

Laxmi Narain Dubey College, Motihari

(a constituent unit of B.R.A. Bihar University, Muz.)

NAAC Accredited 'B+'

Department of Economics

Topic: Isocost line

Paper-I: MICROECONOMICS

Part-I

B.A. (Hons.)

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ISOCOST LINES

- ✓ A producer aims at maximising his profits by reaching the highest isoquant that he can achieve.
- ✓ This depends on the total outlay and the prices of the factors of production.
- ✓ The isocost line represents the various combinations of the factors, for example, labour and capital, which the firm can purchase given the total outlay and the prices of the factors of production.
- ✓ It is also called the **outlay line** or **factor price line**.
- ✓ Assume that there are only two factors, labour and capital. The isocost line can be expressed as:

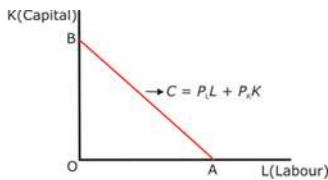
$$C = P_L L + P_K K$$

where C is cost or total outlay, P_L is price of labour, L is amount of labour employed, P_K is price of capital, and K is amount of capital employed.

- ✓ The figure depicts the isocost line, AB, as a straight line intersecting the X-axis and the Y-axis at points A and B, respectively.
- ✓ **We can determine the intersection of the isocost line.**

On the X-axis (Point A): Since K is equal to zero, $L = \frac{C}{P_L}$

On the Y-axis (Point B): Since L is equal to zero, $K = \frac{C}{P_K}$



- ✓ **Slope of the isocost line,** $AB = -\left(\frac{OB}{OA}\right) = \left\{-\left(\frac{C}{P_L}\right) / \left(\frac{C}{P_K}\right)\right\} = -\left(\frac{P_L}{P_K}\right)$
- ✓ The slope of the isocost line is the price ratio of the two factors, labour and capital.
- ✓ In the following figure, a series of such isocost lines have been shown, where the higher the isocost line, the greater is the total outlay or cost.

