



Concept of Cost of the Firm

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Introduction

Cost refers to expenses done by the producers on the factors of production used as an input i.e. Land, Labour, Capital, Entrepreneurship, as well as non factor input for obtain a given amount of output of a commodity.

In a short run production cycle when some factors of production remains fixed where some factor are variable which varies in the every level of production.

So these cost can be generally classified as a (i) Fixed Cost, (ii) Variable cost. Thus, the total cost of any product is a combination of these two costs.

$$\text{Total Cost (TC)} = \text{Total Fixed Cost (FC)} + \text{Total Variable Cost (VC)}$$

So before studying total cost of any product it is essential to learn the concept of Fixed Cost and Variable Cost.



Fixed Cost

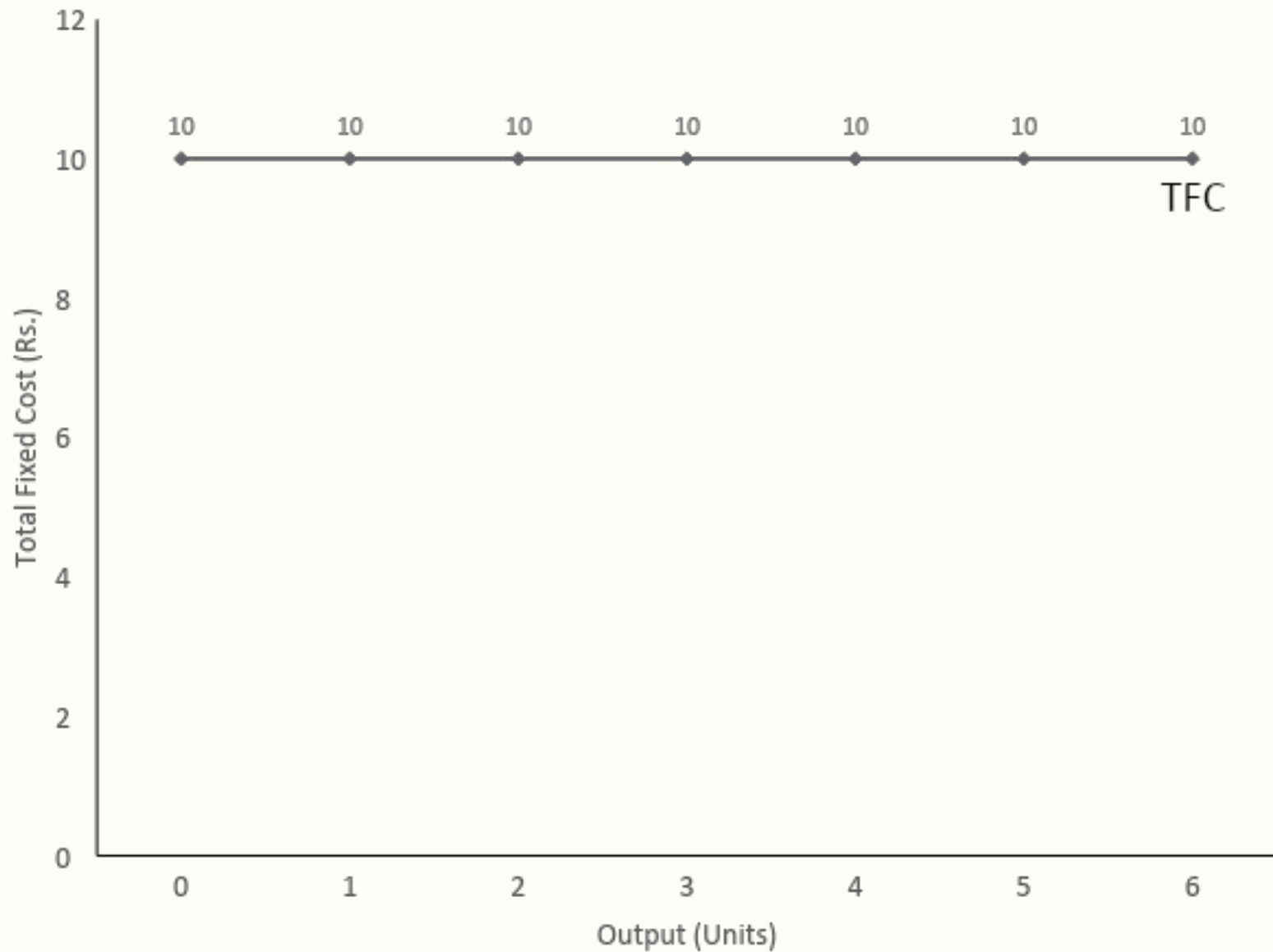
- In a short period cost of fixed factors are known as fixed cost. It is also known as Supplementary Cost, Over head Cost and Indirect Cost
- Every unit of production is not directly depends on this cost so it is known as Supplementary Cost and General Overhead in the sense that this cost is done for every unit of production.
- Total Fixed Cost includes Rent on land, Rent on factory building, Interest on Capital borrowed, Salary of Permanent staff, Licence Fees, Insurance premium, Depreciation of Machinery etc.
- This cost do not change with the change in output. Even when Output is zero Fixed cost is remain the same



Total Fixed Cost

| Unit of Production | Total Fixed Cost (Rs.) |
|--------------------|------------------------|
| 0 | 10 |
| 1 | 10 |
| 2 | 10 |
| 3 | 10 |
| 4 | 10 |
| 5 | 10 |
| 6 | 10 |

This table indicates that at every level of output fixed cost remain constant. When Output is Zero unit is cost is 10 Rs. When it increases to two or three or five or six units even then the fixed cost is Rs. 10



Total Fixed Cost is a horizontal straight line parallel to X-axis, showing that total fixed cost is constant at all level of output. It is Rs. 10, even when output is zero or when output is at six unit.



Variable Cost

Variable cost is the expenditure incurred by the producer on the use of variable factors of production. When output changes this cost also changes. So in general, which cost is increase with the increase in the output and decrease with the decrease in the output. When output is zero, these cost is also zero.

This cost has a direct relation with the level of production so it is also known as direct cost and prime cost.

Variable cost includes 1. purchase of raw material, 2. Wages of casual labour, 3. Expenses on electricity, 4. Expenses on fuel, 5. cost of transportation



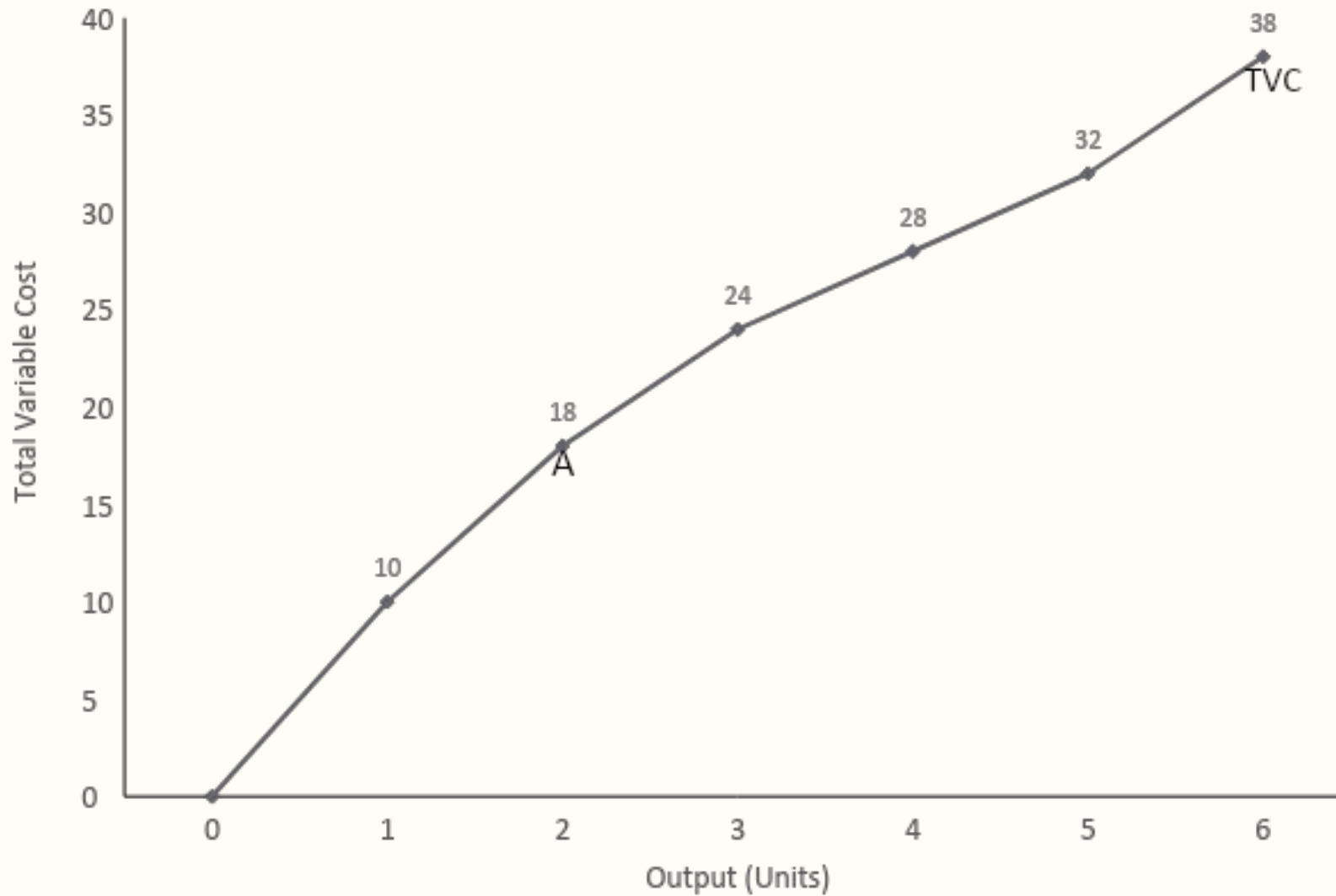
Total Variable cost

| Unit of Production | Total Variable Cost (Rs.) |
|--------------------|---------------------------|
| 0 | 0 |
| 1 | 10 |
| 2 | 18 |
| 3 | 24 |
| 4 | 28 |
| 5 | 32 |
| 6 | 38 |

It shows that as output increases total variable cost increases. When output is zero, total variable cost is also zero.

When output is one unit, total variable cost is 10 Rs. And when output is six units, total variable cost become 38 Rs.

Total Variable Cost



Total Variable Cost increase with increase in output. Initially, it increases at decreasing rate (till point A). Eventually it increases at an increasing rate and from that point diminishing return to a factor start operating.



Difference Between Fixed Cost and Variable Cost

Fixed Cost

- Fixed cost do not change with change in quantity of output
- It is remain constant at all level of output whether it is zero or maximum
- Total fixed cost line is straight horizontal line. It is always parallel to X-axis

Variable Cost

- Variable cost change with change in quantity of output
- Variable cost is zero when output is zero and it is increases when output is increases and decreases when output is decreases.
- Line of Variable cost moving upward from left to right