International Trade

International trade is the exchange of goods and services between countries. An *import* is a Countries purchase of a good or service made overseas. An *export* is the sale of a product which has been produced in a country overseas.

Reason for international trade: A nation trades because it lacks the raw materials, climate, specialist labour, capital or technology needed to manufacture a particular good. Trade allows a greater variety of goods and services.

Theories of International trade

Comparative Advantage

Comparative advantage exists when a country has a margin of superiority in the production of a good or service i.e. where the opportunity cost of production is lower.

The basic theory of comparative advantage was developed by David Ricardo

Ricardo's theory of comparative advantage was further developed by Heckscher, Ohlin and Samuelson who argued that countries have different factor endowments of labour, land and capital inputs. Countries will specialise in and export those products which use intensively the factors of production which they are most endowed.

If each country specialises in those goods and services where they have an advantage, then total output and economic welfare can be increased (under certain assumptions). This is true even if one nation has an absolute advantage over another country.

Worked example of comparative advantage

Consider the data in the following table:

Pre-Specialisation	**CD Players**	**Personal Computers**
UK	2,000	500
Japan	4,000	2,000
Total Output	6,000	2,500

To identify which country should specialise in a particular product we need to analyse the internal **opportunity cost** for each country. For example, were the UK to shift more resources into higher output of personal computers, the opportunity cost of each extra PC is four CD players. For Japan the same decision has an opportunity cost of two CD players. Therefore, Japan has a comparative advantage in PCs.

Were Japan to reallocate resources to CD players, the opportunity cost of one extra CD player is 1/2 of a PC. For the UK the opportunity cost is 1/4 of the PC. Thus the UK has the comparative advantage in CD players.

Specialisation and potential gains from trade

After Specialisation	**CD Players**	**Personal Computers**
UK	4,000	0
Japan	2.400	2,800
Total Output	6,400	2,800

Output of both products has increased - representing a gain in economic welfare. Total output of CD players has increased by 2000 units and total output of personal computers has expanded by 500 units.

Allocating the gains from trade

For mutually beneficial trade to take place, the two nations have to agree an acceptable rate of exchange of one product for another. To work this out, consider the internal opportunity cost ratios for each country.

Without trade, the UK has to give up four CD players for each PC produced.

A terms of trade (or rate of exchange) of 3 CD players for each PC produced would be an improvement for the UK In the case of Japan (specialising in producing personal computers) for each

After trade (3 CD's for 1 PC)	**CD Players**	**Personal Computers**
UK	2,200	600
Japan	4,200	2,200
Total Output	6,400	2,800

compare with the original production matrix

Pre-Specialisation	**CD Players**	**Personal Computers**
UK	2,000	500
Japan	4,000	2,000
Total Output	6,000	2,500

After trade has taken place, total output of goods available to consumers in both countries has grown. UK's consumption of CD players has increased by 200 and they have an extra 100 PCs. For Japan, they have an extra 200 CD players and 200 PCs.

Assumptions underlying the concept of comparative advantage

- Perfect occupational mobility of factors of production - resources used in one industry can be switched into another without any loss of efficiency
- Constant returns to scale (i.e. doubling the inputs in each country leads to a doubling of total output)
  - No externalities arising from production and/or consumption
  - Transportation costs are ignored

If businesses exploit increasing returns to scale (i.e. economies of scale) when they specialise, the potential gains from trade are much greater. The idea that specialisation should lead to increasing returns is associated with economists such as Paul Romer and Paul Ormerod

What determines comparative advantage?

Comparative advantage is a **dynamic concept**. It can and does change over time. Some businesses find they have enjoyed a comparative advantage in one product for several years only to face increasing competition as rival producers from other countries enter their markets.

For a country, the following factors are important in determining the relative costs of production:

- The **quantity and quality of factors of production available** (e.g. the size and efficiency of the available labour force and the productivity of the existing stock of capital inputs). If an economy can improve the quality of its labour force and increase the stock of capital available it can expand the productive potential in industries in which it has an advantage.
- **Investment in research & development** (important in industries where patents give some firms significant market advantage)
- **Movements in the exchange rate**. An appreciation of the exchange rate can cause exports from a country to increase in price. This makes them less competitive in international markets.
- **Long-term rates of inflation** compared to other countries. For example if average inflation in Country X is 4% whilst in Country B it is 8% over a number of years, the goods and services produced by Country X will become ***relatively more expensive*** over time. This worsens their competitiveness and causes a switch in comparative advantage.
- **Import controls such as tariffs and quotas** that can be used to create an artificial comparative advantage for a country's domestic producers- although most countries agree to abide by international trade agreements.
- **Non-price competitiveness of producers** (e.g. product design, reliability, quality of after-sales support)

Absolute Advantage

It exists when a country can produce more of a product per resource unit than another country. Another way of saying this is that absolute advantage exists if a country can produce a given quantity of a good with fewer resources than other countries.

For example, assume there are only 2 countries, the UK and France. There is only 2 products, potatoes and carrots. Output is measured per resource unit.

Country	Annual Output per Resource Unit		
	Potatoes		Carrots
UK	50	or	100
France	100	or	50

If each country divides its resources equally between the 2 goods than the total output or production will be:

Potatoes		Carrots	
UK	25	or	50
France	50	or	25
Total	75	or	75

But, if each country specialised in what they are best at:

The UK is best at producing (has Absolute Advantage) carrots
France is best at producing (has Absolute Advantage) Potatoes

Free Trade

Free trade exists when there are few barriers to international trade between countries. This allows resources to be allocated without the intervention of import tariffs, quotas, and other forms of import controls. Free trade based on comparative advantage can under certain conditions lead to a rise in economic welfare. Countries can specialise in the production of goods and services in which they have a comparative advantage (lower opportunity cost). See also the World Trade Organisation

<u>Economies of Scale</u>

These occur when mass producing goods result in lower average cost. Economies of scale occur within a firm *(internal*) or within an industry (*external)*.

Internal Economies of Scale

These are economies made within a firm as a result of mass production. As the firm produces more and more goods, so average cost begin to fall because of:

- *Technical economies* made in the actual production of the good. For example, large firms can use expensive machinery, intensively.
- *Managerial economies* made in the administration of a large firm by splitting up management jobs and employing specialist accountants, salesmen, etc.
- *Financial economies* made by borrowing money at lower rates of interest than smaller firms.
- *Marketing economies* made by spreading the high cost of advertising on television and in national newspapers, across a large level of output.
- *Commercial economies* made when buying supplies in bulk and therefore gaining a larger discount.
- *Research and development economies* made when developing new and better products.

External Economies of Scale

These are economies made outside the firm as a result of its location and occur when:

- A local skilled labour force is available.
- Specialist local back-up forms can supply parts or services.
- An area has a good transport network.
- An area has an excellent reputation for producing a particular good. For example, Sheffield is associated with steel.

Internal Diseconomies of Scale

These occur when the firm has become too large and inefficient. As the firm increases production, eventually average costs begin to rise because:

- The disadvantages of the division of labour take effect
- Management becomes out of touch with the shop floor and some machinery becomes over-manned.
- Decisions are not taken quickly and there is too much form filling.
- Lack of communication in a large firm means than management tasks sometimes get done twice.
- Poor labour relations may develop in large companies.

External Diseconomies of Scale

These occur when too many firms have located in one area. Unit costs begin to rise because:

- Local labour becomes scarce and firms now have to offer higher wages to attract new workers.
- Land and factories become scarce and rents begin to rise.
- Local roads become congested and so transport costs begin to rise.

Benefits of International Trade

For Consumers

The benefits of international trade to consumers are that they can buy lower priced goods, for example if a business imports cheap products they can pass the savings on to the consumers. Also by international trade the consumers can purchase a greater variety of goods, for example you may not be able to get certain products in the UK but you can get them in America by importing them to the UK the consumers will have greater choice of products. Also the other benefit is that the consumers can buy better quality of products, for example a British watch maker might not produce high quality watches, by importing watches from Switzerland, where many famous brands of watches are made; the consumers can purchase high quality watches, without travelling to Switzerland.

For Producers

The Benefits of international trade to the consumers are that they can increase there sales, for example by exporting to other countries they can increase the number of products that the producers sell. Also by international trade the producers can increase market share, not just in the UK but now they can increase there market share worldwide. Also by international trade the producers can increase profits because selling their products worldwide.

For Countries

The benefits of international trade to the countries will be, they can produce a greater output of products, because they might be exporting more to other countries. Also by international trade the country can increase its GDP this is done by the country producing more domestic goods and exporting them to other countries. Also international trade can create many jobs, for example a business might decide to build new factories to keep up with the demand, and the factories will need employees to work in those factories. Also international trade will increase higher standards of living for the population who live in the country, by the country trading the country will make more money, which will be past on to the public.

Costs of International Trade

For Producers

The costs of international trade to producers are that infant industries may not be able to survive; this means that smaller industries may not survive because of big competition also the industry may not be suitable for the company. Also costs of expanding into foreign markets may be too this meaning that the company may not be able to afford the marketing or setting the factories. Also it can cause diseconomies of scale.

For Countries

The costs of international trade to producers are that over specialisation on a few industrial sectors could lead to instability and periods of low growth. Also unemployment may increase, if domestic industries are unable to compete with foreign competitors. Over specialisation and FDI could increase environmental degradation and threaten sustainable development. Also the other cost that the country can face are that harmful goods can be imported which may not meet British health standards.

For Consumers

The costs of international trade for consumers are, local producers can go bankrupt leading to a reduced variety of products and prices, consumers may be exploited by foreign monopolies, this means that a foreign company may be the only one who can offer the product. Also consumers may not have sufficient information on how imported products are produced, this means that some people will want to know if they are buying a product is made legally not illegally.