

ECONOMICS IN THE REAL WORLD

STUDENT RESOURCES

A-Level



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Edexcel A-Level Economics — 3.5.1 Demand for labour / 3.5.2 Supply of Labour

AQA A-Level Economics — 4.1.6.1 The Demand for labour, marginal productivity theory / 4.1.6.2 Influences on the supply of labour to different markets / 4.1.6.3 The determination of relative wage rates and levels of employment in perfectly competitive labour markets

The Labour market is composed of buyers and sellers. Buyers (firms) demand labour while sellers (workers) supply labour.

Demand for Labour

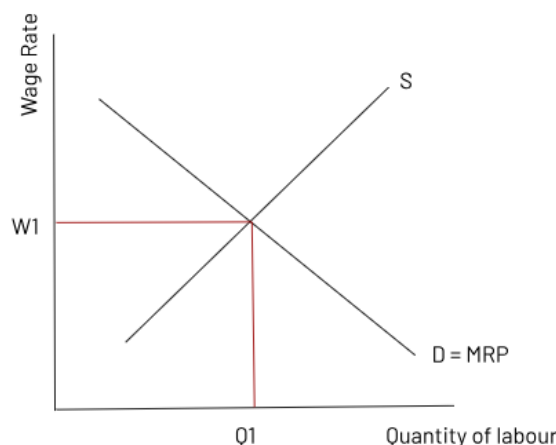
The demand for labour is determined by the **marginal revenue product (MRP)**. The MRP is the additional revenue created by hiring one extra worker. Firms hire up to the point where MRP of the last worker equals the supply of labour. This is the profit-maximising level of employment for the firm. After this point, the wage the firm pays the worker will exceed the additional revenue they bring, making it a burden to the firm.

Marginal revenue product (demand for labour) is calculated by multiplying the marginal physical product (the additional output produced by hiring one additional worker) by the price of output (which is equal to MR).

$$\text{MRP} = \text{MPP} \times \text{MR}$$

MRP acts as the demand curve for labour.

Wages in the labour market are identified using a supply and demand curve. Where supply and demand meet (where labour supply equals MRP) is the labour market equilibrium. This point determines the quantity of labour employed and wage rate in the labour market.



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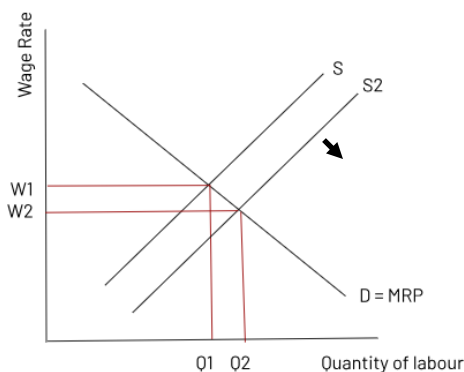
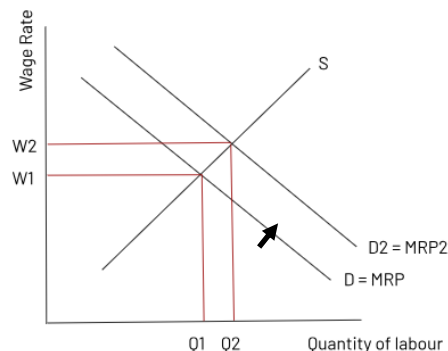
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The effect of changing supply and demand on wages

When demand for labour increases we see a shift from D to D_2 , resulting in a new equilibrium where wages have increased from W_1 to W_2 . This is because firms choose to offer a higher wage to attract more workers. This can be seen on the graph on the right.



Similarly, when supply of labour increases (there is an increase in workers looking for jobs), we see a shift from S to S_2 , resulting in a new equilibrium where wages decrease from W_1 to W_2 . This is because if work opportunities become scarce due to increased competition, workers are willing to accept low wages to guarantee employment.

Factors influencing demand for labour

The demand for labour can be impacted by a multitude of factors.

The demand curve will shift if:

- There is a change in the demand for goods and services as labour is a form of derived demand
 - businesses only seek labour as long as the goods and services the labour is producing continue to be purchased by consumers.
- The price of other factors of production changes: If machinery becomes more affordable then labour will be substituted for capital, resulting in a decrease in demand for labour.
- The productivity of labour changes. If workers become more productive, for example, there will be an increase in demand.
- The number of firms in the market changes. The more firms in one market, the more buyers of labour there will be competing over its limited supply, creating higher demand for labour.

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Factors influencing supply of labour

The supply of labour is dependent on these factors:

- Income tax levels. As income tax increases, those offering their labour become disincentivised to work, and the supply of labour will decrease.
- Training periods. Jobs that require a long training period will often have low supply of labour when compared to those with shorter training period.
- Population: A high population means a large supply of labour. As a result immigration policy will often have an impact on the supply of labour. As more people move into a country, the supply of labour increases as population size does. (This is however dependent on the distribution of the population that is eligible to work).
- Non-monetary benefits. Some occupations will see higher levels of supply of labour due to the non-monetary benefits. These can include holiday time, opportunities for promotion, flexible working hours etc.
- Government legislation can impact the supply of labour. For example retirement age or school leaving age can impact how many people are eligible to join the labour market.
- Culture: in some countries such as the United States, or Korea there is a work intensive culture, on average citizens of these countries work longer hours than those of other countries such as Germany or the UK.