**Economics Notes**

**What is Economics?**

Economics is a study of how people allocate their limited resources to satisfy their unlimited wants.

**Glossary**

Needs: Things that are vital for survival. E.g. H20, Clothing, Shelter, Food

Want: Things that we desire but are not essential.

Land: Land is a natural resource and we use it to make money because in places like Australia there is lots of land so we use it to our advantage because our labour resource is not that strong.

Enterprise: Enterprise is a human resource that controls the labour force sector.

Labour: Labour is a human resource that we use alongside Capital resources to provide goods and services to make money.

Capital resources: Capital resources are a separate sector that is all the tools that you would need to produce needs or want.

Law of Increasing costs: The OC of increasing production of one good in an economy with scarce resources normally increases. Why? Not all resources are equally suited to producing both cars and pizzas.

Market: A market is a place where buyers and sellers can exchange goods and services.

Demand: willingness to pay

Supply: willingness to sell

**Opportunity cost**

Opportunity cost is whenever you decide to buy something it's the opportunity that you don't have anymore because you made such decision. There are two different kinds there is:

* Monetary cost is when there is money involved but it must be of equal value.
* Real cost is where there is no money involved but something is still lost.

**Scarcity**

The problem that we have that we have unlimited wants and limited resources so we must make choices to best use to the limited resources to satisfy the unlimited wants of our community.

**Microeconomics**

Microeconomics deals with the economic problem from an individual or micro point of view. It refers to a small perspective. It attempts to understand how consumers and producers make decision. It basically studies how markets and prices work to allocate resources between all competing industries.

**Macroeconomics**

Macroeconomics deals with the economic problem from the society point of view. Macroeconomics is concerned with the performance of the whole economy. It focuses on total economic activity dealing with total production, total unemployment and the overall price level.

**Positive**

Positive statements are more based on facts. When you test, and develop a theory it is more thought through.

**Normative**

Normative statements are subjective statements which reflect opinions rather than facts. A normative statement involves a value judgement - an opinion that one situation is preferable to another.

**Ceteris Paribus**

This phrase means keeps all other things constant and equal so you can focus on a specific thing.

**The Production Possibility Frontier (Curve)**

Purpose:

* Economic problem
* Opportunity cost
* Economic growth
* Unemployment

Assumptions:

* 2 types of good can be produced
* Technology fixed
* Resources are fixed

**Graph in Book**

**Simple Production Possibility Frontier**

The production Frontier shows the possible output for and economy given fixed resources and technology. The Frontier shows trade-offs, scarcity and Opportunity cost.

**Law of Increasing Opportunity**

The law of increasing opportunity is like the PPF but perhaps there is more resources or more research. The more the research and resources the further out the graph can spread.

**Three type of economy's**

* **Planned-** Planned economy is fully controlled by the government. Total control of resources and decision making.
* **Market-** free or perfect competition, the business sector runs the economy. Forces of demand and supply with no government intervention.
* **Mixed-** Mixed economy is a combination of both planned and market economy.

**Equity and Efficiency Trade Off**

Equity is what we call fairness. Efficiency brings prosperity because of this it ends up as unfairness which in turn is inequality.

**Growth and Development**

Economic Growth is simply the increase income over time or increased output. Not all growth will lead to development. Economic development is improvements in human welfare. e.g. health education and human rights. They can use the GDP to measure growth and we can use the happiness index to measure development.

**Roles of Government**

The role of the government is you control the economy to stimulate high levels of efficiency and equality.

**Threat to Sustainability**

Since we know that economics is the study of what we do with our limited resources. With these resources, we use to grow. The problem with this it is not sustainable. Sustainability is the ability to endure or continue indefinitely.

**5 Sector Model**

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**Demand Curve**

**Demand**

Demand is the quantity that households are willing to purchase at a price at a given time.

The tree fundamental questions of economics are

* What goods and services will be produced and in what quantity?
* How will the goods and services be produced in terms of production technique and types of resources?
* For whom will the goods and services be produced?

Markets are one way to coordinate economic activity- they allocate resources to resolve the economic problem. They help to allocate scarce resources to satisfy the many competing wants in an economic system.

A market is said to exist when buyers and sellers exchange goods, services or resources. A market consists or three important elements:

* Buyers (demand)
* Sellers (supply)
* Something to exchange (a good or service or resource)

**Product markets** deal with the buying and selling of goods and services. In product markets consumers represent the demand side of the market.

**Factor markets** deal in the buying and selling of factors of production or resources such as the labour market, the Capital market and the resource market. In factor market the households represent the supply side of the market.

Competitive markets consist of

* Many buyers and sellers
* Firms are price takers
* Very similar products
* Easy entry into the market

Non-competitive markets consist of

* A small number of firms
* Product differentiation
* Firms are price setters
* Entry to the market is restricted

Income Effect is the measure on how much real income you have, when your real income falls therefore you are poorer and buy less, when the price of a good falls then your real income rises and you buy more.

Substitution effect is when the price of one good goes up other goods become more attractive because they are relativity cheaper. Consumers will change to a substitute.

**Non-Price Factors**

Price of related goods

There are often similar products in the market. These are called substitutes. When prices increase for 1 product, its substitutes increase in demand and vice versa.

Complementary goods- these factors are goods that you normally by when you buy a certain good. For example, when you buy a computer a complementary good to that would be to buy a mouse. So, when the price of the computer rises then the demand for both goods will fall and vice versa.

Preferences and tastes

As new products are released, consumers always go for the new and improved products. For example, a new iPhone comes out customers will go out of their way to purchase the new phone.

Cost of credit

The interest charged on loans. If interest rates go up, people's interest payments rise, less disposable income so there will be a decrease in demand. Rise in interest rates always decrease in demand and vice versa.

Levels of disposable income

Disposable income is the income remaining after the deduction of taxes and social security charges. An increase in disposable income enables customers to be able to afford more goods, therefore, demand more.

Expectation of customers

If people expect things to change in the future, they make decisions how rather they postpone them. For example, if price goes up on petrol due to troubles in the Middle East.

Media and advertising

The more successful your advertising in the more your demand will increase. Company's use celebrities to make their product look cooler and make it more appealing to buy.

Demographic factors

Size of population have an important bearing on the pattern of demand. A growing population increases the market for your goods and services.

**Supply**

Motivation: maximise profits

Supply is the quantity producers are willing and able to sell at a price at a given time. Supply: willingness to sell. Law of supply is as prices increases quantity increases, this is a positive relationship.

TOTAL revenue is price x quantity.

**Law of supply**: “more of a good will be provided the higher it's price less will be provided the lower its price, ceteris paribus.”

**Non-price Factors affecting supply:**

**Costs of productions**

* If price Input goes up, the cost of producing the good increases.
* At each price producers need to sell the product for more money.
* An increase in price of production leads a decrease in supply.

**Expectations of firms**

* If a higher price is expected in the future, firms will decrease supply to take advantage of higher prices in the future.
* E.g. If costs of labour increases, banks would make bank tellers redundant and invest in ATMs /online banking to increase profit and save costs.

**Technology**

* Technology is knowledge about the techniques of production
* As tech improves so does production at the same price
* You can move more dirt with a truck than with a horse
* Tech advancements are usually in the capital sector

**Prices of other goods**

Price of other goods means that the product uses the resources he must produce a similar good that has been rising in price. In some cases, some producers can use the same equipment to produce similar goods. E.g. smaller cars are becoming more popular so a car producer increases the number of small cars that are made.

Equilibrium price – the price that clears the market. The price where D=S

Surplus – price is to high so S>D so there are extra goods that nobody buys. Producers must drop prices to sell excess stock.

Shortage- price is too low so S<D so there are not enough supplies to satisfy the wants of the consumers. Consumers will bid up the price.

Equilibrium – the market is in the balance. There is no tendency to change. INVISIBLE hand: price mechanism at work.

**Changes in Market Equilibrium**

There are four main reasons why the market equilibrium might change they are:

**An increase in demand:**

An increase in demand will raise prices and rise sales in a market. When there is more demand for a product then there will need to be more supplied. In this case prices will rise to a higher equilibrium.

**A decrease in demand**

If there is a decrease in demand it will shift the curve to the left and push down the equilibrium price and quantity. When you see, prices falling and quantities falling in the market then there is a decrease in demand.

**An increase in supply**

A change in production cost or technology can shift the curve. If you can produce more for the same price, then it will shift the curve to the right. When you see prices and quantities falling in a market you can safely say that the supply has increased.

**A decrease in supply**

An increase in prices of production can shift the curve to the left. Then you would be able to make less goods with the same price, this will move the equilibrium. If you see prices going up and quantity sold falling, then the supply is decreased.

**Predicting market changes**

|  |  |  |
| --- | --- | --- |
| Type of shift  | Effect on price  | Effect on quantity  |
| Increase in demand and supply  | Intermediate | Increase  |
| Increase in demand and decrease in supply  | Increase | Intermediate |
| Decrease in demand and an increase in supply  | Decrease  | Intermediate |
| Decrease in demand and increase in supply  | Intermediate | Decrease  |

**Law of Demand:** More of a good will be bought the lower its price, less will be bought the higher its price, ceteris paribus.

**Elasticity**

Elasticity is a measure of how sensitive quantity demanded is to a change in the product price.

 **Elasticity = %change of quantity demanded/ %change of price**

 **Ed=ΔQ/Q x P/ΔP**

**Price elasticity**

Price elasticity of demand is an important concept because of its link with the concepts of total revenue. TOTAL revenue is simply calculated by using the following formula:

 **Price x Quantity = TOTAL Revenue**

**The relationship between Price elasticity of demand and total revenue**

* When D is elastic, Price and TR revenue move in opposite directions
* When D is inelastic, Price and TR revenue move in the same direction
* When D is unitary elastic, a change in P does not change TR

**Price Discrimination**

The concept of charging different ages or gender categories different prices is a form of price discrimination. This happens because different age or gender groups have different elasticity. For example, charging females more for the same haircut makes can get at a lower price.

**Factors Affecting price elasticity of demand**

* **The availability of substitutes,** the closer substitutes a good has the more prices elastic it's demand
* **Whether the good is a necessity or a luxury,** we would expect to find that necessity type goods will be more price inelastic than luxury type goods such as jewellery.
* **The portion of income spent,** expensive goods are likely to be relatively price elastic because they take up a larger portion of a consumer’s income or budget. Cheaper items will be relatively price inelastic.
* **Time,** if consumers have time to respond to a price change, then the demand will be more price elastic. In the very short run, demand for most commodities will be relatively inelastic because consumers do not have time to adjust.

**Price elasticity of supply**

Price elasticity of supply measures the responsiveness of quantity supplied to a change in price. To calculate it we use the same formula a price elasticity of demand but use quantity supplied rather that quantity demanded.

 **Elasticity = %change of quantity supplied/ %change of price**

 **Ed=ΔQ/Q x P/ΔP**

**Determinate’s of supply elasticity**

Several influences determine the ability of producers to respond to change in prices, these include:

* **Time**, if the producer can respond quickly to a price change then supply will be price elastic. If the produced cannot respond quickly then then it will be price inelastic.
* **Nature of the industry,** the supply of agriculture products tends to be relatively price inelastic, while supply of manufactured goods is more price elastic. Products that take a long time to harvest or make are price inelastic but if the producer can change quickly it tends to be price elastic.

**Cross elasticity of demand**

This measures the responsiveness of the demand for one good to a change in the price of a related good. Cross elasticity can reveal if a good is a complementary or substitute good.

The formula for cross elasticity is:

 **% Change in Quantity of good (a) / % Change in Quantity of good (b)**

Substitute commodities will have a positive cross elasticity and complementary goods will have a negative cross elasticity.

**Applications of Price elasticity**

The concept of price elasticity is very important in explaining how markets operate and how consumers and producers will respond to changes in demand and supply.

**Taxes and Elasticity**

Governments tend to tax inelastic products such as petrol and cigarettes. The taxes fund to provide community goods and services, they can also help to raise revenue.

* GST is the goods and services tax, broad based consumption tax flat rate at 10%
* Excise Duty e.g. petrol, tobacco, alcohol

**Market Efficiency**

A competitive market is a result of thousands of individual buyers and sellers interacting with each-other. Demand reflects the intentions of buyers and supply reflects the intentions of sellers. The competitive market establishes an equilibrium price and quantity when demand equals supply.

Efficiency means producing the goods that society wants at the lowest cost possible. And efficient outcome means that it is not possible to make some one better off with our making someone else worse.

**Demand and Marginal Benefits**

The demand curve is a way to measure the benefits consumers derive from markets. A demand curve is willingness to pay curve. It shows the maximum the consumer is willing to pay for a certain good. Consumer surplus is the measure of the economic wellbeing of the consumers if you pay less than you are prepared to pay that is consumer surplus.

**Supply and Marginal Benefits**

The supply cure represents the minimum price that the producers are willing to sell their products for. The supply curve can be thought of as a willingness to revive curve. The minimum price represents the producers cost of production. The curve can also be called the marginal cost curve.

Producer surplus is the area below the price line and above the supply curve. Producer surplus is also a very useful concept because it is an economic measure of wellbeing for producers. As a producer, you are always willing to make more profit.

**TOTAL Surplus**

Consumer and producer surplus can vary between consumers and producers. TOTAL surplus is a measure of the net benefits to society from the production consumption of the good, total surplus is the sum of consumer and producer surplus. It is the measure of net benefits society receives after considering the cost of resources.

 **TOTAL Surplus = Consumer Surplus + Producer Surplus**

 **TOTAL Surplus = Total Benefits – TOTAL Costs**

**Price Ceiling**

A maximum legal price for the market

Aim to protect consumers

A maximum price for a good established by the government at a level below the free market equilibrium.

**Price Floors**

A price floor is a legislated minimum price that sellers can charge for their product in the market. Producers may have lobbied the government to increase market price so a price floor might be set. It Is aimed at protecting the producers.



**Dead Weight Loss**

When total surplus is reduced because of either under or overproduction, it is referred as dead weight loss.

**The Tragedy of the Commons**

Theory: people behave in their own self-interest.

* Stewardship and guardians for future generations.
* Seek knowledge to solve problems and thrift (save for a rainy day)
* Rewards system to reward correct behaviour. Remove incentives to (over consumption)

**Monopoly Power**

Monopoly power refers to the power a certain company has when it dominates the market. These often occur in non-competitive markets because there is very few firms and entry to the market is restricted. This also means the firms are the price setters because they have market power. Monopolies are when one company rules the market and has all the market power, an example for a monopoly would be water corporation.

**Government Restrictions**

There are a couple ways the government can control different markets by putting restrictions on the market. One example is the taxi market in Perth is that the government has put restrictions on the taxi licence making the licences extremely expensive.

**Inefficiency and Taxes Subsidy’s**

Governments levy taxes on goods and services to raise revenue for government spending programs. The market is always less efficient after a tax because the incidence of the tax will be shared between the buyer and the seller. Consumers are worse off because they pay more and consume less and producers are also worse off because they receive a lower price and supply less quantity.

Governments also pay subsidies to different groups of society. A subsidy is a grant paid to a producer with a purpose of reducing the costs and increasing output. Consumers are clearly better off as they pay less and consume more – consumer surplus increases. Producers are also better off because they receive a higher price and sell more pizzas. The subsidy is efficient but what we don’t realise the total money paid by the government is greater than the total surplus creating a deadweight loss.

**Equity**

Horizontal equity is an economic theory that states that individuals with similar income and assets should pay the same amount in taxes. Horizontal equity should apply to individuals considered equal regardless of the tax system in place.

Vertical equity is a method of collecting income tax in which the taxes paid increase with the amount of earned income. The driving principle behind vertical equity is the notion that those who are more able to pay taxes should contribute more than those who are not.