

**School of studies in Management, Jiwaji University, Gwalior**

**BBA 2<sup>nd</sup> Semester – Managerial Economics**

## **Lecture -1**

### **Isoquant Curves**

#### **Meaning**

The term Iso-quant or Iso-product is composed of two words, Iso = equal, quant = quantity or product = output.

Thus it means equal quantity or equal product. Different factors are needed to produce a good. These factors may be substituted for one another.

#### **Definitions:**

“The Iso-product curves show the different combinations of two resources with which a firm can produce equal amount of product.” Bilas

“Iso-product curve shows the different input combinations that will produce a given output.” Samuelson

#### **Assumptions:**

**The main assumptions of Iso-quant curves are as follows:**

##### ***1. Two Factors of Production:***

Only two factors are used to produce a commodity.

2. Divisible Factor: Factors of production can be divided into small parts.

##### ***3. Constant Technique:***

Technique of production is constant or is known before hand.

##### ***4. Possibility of Technical Substitution:***

The substitution between the two factors is technically possible. That is, production function is of ‘variable proportion’ type rather than fixed proportion.

### **5. Efficient Combinations:**

Under the given technique, factors of production can be used with maximum efficiency.

### **Iso-Product Schedule:**

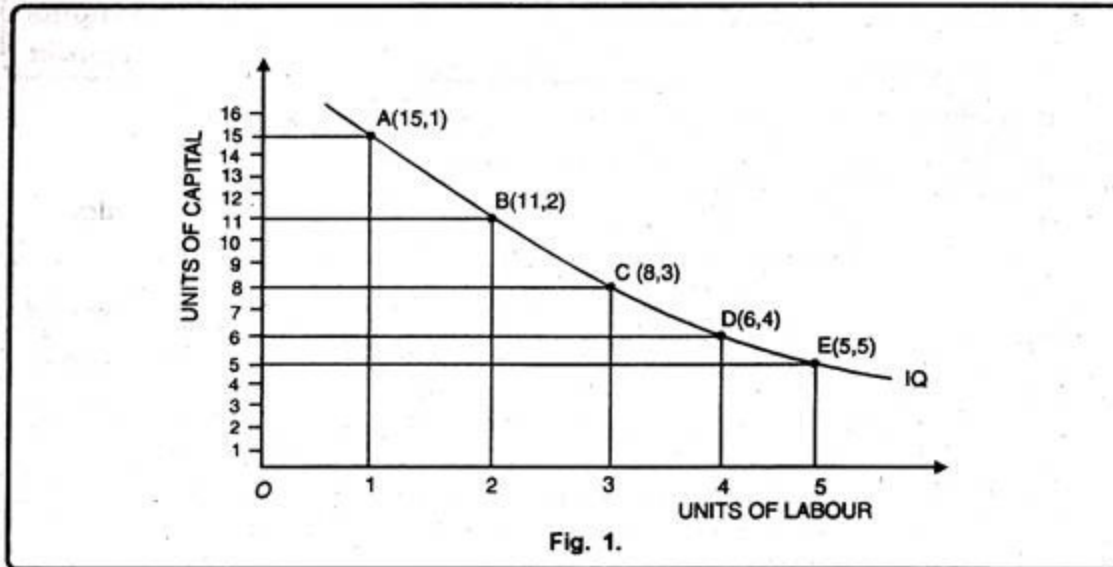
Let us suppose that there are two factor inputs—labour and capital. An Iso-product schedule shows the different combination of these two inputs that yield the same level of output as shown in table 1.

**Table 1. Iso-Product Schedule.**

<b>Combination</b>	<b>Units of labour</b>	<b>Units of capital</b>	<b>Output of cloth (metres)</b>
A	1	15	200
B	2	11	200
C	3	8	200
D	4	6	200
E	5	5	200

The table 1 shows that the five combinations of labour units and units of capital yield the same level of output, i.e., 200 metres of cloth. Thus, 200 metre cloth can be produced by combining.

- (a) 1 units of labour and 15 units of capital
- (b) 2 units of labour and 11 units of capital
- (c) 3 units of labour and 8 units of capital
- (d) 4 units of labour and 6 units of capital
- (e) 5 units of labour and 5 units of capital



### **Iso-Product Curve:**

From the above schedule iso-product curve can be drawn with the help of a diagram. An. equal product curve represents all those combinations of two inputs which are capable of producing the same level of output. The Fig. 1 shows the various combinations of labour and capital which give the same amount of output. A, B, C, D and E.

## **Lecture -2 – Economies of Scale**

Economies of scale are cost reductions that occur when companies increase production. The fixed costs, like administration, are spread over more units of production. Sometimes the company can negotiate to lower its variable costs as well.

Governments, non-profits, and even individuals can also benefit from economies of scale. It occurs whenever an entity produces more, becomes more efficient, and lowers costs as a result.

Economies of scale not only benefit the organization. Consumers can enjoy lower prices. The economy grows as lower prices stimulate increased demand.

Economies of scale give a competitive advantage to large entities over smaller ones. The larger the business, non-profit, or government, the lower its per-unit costs.

**Note:**

- Economies of scale occur when a company's production increases, leading to lower fixed costs.
- Internal economies of scale can be because of technical improvements, managerial efficiency, financial ability, monopsony power, or access to large networks.
- External economies are ones where companies can influence economic priorities, often leading to preferential treatment by governments.
- Diseconomies of scale can occur when a company becomes too big, lowering its production.

**Examples of Economies of Scale**

In a hospital, it is still a 20-minute visit with a doctor, but all the business overhead costs of the hospital system are spread across more doctor visits and the person assisting the doctor is no longer a degreed nurse, but a technician or nursing aide.

Job shops produce products in groups such as shirts with your company logo. A significant element of the cost is the set-up. In job shops, larger production runs lower unit costs because the set-up costs of designing the logo and creating the silk-screen pattern are spread across more shirts.

In an assembly factory, per-unit costs are reduced by more seamless technology with robots.

A restaurant kitchen is often used to illustrate how economies of scale are limited: more cooks in a small space get into each other's way. In economics charts, this has been illustrated with some flavor of a U-shaped curve, in which the average cost per unit falls and then rises. Costs rising as production volume grows is termed "dis-economies of scale."

**Types**

There are two main types of economies of scale: internal and external. Internal economies are controllable by management because they are internal to the

company. External economies depend upon external factors. These factors include the industry, geographic location, or government.

### **Internal Economies of Scale**

Internal economies result from a larger volume of production. You'll typically see them in large organizations

For example, large companies have the ability to buy in bulk. This lowers the cost per unit of the materials they need to make their products. They can use the savings to increase profits. Or they can pass the savings to consumers and compete on price.

**There are five main types of internal economies of scale.**

**Technical** economies of scale result from efficiencies in the production process itself. Manufacturing costs fall 70% to 90% every time the business doubles its output.<sup>2</sup> Larger companies can take advantage of more efficient equipment.

For example, data mining software allows the firm to target profitable market niches. Large shipping companies cut costs by using super-tankers. Finally, large companies achieve technical economies of scale because they learn by doing. They're far ahead of their smaller competition on the learning curve.

**Monopsony power** is when a company buys so much of a product that it can reduce its per-unit costs. For example, Wal-Mart's "everyday low prices" are due to its huge buying power.

**Managerial** economies of scale occur when large firms can afford specialists. They more effectively manage particular areas of the company. For example, a seasoned sales executive has the skill and experience to get the big orders. They demand a high salary, but they're worth it.

**Financial** economies of scale mean the company has cheaper access to capital. A larger company can get funded from the stock market with an initial public offering. Big firms have higher credit ratings. As a result, they benefit from lower interest rates on their bonds.

**Network** economies of scale occur primarily in online businesses. It costs almost nothing to support each additional customer with existing infrastructure. So, any

revenue from the new customer is all profit for the business. A great example is eBay.

### **External Economies of Scale**

A company has external economies of scale if its size creates preferential treatment. That most often occurs with governments.

For example, a state often reduces taxes to attract the companies that provide the most jobs. Big real estate developers convince cities to build roads to support their buildings. This saves the developers from paying those costs. Large companies can also take advantage of joint research with universities. This lowers research expenses for these companies.

Small companies can cluster similar businesses in a small area. That allows them to take advantage of geographic economies of scale. For example, artist lofts, galleries, and restaurants benefit by being together in a downtown art district.

### **Diseconomies of Scale**

Sometimes a company chases economies of scale so much that it becomes too large. This is called a diseconomy of scale.

For example, it might take longer to make decisions, making the company less flexible. Miscommunication could occur, especially if the company becomes global. Acquiring new companies could result in a clash of corporate cultures. This will slow progress if they don't learn to manage cultural diversity.