

Week 3: The Theory of Market Failure versus the Practice of Government

- I. Correcting for Negative Externalities
 - A. A common initial reaction people have to negative externalities is: "Ban it!"
 - B. Obvious objection: The cure is worse than the disease. Many valuable activities (like driving) – and even many activities essential to life (like breathing!) - have negative externalities.
 - C. If they grasp this point, many people's next impulse is to set quantitative limits – like emissions inspections, or technological mandates - like new emissions standards for cars.
 1. A particularly crazy variant: "Best Available Technology."
 2. Perverse effects of technological mandates: Since they raise the price of new cars, they encourage people to keep driving old cars that pollute a lot more.
 - D. *These approaches are highly inefficient.* Quantitative limits and technological mandates ignore heterogeneity: Some firms can reduce pollution more cheaply than others; some people may value polluting more than others; some technologies may cost more than they are worth.
 1. Application: Carpool lanes.
 - E. *More efficient regulatory solutions that take heterogeneity into account exist.*
 1. Taxes
 2. Tradable permits
 - F. Advantage: This gets you the same pollution level at a lower price. Firms that can easily switch to less polluting technologies sell their permits to firms where reducing pollution is expensive.
 - G. Complication: Getting the margin right. A tax on cars reduces the number of cars produced, but does nothing to discourage people who own cars from polluting.
- II. Correcting for Positive Externalities
 - A. A common initial reaction people have to positive externalities is: "This is a job for government, not the market."
 - B. Obvious objection: Overkill. There is no need for government to take over the whole industry just because of some positive externalities.
 - C. A much less intrusive option is for government to subsidize activities with positive externalities.
 - D. Getting the margin right: Suppose there are positive externalities of voter education, but not math. If you subsidize ALL education, adjusting for the externalities of voter education leads to an

inefficiently high level of mathematical education.

- III. The Logic of Pigovian Taxes and Subsidies
 - A. According to CBA, how high should these taxes and subsidies be?
 - B. The economist Pigou explained the logic:
 - 1. Tax goods with negative externalities until the SB and S curves intersect. (This is called a Pigovian tax).
 - 2. Subsidize goods with positive externalities until the SB and S curves intersect. (This is called a Pigovian subsidy).
 - C. Key ideas:
 - 1. The bigger the externality, the bigger the optimal tax or subsidy.
 - 2. As long as you're willing to pay the new market price, you can produce and consume as much as you like.
 - 3. Other than collecting the taxes and sending the subsidies, there is no additional role for government!
- IV. The Reality of Government Policy
 - A. In the real-world, governments barely use Pigovian taxes or subsidies.
 - B. Counterexamples?
 - 1. Sin taxes
 - 2. Gas taxes
 - 3. Cost-sharing for artificial lawns, solar panels, etc.
 - 4. Toll roads
 - C. If they see social problems, governments usually respond with a massive body of detailed regulations or outright prohibition.
 - 1. Carbon taxes versus carbon policy
 - 2. Drug policy
 - 3. Worker safety
 - 4. HOV
 - D. If they see unrealized social gains, governments usually respond with direct ownership and giveaways.
 - 1. K-12
 - 2. National health care
 - 3. National highway system
 - E. The world's most Pigovian country: Singapore.
 - F. What's the harm? Massive efficiency losses. Pigovian taxes deliver much better results than the status quo.
 - 1. Indeed, the status quo could easily be worse than doing nothing, even when there are large externalities.
 - G. Even when they do charge, governments rarely try to set market-clearing prices.
 - 1. Traffic
 - 2. Parking
 - H. Even worse: Governments make little effort to measure externalities, or even get the sign right.
 - 1. Education and credential inflation

2. Delaying vaccines
- I. Critics of markets often use Pigovian logic to condemn markets in theory. But Pigovian logic also condemns government in practice, because zero governments are even close to Pigovian.
- V. What Goes Wrong: The Logic of Decisiveness
 - A. People usually blame bad policies on lack of democracy. But Pigovian taxes and subsidies are almost non-existent even in democracies.
 - B. Why is this so? Almost certainly because the status quo is much more popular than the Pigovian alternative.
 - C. This is not a local or short-lived problem. No earthly government in recorded history has been close to Pigovian.
 - D. Economics and common-sense tell us that for all their faults, people aren't complete fools. Can they really be complete fools in politics?
 - E. I say yes, because of a key asymmetry between markets and politics.
 1. In markets, if you figure out a better approach, you can adopt it and improve your life.
 2. In politics, if you figure out a better approach, you can't adopt it unless you convince a majority of voters first.
 3. Have you ever convinced a majority of voters of anything? I haven't.
 - F. But doesn't "every vote count"? Only microscopically. The chance that your vote flips an electoral outcome, also known as the "probability of decisiveness," is roughly 0.
 1. Mathematically: $p \approx 0$
 - G. For chance that your decision changes the contents of your shopping cart, in contrast, $p \approx 1$.
- VI. The Myth of the Rational Voter
 - A. In my first book, *The Myth of the Rational Voter: Why Democracies Choose Bad Policies*, I use these insights to build a grand theory of government failure.
 - B. Quick version: Since voters' probability of decisiveness is roughly 0, people make little effort to think rationally about politics.
 - C. Instead, they respond emotionally. In markets, self-interest gives you strong reasons to control your emotions; in politics, the opposite is true.
 - D. Selfishly speaking, what happens if you vote randomly – or emotionally?
 1. The same thing that would have happened otherwise!
 - E. What happens if the whole electorate votes emotionally?
 1. Lots of stuff that violates CBA.
 - F. Analogy: Politics isn't a grocery market; it's a common pool. We all throw our intellectual garbage into the pool, even though it's our sole source of drinking water.
 - G. What ideas do voters find emotionally appealing? In *MRV*, I

focus on:

1. Anti-market bias
2. Anti-foreign bias
3. Make-work bias
4. Pessimistic bias

VII. Social Desirability Bias

- A. Now I have a much more general story about what voters find emotionally appealing. We'll talk about this over and over, so pay attention.
- B. Question: Am I fat? Regardless of my weight, there is only one socially acceptable answer: No, of course not, you're beautiful just the way you are.
- C. This illustrates a general principle: When the truth sounds bad, people lie.
- D. Furthermore, if the lies become pervasive enough, they stop sounding like lies. People say the pretty words without thinking hard enough to feel insincere.
- E. The technical name for this in psychology: *Social Desirability Bias*.
- F. Key to SDB: The gap between words and actions.
- G. Illuminating example: Aborting a Down Syndrome baby:

"The decision to undergo an induced abortion varied depending on whether participants were prospective parents recruited from the general population (23%-33% would terminate), pregnant women at increased risk for having a child with DS (46%-86% would terminate), or women who received a positive diagnosis of DS during the prenatal period (89%-97% terminated)." (*Journal of Midwifery and Women's Health*)

- H. Social Desirability Bias (SDB) is everywhere. Standard examples:
 1. Patriotism: "I'd gladly die for this country" versus actual evidence on self-sacrifice.
 2. Religion: "God is the most important thing in my life" versus actual church attendance rates.
 3. Political priorities: If you ask a politician, "Which should be our higher priority: children or disabled veterans," they dodge question. Instead, they'll tell you something like, "Our great country can easily afford to give our children *and* our disabled veterans the very best possible care."
 4. Hyperbole: "If we stand together, victory is certain!"
 5. Price insensitivity: "We'll pay any price to save Ukraine" or "I'd do anything to help stop hunger."
 6. Moral causation: Blaming problems on "the rich" sounds a lot better than blaming problems on "the poor." Blaming foreigners sounds a lot better than blaming fellow citizens.
- I. You can even see SDB in basic grammar. If a friend asks you, "Would you like to come to my party?," the polite answer is the SDB-laden "Sorry, I can't." Which is almost always literally false. 99% of the time, you *can*, but have something better to do.
- J. The "Want to bet?" challenge to SDB.

VIII. SDB and Politics

- A. So what? In politics, SDB crushes CBA!
 - B. Look at political arguments. CBA plays almost no role. All sides just try to say what sounds good – and goad their opponents into saying what sounds bad.
 - C. Think about Covid policy: How often did you hear *anyone* discuss the trade-off between loss of quantity of life and loss of quality of life?
 - D. Instead, the standard arguments were:
 - 1. Pro: “This saves lives!”
 - 2. Anti: “No it doesn’t!”
 - E. Almost no one stood up for fun over health. Much more common to concoct absurd health arguments against lockdowns like, “Keeping gyms closed is killing people, too.”
 - F. Same goes for virtually any policy. Both sides try to sound good, with almost no measurement or math – practically the definition of “demagoguery.” Examples:
 - 1. Taxes
 - 2. Education
 - 3. FDA
 - 4. Carbon emissions
 - 5. Immigration
 - G. When policies don’t match CBA, apologists often say, “People just care more about equity.” But migration patterns show this apology is largely SDB, too!
 - 1. How so? Because material well-being is a *much* better predictor of migration than any measure of “equity.”
 - 2. Lots of California Democrats moved to Texas.
 - 3. The Gulf monarchies have no trouble attracting migrants.
 - H. Unlike rhetoric, actual policies have to use at least a *little* measurement and math. Resources are finite and there are multiple problems, so no government actually “Does everything possible” for any one problem.
 - I. Still, SDB is a *vastly* stronger predictor of actual policy than CBA.
- IX. Action Bias and Politics
- A. When was the last time you heard a politician say, “We should do nothing about this problem”?
 - B. “We should do something” may sound like common sense, but it’s not. What should you do about mosquito bites, for example? Leave them alone.
 - C. In psychology, the technical name for our urge to “do something” is “Action Bias.” While you can easily think of it as a special case of SDB, it’s so pervasive in politics that it’s worth a separate discussion.
 - D. When does CBA recommend “doing nothing” about a problem?
 - 1. When you are extremely ignorant about how to help.
 - 2. When you know that helping is costly.

- E. In politics, however, it is extremely unusual to argue:
 1. "We don't know how to help, so let's do nothing until we learn more."
 2. "We could solve this problem, but the cost is too high."
 - F. Even if we're doing something, Action Bias pushes us to do *more* when any new problem emerges. CBA says this is a silly presumption.
 1. Ex: If you get into one car accident in ten years, does this show you should change your driving habits? Maybe one accident per decade is optimal.
 - G. Action Bias also pushes us to design bespoke "solutions" for every notable problem. E.g., instead of just giving the poor money for necessities, to have separate programs for food, housing, and energy assistance.
- X. Availability Cascades
- A. Closely related: Kuran-Sunstein's "availability cascades" model of mass hysterias and political crusades.
 - B. Cognitive psychologists have found that people frequently estimate probabilities based upon *how easy it is to think of examples*. Psychologists call this the "availability heuristic."
 - C. This often leads to systematically biased estimates. Psychologists call this "availability bias."
 - D. This bias is normally demonstrated in simple experiments. How does it play out in the real world?
 - E. The cycle of hysteria:
 1. The media gives massive coverage to shocking but rare events in order to get good ratings.
 2. The public watches. Watching makes it easier for the public to think of examples of the events the media covers.
 3. One effect: The public begins to think the problems are quantitatively serious, so it gets easier to sell the public similar stories.
 4. Other effect: Politicians begin trying to solve the "problem" to win votes.
 - F. Examples:
 1. Nuclear power
 2. Genetically-altered food
 3. School shootings
- XI. The Ubiquity of Government Failure
- A. The Pigovian framework highlights endless ways for markets to fail. CBA, then, provides a recipe for governments to design remedies that pass CBA.
 - B. This often leads economists and other social scientists to defend almost all of government's current activities, plus many more.
 - C. To repeat, however: No government on Earth is remotely Pigovian!
 - D. Governments don't use CBA to decide whether markets fail.

- Instead, they use SDB: Does market performance *sound* good?
- E. Governments don't use CBA to decide how to "fix" markets, either. Instead, they use SDB: Does this remedy *sound* good?
 - F. The problem: CBA shows that lots of good stuff sounds bad, and lots of bad stuff sounds good. So real-world government actions routinely fail CBA.
 - G. Or so I claim. The rest of the class uses CBA on actual government policies. Let's see what we find.