

Equilibrium of Producer under Monopoly

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Monopoly

DEFINITIONS

- According To **Koutsoyiannis** ,

“Monopoly Is a Market Situation in Which There is A single Seller, There are no close substitutes for commodity it produces ,there are barriers to entry.”

- According To **Baumol** ,

“ A pure Monopoly is defined as the firm that is also an industry. It is the only supplier of some particular commodity for which there exist no close substitutes.”

Features of Monopoly

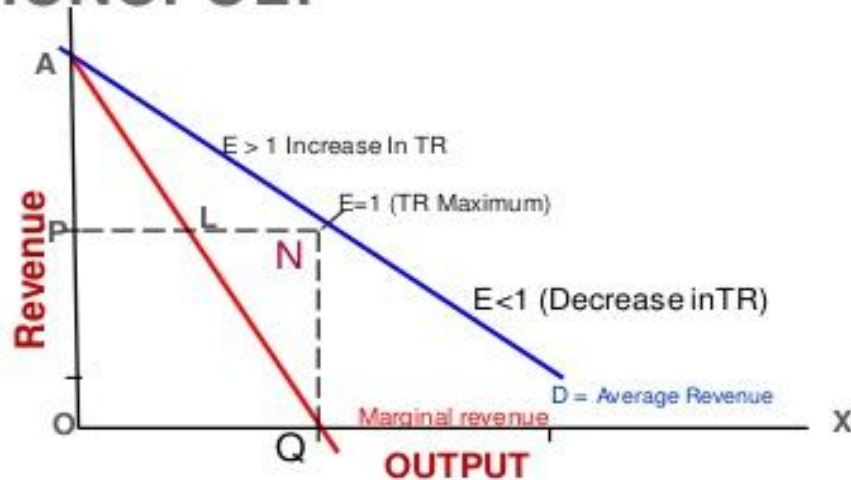
- Single Seller
- Large number of Buyers
- Restriction on Entry and Exit of Firms
- No Close Substitute
- Price Maker

Demand and Revenue Curves under Monopoly

- AR and MR slopes downward
- AR is always positive
- MR can be zero or negative
- Slope of MR is double the slope of AR

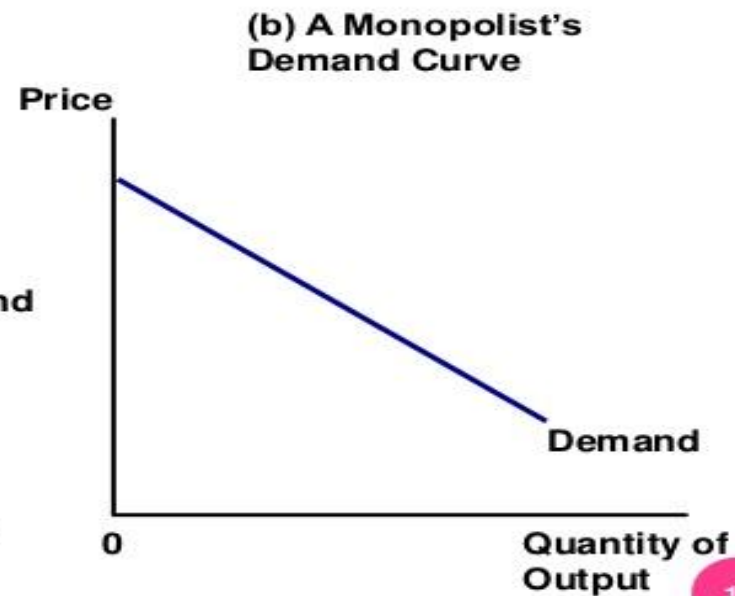
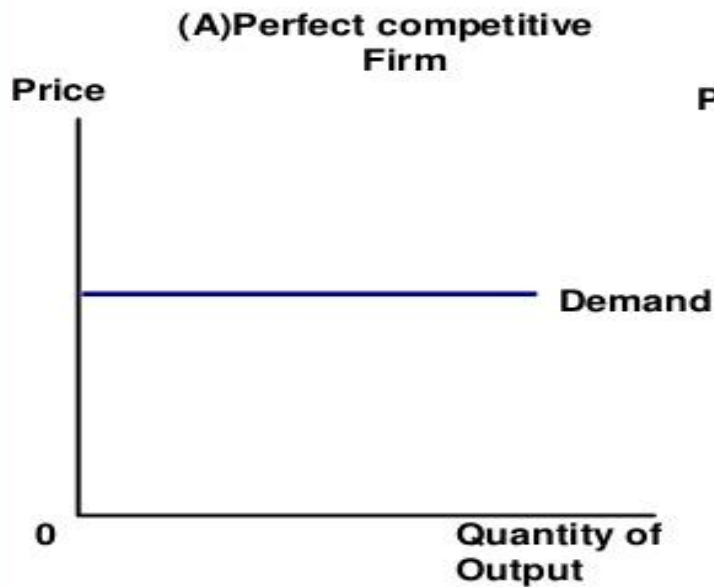
DEMAND AND REVENUE UNDER MONOPOLY

- Demand curve of the monopolist is also average revenue (AR) curve. It slopes downward. It means if the monopolist fixes high price, the demand will shrink.



- Demand rises with fall in price (AR)
- At point 'N', total revenue will be maximum. (i.e. , $TR = P \times Q$)
- Average revenue is never zero, but marginal revenue may be zero or even negative
- At OP price, the monopolist will produce OQ quantity of output, because this price affords him maximum total revenue.

Demand and Revenue Curves under Monopoly and Perfect Competition

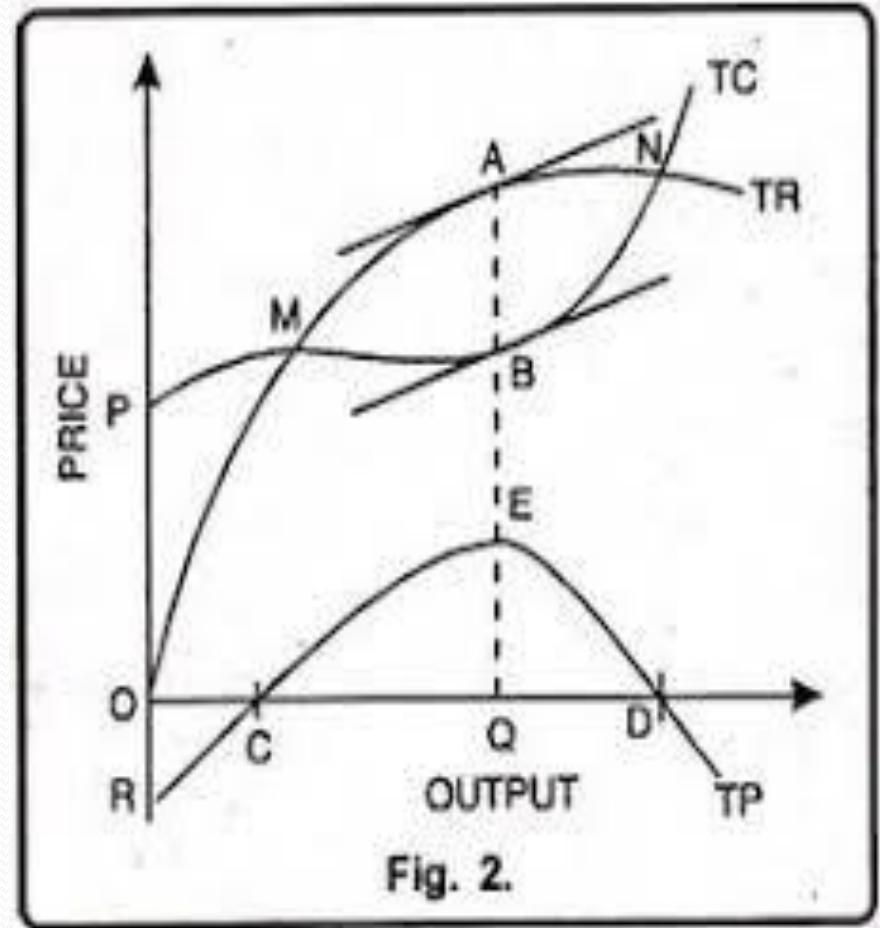


Determination of Price and Output under Monopoly

- Total Revenue and Total Cost Analysis
- Marginal Revenue and Marginal Cost Analysis

Total Revenue and Total Cost Analysis

- Slope of Total Revenue is equal to slope of Total Cost



Marginal Revenue and Marginal Cost Analysis

Condition

- Marginal Revenue is equal to Marginal Cost

$$MR=MC$$

Short Run Equilibrium

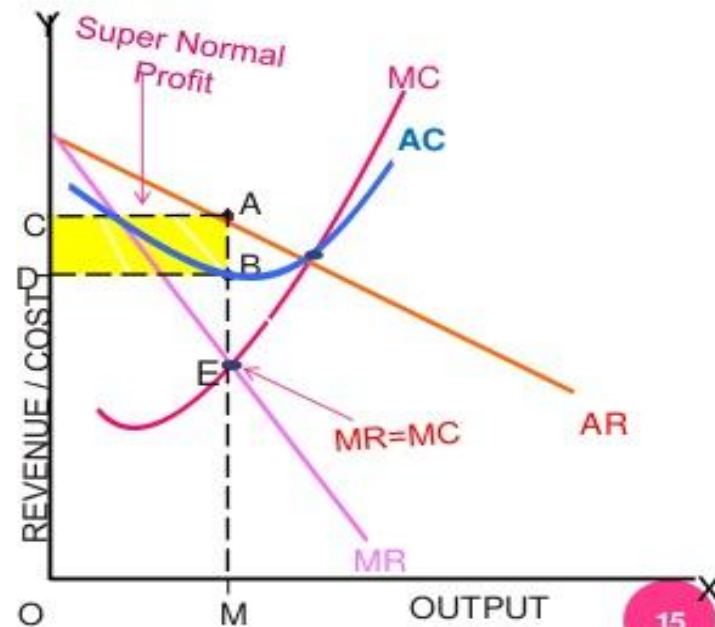
Super Normal Profits

- Marginal Revenue is equal to Marginal Cost
- Average Revenue is more than Average Cost

Short Run Equilibrium

SUPER NORMAL PROFIT

- In This Figure ,The Monopolist is in equilibrium at point **E** .
- Because at this point **MC=MR** .
- The Monopolist Produces **OM** Units & sell it at **AM** price
- Thus in this Situation the super normal profit of the monopolist will be **ABCD**



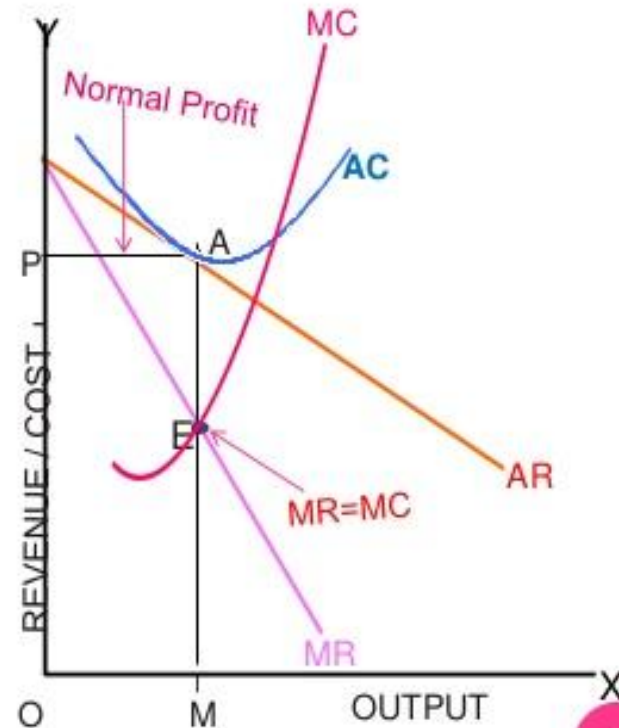
Short Run Equilibrium

Normal Profits

- Marginal Revenue is equal to Marginal Cost
- Average Revenue is equal to Average Cost

NORMAL PROFIT

- In This Figure ,The Firm is in equilibrium at point **E** .
- Where **MC=MR** & OM is the equilibrium output .
- At this output **AC** Curve Touches Average Revenue(AM) curve at point **A**.
- At point 'A' price OP (AM) is equal to the average Cost of the product .
- Therefore firms **earn only normal profit** in equilibrium situation as at equilibrium output its **AC=AR**



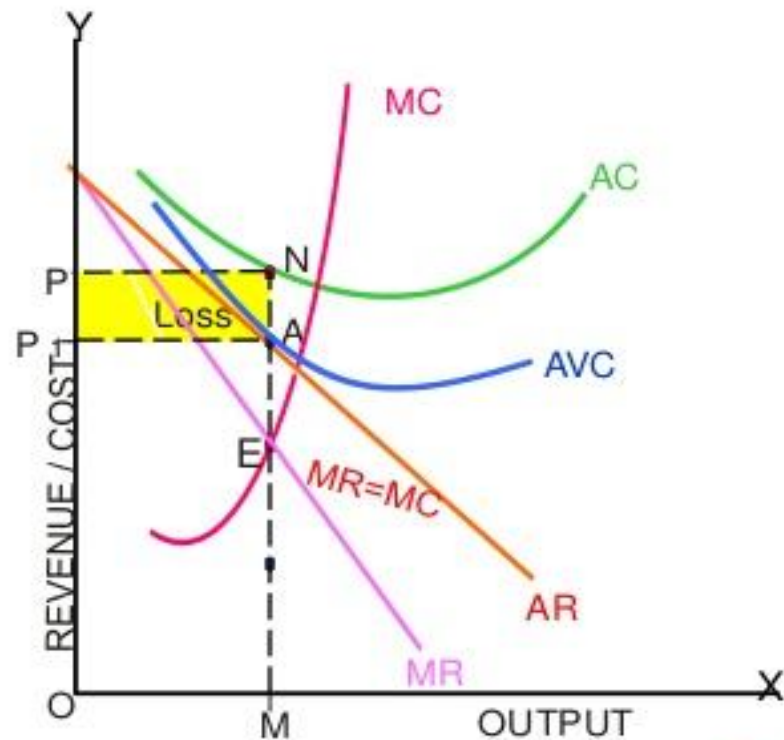
Short Run Equilibrium

Losses

- Marginal Revenue is equal to Marginal Cost
- Average Revenue is less than Average Cost

MINIMUM LOSS

- In this Figure , The monopolist is in equilibrium at point E , Where **MC=MR** & produces **OM** output.
- The price of equilibrium output **OM** is fixed at **OP₁** (AM).
- At this Price The **Average Variable Cost**(AVC) Curve Touches AR curve at point 'A'.
- At this situation the firm will **get only AVC** from the Prevailing Price
- .The firm will bear **the loss of fixed cost** , AN per Unit.



The firm will bear total loss equivalent to **NAP₁P** as shown by the shaded area.

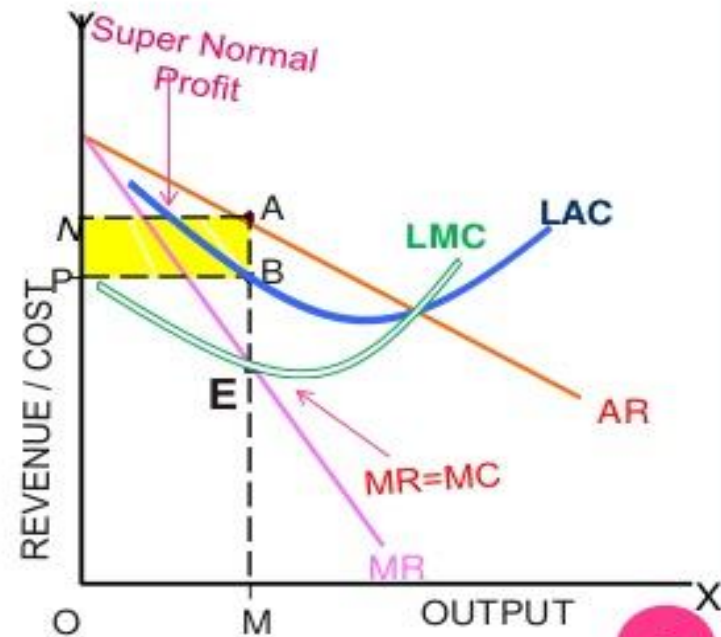
Long Run Equilibrium

Supernormal Profits

- Marginal Revenue is equal to Marginal Cost
- Long Run Average Revenue is more than Long Run Average Cost

PRICE DETERMINATION UNDER LONG RUN

- In the Figure ,Point E Indicates the equilibrium of the monopolist .
- At Point E, **MR = LMC** . Hence **OM** is the equilibrium Output & **ON (=AM)** is the equilibrium Price. **BM** is the long run average cost.
- Price (Average Revenue) AM is being more than long run average cost (**AR > LAC**), the Monopolist earn (**AM - BM = AB**) Super Normal Profit Per Unit.
- The Firm's Super Normal Profit will be **ABPN** as Shown by Shaded Area





Thank You