

EQUILIBRIUM IN A COMPETITIVE FACTOR MARKET

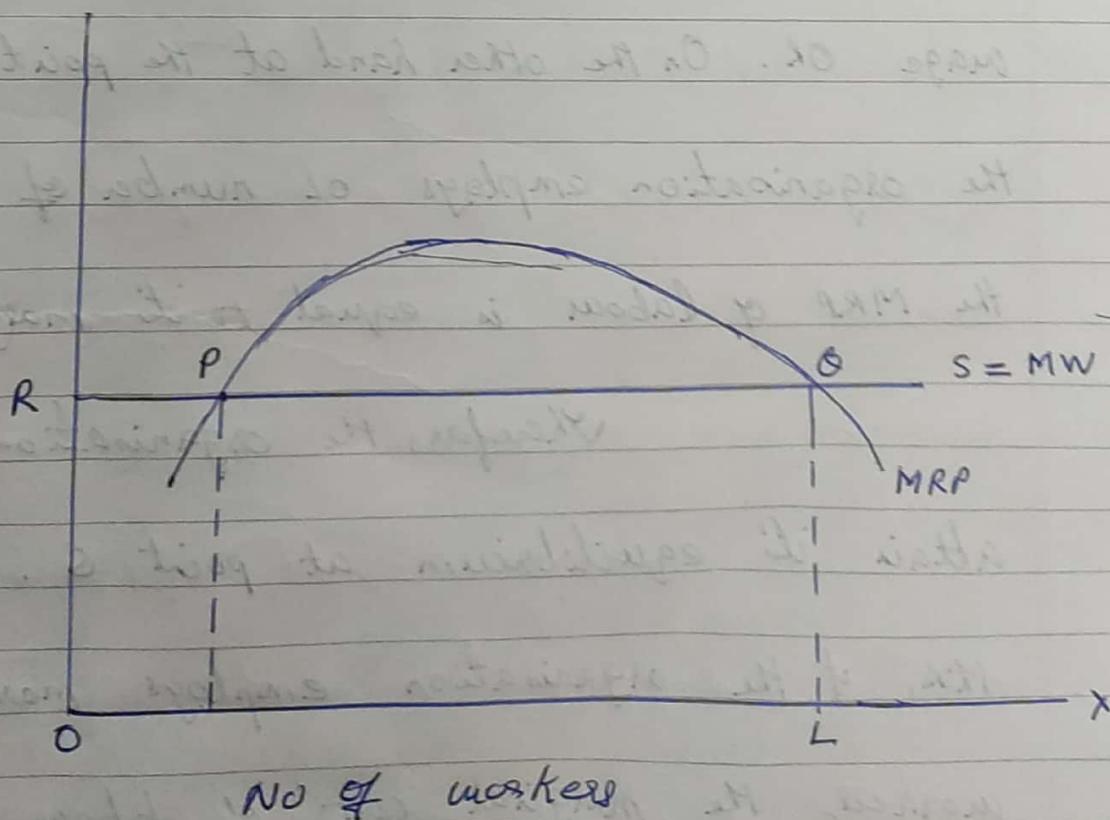
Equilibrium in the factor market, which for a perfectly competitive market is achieved at the factor price and factor quantity given by the intersection of the factor demand curve and the factor supply curve.

In the factor market, under perfect competition, an individual organisation cannot affect the price of a factor of production by increasing or decreasing its consumption.

This is because the quantity demanded by an organisation of a particular factor is very small as compared to the market demand. In such a case the organisation cannot affect the price of the factor, thus it has to purchase the factor at the prevailing market price. Even if the organisation increases the consumption of the factor, the price of the factor would remain the same.

Similarly, if we look upon the supply side, a single supplier does not have ample amount of products to meet the demand of all the customers in the market. Therefore, in perfect competition marginal product (MP) and average product (AP) are same and their curves would intersect each other. Thus, MP and AP would form a straight horizontal line. Here, we take the example of labour and wage to understand equilibrium in factor market under perfect competition.

Equilibrium in the factor market under perfect competition



In the above we have assumed labour as a variable factor, while keeping the other factors at constant. The RS line shows the marginal wage rate. In the factor market, all organisations can hire any number of workers at the prevailing price OR. The MRP curve of labour intersects the line RS at two points P and Q.

An organisation cannot attain equilibrium at point P because at this point the number of workers employed is more. Thus, in this case, the MRP of labour would be higher than the marginal wage OR. On the other hand at the point Q, when the organisation employs OL number of workers, the MRP of labour is equal to its marginal cost.

Therefore, the organisation would attain its equilibrium at point Q. Apart from this, if the organisation employs more than OL workers, the marginal cost of labour would exceed

MRP. In such a case the organisation would incur loss.

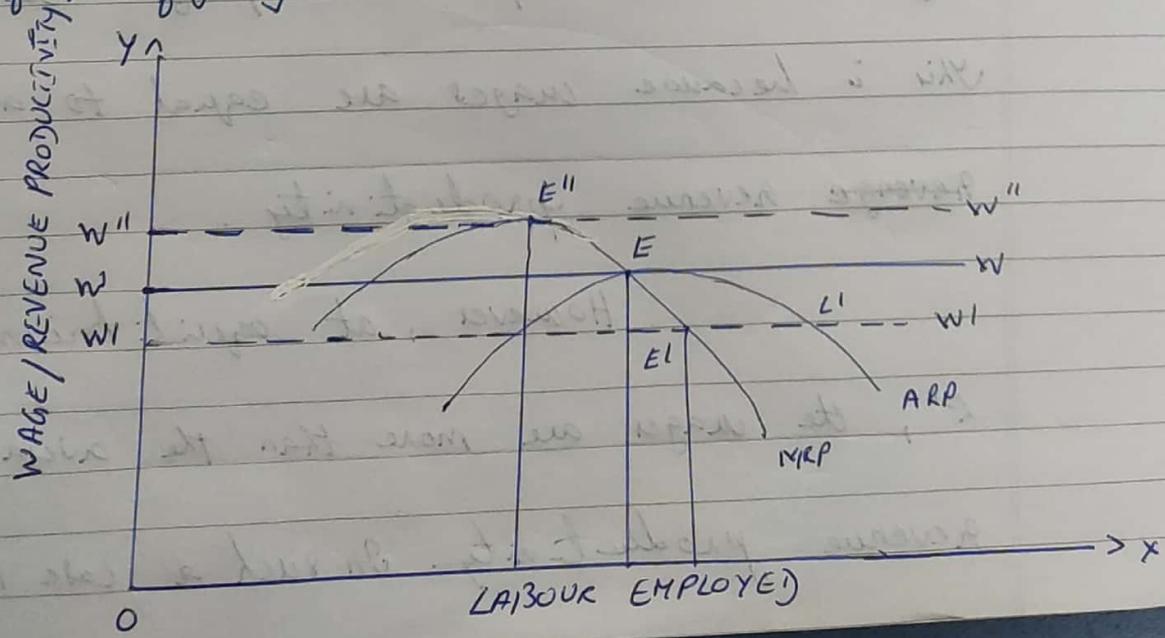
In summation, there are two conditions required for attaining equilibrium in the factor market under perfect competition which are as follows:

- (i) $MRP = MFC$
- (ii) MRP curve intersects marginal cost from above (as shown in the fig)

However, from the above fig we cannot determine whether the organisation would earn profit or incur loss.

This can be determined with the help

of the fig. given below:



In the above fig MRP intersects Average Revenue Productivity (ARP) at point E. When the wages are at level OW the equilibrium point is obtained at E'. On the other hand, when the wages are at level OW" equilibrium point is achieved at point E". At the point E', extra profit is E'L', which is in the short run only.

In the long run, super normal profits attract new organisations to enter the market. This increases the demand for labour, therefore, the wage level of labour also increases and reaches OW. At OW wage level, the equilibrium shifts to E and super normal profit disappears. This is because wages are equal to average revenue productivity.

However, at equilibrium point E", the wages are more than the average revenue productivity. In such a case the

organisation would incur losses. In case of
loose, many organisations would leave the
market, which would result in the reduction of
labour and wage rates. This again brought the
wage level at OW and equilibrium at E . At
this point, MRP would become equal to MRP .