

# Ch. 14 Firms in Competitive Markets

- **Perfectly competitive market:**

- Market with many buyers and sellers
- Each buyer and seller is a price taker
- Identical Products
- Freely enter or exit the market

- $TR = P \cdot Q$

- $AR = TR / Q$

- $MR = \Delta TR / \Delta Q = P$

- Only for competitive firms  $MR = P$

- **For Profit Maximization,  $MR = MC$**

- Maximize profit for  $Q$  where  $MR = MC$

- The MC curve determines the firm's  $Q$  at any price.
- The MC curve is the firm's supply curve.

- **Shutdown vs. Exit**

- Shutdown: A short-run decision not to produce anything because of market conditions.
  - If shut down in SR, must still pay FC, but can save VC.
- Exit: A long-run decision to leave the market.
  - If exit in LR, zero costs.

- Shut down if  $TR < VC$ , or  $P < AVC$
- Sunk Cost :
  - A cost that has already been committed and cannot be recovered
  - In the short run, FC are sunk costs
- Exit the market if:  $TR < TC$  (same as:  $P < ATC$ )
- Market Supply: Assumptions
  1. All existing firms and potential entrants have identical costs.
  2. Each firm's costs do not change as other firms enter or exit the market.
  3. The number of firms in the market is fixed in the short run, and variable in the long run.
- **Zero profit condition**
- The process of entry or exit is complete in the long run
- Remaining firms earn zero economic profit
- If existing firms earn positive economic profit?
- If existing firms incur losses?
- In the long run,  $P = \min ATC$
- Why do competitive firms stay in business if they make zero profit?
- Economic profit vs. accounting profit
- **Long-run Market Supply Curve**
- Horizontal if:
  - all firms have identical costs, and costs do not change as other firms enter or exit the market
- Long-run supply curve might slope upward if:
  - Firms have different costs or costs rise as firms enter the market