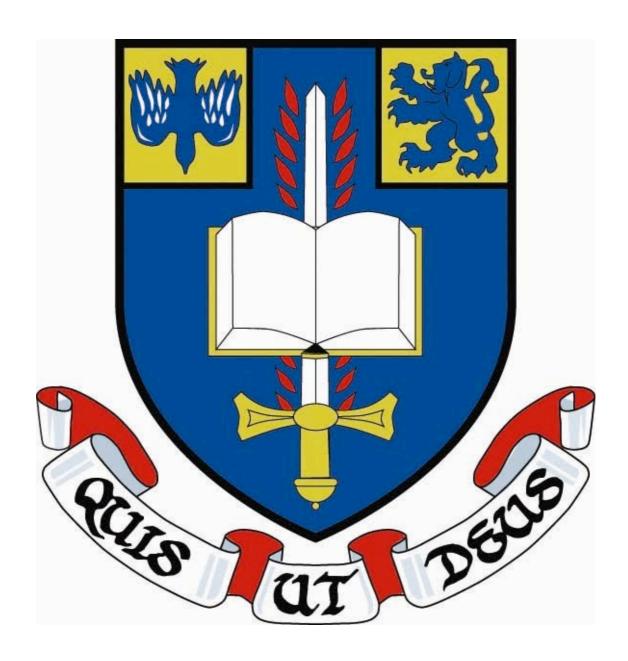
Introduction to Economics

Mr Traynor©

Economics

Note 1 • Leaving Cert • 5th Year



WHAT IS ECONOMICS: Economics is a social science in that it studies some aspect of human behaviour. It is the study of the production, distribution and consumption of goods and services by society.

NOTE: A Social Science is an academic discipline that studies some aspect of Human behaviour.

It is important to remember that, in economics, we recognize that individuals have infinite wants but have limited income. Therefore, when purchasing any good, a choice is involved. Something must be done without in order to buy something else. This act of going without is called opportunity cost.

Opportunity Cost: is the cost of foregone alternatives

E.g. when you are in school you could be out working and earning money. The opportunity cost of school is the wages you could be earning if you were not to attend.

This concept is central to the study of economics because economics studies the allocation of scarce resources, which have alternative uses. The allocation of these resources involves making a choice. With this choice we incur a cost. An opportunity cost.

Thinking Like an Economist

Economics is a way of thinking and as such we have many different tools and methods of analysis.

THE DEDUCTIVE METHOD OF ANALYSIS: This is reasoning from the general to the particular.

I.e. If a law is deemed to be generally true, then we can conclude that it will hold true in a particular case.

THE INDUCTIVE METHOD OF ANALYSIS: This is reasoning from the particular to the general.

I.e. If individual consumers lower their demand for a good as its price rises then we can make a general rule, stating that as price rises, demand falls.

From these methods of analysis, economists have found many things that hold true all over the world. We call these economic laws.

Economic Laws: Are statements that are generally true even though they do not hold true in 100% of cases.

E.g. The Law of Demand, as prices rises demand falls and as price falls demand rises. This economic law is generally true but does not hold true in 100% of cases.

Factors of Production

The Factors of Production: are those resources that are used in the production of goods and services

Put simply, the factors of production are the things that are used to make stuff.

There are four factors of production, they are

- 1) Land
- 2) Labour
- 3) Capital
- 4) Enterprise

Land: is anything provided by nature which is used in the production of goods and services

Land in economic terms is a very vast. It includes

- 1) Agricultural land
- 2) Rivers, lakes and seas. This also means fish and other things contained in these rivers, lakes and seas
- 3) Mineral wealth and natural resources
- 4) The forests
- 5) The atmosphere, weather and climate

We can subdivide land into Renewable and Non – Renewable Resources

Renewable Resources: are those resources, the supply of which can be replenished.

E.g. Water, forests, fish and soil

An increase in the use or consumption of these resources should not be of great concern as more of these resources can be made available in the future

Non - Renewable Resources: are those resources, the supply of which cannot be replenished.

E.g. Oil, coal, gas, mineral wealth

Any consumption of these goods now will mean less of them available for the future.

However, the over – exploitation of renewable resources (or their improper use) can cause them to become non – renewable resources.

E.g. Over fishing can cause these fish to become extinct.

<u>Labour:</u> is all human effort, other than enterprise, which is used in the production of goods and services

The amount of labour available in a country (the supply of labour) depends on

- 1) The Wage Rate
- 2) The Population
- 3) The Rates of Income Tax among others.

In a modern economy, the main feature of labour is its degree of specialisation.

Specialisation means that each worker concentrates on one job and in doing this, this worker develops his skills for this job and as such becomes more productive.

With each worker engaging in specialisation, each worker becomes more productive and more is produced. When more is produced, the country has more goods to buy and sell and the whole country becomes richer.

<u>Capital:</u> is anything man - made which is used in the production of goods and services

E.g. Plant and machinery, buildings, transport equipment, computers, telecommunications systems, and stocks of finished and partly finished goods.

The essential feature of capital as a factor of production is that it makes labour more efficient.

Think of a worker digging a hole with his hands (no capital)

Now think of the same worker digging a hole with a shovel (more capital)

Now think of the same worker digging a hole with a JCB (better capital)

It is the quantity and quality of capital that is used by workers that affects their productivity. The more capital that workers have and the better this capital is, the more productive each worker will be.

We can split capital into further sub categories

Fixed Capital: is the name given to the stock of Fixed Assets

E.g. Factory buildings, machinery etc.

Working Capital: includes stocks of manmade raw materials, finished and partly finished goods

E.g. Processed iron ore and goods that have not yet been completed.

Social Capital: refers to assets that are owned by society in general

E.g. Roads, Hospitals, Parks etc.

It is important to note that money itself is not considered Capital. Money is the means by which Capital can be purchased or created. A country cannot increase its output of goods and services (it is the amount of goods and services in a country which defines how rich that country is), by printing more money.

A country needs to produce more goods and services in order to have a higher standard of living for its residents.

In order to be able to produce more, a country needs to add to its capital stock. This means that each worker has more capital. When each worker has more capital, each worker becomes more productive. When each worker becomes more productive, they make more goods and services. When each worker makes more goods and services, there are more goods and services in the country. When there are more goods and services in the country the country is richer.

The name given to Capital Formation (building more commercial buildings, making more machines etc), is investment.

Investment (Capital Formation): Refers to the production or purchase of Capital goods

There are two different types of investment. Gross Investment and Net Investment. The difference between them is depreciation.

Gross Investment: is defined as the total amount of Capital created in an economy in one year

However, every year, money is spent on replacing or repairing Capital that has been damaged during the normal course of the production process. This is known as depreciation.

<u>Depreciation:</u> is the amount of capital which is used up or worn out in a given year

Gross Investment is the total amount of Capital created in a year and depreciation is the total amount of Capital which is used up in a year. The difference between these two is the net amount of Capital that has been added to the economy in a given year.

Net Investment: is the amount of extra capital that is created in an economy in a given year

Net Investment = Gross Investment - Depreciation

Enterprise: is the factor of production that generates ideas and combines the other three factors of production in order to produce goods and services. It undertakes all the inherent risks of failure in the hope of making a profit

Entrepreneur: is a person who takes a risk to make a profit by bringing together the other three factors of production to provide goods and services

Enterprise is generally considered to be the most important of all the factors of production. It is enterprise that combines the other three factors of production and produces goods and services. The more entrepreneurs in an economy, the more goods and services that exist in the economy. The more goods and services in existence, the richer the economy. If entrepreneurs did not exist, the other factors of production would lie idle.

The Consumer and Producer

Very simply put, the two most important people in economics are

- 1. The Consumer
- 2. The Producer

<u>A Consumer:</u> is an individual that buys goods and services for their own personal use

In order to try to predict consumer behaviour we make predictions about them

ASSUMPTIONS UNDERLYING CONSUMER BEHAVIOUR

- 1) <u>The Consumer has Limited Income:</u> The consumer's income is not large enough to satisfy all of his needs or wants and as such the consumer must choose between those goods that he wishes to buy.
- 2) The Consumer seeks Maximum Utility from their Income: Consumers will spend their income in such a way that they will achieve the maximum satisfaction possible from their spending.

3) The Consumer acts Rationally: The consumer acts in that manner consistent with his preferences – if a consumer prefers fruit to chocolate and they both cost the same, then a rational consumer will buy fruit. If the person sees an identical commodity priced differently in two adjoining shops s/he will act rationally and buy the commodity at the lower price.

4) The Consumer is subject to the Law of Diminishing Marginal Utility:
As consumers consume additional units of a good, eventually the
Marginal Utility gained from consuming this good will eventually
decline.

Economic goods are goods that have <u>all</u> of the following characteristics.

- 1) It must be Scarce (i.e. it must command a price): It must be scarce in relation to demand in order for people to be willing to pay money for it.
- 2) <u>It must provide Utility (satisfaction):</u> The consumer must get some form of happiness from consuming the good.
- 3) It must be Transferable: The good must be able to be passed from one person to another.

Economics Good: is a good that provides utility, is transferable and is scarce relative to the demand for it

Goods that are not economic goods

- 1) <u>Fresh air:</u> At the moment fresh air is plentiful and as such is not scarce enough to command a price.
- 2) <u>Weeds:</u> Weeds are a nuisance and as such do not provide utility, hence they are not an economic good.
- 3) **Good Health:** Good Health is not transferable from one person to another and as such is not an economic good.

UTILITY

Utility: refers to the satisfaction that the consumer gets from consuming a good or service

Utility is measured in imaginary units called utils.

Total Utility: is the entire satisfaction that a consumer receives from consuming a number of goods and/or services

Marginal Utility: is the extra satisfaction a consumer gains from consuming one extra unit of a good

The Law of Diminishing Marginal Utility (LDMU): states that as extra units of a good are consumed, eventually, the satisfaction gained from each successive unit consumed will fall.

Jonathan Traynor's Big Mac Consumption

Quantity	Total Utiltiy	Marginal Utility
0	0	-
1	10	10
2	15	5
3	17	2
4	18	1
5	18	0
6	15	-3
7	10	-5

ASSUMPTIONS UNDERLYING THE LAW OF DEMINISHING MARGINAL UTILITY (LDMU):

- 1) It only applies after a Certain Point called the Origin: The Origin is the minimum quantity of the commodity, which can be used effectively, and until this stage has been reached Marginal Utility may not diminish.
- 2) No Time has passed: If a person eats a number of oranges, each additional orange consumed will give diminished Marginal Utility. However, if a person eats one on Monday, one on Thursday and one on Sunday, due to the time which has elapsed between the consumption of each additional orange, Marginal Utility may not diminish.
- 3) <u>Income remains Constant:</u> If income rises or falls then Marginal Utility may not decline as consumption increases.
- 4) It does not apply to Addictive Goods or Medicine: In the case of goods to which one becomes addicted, the Law of Diminishing Marginal Utility does not apply. The consumer may gain increasing Marginal Utility as they consume extra units.

EXCEPTIONS TO THE LDMU:

- 1) Essential medicines: A patient on a course of antibiotics is required to finish the course of tablets, even if he feels better before finishing the course. The last tablet gives as much benefit (utility) as the first.
- 2) Addictive Goods: The Consumer's Marginal Utility may not decline as each extra unit consumed brings the consumer additional Marginal Utility. E.g. Alcohol or Cigarettes.
- 3) Goods or services where the Consumer needs to Develop a Taste for the Commodity: For certain goods, the Consumer might not like them very much at the start but might gain increasing Marginal Utility the more of the good they consume. E.g. Health Food.
- 4) Goods that give an Increased Marginal Utility: Certain goods provide increased Marginal Utility with each extra unit consumed. E.g. a Wine collection or a stamp collection.

The Law of Equi - Marginal Returns / The Equi - Marginal Principle

The Law of Equi Marginal Returns: A rational consumer will spend his income in such a way that the ratio of Marginal Utility to Price is the same for all goods concerned. Then they will enjoy maximum satisfaction

$$\frac{MU_1}{P_1} = \frac{MU_2}{P_2} = \frac{MU_n}{P_n}$$

Where:

 MU_1 = The Marginal Utility of good 1 etc

 P_1 = The price of good 1 etc

A consumer is said to be Maximizing his Utility (getting the most amount of happiness from his limited income) when he spends all his income in such a way that the ratio of Marginal Utility to Price is the same for all goods consumed.

THE PRODUCER

A Firm: is an individual unit of business which produces output and sells its product in the market

The firm is the basic unit of production that has three main aims.

- 1. To produce goods and services that consumers want.
- 2. To charge prices that consumers are willing to pay.
- 3. To organize production so that revenue from sales exceeds cost of production. I.e. To make a profit.

When you combine a group of firms that produce the same type of output you get an industry.

An Industry: is a group of firms that produce the entire output of a particular good

E.g. Ford, Toyota and Nissan are firms which produce part of the output of the motor industry.

We can also distinguish between what are called "Private Sector Firms" and "Public Sector Firms".

Private Sector Firms: are privately owned businesses that are engaged in the production of goods and services

Types of Private Sector Firms

- 1) <u>Sole Trader:</u> The business is owned by a single individual, e.g. a shopowner
- 2) <u>Partnership:</u> A minimum of 2 and a maximum of 20 individuals join together to run the business and share the profits in an agreed manner.
- 3) **Private Limited Company:** Business units owned by shareholders who have limited liability, but whose shares are not traded on the stock exchange. There must be a minimum of 1 and a maximum of 99 shareholders.
- 4) <u>Public Limited Companies (PLC's):</u> Usually large businesses with many shareholders who have limited liability and whose shares can be bought and sold on the stock exchange. There must be at least seven shareholders (there is no maximum)
- 5) <u>Co Operatives:</u> Business units where each member's profit depends on the volume of business that he/she generates within the Co operative.

<u>Public Sector Firms:</u> are the semi - state bodies which are owned by the state and which supply goods and services to customers

E.g. CIE supplies rail travel

ECONOMIC SYSTEMS

Free Enterprise (Laissez Faire): is an Economic System where the allocation of society's resources, the decisions on what goods are to be produced, how they are produced and who gets them are decided buy the interactions of individuals and entrepreneurs.

NOTE: Free Market Capitalism is another name for a Free Enterprise economic system.

ADVANTAGES OF FREE ENTERPRISE

- 1) **Choice:** Consumers with income have a wide choice of goods and services.
- 2) **Efficiency**: Incentives exist for producers to be efficient. Companies who are inefficient will be forced out by companies who have lower costs.
- 3) <u>Innovation</u>: Producers who are innovative will be rewarded through increased sales on the market.
- 4) **Economic Growth:** As all individuals are motivated by self-interest, each will strive towards their maximum efficiency and so aid economic growth.
- 5) <u>Less Bureaucracy</u>: As decisions are made by individuals within the society, the costs of a large administration to administer matters is significantly reduced.

DISADVANTAGES OF FREE ENTERPRISE

- 1) <u>Distribution of Income /Wealth Inequities:</u> Resources are allocated to those with spending power. Individuals who can't supply a factor of production have no income.
- 2) <u>Lack of Essential Public Services:</u> If an activity does not make a profit then it may not be available e.g. education, health services the government must provide these.
- 3) <u>Vital Services Should Not be in Private Hands:</u> It may be desirable to have certain services e.g. defense, judiciary, police under government control.
- 4) <u>Growth of Monopolies:</u> Some firms or groups of workers may try to gain control over individual markets.
- 5) <u>Social Costs of Commodities Ignored:</u> Producers and consumers may pollute the atmosphere and without government regulation no individual will pay the full price for a commodity.

6) <u>Unemployment / Inflation:</u> If entrepreneurs choose the lowest cost of production or are pessimistic about profitability then workers may become unemployed. If shortages occur, inflation may result.

Command Economy (Central Planning): is an economic system where the allocation of society's resources, the decisions on what goods are to be produced, how they are produced and who gets these goods are decided by the state

ADVANTAGES OF A COMMAND ECONOMY

- 1) More Even Distribution of Wealth: The government may place great emphasis on providing all citizens with a minimum standard of living e.g. subsidising essential food.
- 2) <u>Provision of Essential Services:</u> The state may provide those services to citizens which it considers vital such as health care, education, public infrastructure.
- 3) **Economies of Scale:** The large scale of production may mean that the firm benefits from economies of scale. The government may be more efficient in the provision of those commodities which require a large capital investment e.g. energy generation, roads etc.
- 4) <u>Full Employment:</u> Historically centrally planned economies were able to achieve full employment while those economies consider free enterprise suffered from unemployment.

DISADVANTAGES OF A COMMAND ECONOMY

- 1. **Shortages in Goods and Services:** Because the state may limit prices there may be excess demand and so shortages develop and the available goods may be allocated by a queuing system.
- 2. Restricted Choice / Freedom for individuals: Workers may be allocated particular jobs or in particular areas and maybe restricted in their ability to change jobs by state requirements. Consumers will have little say in what is produced and what is available may be quite restricted.
- 3. <u>Inefficiency:</u> Because there is little incentive for enterprise and innovation, individuals and firms are not encouraged to take risks, work harder or innovate.
- 4. <u>Low Economic Growth:</u> As all individuals are not motivated by self-interest this may result in reduced economic activity resulting in poor economic growth rates.

5. <u>Bureaucracy / Corruption / High Taxes:</u> With so many decisions to be made it may mean that the system becomes over bureaucratic further reducing incentives to work / or be innovative. Taxes may have to rise to fund the administration involved. Corruption may develop within society.

Mixed Economy: is an economy that incorporates elements of both central planning (government involvement) and private enterprise in its economic system.

ADVANTAGES OF A MIXED ECONOMY

- 1) **Best of Both:** Benefit from efficiency encouraged by free enterprise with regulation from central government.
- 2) Enterprise: Entrepreneurial talent is encouraged.
- 3) Fairness: Ensures a fairer distribution of wealth within the country.
- 4) <u>Importance of Government:</u> Regulation by the government is essential to limit possible abuses of the market.
- 5) **Services:** Provision of essential services may be provided by government.

DISADVANTAGES OF A MIXED ECONOMY

- 1) <u>Potential Inefficiency:</u> The government may be forced to financially support unsuccessful enterprises in the short-term which will cost the public in the long-term.
- 2) <u>Difficult Government Decisions:</u> A large public sector and private sector may be politically divisive which could affect how economic problems are solved.
- 3) <u>Burden on the Taxpayer:</u> State intervention may results in higher taxes / bureaucracy /inefficiencies.

The Irish Economy can be described as a Mixed Economy. Below are facts to support this statement.

- 1) **Existence of Social Partnership:** Allows for the involvement of the government and other social partners to set and achieve targets over a specified period of time.
- 2) Existence of Semi-State bodies & private enterprise side by side: Producing goods and supplying services in areas like transport, energy and communications.
- 3) <u>Government Departments / various Regulators:</u> Regulate economic activities through their actions e.g. the financial services regulator.
- 4) <u>Legislation:</u> Which controls the activities of all individuals / firms such as the various labour laws e.g. Minimum Wage Law / Planning Laws / Companies Acts etc.
- 5) <u>Use of taxation / government expenditure:</u> the use of fiscal policy by the government affects economic activity and can alter market outcomes.

<u>Do you think the Irish Economy is moving more towards Free Enterprise</u> or more towards Central Planning?

Arguments that it is moving more towards Free Enterprise

- 1. <u>Privatisation of State Companies:</u> Eircom, Aer Lingus, some Dublin Bus routes
- 2. <u>Public Private Partnerships:</u> Building of second level schools / hospitals
- 3. <u>De-regulation of markets / Allowing competition into the industry:</u>
 De-regulation of taxi industry; Allowing competitors into electricity generation; telecommunications networks i.e. O2, Meteor etc Allowing competitors to set up pharmacies;
- 4. Encouraging Entrepreneurship: County Enterprise Boards; changing curricula in schools; lowering PRSI and CPT etc.

Arguments that it is moving more towards Central Planning

1. <u>Increasing Legislative framework:</u> Introduction of minimum wage rate; Emergency legislation re: BUPA / QUINN health insurance;

- 2. Appointment of Regulators Establishing Tribunals of Enquiry:
 Regulator for Aviation / Financial services etc. Many tribunals of enquiry are currently examining the abuses of the free market system.
- 3. Fear of the 'Nanny State': Individuals may feel that much of our daily lives are controlled / interfered with by the state e.g. smoking laws; planning laws etc.

In this chapter we have discussed the definition of economics, opportunity cost and its importance in economics, the consumer, their underlying assumptions and desires. We discussed the producer, their aims and what affects the size of their firm.

We are about to begin in earnest our study of economic theory, but before we do we should take note of the two different types of statements that economists can make.

Positive Statements: are statements that describe the world as it is. E.g. Minimum Wage laws cause unemployment. This statement is a statement of fact not a statement of opinion

Normative Statements: are statements that attempt to prescribe the world how it should be.

E.g. The government should raise the minimum wage. This is a statement about how the world should be (at least according to this person)

Finally the study of economics is broadly divided into two main areas of study.

Microeconomics: Microeconomics is the study of the individual unit. E.g. The individual person, household, firm or market.

<u>Macroeconomics:</u> Macroeconomics is the study of the economy as a whole.