PERFECT COMPETITION

Benchmark Market System

PERFECT COMPETITION

• Assumptions of the model:
  1) There exist many sellers and buyers in the market
  2) Identical (Homogeneous) product being sold
  3) Freedom of entry/exit by firms
  4) Perfect information for all involved in the market
  5) Each firm has a very small market share

• This leads to the following characteristics of the market:
  1) the firms are price takers; that is, each firm cannot individually affect market price
  2) products are perfect substitutes - demand is perfectly elastic
  3) Price is uniform across suppliers
    This leads us to conclude that, in perfect competition,
    \[ MR = AR = P \]
PRODUCE OR NOT TO PRODUCE?

• Recall, the firm in the Short Run has two questions to answer:
  1) Produce or Shut-down?
  2) If produce, how much should we produce?

Recall economic profit = TR - TC
Profits depend upon market price - 4 scenarios

Produce or Not to Produce

• Case I - - P > AC
Profit/unit = (P-AC) Total Profit = (P-AC)Q
So, if (P-AC) > 0, firm will earn positive economic profit

  How much does it produce? Where MR=MC

Produce or Not to Produce

• Case II - - P = min AC
Profit/unit = (P-AC) Total Profit = (P-AC)Q

Economic Profit = 0 =====>> Firm earns normal profit

  How much does it produce? Where MR=MC
Produce or Not to Produce?

CASE III - - P < minimum AC but P> minimum AVC

(P-AC) < 0 =====> Economic Loss

Should the firm shutdown? NO.
Firms can cover variable costs, so would lose more by shutting
Down than they are by producing

Profit maximization (MR=MC) also minimizes losses

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Produce or Not to Produce?

- CASE 4 P ≤ minimum of AVC

Economic Loss - should we shutdown?
If Economic Loss = Fixed Cost , continue to produce with losses
equal to fixed cost
If Economic Loss > Fixed Cost, SHUTDOWN

SHUTDOWN POINT The output/ price where firms are just
able to cover its variable costs. At a lower price, it cannot
cover variable cost and should shutdown

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SR Supply Curve

- Using what we have just done, can we
explain why the supply curve is upward
sloping

SR industry supply curve - the quantity supplied by the industry
at a given price - Horizontal sum of all individual firms

Price is still determined by Supply and Demand,
but now we know more about why firms will produce/not produce
at that level
LONG-RUN SUPPLY

• Long-run signals by firm:
  1) If positive economic profit exists, firms will enter the market.
  2) If economic losses exist, firms will leave the market.
  3) If normal profits for the firms exist, no motivation to either enter or leave the market.

Firm Entry/Exit

• FIRM ENTRY - As firms enter the market, market supply rises, and the economic profit of the firms drops

• FIRM EXIT - As firms leave the market, market supply falls, and the economic profit of the firms that remains increases (economic loss decreases)

Summary In Long Run, entry and exit of firms yields an equilibrium where the firms earn NORMAL PROFIT (economic profit = 0)

LR Industry Supply Curve

• Relationship between quantity supplied and price when the industry is in LR competitive equilibrium.

  3 Possible scenarios:
  1) Constant cost industry
  2) Increasing cost industry (External diseconomies)
  3) Decreasing cost industry (External economies)