I. The Forest from the Trees

The purpose of this chapter is to provide an overview and recapitulation of the main points developed during the course. This is a useful addition to the course because students have a tendency to remember the course as a collection of "things" that have to be memorized rather than ideas and results that should be internalized into a coherent perspective on public policy from the perspective of methodological individualism.

Developing the "forest" has been the main goal of the course, but it has to be done "one tree at a time" or one step at a time. Thus, the forest created may have been missed by students who focused on the individual trees (ideas, principles, logic, geometry, etc.) focused on in the individual lectures and chapters of the webnotes. The final papers are an attempt to get students to see the forest created—the over-arching themes of the course and how the various pieces fit together into a unified whole.

A. What is Methodological Individualism?

Methodological individualism is the perspective on social phenomena that it is usually best understood as the—often unanticipated and unnoticed—outcome of independent individual decision making by dozens, thousands, or millions of individuals. To understand those outcomes, methodological individualism directs one's attention to the factors that motivate the individuals whose choice generate the outcome(s) of interest. This perspective treats individuals not as members of a herd but as purposeful individuals who can make independent decisions that generally advance their purposes—as they themselves understand them.

This course has focused on economic and political phenomena and so focused its attention on the types of decisions that generate the economic and political outcomes that result from millions of independent choices that jointly determine those outcomes.

B. What is rational choice? And how rational are individuals?

There a number of ways that one can undertake the study of social phenomena from the perspective of methodological individualism. One could, for example, interview thousands of individuals and use their answers to understand why they made the decisions and took the actions that they did. One might also simply observe the individual behavior of millions of people and attempt to deduce the factors that caused them to behave as they did.

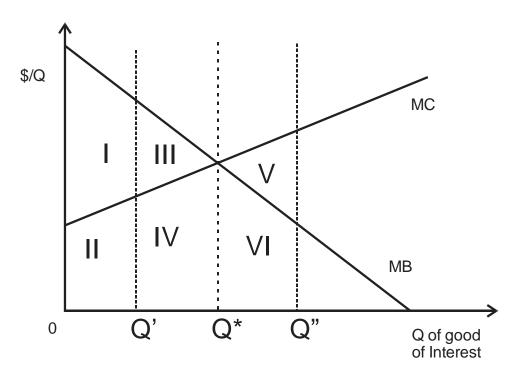
Instead, the approach used in this course and most of economics is deductive and based on a few premises about human behavior (on average). It assumes that whatever purposes people have, the are smart enough and informed enough to systematically advance those purposes. This is not to say that they are brilliant and super informed, and thus, make no mistakes or never give into impulses that divert them from pursuing their long term interests. It simply assumes that people are "self conscious," and so know what they presently want, and take steps that tend on average to get more or less what they want—whether this be satisfying hunger, training up for a long career in a particular field, or advancing their ideas about a good society or moral conduct.

To systematically advance one's purposes requires a form of rationality—optimizing behavior—that can be characterized graphically and/or with other mathematical tools such as calculus. For about 80-90 percent of this course, we have relied upon the "net-benefit" maximizing characterization of the optimizing behavior. When choosing how much of a given product to purchase in a grocery store or which political candidate to favor in an election, we assumed that individual's attempt to maximize their net benefits.

We also made one or two reasonable assumptions about how those benefits increase as the quantity of a good or activity level increases—that marginal benefit curves for all goods tend to be downward sloping. They are subject to diminishing marginal returns (at least "at the margin," for the last units chosen).

This allowed us to characterize decisions in markets and preferences over public policies using relatively simple diagrams—albeit diagrams that became more elaborate and sophisticated as the course went one.

Maximizing Net Benefits



We used that diagram to calculate the net benefits for various quantities or activities of interest. The diagrams characterized the kinds of choices that a purposeful (net benefit maximizing) individual would adopt. If he or she is free to choose, Q* will be chosen. Any quantity larger than Q* or less than Q* will generate smaller net benefits. However, if Q* for some reason is not an option, then individuals will choose from among the quantities that are possible the one that generates the highest net benefits for him- or herself—as he or she perceives them. The latter cases were, for example, common in choices among political candidates and public policies, because an individual's ideal candidate or policy may not be on the ballot.

Such "rational" choices are said to be "self-interested" even in cases in which ethical ideas are used, at least in part, to determine the net benefits of interest. Self-interests are not the same as biological or pragmatic interests—although sometimes they are.

Of course, in many cases, the relevant choice attempts to pursue quite narrow interests (quench a thirst, relieve hunger, or to "just enjoy" whatever activity is being undertaken), but other choices may include consideration of ideas about fairness, proper

sourcing, social net benefits, etc. etc. As long as choices are purposeful, they can be regarded as "rational" in the sense used in this course. Indeed, even some choices made "without thinking" can be rational in the sense that they are internally consistent.

Thus, economists, game theorists, and other users of rational choice models in the other social sciences and biology use the term "rational" in a somewhat broader sense than the word is usually used in English. It simply means generally consistent, purposeful, behavior.

We used the net-benefit maximizing model of "rational" decisionmaking throughout the course. It provided the underlying logic and models for about 80-90% of our conclusions about the effects of public policies on economic outcomes, the interests that voters have in public policies, the way the voters vote, and the outcomes of elections. Every social outcome—markets, elections, policy choices, etc.—was characterized as purposeful choices (rational choices) in the choice setting of interest.

In the normative parts of the course, we used a normative theory (maximize social net benefits) grounded in the same logic and set of geometric models. A "good" policy either increased social net benefit or maximized them. Other ideas of "goodness" are of course possible, but this is the normative theory that is most widely used by economists, and so was the one stressed in the course.

II. Implications of the Net Benefit Maximizing Model about the Effects of Public Policies

We first used the net-benefit maximizing model to characterize the effects of public policy on the private economies, focusing most of our attention on the effects of taxes and subsidies of various kinds.

A. The Effects of Taxes and Subsidies on Market Outcomes

After a review of the key features of net-benefit maximizing choice, we used that "model" to develop theories of market supply and demand. We then assumed that markets prices tend to converge to levels that set demand equal to supply—e.g. market clearing prices—which allowed those models to be used as an explanation of market-level prices and

outputs. The logical foundations of demand and supply allowed us to represent aggregate consumer surplus and aggregate profits as areas under sections of the demand and supply curves (generally from 0 to Q*, the quantity produced and sold).

It turned out that competitive markets (in the absence of externalities) tend to maximize the gains from trade and the aggregate social benefits from each product.,

This model of markets and prices, in turn, was modified to take account of targeted taxes (excise taxes) and subsidies on individual markets.

The analysis built on our model of supply and demand. Since taxes or subsidies do not affect the marginal benefits of the thing subsidized (the source of demand curves) nor do they affect production costs (the source of supply curves), neither demand nor supply curves "shift" as a result of direct taxes or subsidies. Instead, direct taxes and subsidies create a "tax wedge" between the prices paid by consumers and that received by firms (net of taxes or subsidies).

Thus rather than finding a single price that clears markets, we needed to find a pair of prices (one for consumers and one for firms) separated by the amount of the tax or subsidy per unit that would clear the market—e.g. set market prices equal to demand.

We were then able to use the "area" tools used in net benefit models to determine the effects of taxes and subsidies on profits, consumer surplus, and either tax revenues generated or subsidy expenditures made. In most cases it turned out that the burden of taxation (lost profits and consumer surplus) was greater than the revenue generated by a direct tax. And, in most cases, it turned out that the subsidy expenditures were greater than the net benefits created (new profits and consumer surplus). Both types of programs could thus be said to have excess burdens or to create dead weight losses.

Similar losses would be associated with regulations that do not address externality problems or monopoly power, although we did not analyze such policies in class.

B. Externality and Public Goods Problems

We next used a combination of the net-benefit maximizing model of human decision making and the social net benefit maximizing normative theory to identify two cases in which competitive markets do not usually generate outcomes that maximize social net benefits. To reach this conclusion we generally assumed that individuals do not take full account of the effects of their behavior on others. In such cases there may be spillover benefits or costs that are borne by persons in the economy that are not consequences of active decisionmaking.

Such spillovers create problems when the outputs or activity levels that emerge from consumer choices and competition among firms for consumer purchases do not maximize social net benefits. (Note that such "problems" reflect a particular normative perspective and do not necessarily exist under all others that an individual might employ. On the other hand, most ethical systems do discourage causing negative externalities—e.g. harming others. So, negative externalities—although not usually by that name—or often considered problems from other ethical perspectives as well.)

Given the existence of externality problems, we considered methods that our rational choice models imply would tend to reduce the problem (e.g. increase social net benefits). A variety of solutions were possible including (i) do nothing because the externality problems are smaller than the cost of addressing them, (ii) Coasian contracts, (iii) forming a club or other organization to internalize the externality, (iv) Pigovian taxation, (v) having government take over the production of public goods (and financing them with Samuelsonian or Lindalh taxes).

Both the problems and the possible solution were all implications of the net-benefit maximizing model that we employed throughout the course. It is these that characterized the market outcomes, the possibilities to increase total net benefits by changing behavior, and the types of policies that might do so.

III. Public Policies that We Observe

Next, the course analyzed the types of policies that we actually observe. Policies do not come from Mars, they are also products of human decision making—although in this case one's made via various political institutions rather than through market transactions.

It turned out that the net-benefit maximizing model could be used to shed light on various factors that tend to influence public policy choices in a democracy. This required analyzing voter interests and how they affect the outcomes that tend to emerge under majority rule voting.

A. The Median Voter Model

It turned out that the "median voter" is pivotal under majority rule. He or she always votes with the majority in a two candidate election or two issue referendum—and in many other cases where multiple candidates and issues are decided through elections using somewhat more complex voting rules such as single transferable voting. Under some voting systems, it turns out that there tends to be convergence toward the median voter's ideal candidate or policy.

The latter allowed us to use the median voter model to approximate the kinds of policies that tend to emerge from democracies, when elections are competitive, and voting and vote counts are honestly undertaken.

Using that model, we were able to see that in many cases, majority rule tends to promote policies that reduce externality and public goods problems, without necessarily maximizing social net benefits.

We also were able to show how tax systems affect patterns of voting by changing the "price" of government services faced by various groups of voters. Thus, fiscal systems affect voting, while at the same time voting affect tax systems.

Economic and political systems are interdependent, and thus one cannot fully understand on of those systems without understanding the other—and their various interdependencies.

B. Fiscal Federalism

We also extended the net-benefit maximizing model and the median voter model to examine how differences in government institutions (mainly the extent of decentralization) affects public policies.

Decentralized systems of government have many levels of policy making authority, where policy makers are elected by different electorates (national, state, county, city, town, school district, etc.) These different electorates produce different median voters except in cases in which voter preferences (net benefits) do not vary by region. Since, voter preferences do tend to vary by region, the public policies that emerge at different levels of government and among governments at the same level tend to vary, because each regional government has its own median voter.

Thus, one of the consequences of decentralization is that public policies among cities tend to vary and public policies among states tend to vary within policy domains controlled by the elected governments of states and cities. This simply follows from the median voter model, which followed from the net benefit maximizing model when applied to elections.

In addition, we noted that competition for residents and tax base occurs among governments at the same level (e.g. states, or cities, or towns). When that competition is intense and people of very mobile—as in the Tiebou model—individuals can "vote with their feet" as well as with ballots on election day. In that case, competitive pressures as well as elections tend to induce governments to be efficient (least cost) providers of services and differences in the services provided and taxes used to finance the tends to generate "sorting" or "stratification" among towns, or among cities, or among states, or even nation states. People migrate to places offering the best package of public services and taxes that they are aware of and away from places offering the worst fiscal packages.

In this and other ways, fiscal federalism can increase social net benefits. However, the "pork barrel politics" associated with fiscal federalism may generate losses as each lower level of government solicits subsidies for projects that only or mainly benefit a locality's residents. That "fiscal commons problem" can be moderate to some degree through costbenefit analysis.

Again the analysis was grounded in the net-benefit maximizing characterization of purposeful behavior. We did not always focus on individuals, per se, but all the curves that we used were derived from our model of individual decision making.

IV. Conclusion

Of course, we covered other topics as well. We covered a bit of fiscal history in the West, noting trends in the size of government, in taxation, and looming fiscal problems with deficits and rising healthcare costs. We also occasionally used the utility maximizing model of optimizing choice to explore a few points of interest with respect to optimal taxation and the effects of conditional subsidies. But the main theme of the course was that the net benefit maximizing model can be used to understand a wide range of social phenomena.

One does not have to give up on the individual to understand large scale social phenomena. Rather, the best way to understand large scale social phenomena is to start with individuals and to understand their interests, the incentives they face, and how choice settings (markets, or politics, or combinations of the two) affect their choices and thereby the large-scale social phenomena that we are trying to understand (markets and public policies).

That is the forest that we've developed and explored in this course—admittedly one tree at a time until this lecture.

(Anyone that has taken the time to read this overview will, I hope, take a few minutes to answer the student evaluation survey questions (SEIs) for this course. It will only take a few minutes. This seems to be the <u>link</u> you'll need.)