

# ECO101: Introduction to Microeconomics

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Lecture-15

# Perfect Competition

- A perfect competition is a market where competition is at its greatest level possible. It has the following characteristics:
  1. Many firms sell identical products to many buyers
  2. There are no entry restrictions on entry into the market
  3. Established firms have no advantage over new ones
  4. Sellers and buyer are well informed about prices
  5. Firms are Price Takers- they cannot influence the price because its production is an insignificant part of the total market



# Economic Profit and Revenue

- A firm's goal is to maximise *economic profit* =  $TR - TC$
- Total Revenue (TR) = Price x Quantity  
Marginal Revenue (MR) = change in TR / change in Q

Quantity sold (Q) (jumpers per day)	Price (P) (pounds per jumper)	Total revenue ( $TR = P \times Q$ ) (pounds)	Marginal revenue ( $MR = \Delta TR / \Delta Q$ ) (pounds per jumper)
8	25	200	
		.....	25
9	25	225	
		.....	25
10	25	250	

- Since a firm in a perfect competition is a Price Taker, so a firm's

**MR=Market Price**

- A firm can sell any quantity if it sells at the Market Price. **So demand curve is perfectly Horizontal** that is **Perfectly Elastic**. This also means goods a firm is selling have perfect substitutes and if anyone deviates from market price loses market share

# Firm's Decision

- Goal of a competitive firm is to maximise profit and to achieve its goal, a firm must decide:

1. How to Produce at minimum cost
2. What quantity to produce
3. Whether to enter or exit a market

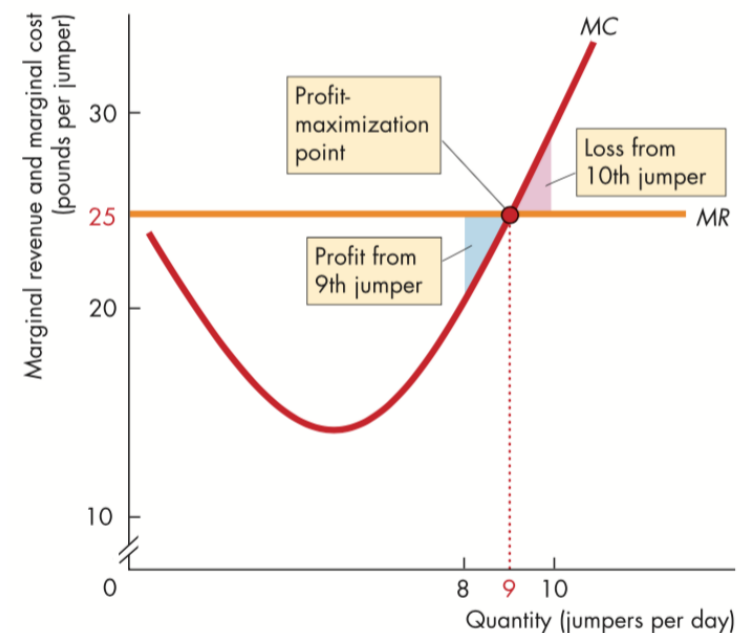
- By simply looking at TR and TC curve we can find the output or the *profit maximising output* that maximises economic profit

Quantity ( <i>Q</i> ) (jumpers per day)	Total revenue ( <i>TR</i> ) (pounds)	Total cost ( <i>TC</i> ) (pounds)	Economic profit ( <i>TR</i> – <i>TC</i> ) (pounds)
0	0	22	–22
1	25	45	–20
2	50	66	–16
3	75	85	–10
4	100	100	0
5	125	114	11
6	150	126	24
7	175	141	34
8	200	160	40
<b>9</b>	<b>225</b>	<b>183</b>	<b>42</b>
10	250	210	40
11	275	245	30
12	300	300	0
13	325	360	–35

# Marginal Analysis

- Marginal analysis is another way of finding the **profit-maximising output** — *and usually this method is used*
- As Output increases MR is constant but MC changes. At low levels of output MC decreases and then increases
- When  $MR > MC$ , then producing more will give more profit, so this cannot be profit-maximising output
- When  $MR < MC$ , then producing more will only give losses
- When  $MR = MC$ , it is the point where the firm gets maximum profit and hence it is quantity it chooses to produce.  
**Therefore  $MR = MC$  is profit-maximising output**

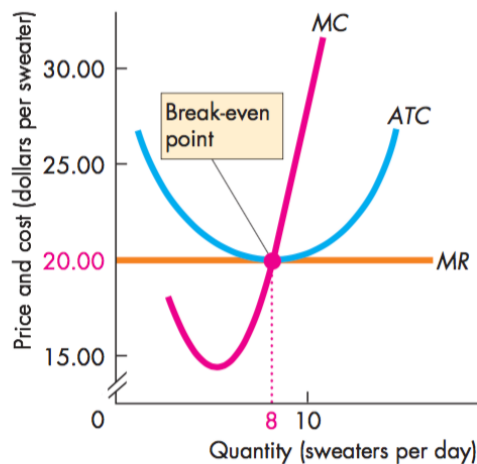
Profit-maximizing Output



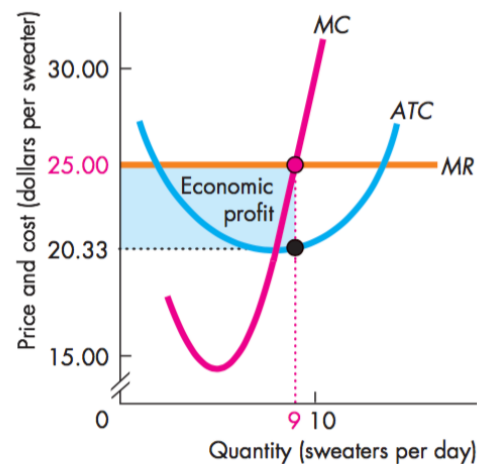
# Shut-down Point and the Possible S-R outcomes

- The shutdown point is where the company is indifferent between producing and shutting down.
- And Break-even point is the minimum of ATC or where  $P=ATC$ . We call it Normal Profit.
- The shutdown point occurs at price & quantity where average variable cost (AVC) is at minimum /lowest —  $P=AVC$
- If price falls below the minimum of AVC the firm shuts down and incurs a loss equal to total fixed cost

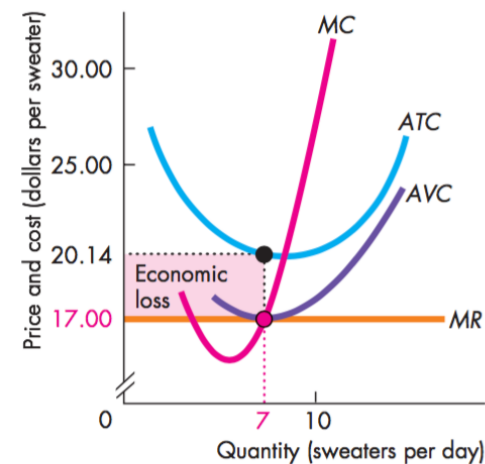
**FIGURE 12.8** Three Short-Run Outcomes for the Firm



(a) Break even



(b) Economic profit



(c) Economic loss

# Essential Readings for Today!

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Economics. Parkin, Powell, Matthews.  
8th Edition

Chapter-11. pages- 250 to 254