AQA Economics A-level
Microeconomics

Topic 6: The Labour Market

6.1 The demand for labour, marginal productivity theory

Notes
The labour market is a factor market. The supply of labour is determined by those who want to be employed (the employees), whilst the demand for labour is from employers.

Labour is a derived demand. This means that the demand for labour comes from the demand for what it produces. For example, the demand for people who make cars is derived from the demand for cars. With no demand for cars, there will be no demand for car manufacturers.

Demand is related to how productive labour is and how much the product is demanded. The elasticity of demand for labour is linked to how price elastic the demand for the product is.

The wage rate will lead to movements along the supply and demand curves for labour. All other factors will shift the curves.

**Demand for labour:**

The demand for labour is affected by:

**The wage rate:**
- The downward sloping demand curve shows the inverse relationship between how much the worker is paid and the number of workers employed.

![Diagram](image-url)
When wages get higher, firms might consider switching production to capital, which might be cheaper and more productive than labour.

**Demand for products:**
- Since the demand for labour is derived from the demand for products, the higher the demand for the products, the higher the demand for labour.

**Productivity of labour:**
- The more productive workers are, the higher the demand for them.
- This can be increased with education and training, and by using technology.

**Substitutes for labour:**
- If labour can be replaced for cheaper capital, then the demand for labour will fall. This will shift the demand curve for labour to the left:

![Diagram showing demand curves](image)

**How profitable the firm is:**
- The higher the profits of the firm, the more labour they can afford to employ.

**The number of firms in the market:**
- This determines how many buyers of labour there is. If there is only one employer, for example the NHS, the demand for labour is lower than if there are many employers, such as in the supermarket industry.
- The lower demand for labour can mean wages are lower, so trade unions try to encourage higher wages.
**The marginal productivity theory of the demand for labour**

This theory states that the demand for labour is dependent on the marginal revenue product (MRP).

- MRP is calculated by marginal product multiplied by marginal revenue.
  - \( \text{MRP} = \text{MP} \times \text{MR} \).
- The marginal product of labour is the additional output each unit of labour can produce.
- The marginal revenue of labour is the additional revenue derived per extra unit of labour.
- Equilibrium occurs where the marginal cost of one extra unit of labour is equal to the net benefit of one extra unit of labour.
- The demand curve shows the MRP.

**The determinants of the elasticity of demand for labour**

- The wage rate and level of employment is affected by shifting the demand or supply curve differently, depending on how elastic the other curve is.
- If labour demand is inelastic, because there are few or no substitutes, strikes will increase the wage rate but not affect the employment rate significantly.
- Where there is an inelastic demand for labour, a lower supply will lead to a higher increase in the wage rate (\( P_1 \rightarrow P_3 \)), than where there is a more elastic demand (\( P_1 \rightarrow P_2 \)).
The elasticity of demand for labour measures how responsive the demand for labour is when the market wage rate changes. This is affected by:

- How much labour costs as a proportion of total costs. The higher the cost of labour as a proportion of total costs, the more elastic the demand. Labour costs are high as a proportion of total costs in the services.
- The easier it is to substitute factors, the more elastic the demand for labour, because firms can easily switch to cheaper forms of production, such as capital.
- The PED of the product also affects labour. The more price elastic the product, the more price elastic the demand for labour.