

OUTLINE — October 7, 2019

- Monopoly & Monopolistic Competition, continued
 - Price-discriminating monopolist
 - Long run equilibrium in monopolistic competition ($\pi=0$)
- Asymmetric Information
 - Adverse Selection
 - Moral Hazard
- Behavioral Economics

MT#1 reflection due on bCourses by 7 pm Wednesday

PS 3 will be distributed Wednesday

Price Discrimination by a Monopolist



Imperfect Competition Adverse Selection Moral Hazard Behavioral Economics

Monopolistic Competition

- Lots of firms
- No barriers to entry/exit
- *Heterogeneous* product

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Long-Run Equilibrium



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Effect of increased variable cost?



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A few thoughts

- Market forces determine what, how, for whom goods and services are produced
- What does that really mean?
- What's the normative question?
 - Distinguishing between necessities and not
- Market failure is important, because it's real life
 - Absence of perfect competition
 - Absence of full information
 - Absence of profit or utility maximization
 - External costs (climate change, anyone?) and benefits

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Market Failure: Asymmetric Info

- When one party to a transaction has relevant info but doesn't share it with the other party
- Effect: markets **fail** . . .
 - . . . to produce the quantity where
 - $p = MC = \text{minimum ATC}$
- Two examples of asymmetric info
 - Adverse Selection
 - Moral Hazard

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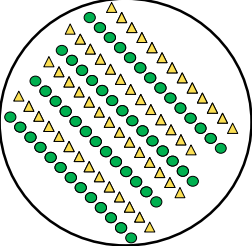
Adverse Selection

- "Adverse" means harmful or unfavorable
- When the selection of goods offered for sale is not a random selection but is instead an "adverse" (unfavorable) selection
 - Applies also to consumers buying insurance
- Occurs before transaction

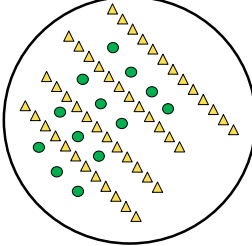
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Adverse Selection

Random Selection
Choose from entire population



Adverse Selection
Choose from (unfavorable) subset



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Adverse Selection & Labor Markets

- You are an employer
- Workers are heterogeneous
 - A mix of high- and low-quality workers
- You want to hire high-quality workers
- You can't tell from the application who is & isn't a high-quality worker
- *Do you offer an above-market, at-market, or below-market wage?*
 - A. Above-market wage
 - B. At-market wage
 - C. Below-market wage

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Adverse Selection & Labor Markets

- *Do you offer an above-market, below-market, or at-market wage?*
 - You offer above-market wages.
 - Below-market wages would make the high-quality workers drop out of applicant pool, leaving you with a bad pool to draw from
 - Above-market wage increases your chance of hiring a high-quality worker.

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Adverse Selection

- **Car Insurance**
 - Good drivers or bad drivers?
 - State requires everyone to get car insurance
- **Health Insurance**
 - Healthy people or unhealthy people?
 - Effect on cost of insurance?
 - Affordable Care Act requires everyone to get insurance
- **Consumer credit**
 - Good credit risk or bad credit risk?
 - Effect on availability of credit?

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Solutions: Screening

- **Screening:** the employer/insurance company (the party with less information) screens applicants
 - Is there a low-cost way to screen applicants?
 - Sort applicants based on characteristics
 - Note: With perfect screening, there is no asymmetry in information . . .

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Solutions: Signaling

- **Signaling:** the employee/insured party (the party with more information) offers a clue
 - Do signals have biased effects on markets?
 - Example: "ban the box"

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Solutions: mandatory enrollment

- **Mandatory enrollment** is another solution
 - Require everyone to buy insurance so that pool of applicants/purchasers remains full random sample

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Moral Hazard

- When one party to a contract changes behavior after the contract is signed
 - Part of a transaction that takes time to complete
- Occurs after contract is signed

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Moral Hazard

- **Insurance**
 - More careful or less careful?
 - Effect on cost of insurance?
- **Bank Bailouts**
 - More careful or less careful with risk?
 - Effect on likelihood of bank failure?
- **Mortgage Rescue Plans**
 - More careful or less careful with \$ commitments?
 - Effect on likelihood of mortgage default?

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Solution: Monitoring

- **Monitoring** is a solution to moral hazard
 - Low-cost way to monitor behavior
 - Cancel contracts that are low-quality high-cost
 - Maintain contracts that are high-quality low-cost
- Note: With perfect monitoring, there is no asymmetry in information

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Behavioral Economics

- Another instance of market failure
 - . . . Failure to reach $p=MC$ at minimum ATC
- Here, challenge assumptions of
 - Utility maximization
 - Profit maximization
- Interested?
 - *Econ 119 (Psych & Econ)*
 - *Econ 138 (Behavioral Econ)*

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Example: Risk Aversion

- Two payouts, both with same mean (6.50).

Die roll	Payout A	Payout B
1	0	7
2	4	5
3	8	9
4	15	6
5	3	4
6	9	8

- Which would you prefer? A? B? Click C for "either"

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Example: Loss Aversion

- Two payouts, both with same mean (6.17) & SD (10).

Die roll	Payout A	Payout B
1	-5	0
2	10	10
3	15	25
4	-8	0
5	10	1
6	15	1

- Which would you prefer? A? B? Click C for "either"

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Example: Loss Aversion

- Do people hate losses more than they like wins?
- If so, implications for risk-taking behavior.
 - You own a stock that you bought for \$50 / share and it is now selling for \$30 / share. Will you sell?
 - You bought a house for \$800,000. If you sold it now, you'll only get \$600,000. You've been offered a new job at a good salary that is 1,000 miles away. Will you sell?
 - You declared a major in X and have taken nearly 80% of the classes you need to complete the major. You hate the major. Will you change majors?

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