

April 1, 2023

# **Edexcel IGCSE Economics**

**Dhairya Shah**

# Contents

1 Preface .....	3
2 Brief Overview of the Course .....	3
2.1 Assessment Objectives .....	3
2.1.1 AO1 .....	3
2.1.2 AO2 .....	3
2.1.3 AO3 .....	3
2.1.4 AO4 .....	3
3 Microeconomics .....	4
3.1 The Economic Problem: Scarcity .....	4
3.1.1 Economic Growth .....	4
3.1.2 Economic Assumptions .....	5
3.2 Demand and Supply .....	6
3.2.1 Demand .....	6
3.2.1.1 Factors affecting Demand .....	6
3.2.1.2 Price Elasticity of Demand .....	7
3.2.1.3 Income Elasticity of Demand .....	8
3.2.1.4 Cross Elasticity of Demand .....	8
3.2.2 Supply .....	9
3.2.2.1 Non-price Determinants of Supply .....	9
3.2.2.2 Price Elasticity of Supply .....	10
3.2.3 Markets .....	11
3.3 The Price Mechanism .....	11
3.4 Economies .....	12
3.4.1 Mixed Economies .....	12
3.4.1.1 Private Sector .....	12
3.4.1.2 Public Sector .....	12
3.4.1.3 Privatization .....	13
3.4.2 Market Failure .....	14
3.4.2.1 Externalities .....	14
3.4.3 Production .....	14
3.4.3.1 Productivity .....	15
3.4.3.2 Division of Labour .....	15
3.4.3.3 Economies of scales .....	16
3.4.3.4 Competition .....	17
3.4.3.5 Large firms VS Small firms .....	19
4 Macroeconomics .....	19
5 Glossary .....	20

# 1 Preface

This is a revision guide made for the IGCSE Economics course. It is not made to be used on its own, but rather to promote understanding and help condense and compress key information in the course. This allows for a more efficient revision process, and helps students make connections between topics efficiently. This greatly helps for the extended response questions.

I hope you enjoy reading this and make good use of the revision notes.

## 2 Brief Overview of the Course

The IGCSE Economics course is split into 2 sections, each of the sections having their own exam paper, Macroeconomics and Microeconomics.

Macroeconomics focuses on the economy as a whole, whereas Microeconomics focuses on the individual parts of the economy like households and firms.

Both papers are 80 marks in 90 minutes and are under codes 04/EC01 and 04/EC02 for micro and macro respectively.

### 2.1 Assessment Objectives

There are 4 assessment objectives that make up the papers.

#### 2.1.1 AO1

recall, select and communicate knowledge of economic terms, concepts and issue.

Paper 1 - 7.5% , Paper 2 - 7.5% and 14-15% of the total grade.

#### 2.1.2 AO2

Demonstrate knowledge and understanding by using appropriate terms, concepts, and theories and calculations effectively in specific contexts.

Paper 1 - 24.4% , Paper 2 - 24.4% and 48-49% of the total grade.

#### 2.1.3 AO3

Select, organize and interpret information from sources to investigate and analyse economic issues.

Paper 1 - 11.8% , Paper 2 - 11.8% and 23-24% of the total grade.

#### 2.1.4 AO4

Evaluate economic information to make reasoned judgements and draw conclusions Paper 1 - 6.3% , Paper 2 - 6.3% and 12-13% of the total grade.

## 3 Microeconomics

### 3.1 The Economic Problem: Scarcity

“There is a *finite* amount of resources and an *infinite* amount of wants.”

Meaning, the **demand** for economic goods is higher than the **supply**.

This is the basic **economic problem**, which leads to 3 questions:

1. What to produce? (not all goods and services can be produced)
2. How to produce? (different production methods)
3. For whom to produce? (different groups of people who need it, how much they should get)

This requires **decision makers** to make a choice. This is called **opportunity cost**.

Decision makers are:

1. **Governments**
2. **Producers**
3. **Consumers**

The **opportunity cost** is the cost of giving up *the next best alternative* when a choice is made.

Choosing what goods to produce is an opportunity cost, This can be illustrated using a PPC (Production Possibility Curve).

The PPC shows the maximum amount of goods that can be produced with the available resources. It often shows the relationship between two goods.

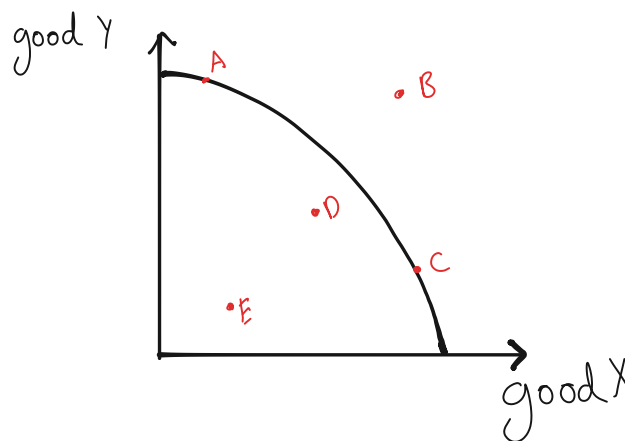


Figure 1: A production possibility curve illustrating the relationship between the production of a good X and Y.

1. Point B is unachievable (due to a lack of resources)
2. Point E & D are inefficient (waste of resources)
3. Point A & C are efficient (maximizing output with the resources available)

#### 3.1.1 Economic Growth

The increased production of goods and services in an economy over a period of time, or GDP.

Factors that affect economic growth:

1. **Population growth** - more people = more demand
2. **Labour productivity** - more output per worker
3. **Capital productivity** - more output per unit of capital
4. **Technological change** - new technology = more output

## 5. **Natural resources** - more resources = more output

Economic Growth influences the PPC, as it shifts it outwards (increase in production).

### 3.1.2 **Economic Assumptions**

Economists make assumptions about the economy to make it easier to analyse and understand. Economists assume that individuals will behave rationally:

1. Consumers aim to maximize benefits or util.
2. Producers aim to maximize profits.

However, there are reasons why this may not be true:

1. For consumers:
  1. **Information asymmetry** - consumers may not have all the information
  2. **Moral hazard** - consumers may not be able to control their spending, (addictions)
  3. **bandwagon effect** - consumers may copy other consumers behaviour
2. For producers:
  1. **Social enterprise** - producers may not be motivated by profit
  2. Performance may be influenced by other aims like selling more goods
  3. Producer has alternative business objectives.

## 3.2 Demand and Supply

### 3.2.1 Demand

“The amount of an economic good that would be bought at a certain price point.”

Demand and **price** are *inversely proportional*. This means that as the price of a good **increases**, the demand for it **decreases** (typically). So, a change in price results in movement along the demand curve.

The demand curve illustrates this relationship as a line. The demand curve is *downward sloping* and is denoted with a capital D.

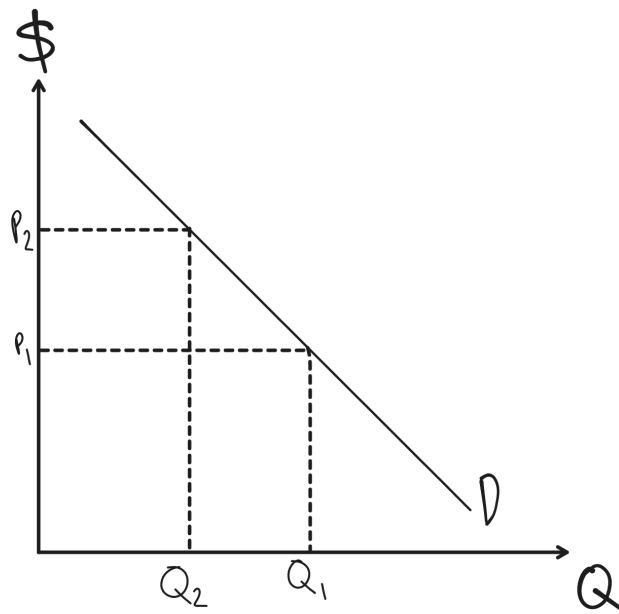


Figure 2: A demand curve showing the relationship between price and quantity demanded at different price points.

#### 3.2.1.1 Factors affecting Demand

The demand curve is affected by 6 non-price factors:

1. **Fashion & Taste** - (proportional)
2. **Disposable Income** - if average income increases, demand increases (proportional)
3. **Price of Complementary goods** - if price of complementary goods increase, demand for the good decreases (inversely proportional)
4. **Price of Substitute goods** - if price of substitute goods increase, demand for the good increases (proportional)
5. **Advertising** - if advertising increases, demand increases (proportional)
6. **Demographics** - if there is a larger demographic that a product targets, demand increases (proportional)

These factors cause shifts in the demand curve -

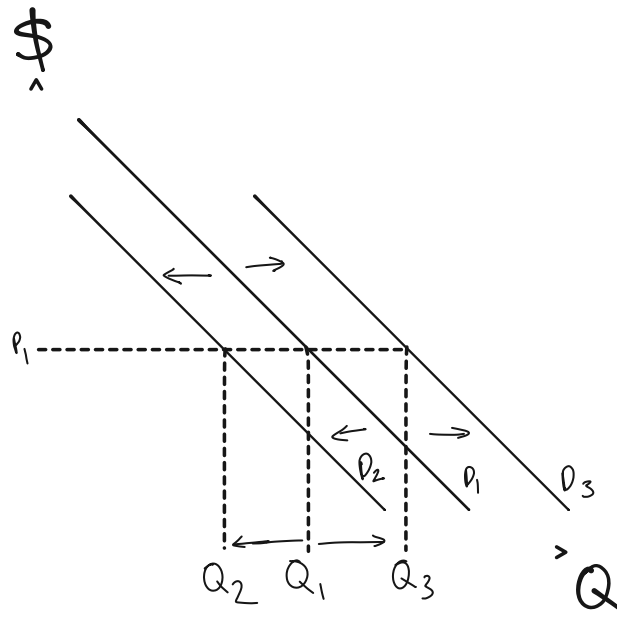


Figure 3: When demand shifts to the left, quantity falls. When demand shifts to the right, quantity rises.

### 3.2.1.2 Price Elasticity of Demand

The **price elasticity of demand** is the responsiveness of demand to a change in price. It is measured by the percentage change in quantity demanded divided by the percentage change in price.

Note: Price elasticity of demand is *always* a *negative* number.

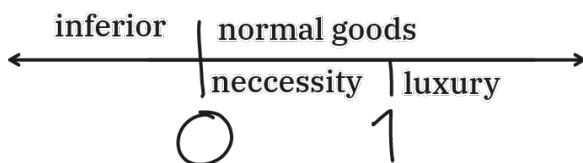
PED is equal to the change in quantity of demand over the change in price. This is also the gradient of the curve.

$$P = \frac{\Delta D\%}{\Delta P\%}$$

For the absolute values of PED:

value	description
$x = 0$	fixed demand
$0 < x < 1$	inelastic
$x = 1$	unit elastic
$x > 1$	elastic
$x = \infty$	perfectly elastic

The categories of goods depending on their PED.



In relation to revenue:

- with a lower PED (inelastic), it is lucrative to increase the price as it increases total revenue.
- with a higher PED (elastic), it is lucrative to decrease the price as it increase total revenue.

#### 3.2.1.2.1.1 Factors of PED:

1. **Substitutes** - if there are many substitutes, PED is higher (proportional)
2. **Necessities** - if the good is a necessity, PED is lower (inversely proportional)
3. **Time** - The longer it takes for a consumer to change products, the higher the PED (proportional)
4. **Proportion of Income** - The higher the proportion of income spent on a good, the higher the PED (proportional)
5. **Utility** - The higher the util value of a good, the higher the PED (proportional)
6. **Additivity** - The more addictive a good is, the higher the PED (proportional)

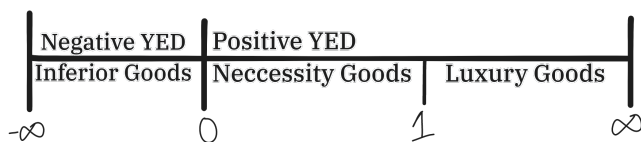
#### 3.2.1.2.1.2 Applications of PED

#### 3.2.1.3 Income Elasticity of Demand

The responsiveness of quantity demanded to a change in disposable income. The formula for YED is the same as PED, but with income instead of price. (It is not IED as IED stands for something different)

YED is equal to the change in quantity demand over the change in income.  $\frac{\% \Delta D}{\% \Delta I}$

#### 3.2.1.3.1.1 Determinants of YED



#### 3.2.1.3.1.2 Applications of YED

1. YED, Producers and the Economic Cycle.
  - Economic growth -> Rise in income -> Demand for goods with high YED increases.
  - Recession -> Fall in income -> Demand for goods with low YED increases.
2. YED and the Economy
  - High YED for services
  - Medium YED for manufactured goods
  - Low YED for primary commodities

#### 3.2.1.4 Cross Elasticity of Demand

Cross elasticity of demand (XED) illustrates the elasticity of a change in price for a good X compared to the change in demand for a good Y. It is measured by the percentage change in quantity demanded for good X divided by the percentage change in price of good Y.

XED is equal to the change in quantity demand for good X over the change in price of good Y.  $\frac{\% \Delta D_X}{\% \Delta P_Y}$

#### 3.2.1.4.1 Determinants of XED

- If XED is positive, the goods are substitutes
- If XED is negative, the goods are complements

#### 3.2.1.4.2 Applications of XED

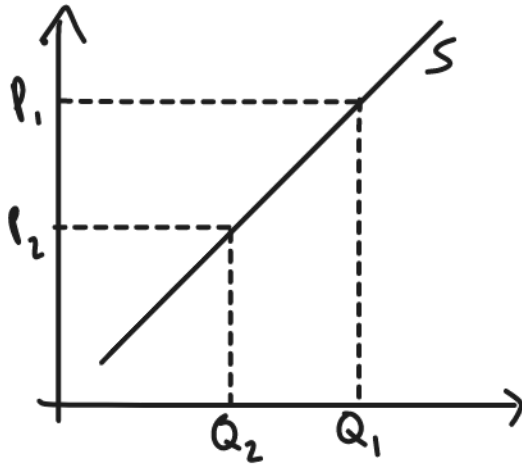
- Similar products
- Rival firms
- Mergers between firms
- Complementary goods



### 3.2.2 Supply

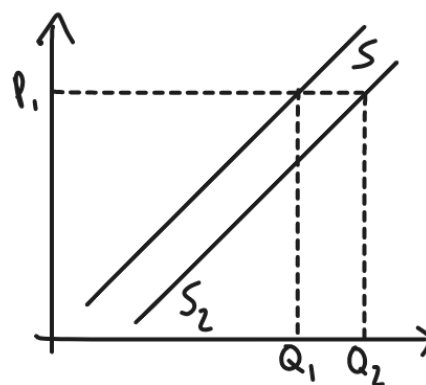
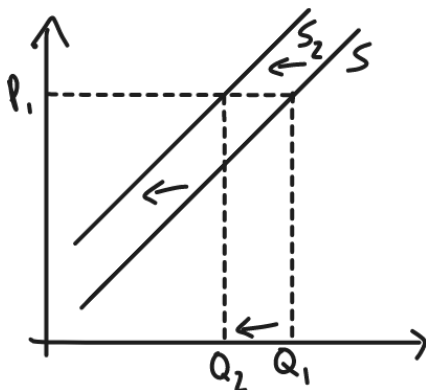
“The amount of an economic good that can be produced at a certain price point.”

Supply and **price** are *directly proportional*. This means that as the price of a good **increases**, the supply for it **increases** (typically). So a change in price results in movement along the supply curve.



#### 3.2.2.1 Non-price Determinants of Supply

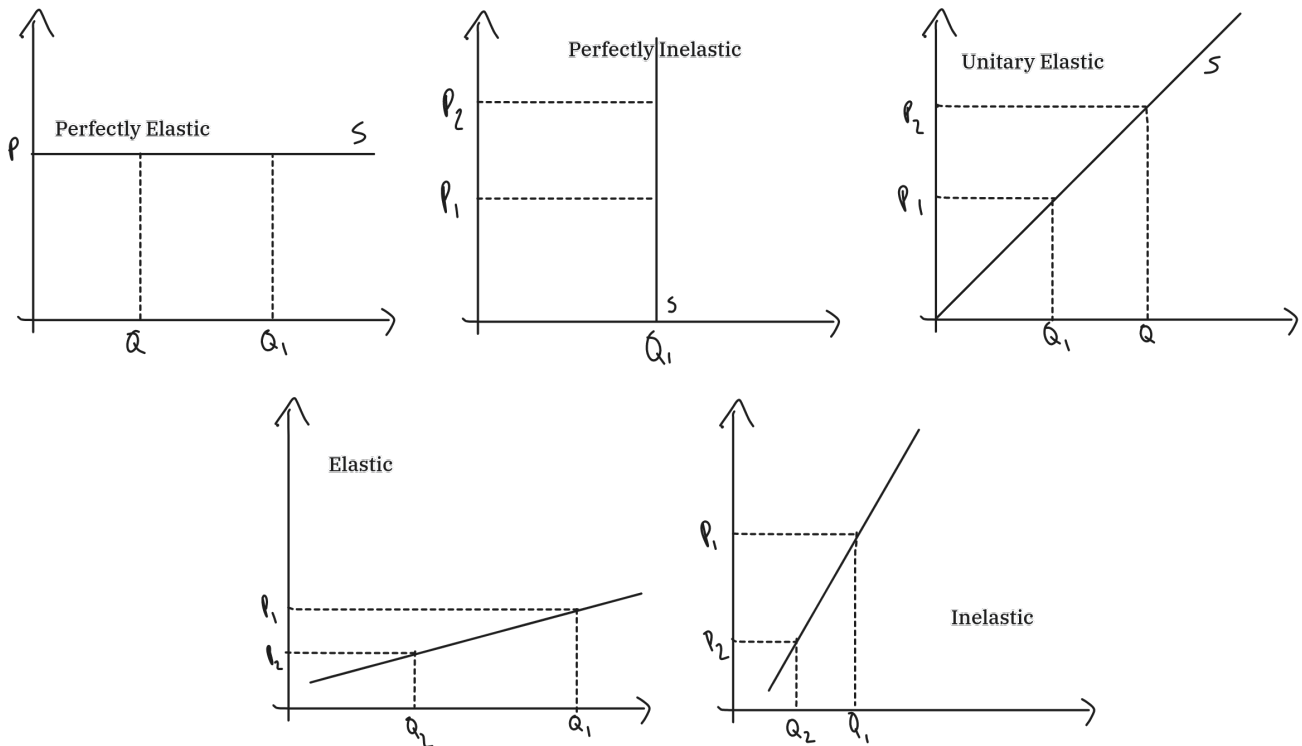
1. Cost of production - A higher cost of production means that less can be produced (inversely proportional)
2. technology - Better technology means that more can be produced at a lower cost (proportional)
3. Indirect taxes - if indirect taxes increase, supply decreases (inversely proportional)
4. Subsidies - if subsidies increase, supply increases (proportional)
5. Natural factors - natural factors can lower supply (inversely proportional)
6. Price of related goods
  - Joint supply - if supply of a joint good increases, supply of the good increases (proportional)
  - Competitive supply - if supply of a competitive good increases, supply of the good decreases (inversely proportional)
7. Number of producers - if the number of producers increases, supply increases (proportional)
8. Expectations at firms - goods may be withheld if prices are expected to rise



### 3.2.2.2 Price Elasticity of Supply

A measure of the responsiveness of supply to a change in price. (**PES**)

$$PES = \frac{\% \Delta S}{\% \Delta P}$$



#### 3.2.2.2.1 Non-price factors of PES

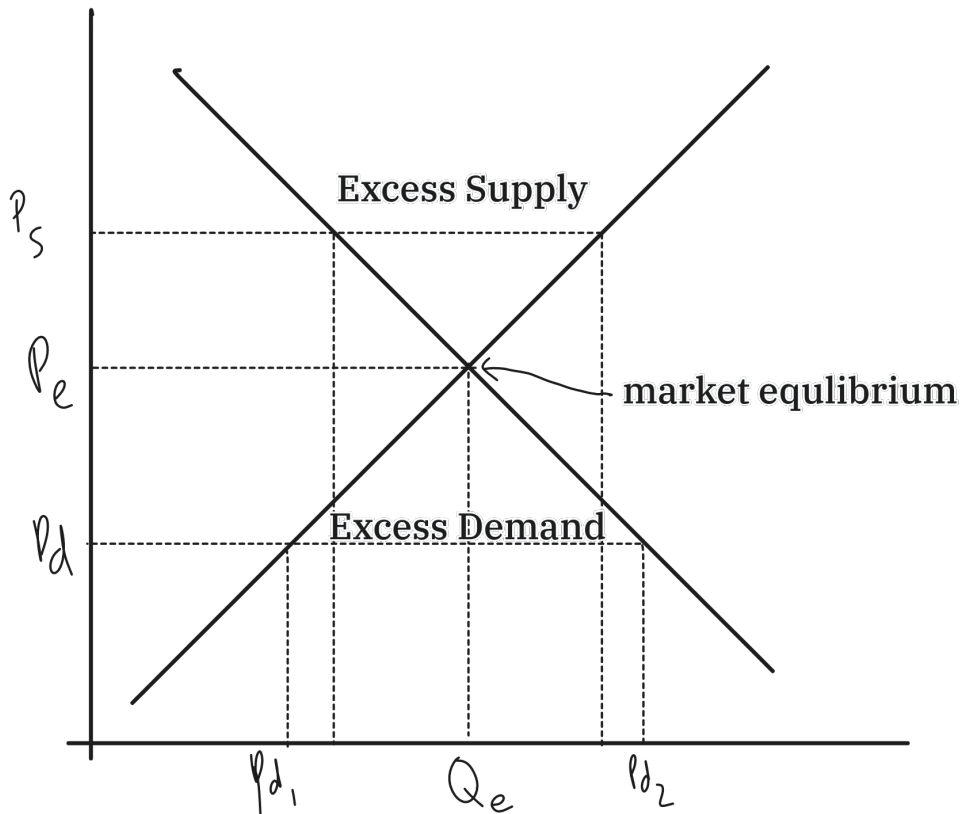
- Time - the longer it takes to produce a good, the higher the PES (**proportional**)
- Mobility of factors of production - the more mobile the factors of production, the higher the PES (**proportional**)
- Wasted capacity - the more capacity wasted, the lower the PES (**proportional**)
- Shelf Life - the longer the shelf life, the higher the PES (**proportional**)

#### 3.2.2.2.2 Applications of PES

1. Primary commodities have lower PES than manufactured goods because
  - Time to respond is higher
  - Low mobility
  - Limited land
  - Time is required to make investments for oil, gas and mineral production
  - Better irrigation systems are needed for cultivation of crops.

### 3.2.3 Markets

“the long awaited crossover of demand and supply”



The **market equilibrium** is where the *quantity supplied* is equal to *quantity demanded*.

This equilibrium is reached by a **price mechanism** / **forces**.

- **Excess Supply:**  $Q_s - Q_d$ . When the quantity supplied exceeds the quantity demanded, the price falls until the quantity supplied is equal to the quantity demanded.
- **Excess Demand:**  $Q_d - Q_s$ . When the quantity demanded exceeds the quantity supplied, the price rises until the quantity supplied is equal to the quantity demanded.

When describing changes in equilibrium, keep in mind:

- Which curve it affects?
- Which curve replaces the other?
- What factors caused it to shift?
- What is the new equilibrium?
- What is the movement in the other curve?

### 3.3 The Price Mechanism

also known as the **invisible hand**, **market mechanism**, **forces of supply and demand**, **market forces** or **resource allocation**. It is the process by which the price of a good is determined by the interaction of supply and demand. This occurs mostly in **free markets**

The condition of scarcity of resources and infinite wants forces decision makers to make decisions like:

- What to produce? (which point on the PPC)
- How to produce? (which combination and amount of resources)

There are two functions that makes up the price mechanism:

- The signalling function
  - Prices communicate information to decision makers about whether to leave or enter markets.
- The incentive function
  - Prices motivate decision makers to respond to the information.

### 3.4 Economies

An economy is a system that attempts to solve the economic problem.

There are 3 major types of economies:

1. The free market
  - Entities have complete freedom.
  - Economic goods are determined by market forces
2. The mixed economy
  - Use both free and command economy ideology
  - Some government intervention to prevent market failure.
3. The command economy
  - Government makes all decisions
  - Can be rather inefficient due to lack of information.

#### 3.4.1 Mixed Economies

The main focus of this course is on mixed economies. This is because they are the most common type of economy in the world.

It is made up of two different sectors, the private sector and the public sector.

Public goods have two characteristics.

- Non-excludable
  - Once the good is in the market, no consumer can be prevented or excluded from the consumption of the good.
- Non-rivalrous
  - Consumption of a product doesn't deplete the amount for others.

These two characteristics lead to the **free rider problem**. A free rider is someone who consumes a public good without paying for it. This leads to a situation where the public sector is unable to recover the costs of producing the good.

Private goods do not face these issues.

##### 3.4.1.1 Private Sector

The private sector comprises individual entities like a sole trader, partnerships or companies/firms.

Aims: (production of private goods)

- Survival and *profit*
- Growth
- Social responsibility

##### 3.4.1.2 Public Sector

The public sector comprises central governed organizations, state owned enterprises or local authority services (non-exhaustive.)

Aims: (production of public goods)

- Improve *quality* of services
- Minimize costs, maximize profits.

- allow for **social cost** + benefit.

### 3.4.1.3 Privatization

The transfer of a business, industry or service from public to private control and ownership.

party	effects
Government - positive effect	<ul style="list-style-type: none"> <li>• Less fiscal burden</li> <li>• Generates revenue</li> <li>• Removal of responsibility</li> </ul>
Firm - neutral effect	<ul style="list-style-type: none"> <li>• No <i>government interference</i> -&gt; have to face higher <b>competition</b></li> <li>• Shifted objectives to <b>profit</b> and no <i>social responsibility</i> -&gt; more <b>efficient</b></li> <li>• Increased <b>investment</b></li> </ul>
Consumers - neutral effect	<ul style="list-style-type: none"> <li>• <i>Prices</i> may rise or fall depending on the asset transferred</li> </ul>
Workers - negative effect	<ul style="list-style-type: none"> <li>• May cause mass <b>firings</b> to reduce costs</li> <li>• Removal of redundant workers</li> <li>• Higher <i>productivities</i></li> </ul>
The Economy	<ul style="list-style-type: none"> <li>• Higher <b>efficiency</b> due to higher competition</li> <li>• Private <b>monopolies</b> may abuse their position</li> </ul>

### 3.4.2 Market Failure

A situation where there is an inefficient distribution of economic goods as well as raw materials in the market.

The free rider problem is an example of market failure.

Other cases include:

- Externalities
- Lack of competition
- Missing markets
- Lack of information
- Low mobility of factors of production

#### 3.4.2.1 Externalities

Externalities are one of the major market failures discussed. Externalities are the cost or benefit of an economic activity onto a third party. These are described as a spill-over effect.

Externalities are a result of consumption or production.

There are also private costs and benefits, these are costs incurred or benefits of economic activity onto the first party.

This leads to social costs and benefits, the sum of private and external costs and benefits.

Social cost = private cost + external cost

Social benefit = private benefit + external benefit

So what does the government do about externalities?

- Negative production externalities
  - Government regulations
  - Taxes on output
  - Taxes on pollutants
- Negative consumption externalities
  - Government regulations
  - Advertising against the good
  - Market based policies (payments)
    - indirect taxes.
- Positive production externalities
  - Direct government provision
  - Subsidies
- Positive consumption externalities
  - Legislation (compulsory education on topics like vaccines or medicine)
  - Advertising
  - Direct provision
  - Subsidizing consumption

### 3.4.3 Production

There are 4 factors of Production

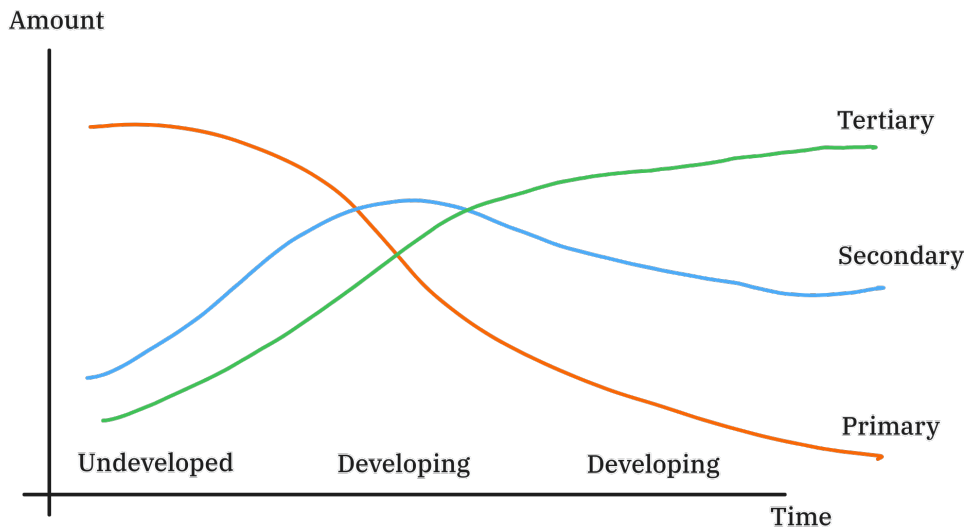
- Land (Rent)
- Labour (Wage)

- Capital (Interest)
- Enterprise (Profit)

In production, there are 3 major sectors

- Primary, responsible for production of raw materials and natural resources (capital goods)
- Secondary, responsible for production of manufactured goods
- Tertiary, responsible for production of services

These 3 sectors can also describe the development of an economy



#### 3.4.3.1 Productivity

The measure of output per unit of input.

Factors that affect productivity:

- land
- labour
- capital

#### 3.4.3.2 Division of Labour

A concept to increase productivity by separating tasks into a production cycle to allow for **specialized** workers.

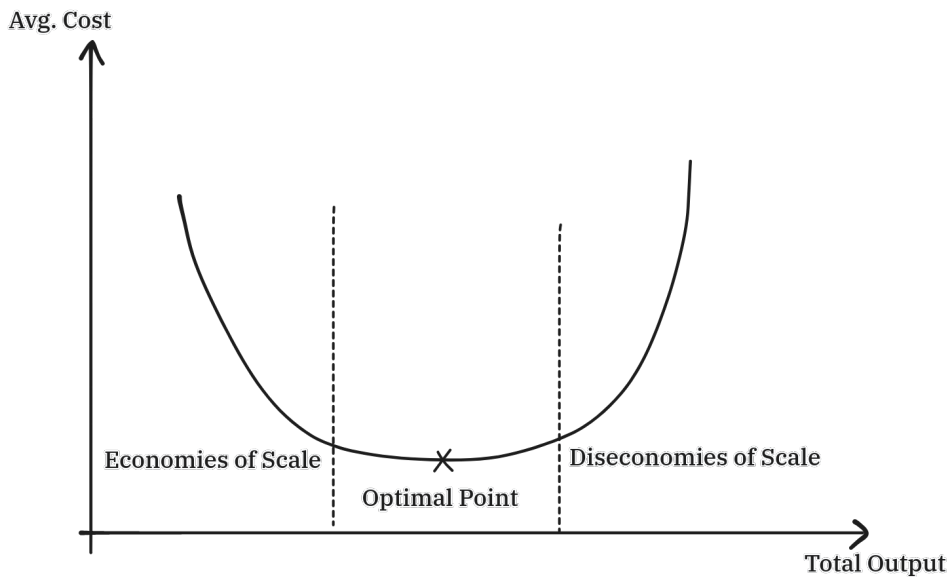
Advantages:

- Increase in production
- Time saving
- Lower unit cost
- Higher employment
- Larger scale production

Disadvantages:

- Repetition, bored
- requires financial incentive
- Lower mobility of labour
- Increased interdependence.

### 3.4.3.3 Economies of scales



Economies of scale is measured using the **LRAC** curve. The LRAC curve is the *long run average cost curve*. It is the **average cost** of producing a good over a longer period of time.

LRAC is split into 3 parts:

- Economies of scale
- Constant cost
- Diseconomies of scale

What are economies of scale?

- Economies of scale (EOS) refers to the *decrease* in **average cost** of production in relation to the output *increasing*.
- Diseconomies of scale (dEOS) refers to the *increase* in **average cost** of production in relation to the output *increasing*.

Under economies of scale, there are internal and External economies of scale. Internal economies of scale only benefit the firm that grows, whereas external economies of scale benefits all the firms when an industry grows.

*Internal Economies of Scale:*

- **Purchasing**
  - Bulk buying materials at a lower price
- **Marketing**
  - Large firms can pay less for more advertising
- **Technical**
  - Large firms can afford to invest in more advanced technology
- **Financial**
  - Large firms can borrow more money at a lower interest rate
- **Risk Bearing**
  - Large firms can take more risks
- **Managerial**
  - Large firms can afford specialists for certain jobs

*External Economies of Scale:*

- **Skilled labour**



- Firms are able to take advantage of better skilled labour
- **Infrastructure**
  - Infrastructure makes it easier to produce
- **Suppliers**
  - there are more suppliers creating price competition
- **Similar businesses** in area
  - there is more innovation in the market.

#### **Diseconomies of scale:**

- Bureaucracy
  - Paper work increases with larger firms
- Communication
  - Large number of staff is challenging to communicate with
- Lack of control
  - Workers can slack off without being caught
- Distance of employees
  - Harder for top level employees and executive officers to understand labourers

#### **3.4.3.4 Competition**

firms compete with other firms to sell their goods to a consumer.

There are several types of market. The most popular 4 discussed are:

- Perfect competition (Perfectly competitive)
- Oligopoly
- Duopoly
- Monopoly (Pure monopoly)

<b>Perfect Competition</b>	<b>Oligopoly</b>	<b>Duopoly</b>	<b>Monopoly</b>
large number of buyers and sellers	few sellers	two sellers	one seller
products are close substitutes	few substitutes	one substitute	no substitutes
low barriers of entry	strong barriers of entry	high barriers of entry	high barriers of entry
low control over price	some control over price	high control over price	high control over price
high information about product.	low information	closed information	closed information

#### **3.4.3.4.1 Monopolies**

(not the board game)

A monopoly is a market structure where there is only one seller of a good or service. The single firm dominates the market.

This single firm is the price maker or price setter.

Common barriers of entry are patents, government regulations, and high start up costs.

Pros and Cons:

- Efficiency:
  - Natural monopolies on markets like rail travel or utilities like gas are more efficient
  - Otherwise, there is a lack of incentive to be efficient.
- Innovation
  - More finance to invest into research and development
  - However, there is no incentive to innovate

- Economies of scale
  - Can exploit EOS to lower production costs
- High prices are Lucrative (inelastic goods)
- Restricted Choice:
  - unique good
  - no competition
  - only one choice for consumers (no substitutes)

#### 3.4.3.4.2 Oligopolies

When a few large firms dominate a market with close substitutes. Typically, there is non-price competition like advertising, loyalty or product differentiation.

In oligopolies, collusions and cartels often take place. These are illegal agreements between firms to set prices and output values in order to profit more.

Pros and Cons:

- More choice
- Higher quality
- Economies of scale
- Innovation
- Price wars
- Collusion & Cartels

#### 3.4.3.4.3 Effects of Competition

Competition & **Firms**:

- **Efficiency**: More pressure to be efficient to keep price low. (negative)
- **Price**: Can't charge high prices. (negative)
- **Innovation**: Constant innovation required. (negative)
- **Choice**: Pressure for product differentiation and brand image. (negative)
- **Quality**: Pressure to provide good quality. (negative)

Competition & **Consumers**: efficiency (positive)

- **Quality**: Higher quality goods. (positive)
- **Innovation**: More innovation. (positive)

Competition & **Economy**:

- **Efficiency**: Resources are allocated more effectively. (positive)
- **Innovation**: Standards of living improve. (positive)

### 3.4.3.5 Large firms VS Small firms

#### Small Firms:

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Flexible</li><li>• Personal services</li><li>• Lower wage costs</li><li>• Better communication</li></ul>	<ul style="list-style-type: none"><li>• Higher costs (no EOS)</li><li>• Lack of finance</li><li>• Difficulty attracting staff (less financial incentive)</li><li>• Vulnerability to competition and natural disasters</li></ul>

#### Large Firms:

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Economies of scale</li><li>• Market domination (less competition)</li><li>• Large scale contracts</li></ul>	<ul style="list-style-type: none"><li>• Diseconomies of scale</li><li>• Lack of coordination and control</li><li>• Less motivation</li></ul>

#### 3.4.3.5.1 Factors that affect the growth of firms

1. Government regulation
  - boosts competition, easier to grow firms
  - improves efficiency
2. Access to finance
  - loans to invest & finance to grow
  - lack of finance
3. Economies of scale
  - lucrative if average cost decreases
  - Diseconomies of scale
4. Desire to take risks
5. Desire to beat competition
6. Size of market
7. Type of market
8. Aims of entrepreneur

## 4 Macroeconomics

## 5 Glossary