Edexcel

A Level

Economics

(Code: WEC11 01)

Unit 04-Section 2

Trade and the global economy

THE DISTINCTION BETWEEN ABSOLUTE AND COMPARATIVE ADVANTAGE

ABSOLUTE ADVANTAGE

Economists in the eighteenth and nineteenth centuries developed theories centred around why differences in costs led to international trade. Adam Smith, in his famous example of a pin-making factory, explained how specialisation enabled an industry to increase the production of pins from a given quantity of resources. In an economy, specialisation exists at every level, from the division of labour in households to production at an international level.

Table 1 shows that it costs more in worker hours to produce a unit of olive oil in Spain than in Portugal. Portugal is said to have an **absolute advantage** in the production of olive oil. It can produce both goods but it is more efficient in the production of olive oil.

	Cost per unit in worker hours	
	Wheat	Olive oil
Spain	10	15
Portugal	20	10

▲ Table 1

In Figure 1, Portugal can produce 3 units of wheat or 6 units of olive oil with 60 worker hours. This is shown in the **production possibility frontier (PPF)** for Portugal. With 60 worker hours, Spain can produce 6 units of wheat or 4 units of olive oil. This is shown in the PPF for Spain. Portugal has an absolute advantage in the production of olive oil. If both countries devote 60 worker hours to the production of olive oil, then Portugal can produce a higher quantity of olive oil (6 units), compared to Spain (4 units).

FIGURE 1

In this example, Spain has an absolute advantage in the production of wheat and Portugal has an absolute advantage in the production of olive oil. However, in other examples, it is possible for one country to have an absolute advantage in the production of both products.

THE THEORY OF COMPARATIVE ADVANTAGE

Consider Table 2. In this example, Portugal can produce both wheat and olive oil more cheaply than Spain (i.e. it has an absolute advantage in both commodities). What David Ricardo saw was that it could still be mutually beneficial for both countries to specialise and trade. This became known as the theory of **comparative advantage.**

A country has a comparative advantage in the production of a good or service when it can produce it relatively more efficiently than another country. In other words, it can produce it at a lower **opportunity cost**.

This example shows the benefits of **specialisation** and trade, according to the theory of comparative advantage. **The theory of comparative advantage** states that if countries specialise in those goods or services in which they have a comparative advantage, then output of both products will increase. This is a gain in economic welfare for the world economy. However, the theory of comparative advantage does not say how these gains will be distributed between the two countries. This depends upon the wheat/olive oil exchange rate, a point discussed below.

	Cost per unit in worker hours	
	Wheat	Olive oil
Spain	15	30
Portugal	10	15

▲ Table 2 Cost per unit in worker hours

	Wheat	Olive oil
Spain	2	1
Portugal	1½	1

▲ Table 3 Opportunity cost ratios

	Wheat	Olive oil
Spain	1	½
Portugal	1	2/3

▲ Table 4: Opportunity cost ratios

	Production before trade		Production after specialisation and trade	
	Wheat	Olive oil	Wheat	Olive oil
Spain	10	5	20	0
Portugal	15	10	6	16
Total	25	15	26	16

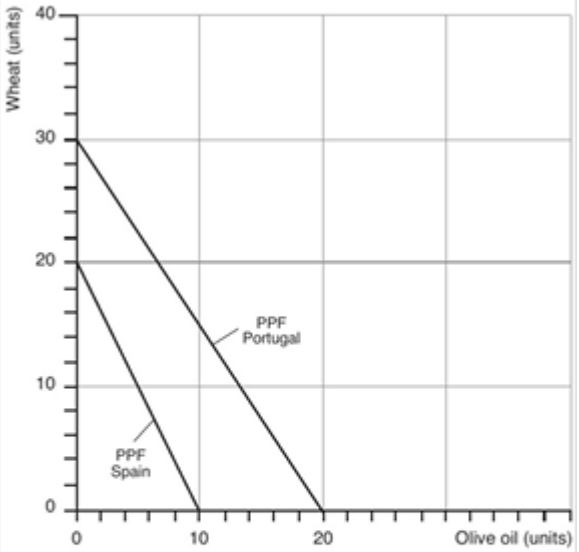
▲ Table 5 Production before trade and after trade

	Output		
	Good X		Good Y
Country A	20	OR	40
Country B	50	OR	100

▲ Table 6

FIGURE 2

The terms of trade



Production possibility frontiers and trade
The PPF for Portugal shows that it can either produce 30 units of wheat or 20 units of olive oil or some combination of these. With the same inputs, Spain can only produce 20 units of wheat or 10 units of olive oil or some combination of these. Portugal has an absolute advantage in the production of both olive oil and wheat but it only has a comparative advantage in the production of olive oil, while Spain has a comparative advantage in the production of wheat.

Spain has a comparative advantage in producing wheat due to its lower opportunity cost compared to Portugal. This advantage is due to the theory of comparative advantage, which suggests that countries find it mutually advantageous to trade if comparative costs of production differ. In this case, Spain can produce 20 units of wheat.

THE ASSUMPTIONS AND LIMITATIONS OF THE THEORY OF COMPARATIVE ADVANTAGE

The simple theory of comparative advantage outlined above makes a number of important assumptions. Because these assumptions are often unrealistic in practice, the theory of comparative advantage has limitations. In other words the gains from specialisation and trade may be less than the theory suggests or it may be hard to apply the theory in practice.

- There are no transport costs. In reality, transport costs always exist, and they will reduce and sometimes eliminate any comparative cost advantages.
- Costs are constant and there are no economies of scale. This assumption makes our examples easier to understand. However, the existence of economies of scale will tend to reinforce the benefits of international specialisation. In Table 6 the total gains from trade will be more than 1 unit of wheat and 1 unit of olive oil if the two countries can lower their production costs by producing more of a particular good.
- The theory of comparative advantage applies to a world with many economies producing a large number of traded goods. Chile, Portugal, and the UK have comparative advantages in copper, olive oil, and apples, depending on consumption patterns. The trade depends on these countries' consumption patterns.

	Cost per unit in worker hours			
	Apples	Olive oil	Wheat	Copper
United Kingdom (UK)	10	15	20	50
Portugal	15	10	30	60
Chile	20	20	50	70

▲ Table 8

- The theory assumes that traded goods are homogeneous (i.e. identical). Commodities such as steel, copper or wheat are bought on price. However, a Toyota car is different from a Ford car and so it is far more difficult to conclude that, for instance, the Japanese have a comparative advantage in the production of cars.
- Factors of production are assumed to be perfectly mobile. If they were not, trade might lead to a lowering of living standards in a country
- There are no tariffs or other trade barriers.
- There is perfect knowledge, so all buyers and sellers know where the cheapest goods can be found internationally.

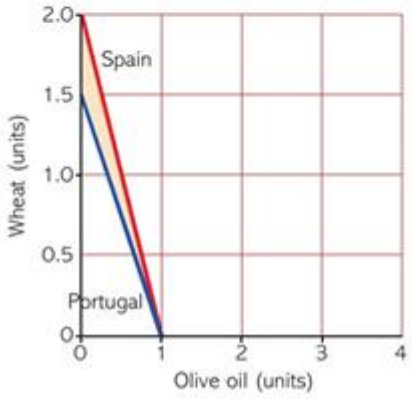
THE TERMS OF TRADE

Table 5 demonstrates that trade between Spain and Portugal can be beneficial, but the success depends on the terms of trade. The terms of trade measure the rate of exchange of one product for another. For Portugal to gain from specialization and trade, the exchange rate must be at least 1.5 units of wheat for every 1 unit of olive oil. Spain, on the other hand, will only specialize in wheat production and trade if it can exchange less than 2 units of wheat for every 1 unit of olive oil received. Trade will only be mutually beneficial if the terms of trade are between 1.5 units of wheat for 1 unit of olive oil and 2 units of wheat for every 1 unit.

FIGURE 4

The terms of trade

Spain will find it advantageous to trade only if its terms of trade are at least one unit of olive oil for every two units of wheat exported. Portugal will only trade if it can receive at least 1½ units of wheat for every 1 unit of olive oil exported. Therefore, the terms of trade between the two countries will lie somewhere in the shaded area on the graph. The opportunity cost ratios of wheat for 1 unit of olive oil are drawn for both countries. The blue line is Portugal's cost ratio and the red line is Spain's cost ratio. Portugal will only gain if the international price is to the right of its domestic line. Spain will only gain if the international price is to the left of its domestic line. Hence, trade will only be mutually beneficial if the terms of trade are somewhere between the two lines.



WHY COMPARATIVE ADVANTAGE EXISTS

David Ricardo's neo-classical price theory suggests that labor productivity is the primary factor influencing comparative costs of production. Countries with high labor productivity have a comparative advantage in producing sophisticated high technology goods, while those with low productivity have a comparative advantage in low technology goods. However, neo-classical price theory also considers factors like capital and land endowments. For example, countries with high unskilled labour but low capital may have a comparative advantage in producing goods using unskilled labor, while countries with high capital and land endowments may have a comparative advantage in producing high-tech goods. The comparative advantage for a country may change over time as factors like education quality and investment in expertise change.

THE BENEFITS OF SPECIALISATION AND TRADE

The theory of comparative advantage shows that world output can be increased if countries specialise in what they are relatively best at producing. This theory shows that all countries can potentially be better off in terms of output, provided the terms of trade lie between the opportunity cost ratios.

Economies of scale Specialisation and trade allow economies of scale to be maximised and therefore long-run average costs reduced. Economies of scale are a source of comparative advantage. Small countries can buy in

goods and services which are produced in bulk in other countries, while themselves specialising in producing and exporting goods where they have developed economies of scale.

Consumers Specialisation is likely to increase both labour and capital productivity for firms. Higher productivity reduces unit costs. Unit costs will also be minimised if firms are also benefiting from economies of scale. This will lead to lower prices for consumers, because many firms will choose to pass on these cost advantages to consumers to remain price competitive.

Economic growth Specialisation is likely to increase economic growth because specialisation increases productivity, leading to higher actual and potential growth. A fall in unit costs increases both the short-run aggregate supply curve and the long- run aggregate supply curve.

Innovation Competition provides a powerful incentive to innovate. Not only are new goods and services being put onto the market, but firms are also competing to find production methods which cut costs and improve the quality and reliability of goods. A few firms are at the cutting edge of innovation in their industries.

THE COSTS OF SPECIALISATION AND TRADE

Specialisation and trade between countries can be beneficial, but they can also have costs.

Overdependence and risk Globalisation, facilitated by increased specialisation and trade, increases economic dependency among economic agents. However, overdependence can expose countries to risks, including external shocks, trade link breakdowns, and financial instability. Smaller countries may be more vulnerable to commodity price or demand fluctuations, leading to GDP drops. Over-dependency on imports can also lead to credit crises and increased borrowing costs.

Jobs China's economy is shifting from labor-intensive manufacturing to higher tech industries and services, leading to increased unemployment. Many workers struggle to find new jobs due to lack of necessary skills. The less mobile workforce increases the likelihood of trade-induced demand reductions.

Distribution of income Trade can lead to a less equal distribution of income. If the benefits of trade go mainly to other countries, a country may find itself relatively less well off.

The environment Trade can lead to environmental degradation and unsustainable development. Demand for timber, for example, has led to large- scale deforestation in the developing world. The environmental costs of transportation should also be considered when considering the merits of trade.

Loss of sovereignty Trade leads to nation states losing sovereignty. This means they lose the ability to make decisions about matters which affect them. The loss of sovereignty may be explicit because a government signs an international treaty.

Loss of culture Trade brings foreign ideas and products to an individual country. Some argue that this leads to a loss of rich traditional native culture.

SUBJECT VOCABULARY

absolute advantage exists when a country is able to produce a good more cheaply in absolute terms than another country

comparative advantage exists when a country is able to produce a good at a lower opportunity cost than another country

opportunity cost the benefits foregone of the next best alternative

production possibility frontier a curve which shows the maximum potential level of output of one good given a level of output for another good

specialisation when nations are not self-sufficient, but concentrate on producing certain goods and services and trading the surplus with others

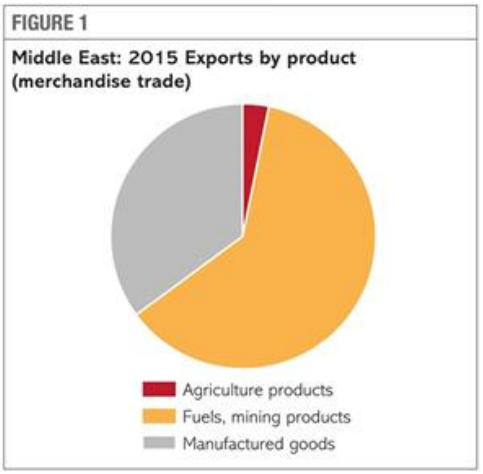
terms of trade measure the rate of exchange of one product for another when two countries trade

theory of comparative advantage states that countries will find it mutually advantageous to trade if the opportunity cost of production of goods differs

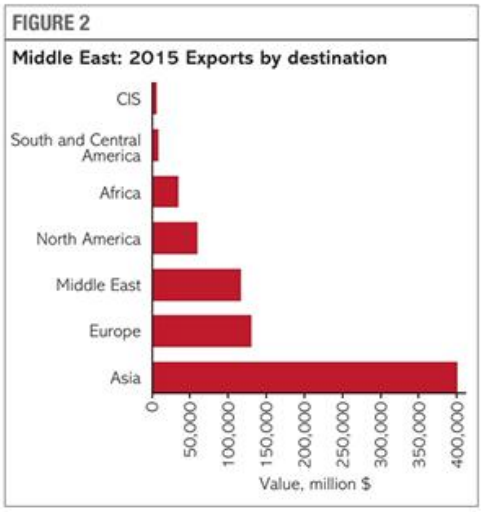
Chapter 24 – Patterns and volume of world trade

PATTERNS OF TRADE

World trade patterns involve the types of goods and services countries export and import, their trade volumes, and their respective regions. For instance, the Middle East and North America have distinct trade patterns. The Middle East exports fuels and mining products, while North America primarily exports manufactured goods. These trade patterns can vary significantly between developed and developing countries.



Tourism exports are becoming an increasing proportion of total exports for some **emerging countries** too. According to the World Trade Organization, many emerging economies experienced rapid growth of more than 10 per cent per year in commercial services exports (travel is included in this category) in 2016. For Sri Lanka, Mongolia and Nigeria this was the second or third year of rapid export growth in this sector. International tourism is an important driver of growth for many of these economies. Although these export values are still small, the positive trend may continue, so this will be reflected in changes in their **pattern of trade** over time.



There are many different factors that influence the pattern of trade between countries today and the change in this pattern of trade over time.

	Exports (£ billion)		Imports (£ billion)	
	Goods	Services	Goods	Services
1995	153.6	59.1	166.6	42.9
2016	302.1	245.4	437.5	153.0

▲ Table 1 UK exports and imports of traded goods and services

IMPACT OF EMERGING ECONOMIES

Economies today rarely stay the same size. On the whole, they grow. However, countries' economies don't grow at a uniform rate. Some are currently growing very rapidly, while others are growing very slowly. When GDP grows, the country is likely to import more goods and services than before.

Economic growth has significantly impacted international trade patterns, with emerging economies like China becoming leading exporters over the past 50 years. This growth in trade is reflected in the decline of market share by developed economies. Emerging economies have a higher economic growth rate than developed ones, disrupting existing trade patterns. This has led to changes in export compositions for developed economies, with developed economies focusing more on high tech secondary and services sectors. Global supply chains have also changed, with multinationals causing more trade flows before final production. FDI flows between countries will also affect trade patterns, with China investing in countries like Kenya and Bangladesh to take advantage of cheaper labor costs.

CHANGES IN COMPARATIVE ADVANTAGE

Comparative advantage theory suggests countries specialize in goods and services they have a comparative advantage in. For example, the UK has a comparative advantage in financial and insurance services, accounting for about 25% of total exports. Over time, this advantage has shifted towards services production and export.

Emerging economies have led developed economies to shift exports towards higher-value goods or services, as advanced economies have a comparative advantage in these areas. This has led to global vertical supply chains, where intermediate goods cross borders multiple times.

GROWTH OF TRADING BLOCS AND BILATERAL TRADING AGREEMENTS

Recent decades have seen a rapid spread of trading blocs and bilateral trade agreements, which are designed to increase trade between participating countries at the expense of other countries. Hence they change the pattern of trade in terms of geographical composition of exports and imports.

CHANGES IN RELATIVE EXCHANGE RATES

The exchange rate of one currency for another affects the relative prices of goods between countries. For example, if the value of the Japanese yen falls in relation to the US dollar, Japanese exports will become cheaper for US buyers but the price of imported goods for Japanese buyers will rise. So changes in relative exchange rates affect patterns of trade. Short term exchange rate changes have almost no impact on patterns of trade unless they are very large. It is long term changes which are sufficiently large that impact trade.

CHANGES IN PROTECTIONISM BETWEEN COUNTRIES

Restrictions on free trade impact trade flows, allowing countries to export more goods and services overseas. Joining trading blocs increases trade concentration. Protectionism can reduce trade flows, leading countries to target other markets or make new trade agreements, potentially altering trade patterns over time.

THE VOLUME OF WORLD TRADE

Trade volume has significantly increased since 1945, with an average growth of 1.5 times faster than world GDP between 1945 and 2007/08. However, the Global Financial Crisis in 2007/08 slowed trade growth, with the ratio of trade growth to world GDP growth falling to 1:1. Factors contributing to this slowdown include slow recovery from the 2008 financial crisis, reduced consumption, low aggregate demand, and a lack of business confidence, which led to a decrease in imports of capital goods.

SUBJECT VOCABULARY

bilateral trade agreement an agreement between two countries, or between a country and a trading bloc, which gives favourable trade arrangements; it reduces some barriers of trade between the two

emerging countries middle-income countries which could become high-income countries over the next 20 or 30 years

merchandise goods to be bought or sold

pattern of trade refers to composition of exports and imports and geographical distribution of trade

Chapter 25 – The terms of trade

CALCULATING THE TERMS OF TRADE

The terms of trade are defined as the ratio between average export prices and average import prices.

$$\text{index of terms of trade} = \frac{\text{index of export prices}}{\text{index of import prices}} \times 100$$

It is measured in the form of an index because it is calculated from the weighted average of thousands of different export and import prices.

FACTORS INFLUENCING THE TERMS OF TRADE

The terms of trade for a country, the ratio of average export to import prices, can change for a variety of reasons:

• **Relative inflation rates** If inflation is occurring in the economies of a country's main trading partners, then a rise in inflation relative to other countries is likely to improve the terms of trade.

• **Relative productivity rates** A rise in productivity compared to a country's main trading partners should reduce the relative price of exports as higher productivity leads to lower costs of production. Hence a relative rise in productivity could lead to a deterioration in the terms of trade.

• **Relative labour costs** A rise in labour costs compared to a country's main trading partners should increase the relative price of exports as higher costs of production will push up prices.

Hence a relative increase in labour costs is likely to improve the terms of trade.

• **The exchange rate** A change in the exchange rate will change import and export prices. For example, a rise in the exchange rate is likely to lead to a fall in the price of imported goods. The terms of trade will therefore improve.

Any factor which influences the price of imports or exports will change the terms of trade.

For example:

• **Commodity prices** Some countries are heavily dependent on exports of commodities such as oil or copper. Their terms of trade will be heavily influenced by changes in the world price of commodities. For example, a large rise in the price of oil will lead to significant rises in the terms of trade for oil-exporting countries such as Saudi Arabia and Venezuela.

• **Changing incomes** Changing incomes will also affect patterns of demand. As world incomes rise, for example, there has been an increase in demand for tourism. If this leads to a rise in prices in the tourist industry in, say, Turkey, then all other things being equal, there will be an improvement in Turkey's terms of trade.

EFFECTS OF CHANGES IN THE TERMS OF TRADE ON EXPORT REVENUES AND THE BALANCE OF TRADE

Exports are price elastic Assuming price elastic exports, a rise in export prices leads to a larger percentage fall in export quantities. Total export revenues, or export values, are equal to average prices multiplied by the volume of goods and services exported. A 10% rise in export prices results in a 30% fall in export volumes, causing a 20% decrease in export value.

Exports are price inelastic If exports are price inelastic, a rise in export prices will cause an improvement in the terms of trade and lead to a less than proportionate fall in export volumes. The value of exports will therefore rise and there will be an improvement in the balance of trade.

Imports are price elastic If imports are price elastic, a rise in import prices will cause a deterioration in the terms of trade and lead to a more than proportionate fall in import volumes. The value of imports will therefore fall and there will be an improvement in the balance of trade.

Imports are price inelastic If imports are price inelastic, a rise in import prices will cause a deterioration in the terms of trade and lead to a less than proportionate fall in import volumes. The value of imports will therefore rise and there will be a deterioration in the balance of trade.

	Elasticity	Price change	Terms of trade	Balance of trade in goods and services
Exports	Elastic	Rise	Improve	Deteriorate
		Fall	Deteriorate	Improve
	Inelastic	Rise	Improve	Improve
		Fall	Deteriorate	Deteriorate
Imports	Elastic	Rise	Deteriorate	Improve
		Fall	Improve	Deteriorate
	Inelastic	Rise	Deteriorate	Deteriorate
		Fall	Improve	Improve

▲ Table 2 The effect of a change in export and import prices on the balance of trade

EFFECTS OF CHANGES IN THE TERMS OF TRADE ON THE DOMESTIC ECONOMY

Changes in trade terms can impact the domestic economy and balance of payments. An increase in export prices can lead to a decrease in export volume, causing GDP to fall. This can lead to unemployment and lower living standards. Conversely, a fall in import prices can increase the volume of imports, making goods more competitive abroad. This shift in spending towards imported goods can lead to a loss of market share for domestic producers.

SUBJECT VOCABULARY

index of terms of trade equal to:

$$\frac{\text{index of export prices}}{\text{index of import prices}} \times 100$$

terms of trade the ratio of export prices to import prices

Chapter 26 – Trade liberalization and trading blocks

THE ROLE OF THE WORLD TRADE ORGANIZATION IN TRADE LIBERALISATION

Following World War II, protectionist policies following the Great Depression led to a collapse in trade and job losses. 23 countries signed the General Agreement on Tariffs and Trade (GATT) in 1947, limiting domestic producer protection and requiring equal terms for all member countries. GATT member countries continued negotiations to reduce tariffs and quotas, leading to the establishment of the World Trade Organization (WTO) in 1995.

TO REDUCE RESTRICTIONS ON FREE TRADE

The WTO aims to promote trade liberalization by lowering protectionist barriers. The Doha Round negotiations address agricultural goods, manufactured goods, and service markets. However, single countries can halt trade deals, leading to failures. This can be politically motivated, as a country may prevent a deal to attack another on unrelated issues.

TO MAKE SURE MEMBER COUNTRIES FOLLOW THE TRADING RULES

The World Trade Organization (WTO) enforces trade agreements and discourages unfair practices like export subsidies and dumping. Countries can file complaints against another country's competitive practices, which are resolved through negotiations. If the complaint is rejected, the winning country can impose trade sanctions, bringing the losing party back to negotiations.

TRADING BLOCS

A trading bloc is a group of countries that have signed a **regional trade agreement** to reduce or eliminate tariffs, quotas and other protectionist barriers between themselves. The number of trading blocs has increased considerably over the past 40 years.

Most trading blocs are created by **bilateral trade agreements** between two countries or existing trading blocs. A minority of trading blocs are created by **multilateral (or plurilateral) agreements** between three or more countries or trading blocs. Some countries belong to more than one trading bloc.

Trading blocs can take the form of **free trade areas, customs unions, common markets or economic unions.**

FREE-TRADE AREAS

A free trade area is where all **tariffs and quotas** are removed on trade in goods between member countries. Each member country can impose its own tariffs and quotas on imports from outside the trading bloc, allowing it to set its own trade policy. Customs controls must exist at internal borders to prevent imports from non-member countries from being sent through the member country with the lowest tariffs.

CUSTOMS UNIONS

Customs unions are where there is free trade within the trading bloc and a common external tariff on goods coming from outside the bloc. A common external tariff means member countries are not free to make their own individual trade agreements with countries outside the customs union. The customs union will act as a single body for the purpose of making any trade agreements with other countries or trading blocs.

COMMON MARKETS

Common markets are customs unions that also include the free movement of labour and capital within the area. Product standards and laws concerning free movement of goods and services are common between countries. The term 'single market' is also used to describe a common market.

ECONOMIC AND MONETARY UNIONS

Economic unions involve fully integrated economies of member countries, with fiscal union and monetary union. The EU's most important monetary union is the Economic and Monetary Union (EMU), where the euro replaced national currencies in 13 EU countries.

Governments must:

- not exceed a fiscal deficit of more than 3 per cent of GDP
- have a national debt of no more than 60 per cent of GDP.

Groups of countries, by forming trading blocs, may evolve over time so they go from fairly shallow integration, such as a free trade agreement, and move gradually towards more complete economic integration, with an economic and monetary union. Complete economic integration is when countries in a union operate in the same way as countries, departments, regions or areas in a nation state. Complete economic integration is therefore associated with political union. With complete economic integration there is a **harmonisation of economic policies.** This means there are common standards, rules and levels on everything from safety standards to tariffs, taxes and currencies.

	Tariffs on trade between countries in the agreement	Common tariffs on imports from outside the agreement area	Free factor mobility within the area	Harmonisation of economic policies
Free trade agreement	Eliminated	No	No	No
Customs union	Eliminated	Yes	No	Possible
Common market	Eliminated	Yes	Yes	Desirable
Economic union	Eliminated	Yes	Yes	Yes

▲ Table 1 Summary of types of trading blocs

SOME EXAMPLES OF TRADING BLOCS

A few trading blocs have a significant impact on world trade.

The European Union (EU) In 2018, the EU had 28 member countries and had reached this size with the accession (joining) of Croatia in 2013. It is in the process of transforming itself from a customs union to a full economic union. Four additional countries - Norway, Iceland, Switzerland and Liechtenstein - are not part of the EU but participate in the EU single market, which allows the free movement of goods, people and financial capital between countries.

North American Free Trade Agreement (NAFTA) NAFTA NAFTA, formed in 1994, is the world's largest trading bloc with three member countries, the USA, Canada, and Mexico. It covers all goods except agricultural products. Tariff barriers have led to businesses moving to Mexico for lower wages. NAFTA includes agreements on environment and labor.

The Association of Southeast Asian Nations (ASEAN) ASEAN was formed in 1992 and consists of 10 member countries from South East Asia. The ASEAN Free Trade Area (AFTA) allows each country to set its own tariffs on imports but imposes no or minimal tariffs on goods which have an ASEAN 40 per cent content value.

Union of South American Nations (UNASUR or USAN) The Union of South American Nations is a union of two South American trading blocs, the Andean Community of Nations (CAN) and Mercosur. Most South American countries belong to USAN, the aim of which is to create a single market between member countries, but little progress has been made to date on this objective.

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) The CPTPP was set up in 2018. Activity 1 provides some background on this trading bloc.

COSTS AND BENEFITS OF MEMBERSHIP OF A TRADING BLOC

TRADE CREATION AND TRADE DIVERSION

A trading bloc with tariffs on countries outside the bloc can lead to winners and losers. Trade creation occurs when a country moves from buying goods from a high-cost country to a lower-cost country, benefiting consumers. Trade diversion occurs when a country moves from buying goods from a low-cost producer to a higher-cost producer, such as the UK buying from France and Italy after entering the EU. Both trade creation and diversion can lead to increased trade between member countries.

COMPETITION, COSTS AND PRICES

A trading bloc reduces trade restrictions, increasing competition between domestic industries. Firms aim to keep costs low to remain price competitive. If a monetary union is present, it leads to lower prices for consumers, promoting price transparency. This pressures firms to be price competitive, as multinational producers can't discriminate between countries for monopoly profits.

However, large international monopolies, earning considerable abnormal profit, will have the resources to devote to research, development and investment. If they fail to develop products that satisfy consumer wants, their monopoly will be lost through the process of **creative destruction.**

ECONOMIES OF SCALE

Membership in a trading bloc offers economies of scale, as the potential market size is larger than in a national market. National companies can achieve economies of scale by accessing markets throughout the bloc, despite different consumer preferences. These economies are achieved through internal expansion or mergers, with greater potential gains as consumers' tastes become more homogeneous.

TRANSACTION COSTS

Transaction costs are extra costs involved with exchange of goods and services. With international trade, transaction costs arise if different currencies are used. When countries have their own currencies, there can be exchange rate variations. In a floating exchange rate system (where exchange rates are not fixed), for example, exporters and importers don't know what the exchange rate will be in three months' time.

MOVEMENT OF FACTORS OF PRODUCTION

In a common market or economic union, there is free movement of factors of production. This will transfer real resources from country to country. Countries in the common market which are particularly dynamic and successful are likely to attract inflows of labour and capital. Countries which have lower growth rates are likely to suffer net capital outflows and lose some of their best workers to other economies. This could increase regional differences, making the richer nations relatively even richer.

POSSIBLE CONFLICTS BETWEEN TRADING BLOCS AND THE WTO

Although the World Trade Organization permits trading blocs, as long as they lead to lower protection against outside countries than before the creation of the trading bloc, trading blocs do sometimes conflict with the objectives of the WTO.

The World Trade Organization (WTO) aims for free trade between all its members, but trading blocs only achieve free trade between countries within the bloc. This results in economic gains from specialization and losses from trade diversion, making regional trade agreements (RTAs) less successful than those involving all WTO members. Trading blocs also fail to meet the WTO's most-favored nation clause, which requires countries to offer the same terms to all WTO member countries. Conflicts between trading blocs can lead to protectionism, as countries can raise barriers against unfairly traded products. The WTO also aims to support development, but most developing countries are not members of powerful trading blocs and often face high common barriers.

SUBJECT VOCABULARY

bilateral trade agreement an agreement between two countries, or between a country and a trading bloc, which gives favourable trade arrangements; it reduces some barriers of trade between the two

common external tariff a common tariff set by a group of countries imposed on imported goods from non-member countries

common market a group of countries between which there is free trade in products and factors of production, and which imposes a common external tariff on imported goods from outside the market; product standards and laws concerning free movement of goods and services are common between countries

creative destruction a process where firms produce or create innovative new products that replace or destroy existing products in the market; for example the internet has led to a significant shift of spending from 'bricks and mortar' high street shops to online shopping

customs union a group of countries between which there is free trade in products and which imposes a common external tariff on imported goods from outside the market

economic union a group of countries where the economies of member countries are as fully integrated economically as different regions within a single country; for example, a single market will be combined with a fiscal and monetary union

fiscal union a group of countries where a central body has some powers over government borrowing, government spending and setting uniform rates of taxation in member countries

free trade area a group of countries between which there is free trade in goods and services but where member countries are allowed to set their own level of tariffs against non-member countries

harmonisation establishing common standards, rules and levels on everything from safety standards to tariffs, taxes and currencies

monetary union or currency union a group of countries which share a common currency, such as the euro

multilateral or plurilateral trade agreement a regional trade agreement between three or more countries or trading blocs

quota a physical limit on the quantity of an import

regional trade agreement an agreement between at least two countries to reduce or eliminate tariffs, quotas and other protectionist barriers between themselves

tariff a tax on imported goods which has the effect of raising the domestic price of imports and thus restricting demand for them

trade creation the switch from purchasing products from a high-cost producer to a lower-cost producer

trade diversion the switch from purchasing products from a low-cost producer to a higher-cost producer

trade liberalisation the move towards greater free trade through the removal of protectionist barriers to trade

trading bloc a group of countries that have signed an agreement to reduce or eliminate tariffs, quotas and other protectionist barriers between themselves

Chapter 27 – Restrictions on free trade

RESTRICTIONS ON FREE TRADE

According to the theory of comparative advantage, **free trade** allows output between trading nations to be maximised. However, every country uses protectionist policies to some degree. **Protectionism** is the use of economic policies to regulate trade between countries, mainly to reduce imports. However, some protectionist policies are designed to reduce or increase exports. There are many methods that can be used, including tariffs, quotas, subsidies to domestic producers, exchange rate manipulation and administrative barriers.

REASONS FOR RESTRICTIONS ON FREE TRADE

The theory of comparative advantage states that there are major welfare gains to be made from free trade in international markets.

TO PROTECT INFANT AND GERIATRIC INDUSTRIES

The infant industry argument is a long-standing argument in favor of protectionism. Infant industries are new to an economy and face higher costs than established foreign producers. They require protection in the short run to compete, and once they are large enough, tariff barriers can be removed. This argument is particularly strong for industries with a comparative advantage in the long run. Countries like Japan and South Korea have successfully developed infant industries behind high trade barriers. However, infant industries may not grow successfully behind trade barriers due to government difficulties in identifying successful winners and lack of competitive pressure.

The use of protectionism to protect **geriatric industries** is often harder to justify, except in certain cases. A geriatric industry in a country is one which is in decline, often because it cannot compete with those abroad. Wage costs differ greatly across the world and can explain why industries in some countries start to lose their competitiveness in global markets. A lack of international competitiveness might also arise if the industry has been run inefficiently.

TO PROTECT DOMESTIC INDUSTRIES AND EMPLOYMENT

Another argument is that protectionism can protect domestic industries and create or at least preserve jobs. If, for example, there is a large increase in the quantity of steel imported, domestic steel producers will see reduced orders. They will reduce production, cutting jobs and possibly closing plants. Protecting the local steel industry from foreign competition will mean that the orders, jobs and plants are preserved. Workers and domestic producers benefit.

TO PROTECT NATIONAL SECURITY

It is sometimes argued that a country needs a particular domestic industry for **national security** purposes. Both military and non-military dimensions are included, such as energy security, food security, cyber security and environmental security. In 2018, the United States imposed a 25 per cent tariff on steel and 10 per cent on aluminium imports on countries such as China and the EU members.

TO PREVENT DUMPING

Dumping can be defined in a number of ways. Broadly speaking it is the sale of goods below their cost of production, whether marginal cost, average total cost, or average variable cost. Foreign firms may sell products 'at a loss' for a variety of reasons.

• They may have produced the goods and failed to find a market for them, so they are dumped on one country in a distress sale (where an asset is sold urgently, even if this means incurring a loss).

• In the short run, a firm may have excess capacity. It will then sell at a price below average total cost so long as that price at least covers its variable cost.

• Low prices could represent a more serious long- term threat to domestic industry. A foreign producer may deliberately price at a loss to drive domestic producers out of business. Once it has achieved this, it can increase prices and enjoy monopoly profits.

TO CORRECT A DEFICIT ON THE CURRENT ACCOUNT OF THE BALANCE OF PAYMENTS

A government might attempt to use protectionism to reduce the value of imports or increase the value of exports as a means of correcting a deficit on the current account of the balance of payments.

TO RAISE REVENUE

A tariff is a tax on imported goods. It is sometimes called an import duty or a customs duty. Tariffs can be used by governments to raise tax revenue. For some developing countries tariff revenue is an important source of income for the government. This is partly because it can be relatively easy to collect, if infrastructure at ports is developed enough, compared to other taxes. Other taxes, such as income tax, will raise relatively low levels of revenue in developing countries because income per capita is very low.

TO HELP AN ECONOMY DIVERSIFY

Some small developing countries rely almost entirely on one crop, such as cocoa, bananas or sugar cane, for their economic wellbeing. These commodities are subject to large fluctuations in price on world markets. Falls in price can give rise to large falls in living standards in these economies. Diversifying, even if the newly established industries are uneconomic by world standards, could provide a valuable insurance policy against commodity price fluctuations. Trade barriers are one means of sheltering these industries from foreign competition.

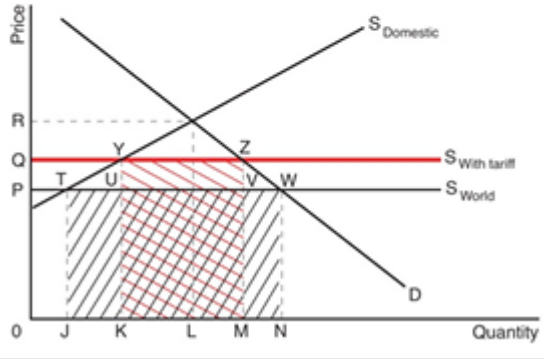
TYPES OF RESTRICTION ON FREE TRADE TARIFFS

A tariff is a tax on imported goods, often used by governments to raise revenue and finance spending. It raises the final price of a good, leading to a fall in demand and a decrease in import volume. Tariffs also help domestic producers by encouraging consumers to switch to domestically produced substitutes. For example, a UK tariff on sugar cane imports would increase demand for British-produced sugar beet. If a government imposes a tariff, the price to domestic consumers rises to OQ, leading domestic producers to expand production. Higher prices cause demand to fall to OM, resulting in lower imports and a decrease in expenditure on imports.

FIGURE 1

Tariffs

If the world price of a good is OP, a tariff of PQ will shift the supply curve upwards from S_{World} to $S_{With\ tariff}$. Domestic consumption will fall by MN while domestic production will rise by JK. Imports will fall from JN to KM.



NON-TARIFF BARRIERS

Non-tariff barriers are any restrictions on free trade, other than a tariff. Examples of non-tariffs barriers are quotas, subsidies, administrative barriers and exchange rate manipulation.

Quotas

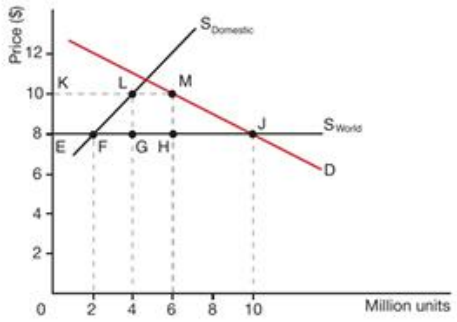
A quota is a physical limit on the quantity of a good imported. It is an example of a physical control. Imposing a limit on the quantity of goods imported into a country will increase the share of the market available for domestic producers. However, it will also raise the price of the protected product.

This is shown in Figure 2. The world supply price of a product is $8. Domestic demand shown by the demand curve D is 10 million units. Of that, two million are produced domestically. The remaining eight million are imported. Now assume that a quota of two million units is imposed on imports. Because quantity supplied is now four million units less than it would otherwise have been, price will rise to $10. Domestic production will rise to four million units. Domestic consumption is six million units. The rise in price has led to a reduction in demand of four million units. It should be noted that quotas, unlike tariffs, can lead to gains for foreign firms who export their goods to this market. It is true in Figure 2 that foreign firms have lost orders for eight million units. But those firms which have managed to retain orders have gained. They used to sell their units for $8. They can now get $10. This is a gain for them, shown on the diagram by the rectangle GLMH.

FIGURE 2

Quotas

If the world price of a good is $8, the introduction of a quota of two million units will reduce supply and raise the domestic price to $10. Domestic consumption will fall from 10 million units to six million units while domestic production will rise from two million units to four million units. Exporters of the two million units subject to the quota will make a gain. Before the imposition of the quota they could only get a price of $8 per unit. After the imposition of the quota they can charge $10 per unit.



Subsidies

Subsidies can be used both to increase exports and to reduce imports.

- Governments can provide export subsidies, either on goods that are actually exported or on products, firms, or industries where exports are a large proportion of output.
- Governments can reduce imports by giving subsidies to domestic firms that compete with imports. These subsidies are almost always indirect subsidies rather than direct subsidies on domestically produced goods that compete with imports.

Administrative barriers

There is a large number of different ways in which countries can put up administrative barriers to reduce imports or encourage exports. One common way is to impose product standards that differ from those in other countries. This raises the costs to importers because they have to adapt their products to the product standards set. Countries may simply ban imports because of a perceived problem with a product,

Exchange rate manipulation

Governments can use exchange rates as a form of protectionist policy. Lowering the exchange rate will make exports cheaper and imports more expensive. Today, most exchange rates are free floating. Governments do not target a particular value of the exchange rate of their currency. However, some governments control their exchange rates in various ways. If these controls are used to lower the value of the currency, it will increase exports and reduce imports.

IMPACT OF PROTECTIONIST POLICIES

Protectionist policies have an impact on consumers, producers, workers, governments, living standards and equality.

Consumers Protectionism tends to harm the interests of consumers. Either they are unable to buy imported goods at a lower price than goods produced domestically. Or they suffer restrictions on the range of goods being offered to them for sale. Their choice is therefore restricted. Protectionist policies also tend to raise the price of domestically produced goods. Goods and services in the supply chain of domestically produced goods may be subject to import restrictions.

Producers Domestic firms can both gain and suffer from protectionism. If their domestic markets are threatened by imports, then protectionist policies can help keep out imports. This means higher output, higher sales and higher profits. Equally, if they benefit from measures to encourage exports, then their output and profits should be higher. However, over time domestic producers could become even less internationally competitive as the incentive to innovate and produce efficiently falls.

Workers Protectionist policies are often justified as necessary to maintain jobs. If protectionist policies were not implemented, firms would shed jobs or close down altogether. This protection is a short-term gain. However, it could be argued that workers in the long term would be better off if production did close down as a result of foreign competition.

Governments - Governments tend to benefit in the short term from protectionist policies. If tariffs are imposed, they gain higher tax revenues. If jobs are protected, they don't lose the taxes paid by those workers that would have been made redundant.

Living standards Protectionism in the short term may protect living standards. However, if protectionism leads to a less efficient, slower growing economy in the long run, then there will be a negative impact on living standards.

Equality Trade unions are often in favour of protectionist policies. They want to protect their member's jobs against 'unfair competition' from abroad. Trade union membership tends to be associated with higher wages than would be the case if the firm or industry was not unionised.

FREE TRADE VS PROTECTIONISM LINK

Free trade promotes efficient resource allocation, specialization, and competition, leading to innovation and consumer choice. However, protectionist barriers can lead to a tit-for-tat response, as seen in the 1930s when countries used beggar-thy-neighbour policies to cut imports and protect industries. During the Global Financial Crisis, countries avoided introducing trade barriers, but a 2014 WTO report found that G20 countries introduced more measures to restrict trade than encourage it.

SUBJECT VOCABULARY

dumping the sale of goods at less than cost price by foreign producers in the domestic market

free trade international trade conducted without the existence of barriers to trade, such as tariffs or quotas

geriatric industry an industry which is in decline

infant industry an industry which is just starting up and in its early stages of development

national security the security of a nation state; both military and non-military dimensions, such as energy security, food security, cyber security and environmental security, are included

non-tariff barrier restriction on free trade other than a tariff

protectionism government actions or policies that restrict international trade

quota a physical limit on the quantity of an imported good

restrictions on free trade or trade barriers any measure which artificially restricts international trade

tariff or import duty or customs duty a tax on imported goods which has the effect of raising the domestic price of imports and thus restricting demand for them