IRTI/IDB 14 DL COURSE
October 11, 2011 Lecture

Factors of production & Factor Markets

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2. LECTURE OUTLINES

- **Inputs and factors of production relationship.**
- **Reason and bases of input categorization.**
- **Variation in number of factors, why and how?**
- **Definition and characteristics of each factor.**
- **Factor markets and factor pricing.**
- **The equity issue and marginal productivity.**
- **Abolish interest? No/yes arguments.**
- **Rent, wages and profit and how each one of these is determined?**

3. FACTORS OF PRODUCTION

- **In the production of goods including services we use a number of things. These are called inputs.**
- **Inputs are too large in numbers. We classify them into several broad categories which differ from one another with reference to the characteristics of inputs each groups together.**
- **The number of factor categories has varied over time with the maximum being five - land, labor, capital, organization and enterprise – and the minimum just two: labor and capital**

4. Factors of production - Land

- **Land refers to all resources that Allah created for mankind and his other creatures on the planet Earth, below its crust and above it. Water, air, rivers, mines, plants, mountains, planes, oceans are some of the examples.**
- **Land is a free gift of nature to mankind as a whole. Property rights arose from population growth and complexity of social dynamics.**
- **Variety and fixity are relatively more dominant characteristics of land.**

5. Factors of production - Labor

- Labor refers to all those physical and mental exertions that people undertake to earn a living. Labor can be skilled or unskilled.
- Labor cannot be separated from the worker. So, work environment becomes important.
- Labor cannot be stored; it is most perishable commodity.
- The staying and bargaining power of labor is very weak. It is sought to be improved through fixing of minimum wages and collective bargaining.

6. Factors of production - Capital

- Capital includes all those man-made tool and instruments that save human time and effort in the processes of production.
- Capital speeds up division of labor, increases productivity and does what humans cannot do.
- Capital formation needs savings from wealth; it involves sacrifice of consumption now to consume more in the future.
- The talk of developing human capital is of recent origin.

7. Factors of production: Organization

- Until the close of the 18^{th} century production was not on a large scale; the management of the firms could mostly be run by the owners.
- After the industrial revolution, the firms' size expanded fast and specialized skills were needed to run business.
- Management got divorced from ownership, especially with the rise of modern gigantic corporations. Organization became a distinct factor of production.

8. Factors of production: Enterprise or Entrepreneurship

- Business revenues fluctuate, sometimes violently. But most people want sure and stable incomes. This divides people into hired and un-hired factors. The latter guarantee contractual fixed payments to the former and run the risk of losing money as revenue may fall short of contractually fixed payments.
- Earlier, un-hired factors were called the enterprisers, now they are the entrepreneurs. Some prefer to replace the title with technocrats

9. Factor markets

- **Like goods, factors of production are also bought and sold in the market but they are very different and mostly are not as visible as for goods.**
- **The important point for these markets is that the un-hired factor are on the demand side while hired factors provide the supply.**
- **In the case of land and capital – real or nominal – there is transfer of ownership but in the case of labor the contract is for work. No one owns the workers like machines or buildings.**

10. Factor Pricing

- We identified above five production factors but for their price determination economists tend to reduce their number.
- For making land useable prior investment is often substantial; it is merged with capital.
- Organization or management is specialized human skill. So, it is included in labor.
- For the entrepreneur, ownership / command of capital it is essential; it goes in capital. And yet it is human skill; some put it with labor.

11. Factor pricing: The marginal productivity theory

- As a defense of capitalism against the land nationalization proposal of Henry George and the socialist program of Karl Marx, J. B. Clark in the U.S came up with the marginal productivity theory of income distribution.
- His objective was to show that free markets distribute output (value) in accordance with their contribution to aggregate output. Thus, markets allocate resources efficiently and distribute incomes equitably.

12. Marginal productivity theory: Explanation

- Nothing has damaged the cause of equitable distribution as the marginal productivity theory of factor incomes. It relies on assumptions of perfect competition and linear production functions.
- The theory argues that in physical terms, we have:

$$\text{Output (Q)} = L.MP_L + K.MP_K$$

This can be converted into revenue terms using the output and factor prices in the market:

$$PQ = [P.MP_L]L + [P.MP_K]K \text{ and}$$

$$TR = MRP_L.L + MRP_K.K$$

13. Marginal productivity theory Criticism

- The assumptions of the theory are illusory. Competition is seldom perfect and many cost curves are non-linear in practice. The sum of parts may not always equal the whole.
- The theory fails to explain interest. Interest rate in the market is determined by the monetary policy of the central bank and placements on the bonds market. What has the productivity of capital to do with either? Its reasoning is circular. In a two factor model the share of one would fix of the other.

14. Marginal productivity theory Criticism (contd.)

- The demonstration that under perfect competition the payment to a factor equals the value of its contribution to output does not by itself prove that its marginal product determines the payment because it is its scarcity relative to other factors that determines both its price and payment.
- Marshall wrote: Marginal uses and costs do not govern value but are themselves governed with value by the general forces of demand and supply.
- This applies to factor markets as well.

15 Factor price: Differential and scarcity Rent

- Fertility of land differs. The price, say of corn, must cover the cost of production of growing it on the least fertile land at a point in time under the pressure of social demand. The cost of production on superior land being less the price will grant them a surplus over cost i.e. economic rent. This we call differential rent as Ricardo explained it. The theory only says that a better article will always fetch a better price.
- Differential rent does not enter price.

16. Factor price: Rent and Islam

- Even if all land had the same productivity rent would arise if price is pushed up by demand above the average cost of production. Then all land will earn rent. Scarcity rent would enter price.
- These theories have given rise to the notions of quasi-rent, earned and unearned incomes and rent-seeking.
- In Islam the concept of rent is not very clear: All agree that land belongs to one who enlivens it. Surplus land may better be given rent free Cash rent is allowed but share cropping is preferred.

17. Factor price: Wages

- **Mainstream economic theory essentially holds that wages are determined by the demand and supply of labor. Diminishing Marginal productivity of labor makes the demand curve slope downward. Supply of labor depends on the rate of population growth and workers choice between work and leisure. It tends to slope backwards if wages rise beyond a point.**
- **Wages can rise only if workers control their numbers. Minimum wages and collective bargaining does not help. Workers are largely responsible in whatever condition – good or bad - they are.**

18. Factor price: wages and Islam.

- Islam is not averse to market wage. It pleads for contribution as a basis for payments.
- But Islam pleads for fair wages if the market wage is not fair. Fair wage is related to the insistence on basic needs fulfillment from which support for minimum wage fixation also follows. Islam is neutral if not supportive of collective bargaining.
- However, the a fair wage is indeterminate; it is not fit for price theory formation.

19. Factor price: ban on interest

Faith apart, the Islamic ban on interest is justified for numerous reasons. Some of these are as under:

1. Capital in money form is unproductive by itself. In any case, productivity as said earlier does not determine the interest rate.
2. Interest has invariably been an instrument of the rich for exploiting the poor. In the past, the money flow in loans was from the rich towards the poor, interest rates were kept high. Today the flow has reversed, rates are low. Depositors rarely have any protection against inflation.
3. Interest has been the cause of most financial crises , especially after World War II.

20. Factor price: Profit

- Profit is a residual income. It is the difference between realized revenues and costs incurred to produce or obtain it. If the difference is negative there is a loss and it falls on capital of the enterprise irrespective of the economic system in operation – capitalist or Islamic
- But because capital bears risk of loss, all of the surplus i.e. profit must go to the entrepreneur is not acceptable in modern times for valid reasons. Sharing it with labor in bonus form is common.

THANK YOU VERY MUCH