.

Figure 1.4 World exports by region and country

- 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; and
- 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.

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 competitiveness

International competitiveness is an important aspect 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 international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term.'* A much simpler definition of international competitiveness is the ability of a country to compete successfully against other countries in international trade.

There are several organisations that produce annual competitiveness reports:

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

The World Economic Forum is the international organization for public-private cooperation. Its focus is to tackle important global issues by bringing together both governments and private corporations. Each year, the WEF compiles a Global Competitiveness report that provides a detailed map of the factors that drive productivity, growth and human development. The WEF defines competitiveness as *'the set of institutions, policies, and factors that determine the level of productivity of a country'*. The Report covers 141 economies, which account for 99% of the world's GDP. A competitiveness index is derived for each country and is based on a set of twelve key factors called the '12 Pillars of Competitiveness.' These are the factors that are considered to be most important in increasing a country's productivity and therefore its economic growth. The index aims to measure the drivers of 'multi factor productivity' (MFP), which is the part of economic growth that is not explained by growth in the factors of production.

he 12 Pillars of Competitiveness (WEF)

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. ICT adoption: information and communication technology (ICT) access and usage are key factors affecting a countries' overall technological readiness
4. Macroeconomic stability: low inflation, low unemployment
5. Health: extent and quality of health services is critical to maintain an active & fit workforce
6. Education and skills: extent and quality of education and training
7. Product market efficiency: competitive markets lower costs and promote improvements in productivity
8. Labour market efficiency: labour market flexibility enables workers to shift from one economic activity to another rapidly at low cost
9. Efficient financial system: economies require sophisticated financial markets that can make capital available for private-sector investment
10. Market size: large markets allow firms to exploit economies of scale.
11. Business dynamism: the quality of a country's business networks and supporting industries; attitude to risk and entrepreneurship
12. Innovation capability: requires sufficient investment in research and development (R&D)

MFP can be interpreted as reflecting improvements in the quality of both labour and capital. The International Institute for Management Development (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 firms. It benchmarks the performance of 63 countries, based on more than 340 criteria - both statistical data and survey data. The IMD focuses on four main factors that are seen as the drivers of competitiveness:

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

Notice that these factors are not that dissimilar to the '12 pillars of competitiveness' and are a useful 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 latest competitiveness report. Singapore is ranked first on both lists which reflects its strong performance in trade, its high quality education system and its sound technological infrastructure. It

Ranking	IMD World Competitiveness Report	WEF Global Competitiveness Report	GDP per capita 2019
1	Singapore	Singapore	Norway
2	Denmark	United States	Ireland
3	Switzerland	Hong Kong	Switzerland
4	Netherlands	Netherlands	Iceland
5	Hong Kong	Switzerland	Denmark
6	Sweden	Japan	Singapore
7	Norway	Germany	Sweden
8	Canada	Sweden	Australia
9	UAE	United Kingdom	Netherlands
10	United States	Denmark	United States
	(Australia 18th)	*(Australia 16th)*	*(Australia 8th)*

Figure 1.5 International competitiveness rankings

is not surprising that seven of the top ten ranked countries are common to both lists: Singapore, Denmark, Switzerland, the Netherlands, Hong Kong, Sweden, and the United States. Australia was ranked 18th by IMD and 16th by the WEF. What is also interesting is the close correlation with the GDP per capita ranking. This makes sense given that a high level of competitiveness would indicate high labour productivity and therefore high income levels.

International competitiveness affects a country's ability to engage in international trade and will therefore have a positive effect on a country's production and income. A fall in competitiveness implies that goods and services produced within a country 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 and training;
- 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.

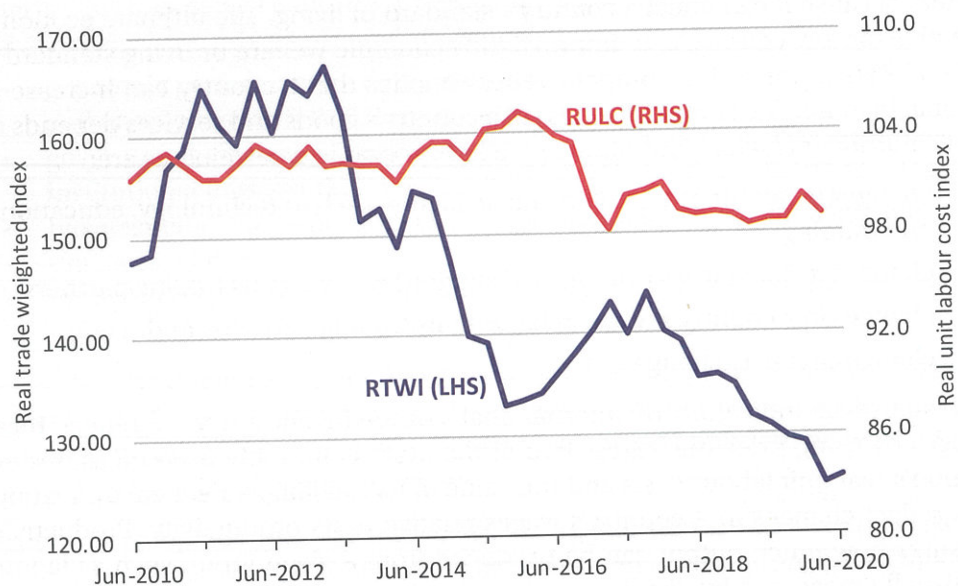
Most statistical indicators of international competitiveness try to reflect these changes by using price measures. Two of the more commonly used measures are a nation's real unit labour costs and the value of its exchange rate. Real unit labour costs reflect changes in a country's wages relative to its 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 the 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 its 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. An appreciation in the exchange rate will have the opposite effect, causing a decrease in competitiveness.

Figure 1.6 shows changes in Australia's real unit labour costs and the real TWI since 2010. Between 2010 and 2012 both the RULC index and the RTWI were relatively high due to the mining boom in Australia. After 2012, world commodity prices (especially iron ore and coal) fell bringing an end to the decade long mining boom. As a result, the real exchange rate fell from its 'dizzy' heights. Between 2013 and 2020, the real TWI depreciated by around 25 per cent, boosting the competitiveness of the traded goods sector. Real unit labour costs remained relatively high in Australia up to 2015 before falling by around 7 per cent by 2020 also boosting competitiveness. It is interesting to note that Australia's trade balance increased significantly over this period of improving competitiveness.

ustralia's international ompetitiveness nproves if either the eal trade weighted index TWI) falls and/or if real nit labour costs fall.

Figure 1.6 Measures of international competitiveness



Purchasing Power Parity

Should the same goods sell for the same price in different countries? For example, should the same model iPhone sell for the same price in Australia and the United States, after the prices are converted using the current exchange rate? Purchasing power parity (PPP) is the theory that says they should. If the prices are different then this would suggest that the exchange rates are not correctly aligned. If a good in Australia sells for $100, then that same good should sell for $80 in the United States if the exchange rate was AUD 1 = USD 0.80 (or USD 1 = AUD 1.25).

So the simple formula to see if PPP holds is:

$$Ep = P1/P2$$

where Ep is the ppp exchange rate between the two countries
P1 is the price of the good in country 1
P2 is the price of the good in country 2

Let's test the formula for a number of different goods. The following table shows the prices for four different goods in the US and Australia as at August 2020 and then shows the implied PPP exchange rate. The actual exchange rate at the time was AUD 1 = USD 0.71 so only the pricing for a Microsoft 365 subscription was 'correct'.

Good	Price in $US	Price in $AUD	PPP exchange rate
iPhone 11	$699	$1199	$AUD1 = $US0.58
Starbucks coffee	$3	$4.50	$AUD1 = $US0.67
Macbook Pro 16"	$2399	$3799	$AUD1 = $US0.63
Microsoft 365	$69.99	$99	$AUD1 = $US0.71

A famous example of applying the PPP theory is the 'Big Mac' index created by the Economist magazine. This index compares the prices for a 'Big Mac' sold in McDonald's stores in different countries of the world. This simple index is useful in determining whether an exchange rate is under or overvalued. The 'Big Mac' index for 2020 is shown in figure 1.7. According to the Purchasing Power Parity (PPP) theory, a 'Big Mac' should sell for the same price in different countries, once converted to a common exchange rate.

Column 2 in the table shows the prices for a Big Mac in each country's local currency. This is then converted into the US price by using the actual exchange rate. For example, in Australia a Big Mac sells for $6.55 which equals USD4.58. In July 2020 the exchange rate was USD1 = AUD1.43 or AUD1 = USD0.70. The table shows the wide disparity in the price of a Big Mac measured in US dollars - from $2.34 in Malaysia (less than half the US price) to $6.91 in Switzerland.

We can use the data to derive some interesting results. If we divide the actual Australian price of the Big Mac ($6.55) by the US price ($5.71) we get the implied PPP exchange rate. This suggests that USD1 should equal AUD1.15 or equivalently AUD1 should equal USD0.87. This suggests that Australia's exchange rate in July 2020 was

Country	Big Mac in local currency	Exchange rate ($1US) July 2020	Big Mac in $US	Implied PPP of $US	% Over or Under Valued
Australia	A$6.55	1.43	4.58	1.15	-20
Britain	£3.39	0.79	4.29	0.59	-25
Canada	C$6.88	1.35	5.08	1.20	-11
China	Yn21.7	7.00	3.10	3.80	-46
Euro Area	€4.21	0.88	4.78	0.74	-16
Japan	¥ 390	107.27	3.64	68.30	-36
Malaysia	Myr 9.99	4.26	2.34	1.75	-59
Singapore	S$5.90	1.39	4.25	1.03	-26
Sweden	Kr 52.6	9.14	5.75	9.21	+1
Switzerland	Fr 6.50	0.94	6.91	1.14	+21
Russia	R 130	62.14	2.09	23.59	-62
United States	$5.71	1.00	5.04	1.00	0

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Figure 1.7 The 'Big Mac' index (July 2020)

undervalued by 20 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 undervalued. For example a 'Big Mac' in Malaysia is 59 per cent cheaper than in the US. Only two currencies in the table are overvalued - Sweden (1 per cent more expensive) and Switzerland (21 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 in Australia in July 2020 was A$469 while in the United States the price was $329. The implied PPP of the US dollar is 1.425 (469/329) which suggests that the implied exchange rate of the Australian dollar should be US$0.70. The actual exchange rate was A$1 = $US0.70. This suggests that the Australian dollar is very close to its implied PPP value. What if we compare the prices of the iPhone X. In the United States it sells for US$999, while

in Australia it sells for $1629. This implies that A$1 should equal US$0.61! This seems odd given that the Ipad price difference is close to the PPP value. Perhaps Apple is taking advantage of the popularity of the iPhone in Australia? There are only three countries where the iPhone has 60 per cent or more of the market - Japan, the United States and Australia. This means that Apple can sell its smart phone at a premium price in these markets.

Globalisation

Globalisation is one of the defining trends of the modern era. 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, the growth in foreign investment and the increased movement of 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 trade (goods and services) as a percentage of world GDP increased from 39 percent in 1990 to 60 percent in 2019;
- the average tariff rate on all goods has fallen dramatically from 15 per cent in 1990 to just 5 per cent in 2019;
- since 1990, inflows of foreign direct investment (FDI) have increased by a factor of five - increasing from US$239bn in 1990 to US$1322bn in 2019;
- the number of internet subscribers per 100 people has increased from 0.4 in 2000 to 15 in 2019 (a factor of 37);
- the number of mobile phone subscriptions per 100 people has increased from 12 in 2000 to 107 in 2019 (a factor of 9); and
- the number of international tourist arrivals has almost tripled between 1990 and 2019.

Indicators	1990	2000	2010	2019
A. Economic:				
Total Trade (% GDP)	39	51	57	60
High income countries	41	51	59	65
Low income countries	12.4	17.8	23.4	18.7
Tariff rate, mean all products	15.0	10.8	7.5	5.0
High income countries	8.4	6.5	4.8	3.8
Low income countries	-	13.4	12.8	11.0
FDI net inflows, $US billions	239	1569	1917	1322
High income countries	219	1424	1304	856
Low income countries,	0.3	1.8	14.7	1.5
B. Social				
Fixed Broadband Subscribers, per 100 people	..	0.4	8	15
High income countries,	..	1.4	26	34
Low income countries	..	..	0.1	0.4
Mobile Phones, per 100 people	0.1	12	76	107
High income countries,	1.0	44	110	128
Low income countries,	0.0	0.3	30	61
International Tourist Arrivals, millions	524	677	956	1442
High income countries, millions	377	457	564	880
Low income countries, millions	5	6	12	17

Source: World Bank

Figure 1.8 Indicators of globalisation

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.

Trade as % of GDP		
	1990	*2019*
World	*39*	*60*
Australia	*32*	*46*
China	*24*	*36*
Thailand	*76*	*110*
Vietnam	*81*	*210*
Korea	*51*	*77*

Research has shown that those economies that increase their trade openness over time experience faster rates of economic growth. Between 1990 and 2019, world trade as a proportion of GDP have increased from 39 per cent to 60 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 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.

Many people think that globalisation is a relatively recent phenomenon, however, it has been occurring since the dawn of civilisation. The first modern waves of globalisation began during the 19th century in Europe. The first wave started around 1870 and ended with the beginning of World War I (1870 - 1914). 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 global financial crisis of 2009. 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. The decades between 1990 and 2010 were a particularly rapid era of globalisation that coincided with a number of important global events – the end of the Cold War (the collapse of Communism); the birth of the Internet; the creation of the World Trade Organisation (WTO) and the emergence of China as an economic superpower.

The decade after 2010 has been quite different with a marked slowdown in the pace of globalisation. The Economist magazine referred to this period as the era of 'slobalisation'. This period has been characterised by an escalation of trade tensions with many countries. The global financial crisis of 2009 caused the world economy to contract and this this had a lasting negative impact on world trade. Many countries reverted to protectionist policies and imposed barriers on the movement of both goods and people. The US-China trade war and the pandemic resulted in a decrease in all the measured indicators of globalisation – trade, investment and travel.

The Swiss Economic Institute (KOF) publishes an annual globalisation index which measures the economic, social and political dimensions of globalisation. It is used to monitor changes in the levels of globalisation of different countries over a long period of time. Figure 1.9 shows this index for several countries, including Australia, from 1985 to 2017 (latest data available). The index measures globalisation on a scale from 1 to 100. The economic dimension includes both trade flows and financial flows. The social dimension includes personal contact, information flows and cultural globalisation. The political dimension is measured in terms of the numbers of embassies and international nongovernmental organisations (NGOs) as well as participation in UN peacekeeping missions. Switzerland was ranked the most highly globalised country in the world in 2017, followed by the Netherlands and Belgium. Interestingly, the top 15 ranked economies are all in Europe, due to their their high levels of economic, social and political interconnectedness within the EU.

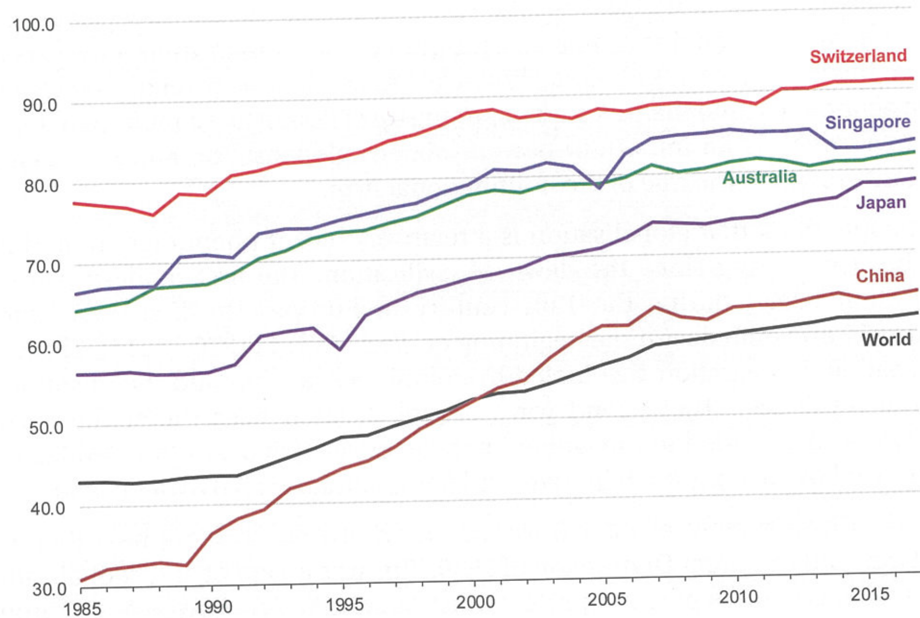


Figure 1.9 The KOF index of globalisation

Small countries tend to be more strongly globalised than large ones because they are more highly interconnected with neighbouring countries. The United States was ranked 23rd, while Japan – the world's third-largest economy – was 37th. China comes in the lower third of the overall index, ranking 80th. Australia makes the top 25 out of 200 countries which given its isolation as an island continent, means it 'punches above its weight'. What the graph reveals is that most countries experienced a consistent rise in their index from 1980 to 2008. But in the past decade, the index has plateaued due to the weaker world economy and opposition to free trade. If we were to forecast the impact of the 2020 pandemic we would expect each countries index to actually decline.

Factors facilitating globalisation

There have been a number of important drivers 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, however it remained an agreement until it was superseded by the WTO in 1995. Since 1990 world tariff rates have fallen from an average of 15 per cent to just 5 per cent. Today average tariff rates are below 4 per cent in high income economies and 11 per cent in low income countries.

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 - 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.

Regional trading groups (or trading blocs) such as the European Union, NAFTA and ASEAN have also flourished 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 Facebook, Apple, Nike and Microsoft from the United States, Shell and Vodafone from the United Kingdom, Toyota and Sony from Japan, Samsung and Hyundai 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 one million subsidiaries or affiliates in almost all industries and countries in the world. 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 lets 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 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.

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

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 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.

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

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. In general,

they concluded that 'higher growth rates in globalising developing countries have translated into higher incomes for the poor.'

More recent events such as the China/United states trade war, the United Kingdom exiting the European Union (Brexit) and the COVID-19 pandemic signal that the world maybe moving away from globalisation. A new political climate is developing in which trade liberalisation is increasingly unpopular. The IMF believes that the failure to support displaced workers and others affected by globalisation has encouraged protectionist sentiment in many countries. To prevent the world from slipping into a new protectionist era, governments should not only focus on economic growth but also on reducing inequality. 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

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 gown 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 is the largest category of world trade?
9. Describe the main types of services that are traded.
10. Manufactured goods account for ____ % while services account for ____ % 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 currency 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?

Multiple Choice

1. Which of the following describes an effect of globalisation?
   a. There has been a greater divergence in world economic systems.
   b. There has been an increase in global poverty
   c. There has been an increasing trend towards regulation of markets.
   d. There has been an increase in the flow of financial capital

2. What would limit the globalisation process among nations?
   a. Increases in the number of free trade agreements
   b. Increases in the flow of direct foreign investment
   c. Increases in the volume of trade flows
   d. Increases in tariffs

3. Which of the following describes a role of the World Trade Organisation?
   a. it promotes international financial stability.
   b. it regulates investment in public infrastructure.
   c. it advocates protectionist policies for developing countries.
   d. Iit monitors developments in world trade and reviews barriers to trade.

4. Multinational corporations
   a. seek to maximize profit margins in all of their subsidiary operations
   b. cannot exist without global markets
   c. are the merger of companies from two or more countries
   d. invest and/or operate in more than one country

5. Which of the following is not an international capital flow?
   a. an American depositing money in a bank account in Switzerland.
   b. a Canadian purchase of a Japanese-made automobile.
   c. a Brazilian firm borrows from an Argentine bank.
   d. a Korean car company buys a factory in California.

6. Critics of globalisation generally argue that globalisation
   a. helps spread the best of each country's culture.
   b. reduces income inequality.
   c. causes a degradation in the world's environment.
   d. helps each country safeguard the best of its own culture.

7. Which international organisation is mainly responsible for monitoring and enforcing global multilateral trade agreements?
   a. The Global Trade Network
   b. Asia Pacific Economic Co-operation
   c. World Trade Organisation
   d. International Monetary Fund

8. What is the role of the International Monetary Fund (IMF)?
   a. to implement and advance global trade agreements
   b. to settle industrial and trade disputes between members
   c. to help poorer countries with their economic development
   d. to maintain international financial stability in global financial markets

9. Which of the following would increase Australia's competitiveness?
   a. an increase in Australian tariffs
   b. an increase in Australian wage rates
   c. an increase in productivity
   d. an increase in inflation in Australia

10. Which of the following could decrease Australia's competitiveness?
    a. an decrease in Australia's inflation rate
    b. a fall in interest rates in Australia
    c. an appreciation of the Australian dollar
    d. a decrease in average weekly earnings in Australia

11. The largest category of global trade is
    a. agriculture
    b. manufacturing
    c. oil
    d. services

12. If the same basket of goods cost $400 in Australia and 200 pounds in the UK, then according to the purchasing power parity theory
    a. goods must cost half as much in the UK as in Australia.
    b. the exchange rate should approach $2 per pound.
    c. the exchange rate should approach $0.50 per pound.
    d. goods must cost half as much in Australia as in the UK.

13. If the purchasing power parity theory is true then
    a. the price of a traded good should be the same everywhere in the world.
    b. exchange rates should be the same everywhere in the world.
    c. interest rates should equalise around the world.
    d. inflation rates should equalise around the world.

14. Research by the World Bank has concluded that globalisation has
    a. increased world poverty and income inequality.
    b. decreased world poverty and income inequality.
    c. decreased world poverty but increased environmental damage.
    d. increased income inequality but decreased world poverty.

15. One possible argument against globalisation is that it may
    a. lead to higher rates of domestic inflation.
    b. create short term structural unemployment in less efficient industries.
    c. result in increasing deficits in Australia's trade balance.
    d. lead to lower rates of economic growth.

16. Which of the following is likely to improve Australia's competitiveness in the global economy?
    a. increased spending on transport infrastructure in Australia
    b. an appreciation of the Australian dollar
    c. deflation in the major countries in the European Union
    d. a change in the industrial relations system in Australia toward more centralised wage determination.

17. Which of the following is not likely to be associated with globalisation?
    a. higher levels of protection against cheap foreign imports
    b. an increase in exports as a proportion of nations' Gross Domestic Product
    c. growth in the influence of multinational corporations
    d. higher rates of economic growth for countries becoming more open

18. The three nations that are the world's largest exporters are
    a. China, India and Japan.
    b. China, Russia and USA.
    c. China, USA and Germany.
    d. China, Brazil and South Korea.

19. Governments have facilitated globalisation by
    a. encouraging democracy.
    b. reducing restrictions on international businesses.
    c. encouraging people to buy domestic production only.
    d. introducing subsidies.

20. A factor not facilitating the process of globalisation would be
    a. the reduction of tariffs in some manufacturing industries.
    b. an improvement in telecommunications technology.
    c. more free trade agreements.
    d. an increase in income inequality.

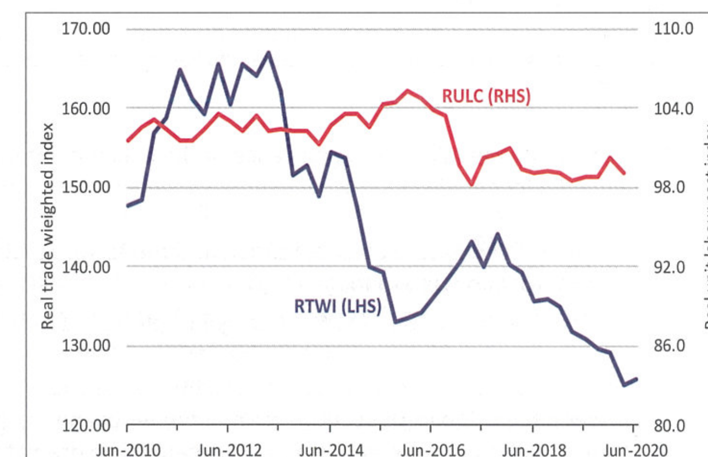
Worksheet 2

Read the competitiveness and globalisation sections to answer these questions:

1. Why is productivity important for a country's competitiveness?
2. Define international competitiveness.
3. Explain the key factors that affect a country's international competitiveness.
4. What are the important drivers of competitiveness according to the WEF and the IMD?
5. What is the trade weighted index?
6. Describe the trend in Australia's competitiveness since 2017.
7. What impact does an appreciation have on a country's international competitiveness?
8. Describe the purpose of the 'Big Mac' index.
9. What does purchasing power parity mean?
10. Explain why the prices of Big Macs are not the same worldwide.
11. Define globalisation.
12. What is the 'engine of globalisation'?
13. How is trade openness measured?
14. Describe five different indicators of globalisation.
15. Describe three main causes of globalisation?
16. Outline three arguments against globalisation.
17. Outline three arguments for globalisation.
18. Discuss the impact of the Covid pandemic on globalisation.

Data interpretation

Refer to the graph showing Australia's real TWI and real unit labour costs.



1. What does the real trade weighted index measure?
2. Provide two reasons to explain why the TWI increased between 2010 and 2013.
3. Explain the change in the real TWI between 2017 and 2020. How would this affect Australia's tourism and education sectors?
4. Explain the effect of the following on real unit labour costs:
   i. an increase in productivity.
   ii. an increase in inflation.
5. Explain why a rise in real unit labour costs decreases competitiveness.

Economics in the news

Read the extract and answer the questions below.

Will COVID-19 kill globalisation?

The COVID-19 crisis and the necessary public health response have caused the largest and fastest decline in the global flow of trade, investment and people in modern history. The forecasts tell a sorry tale: a 33% decline in merchandise trade, a 40% fall in foreign direct investment and an 80% reduction in international airline passengers. During 2020, every country had imposed restrictions on overseas travel and most countries had partially or fully closed their borders to foreign travellers.

Does this necessarily spell the end of globalisation? The simple answer is no, but it has certainly been damaged. How long will it take to recover? Perhaps up to a decade, depending on the success of an effective vaccine and on a cooperative global community. Remember that global cooperation holds the answer to how quickly a vaccine can be created and disseminated.

Foreign trade, investment and travel will all eventually recover, but the world will become more wary of becoming overdependent on other economies. Firms may question their reliance on global supply chains and it may be wise for countries to reduce their diversify their trading partners and not rely on just a few major suppliers.

1. Distinguish between the flows of trade, investment and people.
2. Explain why there was such a significant fall in airline passengers.
3. Discuss both the advantages and disadvantages of global interdependence.
4. What will be the likely effect of the pandemic on global internet commerce?

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]

Free trade and protection 2

Chapter concepts

- **the significance of trade for the Australian economy**
- **the theories of absolute and comparative advantage**
- **demonstrate the gains from specialisation and trade, using the demand and supply model, the production possibility frontier and/or the concept of opportunity cost**
- **identify different forms of protection**
- **demonstrate the operation of tariffs and subsidies as forms of protection and their effects on trade and market efficiency**
- **arguments for and against trade liberalisation**
- **the influence of trade agreements, organisations and blocs on world trade**