MARKET STRUCTURES

- Firms make decisions about how to combine factor inputs so that they may produce efficiently

- Firms also select factors of production from the factor markets

- Firms also consider the market in which they operate

- Markets are not all the same

  - Monopoly: a producer is the only supplier and has no competition
  - Perfect competition: very large number of small firms. No one firm can dominate the market
  - Oligopoly: a small number of large producers

- Perfect competition occurs when not one of the market participants either buyer or seller can influence the price of a good

  - Price is set by the interaction of the market forces of supply and demand
  - All the participants are price takers

- Conditions for perfect competition:
  - Large number of buyers and sellers
  - No collusion between buyers and sellers
  - Homogeneous product – the goods are identical
  - Freedom of entry to and exit from the market – no barriers to entry

- o Perfect knowledge of market conditions
- o No government intervention
- o Mobility of factors of production

- No market meets all the requirements of a perfectly competitive market

- In really only approximations of perfectly competitive markets occur
  Examples: Farmers
                         International commodity Markets

- Relevance of the study of perfect markets

  - o Provides insight into how such markets function – for agriculture
  - o Presents a meaningful point for analyzing the determination of price and output
  - o Act as a standard or norm against other markets may be measured
  - o Provides a basis for market analysis

- Perfect competition not the most desirable market

PERFECT COMPETITION

> ## 5 CHARACTERISTICS

- Many buyers and sellers each small in relation to the market and not able to influence market price.
- Homogeneous goods – good is identical.
- All factors of production are mobile i.e. able to move from one market to another.
- Complete knowledge of the market by all buyers and sellers.
- Total freedom of entry to and exit from the market.
- No government intervention to influence buyers and sellers.
- No collusion between sellers – each seller acts independently.

NOTE:

1. Very few examples of perfectly competitive firms exist.
2. The model of perfect competition is useful to draw conclusions and to make predictions.
3. It serves as a norm for comparing markets.
4. A good point of departure for analysis of what determining prices and output.

- Demand for goods under perfect competition

    - The interaction of D and S determine price
    - The individual firm is a price taker
    - Charging a higher price will mean a firm will lose out
    - Charging a lower price will not ensure market dominance – no one firm can
    - D-curve will be horizontal (= perfectly) elastic)
    - Since there is only one price and the firm can only sell at that price the market price will be the same as the Marginal Revenue (MR) which will be the same as the Average Revenue (AR)

        - Thus MR = AR = P

    - Because the firm is a price taker and price is set in the market any one additional unit of a good sold yields the same income as the previous units thus Total Revenue (TR) increases by the same amount
    - The TR is a straight line through the origin upwards to the left with a slope equal to the price
    - Equation for Total Revenue is TR = PQ

- **Equilibrium under perfect competition**

  - Equilibrium = profit maximization position
  - Equilibrium conditions for a firm under any market conditions
    - Profit = Revenue
      - Cost
  - When revenue and cost are known 2 decisions to be taken
    - Whether to produce at all
    - At which level of output will profit be maximized

  - <u>2 rules</u> for all firms under any market conditions: 1. shut-down rule
    - 2. profit maximization rule

    1.
       - Shut-down rule: a firm can produce as long as TR is equal to or greater than Total Variable Cost (TVC
       - Shut-down rule = close down rule
         - = start-up rule
       - Shut-down rule indicates where a firm should restart production
       - Shut-down rule stated in unit cost
         A firm should only produce if AR (= P) is equal to or greater than Average Variable Cost (AVC)
       - Firms have FC and VC
         TC = FC + VC
       - FC are incurred even if output is zero
         Thus firms must cover VC

- If revenue at least covers VC and some FC it could continue production in the short term
- If Total Revenue does not cover Total Variable Cost it should shut down

2. The profit-maximisation rule:
   - Firms should produce that quantity so as to maximize profit or minimize losses
   - Profit maximization may be expressed in terms of TR and TC or in terms of MR and MC
   - Since profit is:
     $$\frac{TR - TC}{Profit}$$
   - Profit is maximized where MR = MC
     - Each factor of production has a reward accruing to it
     - Thus profit accrues to entreprenuership
     - Profit is added in as a cost
     - Thus if MR is greater than MC the firm is still making profit on the last extra unit
     - A firm can add to its profit by expanding its production until no extra profit is made on the last unit of output produced which is where MR = MC
     - At this level of output profit is maximized

❖ If a firm continues producing beyond this point the cost of producing each additional unit of output (MC) will be greater than the revenue gained from selling it (MR). This firm will make a loss on the production of each additional unit of output and its profit will decreased

o 3 possibilities:
  ▪ When MR > MC output should be expanded
  ▪ When MR = MC profit is maximized
  ▪ When MR < MC output should reduced