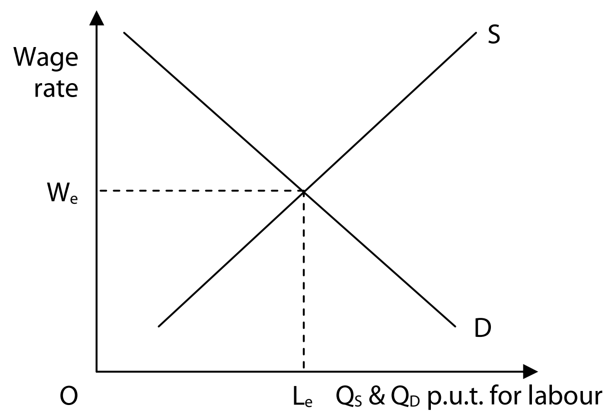
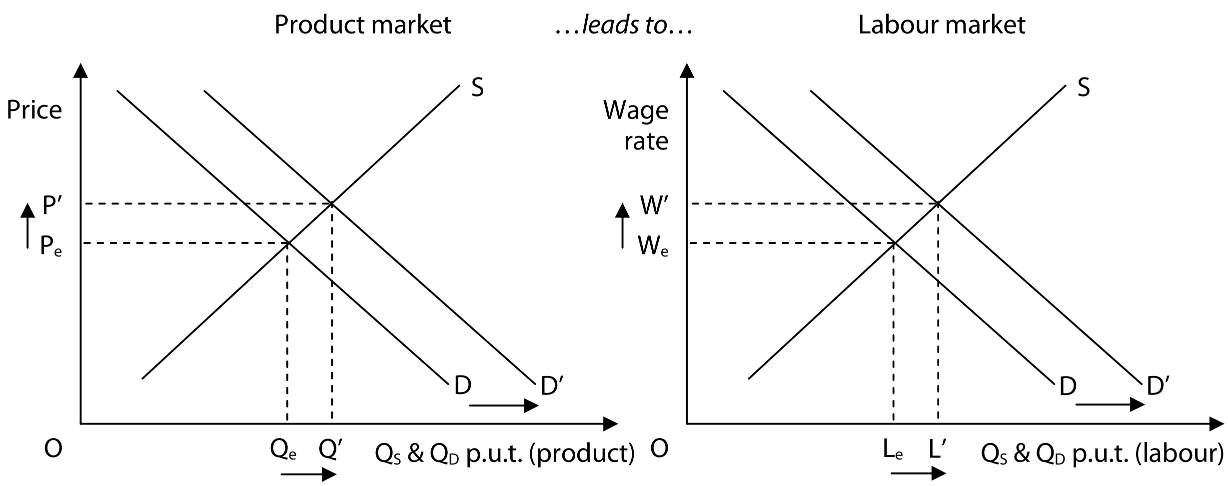
Wage determination

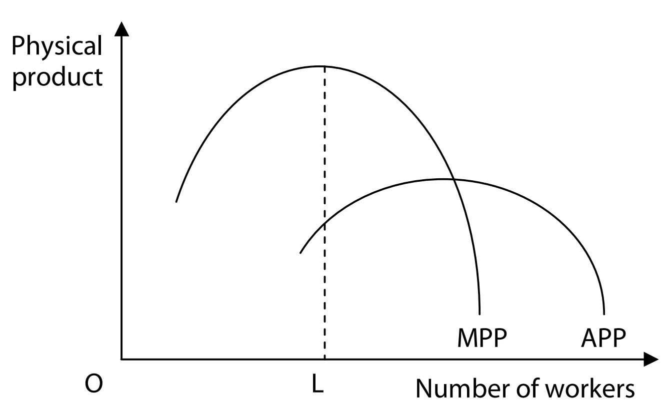
Wages are determined in the free market by the interaction of supply of labour and demand for labour.



Demand for labour is a derived demand, derived from the demand for the good or service the labour is involved in the production of.



Demand for labour and MRP theory



The MPP, the marginal physical product, is the additional output gained by employing one more worker. The APP, average physical product, is the mean output at any given level of employment. The law of diminishing returns means that the MPP curve decreases after a given level of output. As with the AC and MC cost curves the MPP curve cuts the APP curve at the highest point on the APP curve.

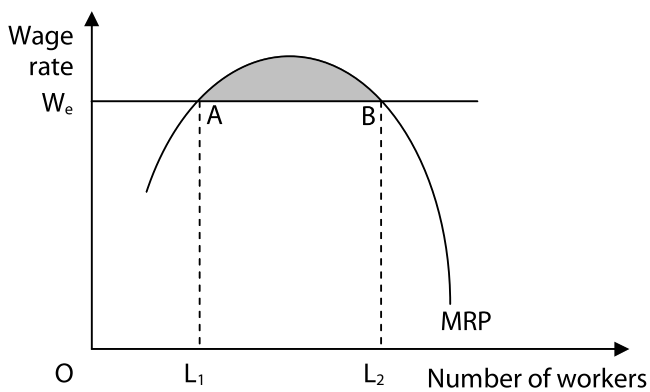
The marginal revenue product is the revenue a firm gains by employing one additional worker. It is calculated by MPP x MR, the additional physical product created by the additional worker multiplied by the revenue gained from those additional units of output.

The VMP, the value of the marginal product is calculated as MPP x P, the additional physical product created by the price the units are sold for.

If the market is perfectly competitive P = MR as the firms are price takers, taking the market price. Therefore under perfect competition MRP = MPP x P, meaning MRP = VMP.

If the market is imperfect, then P > MR which means that VMP > MRP.

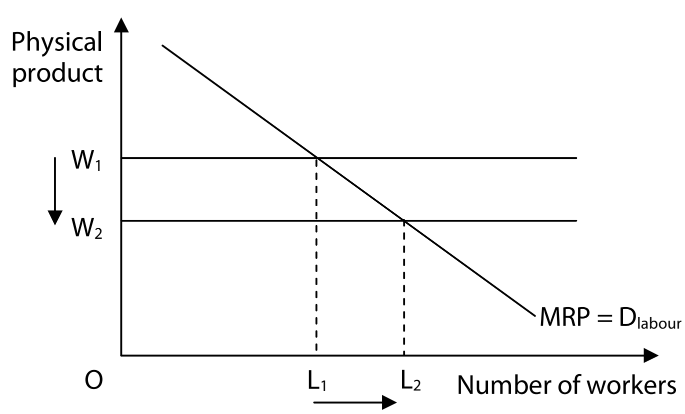
The profit maximising level of employment for a firm



At a given wage rate under perfect competition the MRP gives the firm its profit maximising employment level. At a higher level of employment some workers will contribute less to TR than their cost of employment, the wage rate. At a lower level of employment further workers can be employed who will add more to TR than their cost of employment.

At a wage rate W_e there are two levels of employment L_1 and L_2 which correspond to W_e. The firm will employ L_2 workers and operate at B as here the workers will add more to total revenue than their wage rate so give profits to the firm, shown by the shaded area.

The downward sloping section of the MRP curve therefore represents the demand for labour, and shows that at a lower wage rate more workers will be employed.



These notes are from a lesson on 07/12/2004.