

## Module 3

### Lecture 18

#### Topics

#### 3.3 The Marginalist Revolution III

##### 3.3.1 The marginalist theory of employment

##### 3.3.2 Criticisms of MP theory

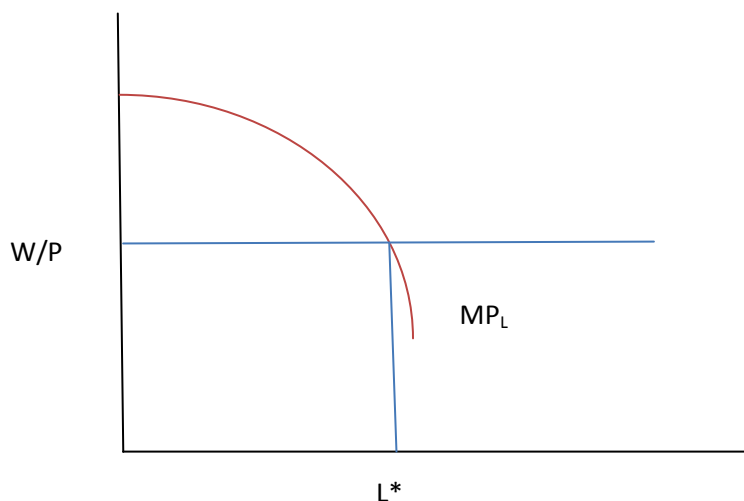
##### 3.3.3 The Marginalist theory of profit

##### 3.3.4 The Marginalist theory of interest

#### 3.3 The Marginalist Revolution III

##### 3.3.1 The marginalist theory of employment

- Marginal productivity analysis was developed to explain the forces determining the prices of factors of production and the distribution of income.
- But soon it was believed that it could also be applied to the forces determining the level of employment. In equilibrium marginal product of labor is equal to the real wage.
- The intersection of the marginal product line and the real wage line determine the equilibrium level of employment. The explanation of the equilibrium has been detailed in the last lecture.

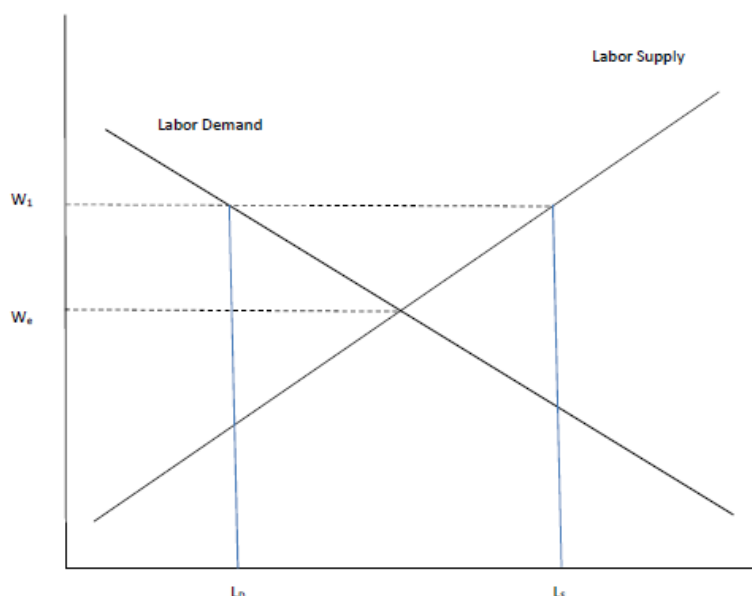


- If the price of labor increases less labor is hired so that at the firm level the marginal price of the last unit of labor goes upward.
- At the industry level if labor supply is more than the demand at a given wage it causes unemployment.
- This means in labor market like any other markets wage will fluctuate to equilibrate the market
- This conceptualization leads to some important policy conclusions:
  1. The wages should be kept flexible.
  2. Trade union contracts and minimum wage legislation are undesirable. In fact they cause unemployment by not allowing the labor market to clear.
  3. Macro conclusion: Depression can be overcome by letting wage fall.
- The argument of abolishing minimum wage can be understood from the following diagram.
- In the diagram if minimum wage is fixed at  $W_1$  then there will be unemployment of degree  $L_D L_S$ . This will disappear if wage is allowed to fall till  $W_e$ .
- Marginal productivity theory coupled with Laissez-faire principles led American economists to suggest that the best way to cure depression is to keep government out of the economy.
- Keynes however strongly criticized this theory. His main criticism was that the cut in wage may decrease cost for firm but it will also decrease income of workers which will lead to less aggregate demand leading to lower price. The problem of marginal productivity theory as a theory of general employment is that it does not take up the issue of aggregate demand and its relation of wage cut.

### 3.3.2 Criticisms of MP theory

- F.W. Tanssing criticized the very notion of marginal product saying that we cannot separate product produced by labor from that produced by capital.
- A more popular version of this criticism is contained in G.B. Shaw's Intelligent Woman's Guide to socialism and capitalism. Suppose a house is constructed by carpenter (L) using hammer (K). If another carpenter is added what is his

marginal physical product? To be precise, if employment of labor requires another unit of capital how do we measure the marginal product of capital?



**Figure 1: Labor market equilibrium**

- Marshall's Solution: Net product of labor be calculated by deducting value of capital.
- Clark's Solution: Capital is constant but its function varies. This is a long run view.

### 3.3.3 The Marginalist theory of profit

- Bohm-Bawerk failed to use marginalist analysis to explain profit.
- Classical economists applied the term profit for a payment for the use of capital, and a payment to the entrepreneur for management of business activity.
- In the marginalist, neo-classical tradition payment for the use of capital is called interest.
- What is the payment to entrepreneurship then?
- J.B. Clark defined profit as a residual payment (income left after paying to land, labor and capital) which disappears in the long run.

- Another view is that when a capitalist runs a business he takes a risk because estimated final price may be different from the realized. This can lead to profit or loss. Such risk cannot be insured. This leads to an explanation of profits as temporary income resulting from dynamic changes in the economy (i.e. transitory phases between two long run equilibrium.)

### 3.3.4 The Marginalist theory of interest

- Capital theory has been very controversial. One set of writers include Schumpeter, Fisher and Knight made a broad philosophical inquiry into the nature of capital and reasons for existence of interest.
- A Second set of authors tried to explain forces which determine rate of interest
- There are three subgroups within this group: Non monetary, monetary and neo-Keynesian. The last one is the synthesis of the first two.
- Non Monetary Theory: Long run real forces such as rate of investment determine rate of interest.  
Monetary Theory: Bohm-Bawerk, Knight and Fisher are the major proponents of this group. They proposed loanable fund theory { short run demand and supply for loanable fund determine the rate of interest.  
Neo-Keynesian Theory: This is a synthesis of the two other theories that was proposed by Fisher.
- The major problem of interest theory is that how do we to explain return to capital?
- Capital is made by labor and land. These factors must have got their payment for making these capital goods.
- Why does the capital get an extra payment? In other words, why is the payment to capital necessary?
- An obvious answer is that capital is productive.
- This is not a satisfactory answer -- if capital is more productive, land and labor involved in the production of the capital good should get the extra output like any other intermediate input. But why should capital get anything?

- There could be three possible reasons:
  1. Capital in the third original factor.
  2. Product Exhaustion theory is wrong in holding that in LR competitive equilibrium revenue from the sale of final goods will be equal to the flow of payments to the factors of production.
  3. MP theory is a theory of comparative static which is not the case in reality.
- Two major Contributions on this issue was made by BohmBawerk. He maintained that interest is not institutional but behavioral. It exists because present good is worth more than future good --- Re. 1 today is preferred to Re.1 tomorrow. This is because of the differences between the wants and the provision between present and future.
- Fisher in a more general theory of interest reasoned that any factor payment is a type of interest payment. For example wage can be seen as a return to human capital. Similarly rent can be seen as the return to the capitalized value of the land.
- Fisher discarded categories of payments for different factors of production. He said interest is the result of individuals adjusting their income flows in marketplace.
- Interest is nothing but the return people get for forgoing current consumption for future consumption.
- Fisher reasoned that interest depends on both the time preference of individuals and productivity of capital.