5.3 International Trade & Competitiveness

At the end of this a student should be able to:

- investigate and analyse patterns in Irish trade in terms of quantity and types of goods and services over a period of time;
- assess the benefits and costs of trade on the Irish economy
- describe the main components/the basic composition of Ireland's balance of payments account
- discuss the factors that determine a country's competitiveness
- explain the principle of comparative advantage and its role in determining competitiveness
- discuss the arguments in favour of international trade, trade protection and the fair trade movement
- discuss the determinants of exchange rates; analyse the effects of changes in exchange rates on the Irish economy
- examine the role and effectiveness of trade agreements and global institutions in the operation and management of international trade

An **open economy** is one that engages in international trade (imports and exports) whereas a **closed economy** does not.

Importance of International Trade

- **Greater standard of living / increased wealth**
  - Trade can increase wealth / GNI and this allows the purchase of a greater quantity of goods and services.
- **Greater choice of commodities / Commodities we are unable to produce.**
  - Trade allows us benefit from a greater variety of goods and services, than would be available without trade. We lack some essential raw materials for production and thus must import these.
    At what cost?
- **More competitive prices of goods and services.**
  - Trade results in greater competition in the market which should lead to more competitive prices for consumers.
- **Employment / Investment opportunities.**
  - Efficient production means that employment in these industries is more secure. Employment will be created in those industries which are expanding due to the benefits of trade. A healthy trading economy generates confidence in the economy and investment is thus encouraged.
- **Companies benefit from economies of large scale production**
  - With trade specialisation will take place. Companies will increase production and may benefit from **economies of scale**. These savings may be passed onto consumers in the form of lower prices and/or greater innovation.
- **Allows for the sale of surplus/ excess domestic output.**

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        - If a company is competitive then it has the opportunity to sell that output which it doesn't/can't sell domestically on the international market. The Irish domestic market is small.
        - Example of beef in Ireland
    - **More efficient use of scarce world resources.**
        - By specialising in production countries maximise their combined outputs and thus resources are allocated more efficiently, resulting in less wastage.

Competitiveness

- **Factors that affect the competitiveness of Irish Firms**
    - **Irish inflation rates v. that of competitors**
        - If the level of inflation is lower in Ireland than in the firm's export markets then the firm's goods have a price advantage.
    - **Value of the Euro v. that of other currencies**
        - If the value of the euro rises against that of other currencies then the price of that firm's exports will rise. In the recent past the euro fell against both the dollar and sterling making exports to these countries cheaper / imports from these countries dearer.
    - **Transport costs**
        - As Ireland is an island nation transport costs can be significant when exporting goods from Ireland and must be included into the final price. Transport costs are rising: toll charges; fuel prices. The rise in world oil prices has meant that Irish producers face a rising transport bill.
    - **Labour Market – Costs**
        - If labour costs in Ireland rise above that in export markets, then these additional costs must be borne by the final consumer and this increases the price of the exports. Industry representatives have stated that Ireland must limit wage increases so as to maintain international competitiveness. The introduction of the minimum wage rate has increased labour costs
        - Comparison of monthly wages across the EU based on being paid minimum wage in those countries
    - **Government policies which affect a firm's cost structure**
        - Any actions by the government or EU imposing further requirements on industry which have cost implications for firms will have the effect of making exports less competitive. Examples include increasing rates of VAT, additional regulations in the market.
    - **Costs of production**
        - Many firms have expressed concern about the cost of utilities i.e. waste disposal; water provision; insurance costs. These cost increases force prices up and this makes exports less competitive. With rising oil prices energy costs rise leading to reduced competitiveness.

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Specialisation

- Specialisation occurs when an organization/country focus all their factors of production on producing one good/service in order to exploit a comparative advantage it has in the production of the good/service

- **Importance/benefit of specialization**
  - **Greater efficiency in the allocation of scarce resources.**
    - When countries specialise in producing goods in which they have a comparative advantage, they maximise their combined output and allocate their resources more efficiently.
    - Should this be happening?
  - **Greater inter-dependence.**
    - A country which specialises is no longer self-sufficient and hence must trade for the remainder of its requirements.
    - US vs China Trade War
  - **Increased wealth, raising aggregate demand.**
    - When specialisation occurs individual countries gain thus increasing wealth and allowing it greater opportunities for engaging in trade / consumers will demand increased choice /variety of commodities.
  - **Lower costs and prices.**
    - Specialisation improves efficiency resulting in lower costs and prices. With lower prices for commodities consumers will increase their demand and this leads to more trade.
  - **Division of labour.**
    - When labour specialises skills may improve. Labour therefore becomes more mobile thus allowing for greater trade in labour.
  - **Economies of scale.**
    - Greater economies of scale may be available when producing a product for a world market that would not be available when producing for a more limited domestic market.

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The Laws of Comparative Advantage

- **The Law of Compartive Advantage states that:**
  - Each country should specialise in the production of goods that it is **relatively more efficient** at producing (can produce more efficiently than other countries) and trade for its other requirements

Example

Table 1 - Before Trade:

Country	**Commodities (Output per worker per hour)**	
	Food	**Machinery**
Country X	5 Tonnes	10 units
Country Y	20 Tonnes	30 units
Total Output	**25 Tonnes**	**40 units**

Country Y has absolute advantage (is more efficient) at producing both goods. However, in a specialised world, how do we decided which country should specialise in which product?

Table 2 - Opportunity Costs (OC):

Country	**Commodities (Output per worker per hour)**	
	Food	**Machinery**
Country X	1 tonne food: OC is 2 machines (10/5)	1 machine: OC is 0.5 tonnes of food (5/10)
Country Y	1 tonne food: OC is 1.5 machines (30/20)	1 machine: OC is 0.66 tonnes of food (20/30)

- **Who should produce food?**
  - The country that gives up 1.5 machines or the country that gives up 2 machines?
    - The country with the lower opportunity cost – country Y (1.5 vs 2)
- **Who should produce machines?**
  - The country that gives up 0.5 tonnes of food or the country that gives up 0.66 tonnes of food?
    - The country with the lower opportunity cost – country X (0.5 vs 0.66)
- In summary Country Y should specialise in producing food and trade for machinery and vice versa

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Option 1

- **Terms of Trade**
  - **Definition:** The amount of imports that can be purchased with a unit of export OR The ratio between the average price of exports and the average price of imports
- **In the above example (see table 1):**
  - 1 tonne of food is worth 2 machines (10/5) to Country X and 1.5 Machines (30/20) to Country Y
  - 1 Machine is worth ½ Tonne of Food (5/10) to Country X and 2/3 Tonne of Food (20/30) to Country Y
  - **Terms of Trade:**
    - 1 Tonne of food is worth between 1.5 and 2 machines
    - 1 Machine is worth between 0.5 and 0.66 tonnes of food

- **What "price" should the countries sell at in order to benefit from trade?**
  - So long as Country X **gets** at least 0.5 Tonne (5/10) of Food for each machine it exports, it will benefit from trade
  - So long as Country Y **gets** at least 1.5 machines (30/20), for each tonne of food it exports, it will benefit from trade

Further example available here

Option 2

- With specialisation food output has increased from 25 tonnes to 40 tonnes (a 60% increase)

Table 3 - After Specialisation:

Country	**Commodities (Output per worker per hour)**	
	Food	**Machinery**
Country X		20 units (10 x 2)
Country Y	40 Tonnes (20 x 2)	
Total Output	**40 Tonnes**	**20 units**

- Country X specialises in producing machinery and doubles its production to 20 machines, as all those who used to make food now switch to making machinery.

- Country Y specialises in producing food and doubles its production to 40 tonnes of food, as all those who used to make machinery now switch to making food.
- With specialisation machinery production has dropped from 40 units to 20 units (a 50% reduction)
- How do we prove the world is better off in terms of how it uses it resources? Is the decrease of 20 machines offset by the 15 tonne increase in world food production?
  - To figure this out we must calculate the value of food in terms of machines and vice versa

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- **Before specialisation and trade (see table 1)**
  - 1 tonne of food = 1.6 machines
    - 40 machines/25 tonnes food
  - 1 machine = 0.625 tonnes food
    - 25 tonnes of food/40 machines
- **In world terms:**
  - A decrease of 20 machines means food production should have increased by 12.5 tonnes (20 * 0.625)
    - In fact, food production has increased by 15 tonnes
  - As the 60% (15/25) increase in food production is greater than the 50% (20/40) decrease in Machinery production the world is using its resources more efficiently and is better off.

- **<u>Assumptions underlying the Law of Comparative Advantage</u>**
  - **Transport costs do not exist**
    - The LOCA assumes that transport costs do not exist. However, for an island nation like Ireland, transport costs can be a major cost factor and can act as a major barrier to trade. A firm's cost-efficiencies may be eliminated by the transport costs involved.
  - **The law of diminishing marginal returns (LDMR) does not apply**
    - The LOCA assumes that the LDMR does not apply/assumes constant returns to scale. But this law does apply. Each extra person employed will not continue to produce the same amount as the original person. A point will eventually be reached when an extra person employed will produce less additional output.
  - **Free trade takes place**
    - The LOCA assumes that free tree takes place. While this may be true within the EU, free trade is often limited where countries impose barriers to trade for economic, social or cultural, moral reasons.
  - **The complete mobility of labour/factors of production exist**
    - We have assumed that the person who becomes unemployed in each country as a result of specialisation occurring can switch to an alternative job and that there are no barriers to mobility. This is not always the case as there are barriers to the complete mobility of labour.
  - **Alternative employment is available**
    - It is assumed that people who become unemployed in one sector arising from specialisation can find alternative employment. This may not be the case. Consider countries during a recession the availability of employment is very difficult/ huge adjustment costs in the transition.
  - **An equal distribution of benefits occurs**
    - When we calculate the terms of trade we assume that both countries benefit from trade. Consider a developing country – sometimes the terms of trade may not be to its advantage. It may receive very low export prices and have to pay high import prices. Hence, their bargaining position is weak and they may not benefit from trade to the extent that developed more powerful counties do.

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- **<u>Sources of Comparative Advantage for Ireland</u>**
  - **Climate**
    - Our climate is suitable for the production of crops like potatoes, grazing for livestock.
  - **Raw Materials**
    - For example Moss Peat, blanket bogs provide the raw material which is scarce in other countries.
  - **Educated and skilled workforce**
    - Companies locate here without incurring exorbitant training costs. the workforce has developed specific skills in production/services over a period of time e.g. ICT, food production, pharmaceutical companies
  - **Low rate of CPT**
    - This means that the costs of operation may be more competitive in Ireland than in other countries.

Free Trade verses Protectionism

Free Trade: When there are no barriers to the movement of good and services between nations

Protectionism: Where a country takes measures to restrict imports entering the country.

- **<u>Arguments in Favour of Restricting Free Trade</u>**
  - **Protect indigenous firms / infant industries.**
    - Infant industries may have a difficulty competing with established industries in other countries. By protecting a newly established **company it may mature into a strong company worldwide.**
  - **Protect domestic employment.**
    - Foreign competition may result in job losses. By limiting imports jobs may be protected.
  - **Prevent 'dumping'.**
    - Barriers will stop other firms from 'dumping' and so stop their ability to undermine domestic firms, which may result in their closure.
  - **Prevent imports from 'cheap labour' economies.**
    - Companies cannot compete with those countries who gain their comparative advantage by paying their workers low wages. Competition from these countries may be considered unfair.
  - **Protect a declining industry for a period of time.**
    - In the past some industries have been protected so that their decline can be gradual thus allowing workers retrain and allowing time for sourcing replacement industries.
  - **Protect industries/firms susceptible to foreign competition.**
    - Within the EU, agriculture and fishing are seen as important industries. For this reason the EU seeks to protect these industries from external competition.
  - **Safeguard National Security.**

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- In the past Ireland imposed strict regulations governing the importation of agricultural commodities so as to protect the country from foot and mouth disease.

- **Safeguard the production of strategic goods.**
  - Countries may wish to ensure that the production of certain commodities, which it deems essential to the operation of the economy, are safeguarded from competition to provide continuity of supply.

- **<u>Methods of Restricting Free Trade (Protectionism)</u>**
  - **Tarrifs**
    - A tariff is a tax on imports. It makes the import more expensive so that consumers are encouraged to purchase home produced goods instead
  - **Quotas**
    - A limit placed on the number of goods allowed to enter the country. Again, this helps to encourage the purchase of domestically produced goods. Depending on the nature of the good, it can encourage profiteering by the importer.
  - **Embargoes**
    - A complete ban on the importing of a good, or importing goods from a particular jurisdiction.
  - **Administrative barriers**
    - Where countries place some much "red tape" on the importing of goods that importers do not bother with the inconvenience.
  - **Subsidies to exporters.**
    - Where the government intervenes to reduce the cost of production for domestically produced goods so that the indigenous firm can compete with foreign imports.

<u>Trade Agreements and Trading Blocs</u>

- **Trading Bloc**
  - An agreement between states, regions, or countries, to reduce barriers to **trade** between the participating regions.
    - **EU:** Within the EU there is free movement of goods and services. Member states cannot place tariffs on good and services purchased from other EU states
      - **The EU is a "Customs Union" meaning that there are no barriers to trade between the countries in the union, but the union also has common (unified) external tarrifs against non-**member
    - **NAFTA** (North American Free Trade Agreement): A trading bloc involving Canada, USA and Mexico
      - **NAFTA is a "Free Trade Area" meaning the countries bound by the agreement trade freely with each other but will establish their own**
- **World Trade Organisation**
  - WTO was setup in 1995 and now consists of 153 countries. The main objective of the WTO is the promotion of trade among its members

based on the principle of non-discrimination. It holds negotiations between countries and works towards the removal of trade barriers.

- Objective of the WTO
    - To promote World Trade in a manner that benefits every country;
    - To ensure that developing countries secure a better balance in the sharing of the advantages resulting from the expansion of international trade corresponding to their developmental needs
    - To demolish all hurdles to an open world trading system and usher in international economic renaissance because the world trade is an effective instrument to foster economic growth;
    - To enhance competitiveness among all trading partners so as to benefit consumers and help in global integration;
    - To increase the level of production and productivity with a view to ensuring level of employment in the world;
    - To expand and utilize world resources to the best;
    - To improve the level of living for the global population and speed up economic development of the member nations.

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Balance of International Payments

The Balance of International payments is a record of a country's monetary transitions with the rest of the world over a period of time. It deals will all inflows and outflows of funds to and from other countries. The Balance of International Payments is made up of three categories:

1. **Balance of Payments on current account** consists of trade in **goods** (Balance of Trade) and **services** (Balance of Invisible Trade), **income inflows and outflows** (Net Factor Income Abroad – profits/dividends/interest) and **current transfers** (remittances of income by immigrants and foreign aid)

    - **Balance of Trade**
        - The difference between visible exports and visible imports
            - Visible goods are goods that are tangible
            - Generally, countries seek to have more exports than imports. i.e. a trade surplus
    - **Balance of Invisible Trade**
        - The difference between invisible exports and invisible imports
            - Invisible exports are services we sell to other countries
                - Eg Ryanair selling a ticket to a foreign person
                - Or tourists staying in Irish Hotels
                - Foreign person buying insurance from an Irish company
            - Invisible imports are services we buy from other countries
                - Irish person buying a flight from British Airways
                - Irish tourists holidaying in Spain
                - Irish people attending a Coldplay gig in Dublin
    - **Net Factor Income Abroad**
        - This is the difference between incomes (profits/interest/dividends – referred to as primary income sources) earned by foreign factors of production in Ireland and sent abroad and income (profits/interest/dividends) earned by Irish factors of production abroad and returned to Ireland.
        - NFIA is negative because the profits earned by MNCs and repatriated back to their home countries exceed the profits earned by Irish MNCs located abroad and returned to Ireland and the interest payments on Irish debt held by non-residents also cause the 'Net Factor Income from Abroad' figure to be negative.
        - The net repatriation of profits and the interest repayments on the national debt to non-residents are both outflows hence GDP is consistently and considerably larger than GNI in Ireland.

    - **Current Transfers**
        - Remittances of income by immigrants and foreign aid
        - For example, a polish worker transferring money from an Irish bank account to a family member's bank account in Poland would be an outflow.
        - The Irish government granting Foreign Aid to Malawi would be an outflow

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2. **Balance of Payments on Capital Account**
   - The record of capital receipts and capital payments for a country. The inflow and outflow of items of non-recurring expenditure
     - Examples of capital receipts are:
       - An EU grant or the
       - Sale of patents and copyrights by Irish companies.
       - Investments by foreign companies/individuals in Ireland in fixed assets.
     - Examples of outflows would be:
       - The purchase of foreign assets by Irish individuals or companies.
       - Investments by Irish companies / individuals in foreign companies in fixed assets.
3. **Balance of Payments on Financial Account**

   - The **financial account** is concerned with transactions in foreign financial assets and liabilities
     - Foreign Direct Investment falls within this category
     - If Google invests money in Ireland, that is an inflow whereas if CRH invests money in a foreign country, that is an outflow

   - **Consequences of a Deficit on the Balance of Payments (Opposite is true for a surplus)**
     - **Income leakage from the economy.**
       - As imports are a leakage from the circular flow of income the multiplier is reduced in size and so national income falls.
     - **Reduction in our external reserves**.
       - If our external reserves are used to finance this deficit then we reduce our ability to make international payments.
     - **Increased foreign borrowing**
       - If borrowing is used to finance this deficit our national debt will increase placing a greater burden on taxpayers.
     - **Job losses**
       - If imports are bought in preference to domestically produced goods it may result in job losses in those domestic industries forced to rationalise.

   - **Dealing with a Deficit on the Balance of Payments**
     - **Imports can be restricted**
     - **Control Inflation**
     - **Encourage Exports**
     - **Import Substitution**

   - **How Foreign Firms operating in Ireland impact on the Balance of Payments on Current Account**
     - **Salaries / wages returned to home country**
       - These companies may bring staff / expertise from their home country. Part of the salaries earned may be returned to the home country thereby leaving Ireland.
     - **Imported raw materials / capital goods**

        - These companies will require capital goods and raw materials. Some of these may need to be imported. These are physical imports and will appear in the Current Section. **3.**
    - **Exported finished products**
        - Some foreign companies produce their commodities mainly for export. These are considered physical exports and appear in the Current Section.
    - **Repatriated profits**
        - Once profitable these companies may decide to repatriate their profits. These are considered an invisible import.
    - **Effect on the Balance of Payments – Capital Account.**
        - When the foreign firms first come to Ireland they bring with them additional capital investment. This is a long term capital inflow into Ireland.

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Exchange Rates

The exchange rate is the price of one currency in terms of another.

Factors Affecting Exchange Rates

- **Foreign Trade**
  - If businesses outside the Eurozone want to purchase goods from the Eurozone they need to purchase euros in advance. This increase demand for euros while also increasing supply of whatever currency they are exchanging to purchase euros. This will cause the euro to appreciate in value.
  - Conversely, if businesses in the Eurozone are purchasing goods from outside the Eurozone they will sell their euros to purchase the appropriate foreign currency. This increases demand for the foreign currency while also increasing the supply of euro. This will cause the euro to depreciate in value
- **Interest Rates**
  - If interest rates are high in a country, money will flow into that country so that businesses/people can get a good return on their investment. This increases the demand for the country's currency and causes the value to appreciate.
- **Level of Money Supply**
  - An increase in money supply leads to more currency in circulation which could push down the value of the currency. Central banks can put more money into circulation (quantitative easing) or purchase their currency with foreign currency reserves, depending on the policy they are pursuing
  - It also means more money is available to purchase imports. As we sell our currency to purchase imports from outside the Eurozone, we increase the supply of it and the value of the currency depreciate.
- **Role of Speculators**
  - Many large financial institutions have departments responsible for speculating on the currency markets. They buy and sell huge volumes of currency to get a return for their investors.
  - For example €1 is currently (16/4/2015) worth $1.06. Suppose an institution buys €1,000,000 worth of dollars. This would amount to $1060,000. Let's say the company gambles on the euro/dollar exchange rate changing such that €1 is worth $1.02. If the company converts the $1,060,000 back into euro ($1,060,000/1.02) they will now have €1,039,216. In essence the institution has made €39,216 from the trade or a 3.9% return on its original sum
- **Purchasing Power Parity Theory**
  - The theory states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries (taking into account the exchange rate)
  - Suppose that one U.S. Dollar (USD) is currently selling for ten Mexican Pesos (MXN) on the exchange rate market. In the United States wooden baseball bats sell for $40 while in Mexico they sell for 150 pesos. Since 1 USD = 10 MXN, then the bat costs $40 USD if we buy it in the U.S. but only 15 USD if we buy it in Mexico. Clearly there's an advantage to buying the bat in Mexico, so consumers are much better off going to Mexico to buy their bats. If consumers decide to do this, we should expect to see three things happen:
    - American consumers desire Mexico Pesos in order to buy baseball bats in Mexico. So they go to an exchange rate office and sell their

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American Dollars and buy Mexican Pesos. This will cause the Mexican Peso to become more valuable relative to the U.S. Dollar.
        - The demand for baseball bats sold in the United States decreases, so the price American retailers charge goes down.
        - The demand for baseball bats sold in Mexico increases, so the price Mexican retailers charge goes up.
    - Eventually these three factors should cause the exchange rates and the prices in the two countries to change such that we have purchasing power parity. If the U.S. Dollar declines in value to 1 USD = 8 MXN, the price of baseball bats in the United States goes down to $30 each and the price of baseball bats in Mexico goes up to 240 pesos each, we will have purchasing power parity. This is because a consumer can spend $30 in the United States for a baseball bat, or he can take his $30, exchange it for 240 pesos (since 1 USD = 8 MXN) and buy a baseball bat in Mexico and be no better off.
    - Purchasing-power parity theory tells us that price differentials between countries are not sustainable in the long run as market forces will equalize prices between countries and change exchange rates in doing so.
    - Weaknesses?
        -
        -

Impact of a declining Euro (Opposite is true of an appreciating Euro)

- **Imports from Non-Euro countries**
    - Price of imports from non-euro countries increases which results in a lower quantity demanded. This can positively impact the Balance of Payments on Current A/c
- **Exports to Non-Euro countries**
    - Price of exports to non-euro countries decreases. This will lead to an increase in exports which will positively impact the Balance of Payments on Current A/c
- **Inflationary Pressure**
    - As we are an open economy that imports many goods and services from outside the Eurozone, we are susceptible to inflation with increasing prices of imports
- **Increased employment**
    - With the lowering price of exports, and increased demand, there will be an increase in employment as more goods and services are demanded abroad.
- **Real value of money invested abroad diminishing (BoP Capital A/c)**
    - It will become more expensive to purchase non-euro assets abroad therefore capital will stay in Ireland
- **Real value of money from abroad invested in Ireland increases (BoP Capital A/c)**
    - As the euro declines in value it becomes more attractive to invest foreign money in Ireland
- **Irish borrowing abroad less attractive. (BoP Capital A/c)**
    - It becomes more expensive for Irish to borrow in a foreign currency which will reduce Irish investment abroad

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