

I. The Geometry of Rational Choice and Public Economics

- A. Public economics uses a variety of methodologies to think about public policy.
- However, in this course all these boil down to implications of rational choice.
 - We'll assume that individuals are more or less rational--not necessarily self-centered--but interested in maximizing their own **net benefit** or own **utility** as they understand it.
 - This assumption has fairly specific implication for individual behavior in markets and in politics.
 - It is the development of those implications that the course devotes most of its time in lectures and in the online class notes.
 - It turns out that geometry can be used to represent rational choices, markets, and political systems.
 - The various diagrams--if you take the time and effort to fully understand time--allows you to understand a variety of subtle relationships that are not intuitively obvious and also to make predictions about the effects of taxes, subsidies, and politics on market phenomena.
 - The same general approach can be used to think about the normative properties of public policies and political outcomes.
- B. The models developed in class and in the text books shed light on a variety of properties that political economic systems have.
- Some of these are "obvious" for persons who read newspapers, blogs, news magazines, or listen to the news on radio, pod casts, or tv.
 - Others are more subtle and would be difficult if not impossible to understand without the geometry developed.
 - It is for this reason that the course spends a lot of time developing and teaching models.
 - There is also some value in developing an internally consistent way to think about economics and politics.
- C. The models are "just" models in that they abstract from many details that matter for real persons making real decisions, but by doing so they reveal general conclusions that apply to a wide variety of choice settings.
- They provide simply systematic ways of thinking about public policies: what their effects are and why they were adopted.
 - Once they are understood--fully understood, not simply memorized--they will inform your intuitions about the effects and merits of public policies.
 - It is fair to say that the implications never capture everything there is to know about economic and political activities, but they capture most of what is

general--which is to say they provide principles for making sense of a wide range of economic and political phenomena.

- D. The approach of the course is sometimes referred to as methodological individualism. It demonstrates that social outcomes can be understood as those generated by more or less rational men and women operating in a particular institutional context, where the institutional context includes all manner of laws (including constitutional laws), the technologies of the era, and the prevalent ideas, ideologies, and norms of the societies in which persons make decisions.
- E. Social outcomes are ultimately outcomes of individual choices.
- However, not all such outcomes are the ones intended or hoped for by the individuals making the choices, because no single individual controls the "social outcome."
 - Most economic and political phenomena are jointly determined by one's own choice and the choices of others.**
 - Similarities in the choices of all those concerned, help to reduce the range of possible outcomes and thus make both general understanding and predictions possible.
- F. The focus of this course is on Public Finance, but many of the models, conclusions, and ideas covered in this class extend well beyond that field of study.

II. Positive and Normative Economics

- A. Before starting that analysis it is useful to divide the universe of ideas and statements into two parts: Positive and Normative.
- B. This is especially important in public economics because so many issues have normative or ideological implications.
- C. We will use Karl Popper's characterization of these two areas of thought.
- A **Positive Statement** is a statement about what is, has been or will be.
 - It is a statement that tries to describe the world in ethically neutral language.
 - A **Normative Statement** attempts to evaluate the desirability of alternative states of the world or alternative public policies.
 - A normative statement often relies on a normative or ethical theory, and may include consideration of some facts.
 - Generally, normative statements conclude that a particular policy is good or bad, is Pareto optimal or not, should be undertaken or not, etc.
- D. The reason why this distinction matters is that positive issues are often easier to resolve than normative ones. Positive ones involve matters of "fact."

- i. Most positive claims (hypotheses) are “operational” in that they can be tested to determine whether they are true or false.
 - ii. Or stated in statistical terms, more likely to be true than false--or not.
 - iii. Such claims and tests are sometimes very easy to do, and so disagreements about positive issues are often--although not always--easier to resolve than disagreements about normative issues.
- E. Normative statements and issues--in contrast--often rely upon completely different theories of what is “right and wrong,” “virtuous or non-virtuous,” will “improve society or not” and so forth.
- i. Most people who have not studied philosophy, religion, or welfare economics tend to rely upon intuition when making normative statements.
 - ii. However, it is not intuition that is the difference between Positive and Normative claims. Many positive claims are also made using intuition.
 - iii. Nor is it always the case that a normative claim cannot be tested--is not operational. Some normative theories are so clearly stated that one can test whether a result is “better or worse” from the perspective of a given theory.
 - iv. For example, the “social net benefit” theory used by economists is often testable. One can attempt to estimate the net benefits associated with a policy and determine whether they go up or down. If they go up, most economists would conclude that the policy is a good one, or at least is an improvement over the preexisting one(s).
- F. The difference between positive and normative statements (claims, or hypotheses) is whether one is trying to describe the world, or evaluate the relative merits of alternative states of the world.
- G. Confusion also occurs because reasoned normative statements often include a positive clause to support their conclusions.
- An example is the following statement: "Policy X is undesirable, because X increases unemployment."
 - By itself, "X increases unemployment" is a positive statement, which may be true or false.
 - The conclusions that X is a bad policy is normative. It assumes that reducing unemployment is always **GOOD**.
 - Whether X is a bad policy or not depends on the effect that X has and also on whether minimizing unemployment is used as a norm or normative theory.
 - If one believed that leisure was always a good thing, then policies that increase unemployment would be good (desirable) rather than bad (undesirable).
 - More moderate norms might insist that there is an appropriate “work-life” balance and only if increased employment (longer work weeks) is good only if it improves or at least does not worsen one’s “work-life balance.”
- H. Most positive statements are "operational." *Operational statements* are statements that can at be tested to determine whether they are true or false.
- However, not all positive statements are completely testable.
 - Moreover, some normative statements are testable, given a normative theory.
 - For example, when economists use cost-benefit analysis to evaluate the relative merits of public policies, there are many testable propositions. Does consumer surplus rise or not? Do profits rise or not? Do social net benefits rise or not.
 - However, the conclusion that policy Z is better than policy X because social net benefits increase is based on a particular normative theory, rather than properties of the world per se.
- I. It also bears noting that positive statements can be false.
- Indeed, scientific progress often occurs when a past theory is disproved or shown to have weaknesses.
 - Such negative results help us avoid mistakes and also help stimulate more research to better understand the world.
 - Many new results and theories show that old ones are wrong or at least not as true as the could be.
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- J. Examples of Positive and Normative statements:
- The moon is made of green cheese. (p, but false)
 - Minimum wage laws always increase unemployment. (p, probably true)
 - Tariffs are a bad policy because they reduce consumer welfare. (n, probably true)
 - Mass transit reduces air pollution. (p, probably true)
 - Mass transit should be subsidized because it reduces air pollution. (n, possibly true)
 - Global warming can only be reduced with a high carbon tax. (p. probably false)
- K. Examples of Normative Theories
- i. The Pareto Criteria
 - ii. Utilitarian Social Welfare Criteria
 - iii. Cost Benefit Analysis / the Compensation Principle
 - iv. Green Idealism
 - v. Contractarianism
 - vi. Any other theory or ideology that allows one to determine "the best or worst" policy

- vii. In contrast, a positive theory is concerned with whether a claim is "true" or "false."
- L. In this class, the difference between normative and positive issues is often important, policy issues include both positive and normative ones.
- How does policy Z affect the real economy? (positive)
 - How does policy Z affect consumers and firms? (positive)
 - Many disagreements about public policy follow from different understanding of the effects of particular policies.
 - However, many others follow from differences in the normative theories (ideologies) applied to evaluate the merits of alternative policies.
 - One should understand that positive issues often exist and need to be explored before a normative analysis can be undertaken.
 - For example, one can dispute positive claims about global warming, without being a lobbyist for an oil or coal company--simply because the climate is complex, and careful scientists may disagree about how the climate operates and what the consequences are for man and other animals on the planet.
 - Given agreement about the properties of global warming or taxation, serious people may still disagree about the merits of reforms to address global warming (subsidized air conditioners or carbon taxes) or tax policies (more or less progressive and broad taxation).
 - In public economics, it is often useful know what the source of disagreement is.
 - Often it is differences in normative theories rather than economic theories.

III. The Rational Choice Approach to Social Science

- A. The rational choice approach to social science assumes that individuals have goals that they try to advance with their actions.
- i. The goals need not be grand ones--getting more sleep can be a goal--nor are all persons as "forward looking" or "reasonable" in their assessments about how to advance their goals as others. Some people make more "mistakes" than others.
 - ii. The goals need not be narrow ones that focus only on wealth and health. They may include moral ones or social ones. One may want to conduct himself so that they behave morally and are respected by others.
 - iii. The rational choice approach simply assumes that **everyone has goals and acts to systematically advance them.**
- B. We will model such choices as efforts to maximize the "net benefits" of every action or sequence of actions, where net benefits are simply "total benefits" less "total cost."

- i. In most economic and political settings, it turns out that maximizing net benefits requires persons to choose the quantity of a good or service that sets their "marginal benefits" equal to their "marginal costs."
 - ii. Perhaps surprisingly, this one assumption allows one to build models of market activities based entirely on individual choices and market incentives (mostly prices and price signals).
- C. It does not, however, imply that each person controls market outcomes. In competitive markets, the results depend on (and affect) the decisions of thousands or millions of persons. In monopolist markets, the monopolist exercises quite a bit of control over prices and sales, but ultimately even a monopolist does not control market outcomes, because what is possible for him/her/it depends on the choices of all of their consumers--who make their decisions more or less independently.
- D. The next several lectures will show how one can use the net benefit maximizing model to characterize market outcomes.
- E. These "review lectures" are then used to provide the basis for understanding (1) how taxes and subsidies affect markets, (2) problems and solutions associated with externalities, (3) problems and solutions associated with public goods, (4) the manner in which voters choose among policies and candidates, (5) the manner in which majority rule selects among policies, and (6) the manner in which interest groups (attempt to) affect public policies.
- F. All these are consequences of "rational behavior" in settings with a reasonably well-functioning civil, criminal, and constitutional law. For the purposes of this course, we'll assume such "framing institutions" work well and can be taken for granted (which is to say ignored) for purposes of analysis.
- Failures in such institutions are addressed in the courses on law and economics and moral foundations of capitalism.