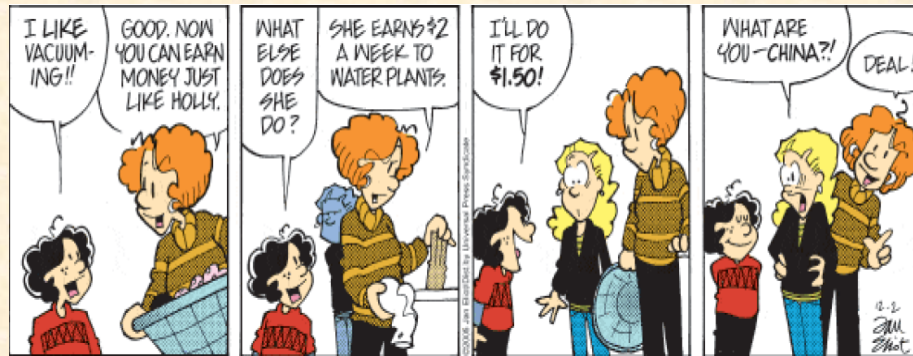


Chapter 9: Perfect Competition



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Markets & the Nature of Competition

- **Competitive markets**
- **Imperfect markets**

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Competitive Markets

- Competitive Markets
 - Many
 - Similar
 - Free
 - Firms
- Price taker
 - Has the market price
 - “Takes” the

3

Economics in *The Simpsons* “Mr Plow”

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Deciding How Much to Produce

- The $MR = MC$ rule – a firm will expand output until marginal revenue (MR) is just equal to marginal cost (MC).

$MR = MC$

– This is a rule for profit-maximizing production.

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Calculating Profits

(price = \$10)

Quantity	TR $P \times Q$	TC	Profit $TR - TC$	MR ΔTR	MC ΔTC	Change in Profit $MR - MC$
0	\$0	\$25	-\$25			
1	10	34	-24	\$10	\$9	1
2	20	41	-21	10	7	3
3	30	46	-16	10	5	5
4	40	49	-9	10	3	7
5	50	51	-1	10	2	8
6	60	54	6	10	3	7
7	70	60	10	10	6	4
8	80	70	10	10	10	0
9	90	95	-5	10	25	-15
10	100	145	-45	10	50	-40

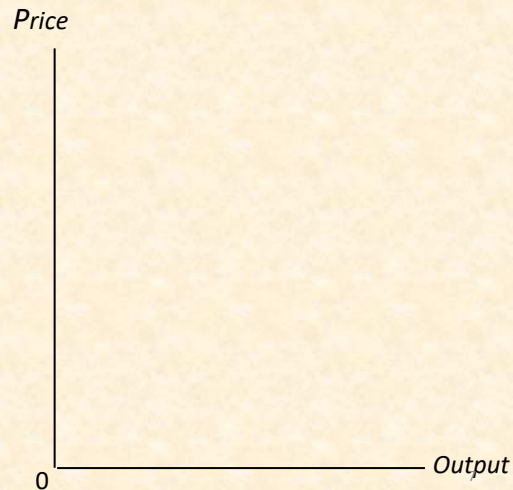
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Profit Maximization when the Firm is a Price Taker

When output is q this will maximize the firm's profits (rectangle $BACP$).

When $MR < MC$ then the firm should increase output until it reaches q .

When $MR > MC$ then the firm should decrease output until it reaches q .



Review Question: Would you accept \$200 to make the 101st case?

	Jelly Bean Production	
	Cases	Avg Cost
	98	\$150
	99	\$151
	100	\$152
	101	\$153

Answer

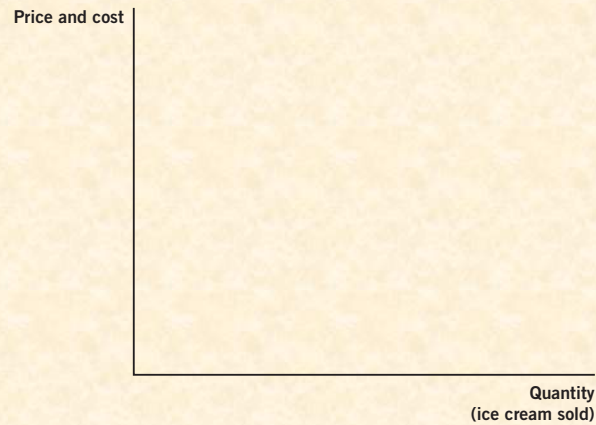
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The Short-Run Shutdown Price

- Would you continue to produce if you were incurring a loss? What are the options?
 - In the short run
 - to minimize loss
 - Shut down (Mt Buffalo Ski resort)
- What about
 - Depends on the long term outlook

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When to Operate or Shut Down

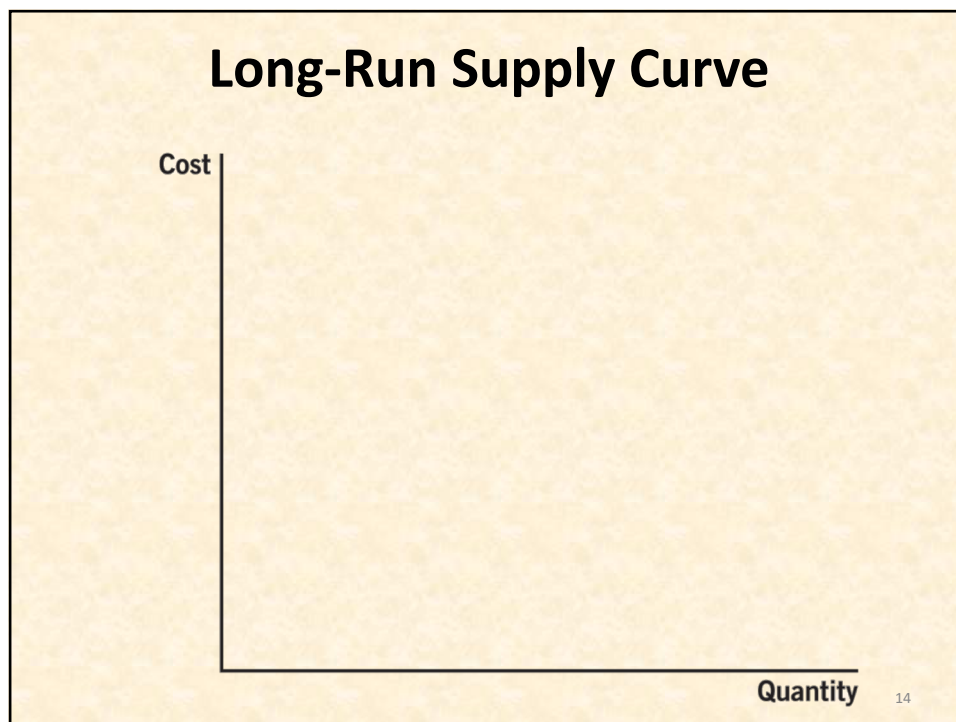
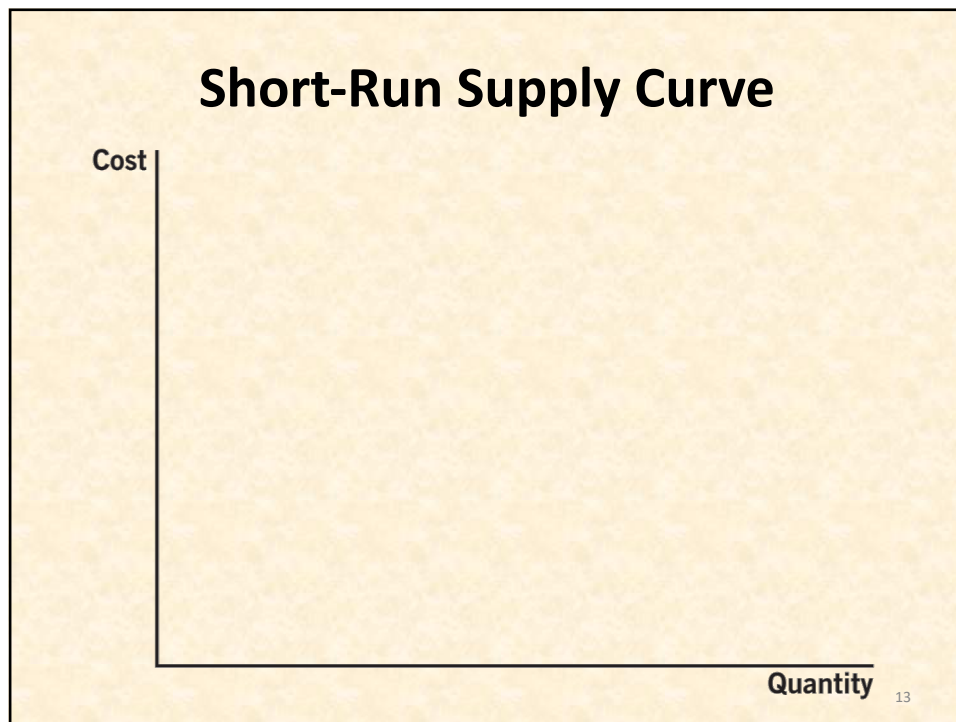


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Profit and Loss in the Short Run

<u>Condition</u>	<u>Outcome</u>
$P > ATC$	The firm makes a profit
$ATC > P > AVC$	The firm will operate to minimize loss
$AVC > P$	The firm will temporarily shut down

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Long-Run Shut Down Criteria

<u>Condition</u>	<u>Outcome</u>
$P > ATC$	The firm makes a profit
$P < ATC$	The firm should shut down

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Sunk Costs

- Sunk costs
 - Costs that have been incurred as a result of past decisions
 - Are
- Sunk Cost Fallacy
 - Considering sunk costs when making
 - Can lead to using out of date facilities and incurring large

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Economics in *The Big Bang Theory*, “The Einstein Approximation”

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Break Up With Him

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Entry and Exit

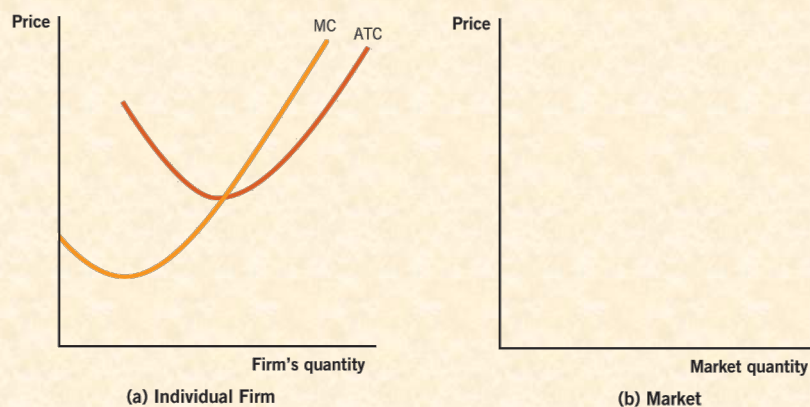
Profits act as a **signal** for firms to enter or exit a market in the long run.

PROFITS

LOSSES

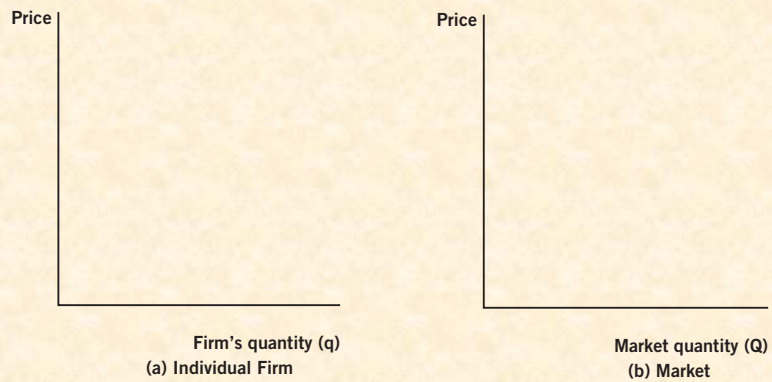
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Long-Run Market Supply



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Market in Long Run Equilibrium

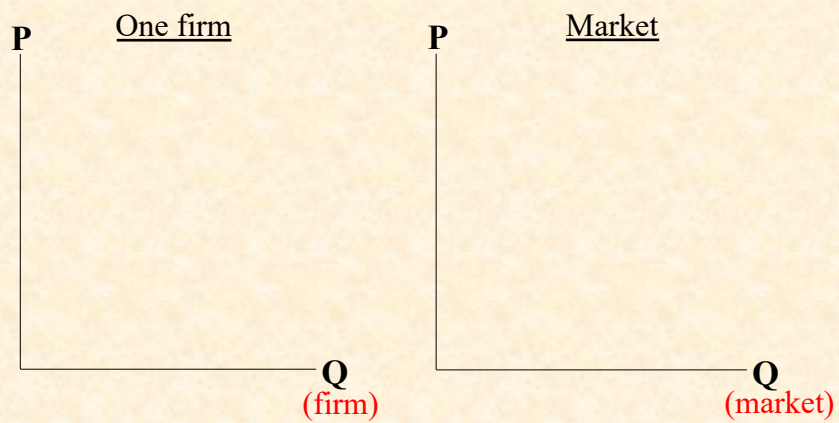


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Economics in *I Love Lucy*, “The Diner”

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Short & Long Run Adjustment to Demand Increase



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