Factor Market

Definition

Resources must be used in the production process to produce goods and services. Resources are also called ***factors of production***. The major factors are: labor, capital, land and entrepreneurship.

The first three factors listed are traded in the factor market where the Equilibrium Quantity Of the factor and the factor price are determined. The entrepreneurship factor creates firms and hires the other factors. Most factor markets are competitive, that is, there are many buyers and sellers.

Labour Market

In this market, human resources are traded. Most labor is traded on a **contract, called a job**; some labour is traded on a temporary daily basis called **casual labor**.

Human Capital is an individual's skills obtained from education, experience and training. The price of labor is wage rate.

Capital Market

Capital is the funds that firms use to buy and operate their production process. In this market, people lend and borrow to finance the purchase of capital goods. The price of capital is interest rate.

Land Market

- Land consists of all the resources given to us by nature. It included natural gas, water, mineral, etc.

Demand of a Factor

Factor demand is a derived demand. It is derived from demand for products, that factors are used to produce

Marginal Revenue of Product (MRP)

- The marginal revenue product, is the additional revenue generated by employing an additional unit of a factor.
- MRP = change in total revenue / change in the quantity of the factor

Since change in total revenue/ change in quantity of output = Marginal revenue (MR);

and change in the quantity of output/change in quantity of a factor (labour) = Marginal product (MP).

Then:

- MRP = MR X MP

Value of Marginal Product (VMP)

VMP equals to price (P) of a unit of output multiplied by the marginal product (MP) of the factor (labour) of product.

VMP = P X MP

In perfect competition: P = MR, therefore, MRP = VMP

As stated in the law of diminishing returns, MP will eventually decrease as the quantity of factor increases in the short run. On the other hand, MR in non-perfect competitive market is also downward sloping. Therefore, MRP and VMP are downward sloping. The marginal revenue generated by each factor and the factor's per unit cost (factor price) determine the quantity of factor demanded by a firm. As the price of a factor increases, less factor will be demanded.

- To maximize profit, a firm hires up to the point at which the MRP (VMP in Perfect competition) equals the factor price.

Hiring rule

- MRP > P of the factor: firm should continue to hire more factors.
- MRP = P of the factor: firm should stop hiring at the unit of factor.
- MRP < P of the factor: firm should reduce the quantity of factors.

Labour Market

- **Demand of Labor**

  We know that firms' demand is determined by MRP. Therefore, firm's demand for labor depends upon marginal revenue generated from each unit of labour input.

- MR: Marginal revenue will increase as price of output increases, Firm will demand more labor when output's price gets higher.

- MP: Productivity increase will increase demand for labor also. If there is a technological advancement, causing the replacement of labour by machinery, labor demand will change. If more labor is needed per machinery, labor demand will increase, otherwise, labor demand will decrease as machine replaces human labor. Investment in human capital, such as training and education, can increase productivity, too. **Therefore, high skill workers face a higher demand than low skill workers.**

Supply of Labor

Determinants of Labor supply are:

1. Adult population: increase in population will increase work force, and labor supply.
2. Preferences: as more woman or retired people choose to work, labor supply increases.
3. Time in school and training: when people spend more time in school, the low skill labor supply decrease, and high skill labor supply increases.

Labor Market Equilibrium

- The labor market equilibrium determines the wage rate and employment, if the wage rate exceeds the equilibrium wage rate, there is a surplus of labor and wage will fall. If the wage rate is less than the equilibrium wage rate, there is a shortage of labor and wage will rise.

- **Wage Differences**

  Wage rate is not homogenous in our economy. The differentiation in wage is mainly due to the following three reasons:

1. Workers are not homogenous: as the labor quality varies, wage rate varies, too. The high skill labor has a higher MRP, their demand for them is usually higher. The education level, experience, training etc all contribute to the differences in labor qualities,
2. Jobs are differentiated: some jobs have more risk (construction workers); some jobs are dirtier (Janitor); some jobs needs a lot of training (doctors). The differences in job nature contribute to differences in wage rates.

The Lorenz Curve

- The Lorenz curve is a graphical representation of the distribution of income, expressing the relationship between *cumulative percentage of families* and *cumulative percentage of income*. While looking at a particular point on the graph we can see what percentage of income is earned by what percentage of the population.

Financial capital Market

- ***INTEREST RATES***

Interest refers to:

1) the price that borrowers pay for the use of loan able funds

2) the rate of return earned by capital as an input of production.

There are many factors affecting interest rates. The most important factors are *Risk, Term of loan, and Cost of making the loan.*