Competitive Markets in Equilibrium
Make the Right Decisions...

• For five reasons:

  • They figure out how much is to be produced and sold—enough to power all win-win transactions, and no more…

  • They figure out who should produce—all those with an opportunity cost less than the market equilibrium price…

  • They figure out who should not produce—all those with an opportunity cost more than the market equilibrium price…

  • They figure out who should consume—all those with a willingness-to-pay higher than the market equilibrium price…

  • They figure out who should not consume—all those with a willingness-to-pay lower than the market equilibrium price
The Competitive Market Is Perfect, Except for…

• Six kinds of meddling market mishaps—failures—in competitive markets: Shaggy, Scooby… no, that’s not it. It’s:
  
  • …the wrong distribution of purchasing power and wealth—**maldistributions**
  
  • …people who misapprehend what their interests really are—**miscalculations**
  
  • …commodities where people do not know what they are really buying or selling—**information asymmetries**
  
  • …commodities where use is divorced from ownership—**non-excludibility**
  
  • …commodities where one person’s use does not preclude another’s—**non-rivalry**
  
  • …commodities where the costs and benefits are not internal to the parties to the transaction—**externalities**
  
• Plus: market power—things that make markets not competitive
Six Classes of Market Failure in Competitive Markets

- Six cases:
  - Maldistribution
  - Miscalculation
  - Information
  - Non-excludibility
  - Non-rivalry
  - Externality

- In all six of these cases, the competitive market in equilibrium is not the societal planning, calculation, and allocation mechanism we are looking for: it will fail.
Six Classes of Market Failure II

• We have already talked about: maldistribution failures

• We won’t talk about: miscalculation failures

• We are leaving for future classes: information failures, non-excludibility failures, and non-rivalry failures

  • Market power—sustainable market power, that is—is linked…

• Today’s topic: externality failures
Ladies, Gentlemen, and Large Intelligent Semi-Talking Dogs Who Did Not Go to U. Mass, to Your i>Clickers!

• To refresh your minds, a maldistribution failure arises when:

  • A. The marginal utility of wealth is different for some than for others

  • B. The distribution of wealth is awry and so at the margin people’s ability to buy things does not correspond to our ideas of who needs and deserves things.

  • C. Some have gotten rich and others poor through luck—or through crime, or through unfair inheritance, or through fair inheritance of the fruits of past crimes.

  • D. All of the above

  • E. None of the above (except D)
Ladies, Gentlemen, and Large Intelligent Semi-Talking Dogs Who Did Not Go to U. Mass, to Your i>Clickers!: Answer

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  • D. All of the above
  
  • E. None of the above (except D)
Today We Do Externalities

- In the context of our Lego Movie example market:
  - Lego bric manufacturers sell…
  - Master builders buy…
  - But Lego bric factories emit toxic plasticized smoke that pollutes Cloud-Cuckoo Land…
Today We Do Externalities

- Lego bric manufacturers sell…
- Master builders buy…
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Today We Do Externalities

III

• Lego bric manufacturers sell...

• Master builders buy...

• But Lego bric factories emit toxic plasticized smoke that pollutes Cloud-Cuckoo Land

• And Unikitty is very unhappy
Ladies, Gentlemen, and Products of Genetic Engineering Gone Awry, to Your i>Clickers?

- Should We Expect the Right Decisions to Be Made by a Market with an Externality?

  - A. Yes, a competitive market in equilibrium produces Pareto-optimal results
  
  - B. No. When the market makes the right decisions, it does so because it takes account of and properly weighs the consequences. With externalities present, it does not do so.
  
  - C. Yes, a competitive market in equilibrium maximizes the social welfare function
  
  - D. No—but the costs of using government to try to fix it will generate government failure problems worse than the errors of the marketplace.
  
  - E. Yes, because this externality does not involve a good or service sold on the market it has no effect on market optimality
Ladies, Gentlemen, and Products of Genetic Engineering Gone Awry, to Your i>Clickers?: Answer

• Should We Expect the Right Decisions to Be Made by a Market with an Externality?

• A. Yes, a competitive market in equilibrium produces Pareto-optimal results

• B. No. When the market makes the right decisions, it does so because it takes account of and properly weighs the consequences. With externalities present, it does not do so.

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• D. No—but the costs of using government to try to fix it will generate government failure problems worse than the errors of the marketplace.

• E. Yes, because this externality does not involve a good or service sold on the market it has no effect on market optimality

• I say B. C is rarely true, B is sometimes true—but not with externalities—and E is simply wrong. D is, I think, ideology: whether government failures from attempting to correct externalities are cures worse than the diseases is an empirical question that varies from case to case: not a theoretical a priori conclusion.
No, We Should Not Expect the Right Decisions to Be Made by a Market with an Externality

- Individual bric producers sell only if the market price is greater than their opportunity cost...

- Individual master builders buy only if the market price is less than her willingness-to-pay...

- All possible win-win deals between master builders and bric producers are made, and no not win-win deals between those two groups are made...

- But Unikitty doesn’t get a say—and her lungs are coated with plastic smoke...

- This cannot work out well when the market gives some important stakeholders no voice in the decision at all...
So What Should the Government Do?: To Your i>Clickers

• A. Forbid bric producers to use any production process that pollutes Cloud-Cuckoo Land?

• B. Tell Unikitty to go and use the courts—to sue the individual bric producers under the doctrines of tort law for damages to repair the economic harm that air pollution does them?

• C. Tell Unikitty to buy a gas mask?

• D. Impose a quota on maximum allowable production in order to limit the damage from pollution?

• E. Impose a tax to force bric producers (and master builders!) to take account of the damage they inflict on Cloud-Cuckoo Land, and then use the revenue for pollution remediation (or some other benefit to CCL?)
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I say that the answer is going to be E: A is wrong: to forbid bric production may mean that we are giving up something of immense social benefit in order to guard against what may be a small harm. B is wrong: tort law has not, historically, dealt well with externalities. C is also wrong: why should Unikitty be required to pay for dealing with a situation she did nothing to create? And D is a less-destructive but still flawed version of A. that leaves E...
• Yes!

• E. Impose a tax to force bric producers (and master builders!) to take account of the damage they inflict on Cloud-Cuckoo Land, and then use the revenue for pollution remediation (or some other benefit to CCL)

• A.C. Pigou, *The Economics of Welfare*