CHAPTER 22 :Firm costs revenue and objectives

Key terms

1. Total cost : the total amount that has to be spent on the factors of production used to produce a product.
2. Average total cost : total cost divided by output.
3. Fixed costs : costs which do not change with output in the short run.
4. Average fixed cost : total fixed cost divided by output.
5. Variable costs : costs that change with output.
6. Average variable cost : total variable cost divided by output.
7. Long run : the time period when all factors of production can be changed and all costs are variable.
8. Price : the amount of money that has to be given to obtain a product.
9. Total revenue : the total amount of money received from selling a product.
10. Average revenue : the total revenue divided by the quantity sold.
11. Profit satisficing : sacrificing some profit to achieve other goals.
12. Profit maximisation : making as much profit as possible or making the largest difference between total revenue and total cost.

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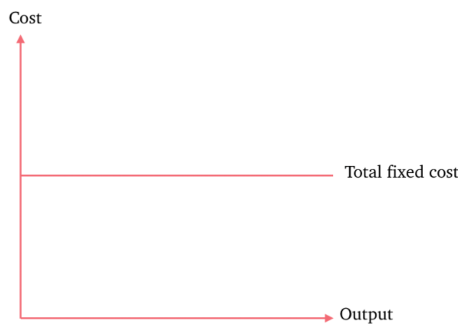
1. Calculating the costs of production

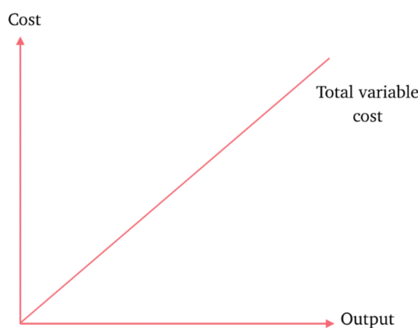
- **Total cost** : the total amount that has to be spent on the factors of production used to produce a product.

Total cost = Fixed cost + Variable cost

- **Fixed costs** : costs which do not change with output in the short run e.g. machines, rent, and interest on loan.

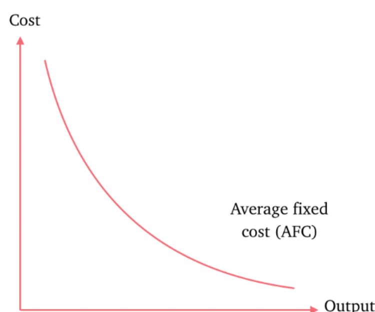


- **Variable costs** : costs that change with output e.g. raw material.



- **Average fixed cost** : total fixed cost divided by output.

$$\text{Average fixed cost} = \frac{\text{Total fixed cost}}{\text{Quantity of output}}$$



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Average variable cost : total variable cost divided by output.

$$\text{Average variable cost} = \frac{\text{Total variable cost}}{\text{Quantity of output}}$$

AVC↑ ⇒ when a firm faces diseconomies of scale.

AVC↓ ⇒ when a firm faces economies of scale.

2. Revenue

- Total revenue : the total amount of money received from selling a product.

$$\text{Total revenue} = \text{Price} \times \text{Quantity}$$

- Average revenue: the total revenue divided by the quantity sold.

$$\text{Average revenue} = \frac{\text{Total revenue}}{\text{Quantity of output}}$$

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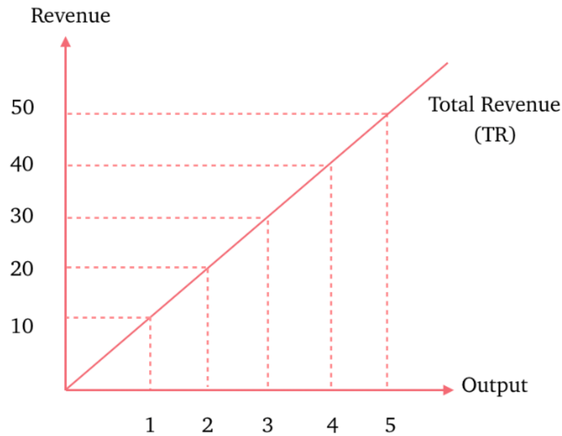
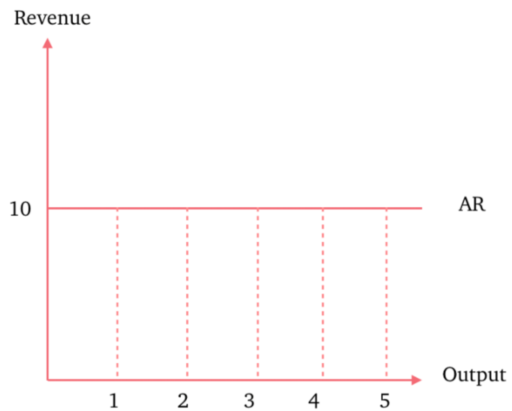
CASE : When price is constant in perfect competition market

$$\text{Average revenue} = \frac{\text{Total revenue}}{\text{Quantity of output}} = \text{Price}$$

For example : Price = 10 USD





Quantity	Price	Total Revenue (TR)	Total Average Revenue (AR)
1	10	10	10
2	10	20	10
3	10	30	10
4	10	40	10
5	10	50	10

To sum up : When price is constant, AR = P

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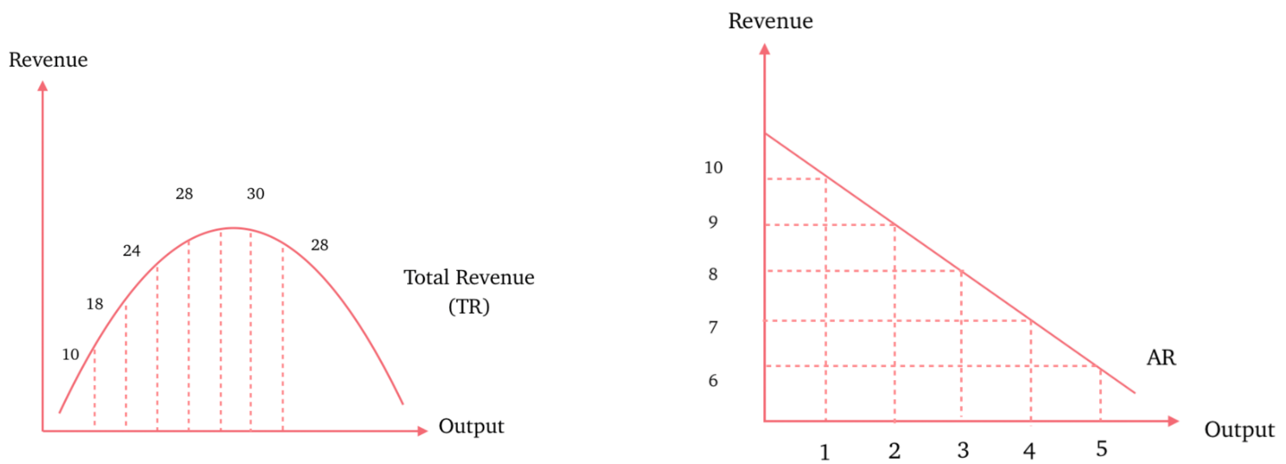
CASE: When price is falling as the quantity sold rises

For example :



Quantity	Price	Total Revenue (TR)	Total Average Revenue (AR)
1	10	10	10
2	9	18	9
3	8	24	8
4	7	28	7
5	6	30	6
6	5	30	5
7	4	28	4

To sum up : When price is falling as the quantity sold rises AR =P and AR is falling. TR rises and falls.

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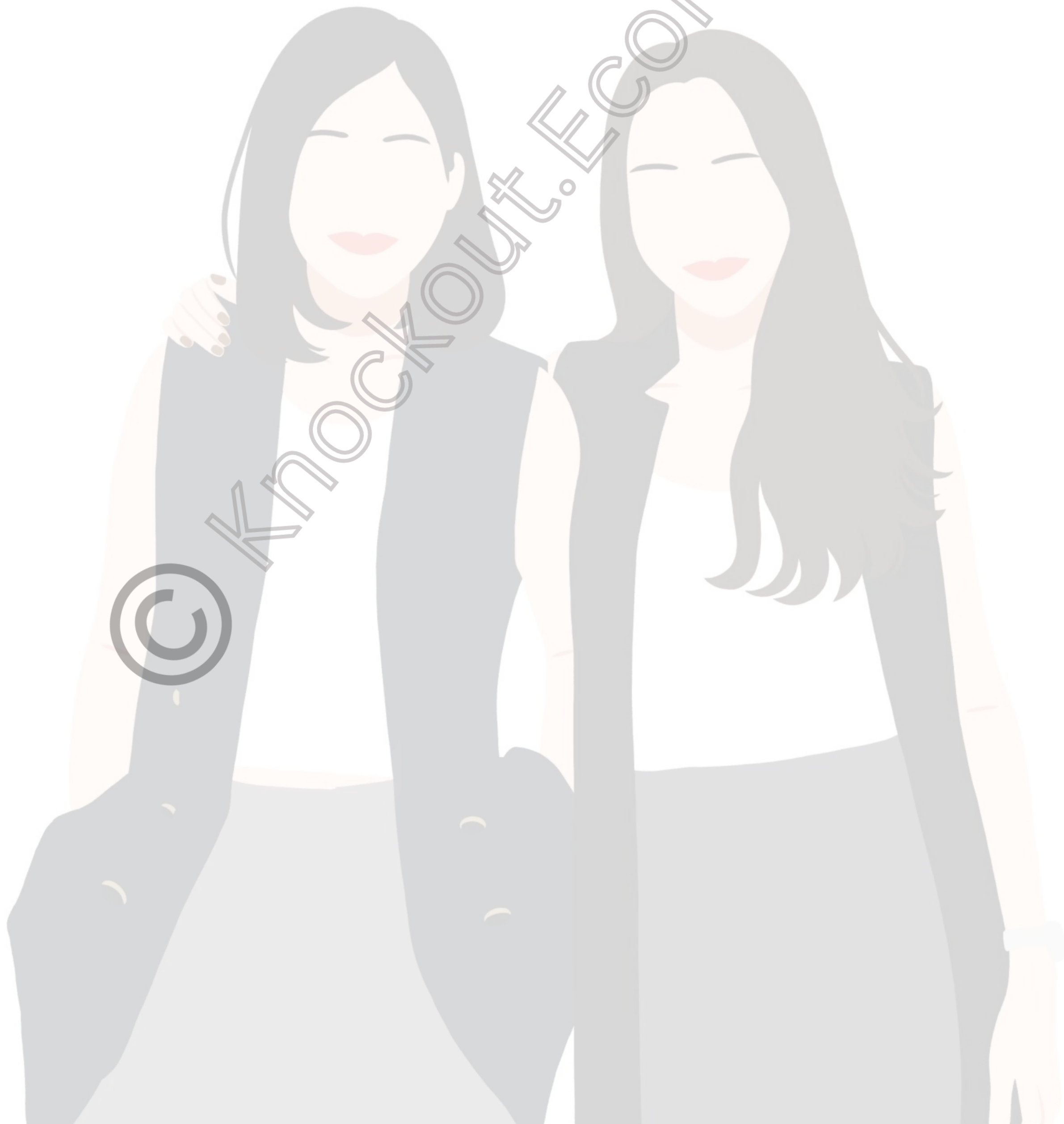
3. Objectives of firms

1. Survival
2. Growth
3. Social welfare
4. Profit satisficing
5. Profit maximization

4. To increase profit

1. Reducing cost of production.
2. Increasing revenue



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