

# Edexcel Economics (A) A-level

## **Theme 3: Business Behaviour and the Labour Market**

### 3.5 Labour Markets

#### Detailed Notes



### 3.5.1 Demand for labour

The demand curve for labour shows the **quantity of labour that employers would wish to hire at each possible wage rate.**

The demand for labour is determined by **marginal revenue product (MRP)**, the extra revenue generated by an individual worker. The higher the MRP, the higher the demand for workers. The law of diminishing marginal productivity means that increasing the number of workers, whilst all other factors are fixed, is likely to increase MRP at first but then cause it to decline. The demand for labour is assumed to be downward sloping because of two main reasons: in the long run, all factors of production vary so high wage rates will encourage businesses to use machinery instead of workers; and in the short run firms have fixed levels of capital and so diminishing marginal productivity means that adding extra workers gives a lower return so to employ these workers, the wage rate has to fall.

MRP = marginal output x price OR the difference in total revenue

#### Derived demand:

Firms hire workers in order to produce goods to meet their aim, usually of making a profit. Therefore, the demand for labour is derived demand as it is derived from demand for the product the labour produces. Businesses only want the worker for as long as people are willing and able to buy the product they produce.

#### Factors influencing demand for labour:

- **Wage rates:** A wage is the price of labour and so has the same influence on demand for labour as price has on the demand for a product. As wage rates increase, demand for labour contracts since the MRP of labour must be higher for it to be worthwhile employing more people, so less people are employed.
- **Demand for the product:** Since labour is a derived demand, if there is no demand for the product, there is no demand for the labour. Firms won't employ people if the goods they make aren't going to be sold and make a profit. An increase in demand for the product leads to an increase in demand for labour. This is linked to the concept of MRP: an increase in output or price of a good will increase demand for the labour that produces that good.
- **Prices of other factors of production:** If machinery and equipment becomes cheap, people will switch machinery for labour and therefore the demand for labour will fall.
- **Wages in other countries:** If wages are lower in other countries and therefore wages in the UK are relatively high, people will be employed in other countries as it represents a lower cost for businesses. This means that demand in the UK is low.



- **Technology:** Improvements in computers and technology means that many jobs have been lost with the work being done by machines. This means that there is less demand for labour, but demand for labour in technological based industries is increasing. By 2040, about 47% of jobs could be lost to technology.
- **Regulation:** As laws are passed some jobs disappear, such conductors, whilst other jobs are made. High regulation within the labour market is likely to discourage firms from hiring since it can be very costly and time-consuming so this will reduce demand for labour in these areas. France is a country that used to have high levels of labour regulation and this is something the new president, Emmanuel Macron, is trying to change.

#### Synoptic point:

The demand for labour is also influenced by the **state of the economy**, as this affects demand for the product. When the economy is in a poor state, there will be low demand for the product. Moreover, the state of the economy affects expectations for the future and business confidence so if confidence is low, the business may start laying off workers and are less likely to employ more as they are worried for the future.

### Price elasticity of demand:

This is the **responsiveness of the quantity demanded of labour to the wage rate.**

#### Factors affecting PED of labour:

- It is **directly correlated to the price elasticity of demand for the product** the labour produces. If the good is elastic, then a rise in wages and hence a rise in prices for consumers will have a large impact on the quantity the business sells. This will mean that the business will reduce the number of people it employs, in order to help it make a profit.
- It is affected by the **proportion of wages to the total cost of production**: if wages are a huge proportion of costs, then an increase in wages will increase costs massively and so there will be a large fall in demand for labour hence it will be elastic.
- If there are many **substitutes**, such as machinery and labour in other countries, then the demand will be elastic. This means high skilled jobs tend to be more inelastic than low skilled jobs as the labour cannot be easily replaced.
- **Time** also plays a role. In the long run, it is more elastic as machinery can be developed and jobs can be moved whilst in the short run firms have to employ workers and redundancy payments can be expensive.



### 3.5.2 Supply of labour

The supply of labour curve shows the **ability and willingness of people to make themselves available to work at different wage rates.**

#### Factors influencing supply of labour:

- **Wages:** The supply of labour curve for an individual is a backward bending curve: an increase in wages will lead to an increase in hours worked at first but beyond a certain point, it will lead to a decrease in hours worked. However, we are concerned with the supply curve for a particular occupation; this is more likely to be the typical upward sloping curve. Firms can increase the number of hours worked by its workforce in two ways: it can increase the number of hours by its existing labour force or it can recruit new workers. Therefore, although an increase in wage rates may not increase the number of hours worked by existing labour, it will increase the number of workers. This is because new workers may join from other industries or from being unemployed.
- **Population and distribution of age:** A high population will mean there is a large supply of labour. The distribution of age is important as there needs to be many people of high working age to ensure there is lots of labour. Migration plays a role in determining the workforce, since many migrants are of working age and come to the UK to work.
- **Non-monetary benefits:** Supply of labour will increase if there is high job satisfaction, for example in vocational jobs. Some jobs are attractive because they are close by or in an area with good social life, such as London, require little commuting or are near friends and family. Similarly, some jobs offer perks such as free private healthcare etc. which will increase supply. Factors such as holiday, hours of work, flexibility and opportunities for promotion also play a significant part.
- **Education/training/qualification:** More educated workers means there is a higher supply of workers. This is particularly important for some industries which require qualifications. Occupations which require high levels of education may suffer from lower supply of labour compared to low skilled jobs.
- **Trade unions and barriers to entry:** Trade unions may be able to restrict the supply of labour by introducing barriers to entry, for example you have to have a degree for teaching.
- **Wages and conditions of other jobs:** If many jobs in a local area are considered to be unpleasant and offer low wages, then supply for alternatives will be higher.
- **Legislation:** The government rules can affect supply of labour, for example school leaving age and the retirement age.



## Market failure:

The labour market should operate in the same way as any other. An increase in wages should attract labour to the industry and a fall in wages should mean labour leaves industry. However, labour is not a perfectly free market.

### Immobility:

- Labour can suffer from either occupational or geographical immobility.
- They can suffer from **occupational immobility** where workers find it difficult to move from one job to another because of a lack of transferable skills. It is particularly difficult in the short term when workers need to get new training but in the long run it may only be possible at a high cost.
- Moreover, they can suffer from **geographical immobility** where they find it difficult to move from one place to another due to the cost of movement, family etc. There may be no jobs available in Glasgow, but jobs in London. Unfortunately, someone from Glasgow will struggle to get a job in London as they may not know about the vacancies, it would be expensive to attend interviews and they would have to leave their family behind. Housing is also a big issue because people may not be able to afford to buy a house in their new area. They may also struggle if they need to find social housing and it is difficult for young people, since they often do not have the money to move out of their parents' home. In general, those on lower incomes are more geographically immobile.
- Immobility can mean that there can be **excess supply** of labour in one area/occupation and **excess demand** in another. Even if wages are higher where there is excess demand, people will be unable to leave where there is excess supply to get a job in that area/occupation because of their immobility.

The UK suffers from a severe skills shortage and this could cost £90bn a year following Brexit. There are four million too few high skilled people but six million too many low skilled people. Engineering is one industry suffering particularly badly from skills shortages.

## Elasticity of supply:

- This is the **responsiveness of supply to a change in wage rates**.
- It will depend on the **level of qualifications and training** since if there is a high level of qualifications necessary for the job, people will not easily be able to take up the job so the supply of labour will be inelastic.
- Similarly, it can depend upon the **availability of suitable labour in other industries**, for example if a company can 'poach' workers from other industries, then it will be more elastic.



- Moreover, it depends on **time** as in the long run supply of labour will be more elastic as people will have time to train. If the job is vocational, it will be inelastic since even if wages fall people won't leave the job.

**Synoptic point:**

Government spending and tax affects the supply of labour: high tax rates and high welfare benefits can reduce incentives and means there is a lower supply. This affects the entire workforce, and so therefore will have an impact on individual occupations.

The level of unemployment has an impact on the elasticity of supply. High levels of unemployment make supply more elastic as the firm can increase the number of people it employs without having to raise wage rates significantly.

### 3.5.3 Wage determination in competitive and non-competitive markets

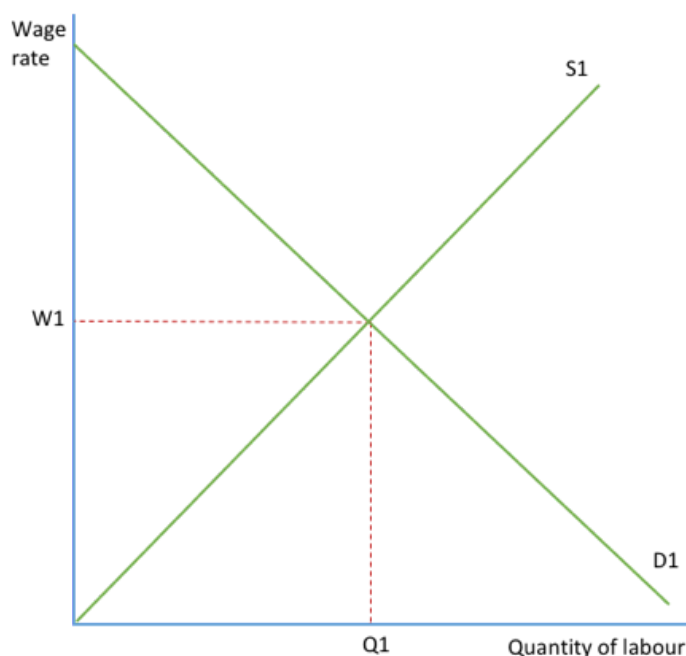
Wage rates differ within an occupation due to age, education, training, work experience, skill/talent/ability to perform tasks, sex and ethnic background. These last two are illegal but average wages suggest that this still can be an issue. For the highest paid workers, there will be a low supply and a high MRP. The immobility of labour means that there may be excess supply in one area/occupation, causing low wages, and not enough workers in another, meaning high wages. The lower the elasticity of supply/demand, the greater the change in the real wage rate and the smaller the change in employment as a result of a change in demand/supply for labour. The effect will also depend on the size of the shift.

#### Wage determination:

##### Perfect competition:

In a perfectly competitive labour market, we make the same assumptions as in a perfectly competitive product market. Therefore, wages are determined purely by demand and supply and all workers are paid the same. If workers were not paid the same, they would simply move somewhere else where the wage rate in the industry was higher. For example, a waiter in Liverpool would move to be a waiter in Portsmouth if the wage rate was higher. This would reduce supply and lead to an increase in wages in Liverpool, and increase supply and lead to a fall in wages in Portsmouth.

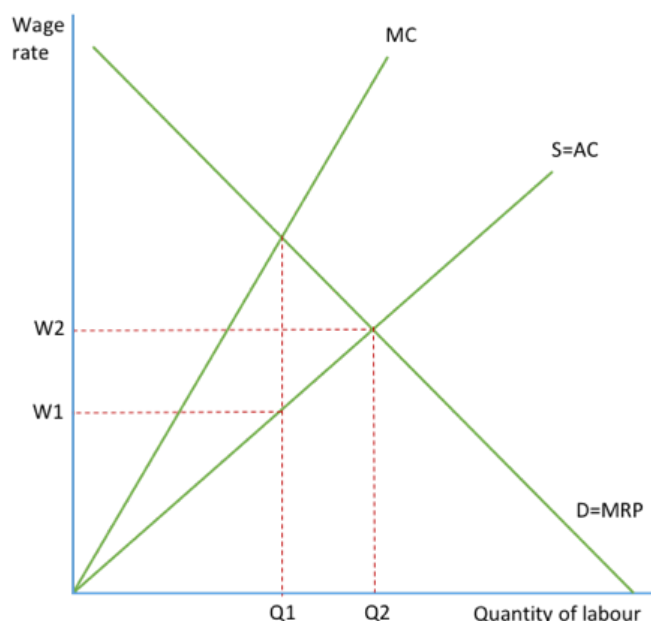




However, in an **imperfectly competitive market**, wages will not always be set where demand equals supply.

### Monopsony in the labour market:

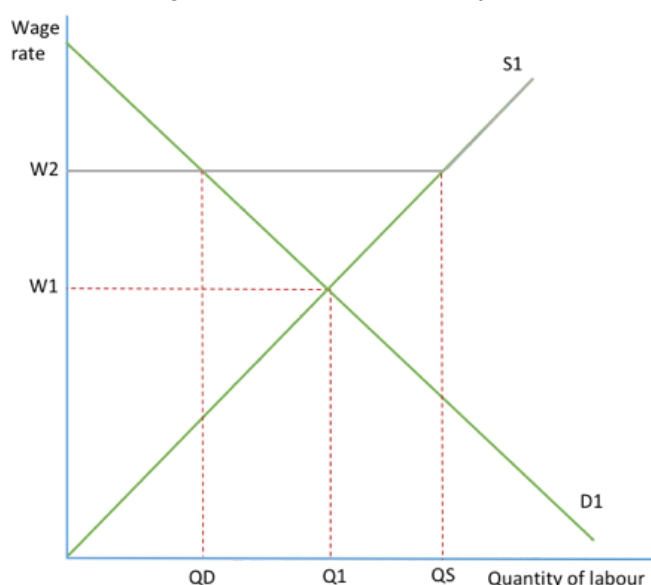
In a monopsony market, there is only one buyer of the labour. In this situation, businesses know that if they want to increase their labour force they will have to increase the wage they offer and, just like with monopsony product markets, an increase in the wage for one increases the wage for all. Therefore, the MC curve is above the supply curve (AC) of labour because it costs more to employ an additional worker than the average cost of labour. A firm will determine how many workers to employ where the cost of employing them is equal to the value of that worker to the company. They employ where  $MC=D$  at  $Q1$  and at this output, they will pay their workers  $W1$  (determined by the  $S$  curve). Compared to a perfectly competitive market (which would produce at  $W2Q2$ ), they employ **less people at a lower wage rate**.



## Monopoly in the labour market:

The existence of trade unions means they can operate as the only seller of labour. A trade union is an organisation with members who are usually workers or employees, which protects the rights and pay of workers through a process of collective bargaining.

There are two ways they could increase wages. Firstly, they could set barriers of entry which would reduce supply. Teachers' unions lobbied for a rule which means that all teachers must have degrees. Alternatively, they could set wages at a specific wage and ensure workers are not prepared to work for less, creating a kinked supply curve as seen in the diagram (the grey line). Supply is perfectly elastic up to output of  $Q_S$  and if the company wanted to employ more than this, they would have to increase wages further. The firm will employ where supply is equal to demand, at  $Q_{DW2}$ . Both of these methods will lead to **higher wages but cause a fall in employment** from the perfectly competitive equilibrium of  $Q_1W_1$ .



The government have been able to reduce the power of trade unions through acts which have introduced postal ballots, outlawed secondary picketing, restricted the size of the picket line and forced unions to provide 14 days' notice of action. The Trade Union Act 2016 was the most recent act, and this included a clause saying that at least 50% of people must vote in the ballot; the most recent teachers union ballot only had 28% voting turnout.

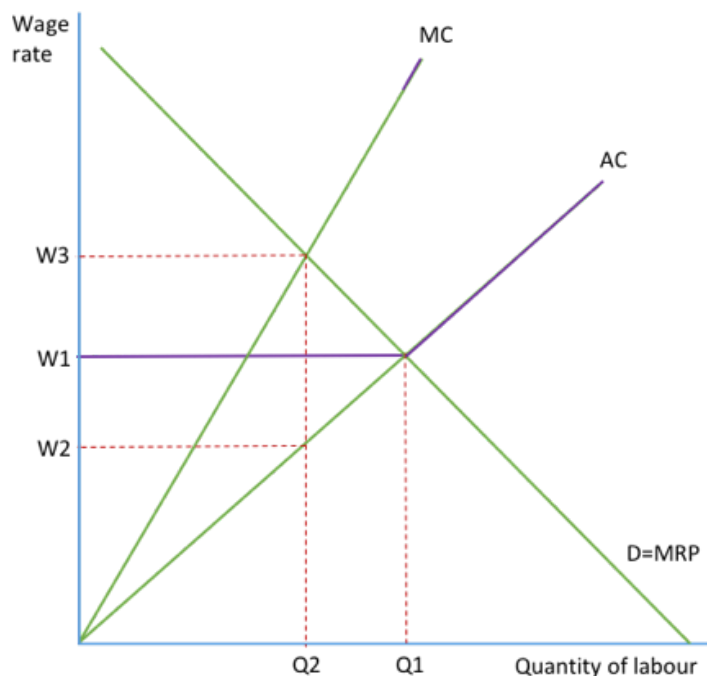
## Bilateral monopoly:

It is possible for there to be both monopoly and monopsony in a labour market, called a bilateral monopoly. The firm is a monopsonist and wants to employ at  $Q_2W_2$ . However, the union may decide to set a minimum wage at  $W_1$  and ensure that there is no one willing to work below this price, creating a kinked supply curve. The new MC and AC curves are the purple curves. In this situation, there is a battle going on between the two parties. The **wage that is set will depend on the relative bargaining strength of both**. This is dependent on a number of factors, including the size of the union and the strength of the economy.





In a time of economic recession and unemployment the unions may have less bargaining power and wage is most likely to be down at  $W_1$ . In times of full employment, they may have the power to influence and wages could be at  $W_3$ . This diagram highlights that Unions can have a **positive impact on both wages and the number of people employed**: they are able to increase wages to  $W_3$  without negatively impacting the number of workers. This increase in wages and employment is able to make the economy more efficient.



### Labour market issues:

There are a number of current issues in the labour market which you need to be aware of. The best way to do this is to do some research close to the exam but some of the issues include:

- Skills shortages:** The UK suffers from geographical and occupational immobility, which means that even if there are enough engineers, there aren't enough engineers in certain areas.
- Young workers:** Workers who join the workforce during recessions tend to receive lower lifetime earnings than those who enter the labour force in better times. Youth unemployment can be a particular issue; during hard times, firms are unlikely to employ new workers but are reluctant to let go of their current workers and so the young struggle to get a job.
- Retirement:** Rising life expectancy and an increase in the number of people reaching retirement age, as the 'baby boomers' reach retirement, has negative effects on the government budget. Pensioners now makeup over 50% of welfare spending. The



retirement age will have to continue to rise and the government is trying to encourage people to save for their own pensions.

- **Wage inequality:** Over time, those on the highest wages have seen their wages grow by a bigger percentage than those on the lowest wages. This is a contentious issue and raises questions over relative poverty and the level of redistribution required.
- **Zero-hour contracts:** There has been a rise in zero-hour contracts and this causes problems for employees who do not know how much they will earn a week and receive little notice of when they will be required to work.
- **The ‘Gig economy’:** Many more people are now self-employed and undertake short term contracts, working for companies such as Uber and Deliveroo. There are concerns over the rights of these workers and the unreliability of their pay each week.
- **Migration:** Many people suggest that migration causes a fall in wages but it allows employers to recruit from a larger pool of workers and helps to fill skills shortages.

There are also issues over the correct level of unemployment, underemployment, the minimum wage, conditions in work etc.

## Government intervention:

### National minimum wage:

- Labour introduced the National Minimum Wage in April 1999 to raise people out of poverty and decent minimum standards in the workplace. It changes every April, all workers over school leaving age receive their minimum wage and a failure to pay employees can lead to the firm being fined. The National Living Wage has been introduced for over 25 year olds, and the government pledge for it to be £9 by 2020.

### Arguments for the national minimum wage:

- The wage is able to **reduce poverty** as it mainly impacts the lowest wages and ensures that these people have enough to live on.
- It can **reduce male/female wage differentials** as women are more likely to take up lower paid jobs (because they are vocational, offer more flexible hours etc.) and so a minimum wage is able to decrease the gaps between men and women.
- It may make employees less likely to leave their job as they feel more **loyal to the businesses**, which will decrease labour turnover, and therefore recruitment and training costs. This will increase profit but is a **weak argument** since if they are offered a higher wage elsewhere, then they will leave.
- There could also be a **more content workforce** who will be more motivated and, thus making the business more productive and increasing its profits. However, this assumes all people are **motivated by money** and this is not necessarily the case.



- Moreover, a minimum wage provides an incentive to work and prevents the ‘**unemployment trap**’, when benefits are higher than the wage people would otherwise receive.
- It ensures everyone receives a **fair wage**, and is not exploited by being drastically underpaid.

#### Arguments against the national minimum wage:

- The most notable negative consequence is the potential **loss of jobs in the industry** (or unemployment on a macro level).
- Moreover, the minimum wage will **raise costs for the companies** and so may increase their prices, which is likely to lead to a fall in profit.
- Another negative impact could be the **wage spiral** as individuals will try to protect wage differentials between them and the lowest price workers. An increase in the wage of the lowest paid will mean that others expect theirs to rise too. This will reduce profit and further reduce competitiveness.
- There is **no consideration of regional differences**, and so this, alongside the fact many people on minimum wages are **secondary earners**, means the minimum wage may be ineffective at reducing poverty.

**The impact of any minimum wage will depend on** where it is set, and whether this is above or below the current wage. The level of job losses is dependent on the elasticity of supply and demand. If both are relatively elastic, there will be large job losses but if both are relatively inelastic, the losses will be small.

#### Synoptic point:

Minimum wages have many macroeconomic effects:

- They are able to reduce inequality.
- They will lead to a rise in AD, since the poorest people see a rise in income and they have a high MPC. This will lead to economic growth and employment.
- Public finances will be worsened as the government employs many people on the minimum wage
- The rise in business costs will lead to a reduction in competitiveness, which will negatively affect the trade balance and reduce the net trade component of AD. It will also increase SRAS, causing inflation in the short term.

#### Maximum wages:

- Minimum wages are fairly common but few places set maximum wages. Some people suggest there should be a maximum wage for chief executives or a **maximum pay ratio** compared to the lowest wage earners. The government can set **maximum pay limits for public sector workers** in order to keep public sector spending down. It will help to **reduce inequality**.
- The introduction of maximum wages will lead to **excess demand** within the industry, since people may not put themselves forward for the job if they don't think the salary matches the stress and responsibilities or they know they could get higher wages



abroad. The UK may suffer from a **loss of the best workers**, which will reduce the quality of businesses and decrease competitiveness.

- The impact of this depends on the elasticities of supply and demand: inelastic means there will be little impact. It is argued that supply and demand for the highest paid workers, such as chief executives, is **very inelastic** since there is a small supply of chief executives and firms only need one chief executive so their cost is a very small part of total costs. This could mean maximum wages will have **almost no effect on the market**, other than causing a reduction in wages.

### Public sector wage setting:

- Since trade unions in the UK are weak, in the **short run**, the government can effectively **make whatever wage decisions it decides** in order to improve the budget.
- Between 2010 and 2015, public sector workers experienced a **pay freeze**. This put **downward pressure on private sector wages** since few people were likely to leave the private sector for the public sector and private sector employers could use this as evidence to limit pay rises for their workers.
- However, in the **long run**, if private sector workers receive pay rises and public sector workers don't, people will move from the public sector to the private sector and this will **force the government to increase public sector wages** in order to expand supply.
- As a result, the wages of public and private sector workers tend to rise by the same percentage over a long period of time but in the short term they can rise by different rates.

### Tackling immobility:

The government can attempt to improve geographical mobility of labour through many different methods:

- They could improve the **supply of houses** and reduce the price of properties making it easier for people to move. They could make renting cheaper to help people working in temporary jobs.
- They could **improve transport links** which will allow people to work further away from where they live and if they do move, it will be easier for them to visit family and get to job interviews.
- **National advertising** could be used so people know about jobs all over the country.
- The government could introduce subsidies on houses, taxes etc. in **areas where there are labour shortages** to encourage people to move to the area and take up jobs.
- One action taken has been to **move public agencies** out of London, for example the DVLA was moved to Swansea. Although this doesn't improve the mobility of labour, it



helps to prevent excess demand for labour in one place and excess supply in another.

Additionally, they can improve occupational mobility of labour, through education. This will help to make the workforce more employable and better at a wider range of jobs:

- **Vocational training** can be increased, particularly for younger students.
- They could encourage **further study**, such as university or technical courses at college. They have been encouraging engineering degrees.
- They could encourage greater spending on **training within work**.
- Education could be targeted at improving skills shortages and helping with job applications, for example interview skills.

They could also encourage **flexible work patterns** which will allow more parents to work. On top of this, **discrimination** in the labour market could be reduced and employers who take on unemployed individuals from groups with above average unemployment rates could be subsidised.

