



Two kinds of economics

- Macroeconomics ...
 - □ ... is about big aggregates
 - (unemployment, inflation, output, ...)
 - ... is not what we do in Economics 103
- Microeconomics ...
 - ... is what we do in Economics 103



Free to choose

- (Micro)economics is about making choices or making decisions.
 - \square We live in a world of *scarcity*.



Why are microeconomists weird?

- (Micro)economists think about decisions in terms of trade-offs:
 - □ Every decision has good things and bad things associated with it.
 - □ We call good things benefits and bad things costs.
 - They don't have to be monetary costs and benefits. But to make life easy, we will use dollars to measure benefits and costs – at least for now.



Decisions and opportunity cost

- Every decision to do something involves not being able to do something else (scarcity).
 - □ Every decision has an *opportunity cost*
- More precisely, the opportunity cost of a decision is



Costs and benefits

- Example: should you go see a movie or study for Econ 103?
 - □ Costs and benefits of going to see a movie:

benefit (enjoyment): \$10 - cost of ticket: - \$8

= total:



All costs are opportunity costs

- "Should I go see a movie" in isolation makes no sense to an economist:
 - ☐ In the example, you might think that since the benefit is greater than the *explicit* cost, you should go see a movie.
 - ☐ But this explicit cost is only one of the opportunity costs of seeing a movie.



All costs are opportunity costs

- Remember opportunity costs:
 - ☐ One of the opportunity costs is giving up the opportunity to do the next best thing:
 - □ We sometimes call this an *implicit* cost.

■ To make good decisions, you need to take all opportunity costs into account.





Economists v Accountants

Let's say you have a business and want to know whether it's worth keeping it open.

Revenue \$100,000
- Explicit costs - \$60,000
- Depreciation - \$5,000
= Accounting profit \$35,000



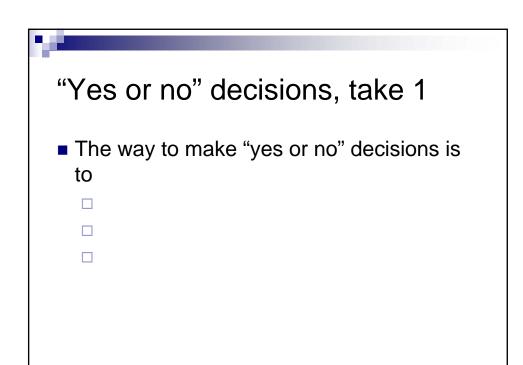
Economists v Accountants

 So your accountant would say that your business makes a profit.



If you want to know whether you should stay in that line of business, you need to take all opportunity costs into account.





But ... sunk costs Example: You have already paid \$10 for a non-refundable ticket to a football game. Your friend has a free ticket. On the day of the game, there is a tremendous snowstorm. If you both have the same tastes, who do you think is more likely to attend the game?



But ... sunk costs

- Sunk costs are costs that you incur regardless of what decision you take



"Yes or no" decisions, take 2

- The way to make "yes or no" decisions is to
 - □ add up all the benefits
 - \square subtract all the opportunity costs
 - □ see if the benefits are greater than all the costs



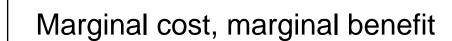
"How much" decisions

- Not all decisions are "yes or no" decisions.
- Most decisions are "how much" decisions.
 - □ Economists make "how much" decisions by using *marginal analysis*.



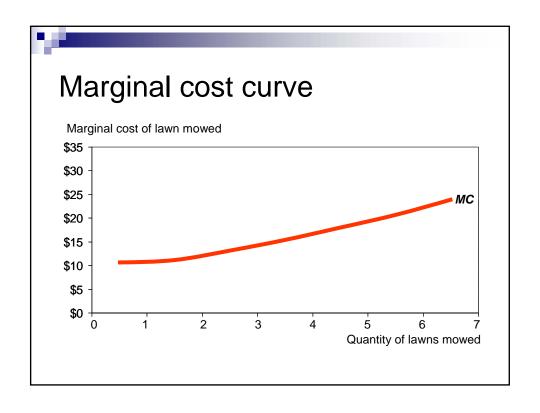
Marginal analysis

- Economists make "how much" decisions by thinking about them one step at a time.
 - ☐ Think of it as trying to climb a mountain in the dark. You take one step and if it's a step up, that was a good step to take. If the step is a step down, then that wasn't good.
 - □ It's called *marginal analysis* because you're pushing out the edge (the "margin") a little bit at a time, and then see if that was a good or a bad step.



- The marginal cost:
- The marginal benefit:
- Example: lawn-mowing business
 - □ Costs:
 - i
 - □ Benefits:

Marginal cost Marginal cost of mowing lawns Quantity of Marginal cost of Total cost lawns mowed lawn mowed 0 \$0 **>> \$10.50** 1 10.50 11.25 2 21.75 13.25 3 35.00 15.50 50.50 68.50 5 89.25 113.00



Marginal benefit Marginal benefit of mowing lawns Quantity of Marginal benefit of Total benefit lawns mowed lawn mowed 0 \$0 \$35.00 1 35.00 30.00 2 65.00 26.00 3 91.00 23.00 114.00 135.00 5 154.00 7 172.00

