

Staff Paper

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GETTING FROM ECONOMIC ANALYSIS TO POLICY ADVICE

James T. Bonnen and David B. Schweikhardt¹

When conducting analysis with the intent of advising policy makers, public or private, the economist faces the challenge of adapting the analysis to the context in which decisions will be made. Analysts must convince decision makers, who typically are not economists, that the analysis deals realistically with actual dimensions of their problem. Organized groups, who put the problem on the policy agenda and who are pressing for action, often must be convinced also. With some problems this may be easy, but generally it is a substantial challenge.

All I Needed to Know I Learned in Econ. 101

Some of the difficulty lies in our training as economists. The analytic power of economic analysis comes from its logical, often mathematical and statistical, rigor and from theory and assumptions that simplify the conceptual framework of the analysis. We are trained to resist movement away from this methodological dispensation. Many economists, especially those without much experience in policy wars, fail sufficiently to appreciate the large differences between what a rigorous “economic model” can address and the actual dimensions of a policy maker’s problem. Policy problems are often messy and subject to such large economic and other uncertainties for which a clear or rigorous definition is not easy, to say nothing of analysis at the economic profession’s expected level of rigor. In the nature of things there is a trade-off between rigor and relevance in policy that is unforgiving and unavoidable. But as Nobel Laureate T.W. Schultz observed many years ago:

There is no paved highway connecting “economic analysis” and “public policy.” For the most part it is an unmapped, badly maintained, and hazardous stretch to travel... In the belief, however, that the findings growing out of economic inquiry may be better understood and thus made more useful in the field of public affairs, economists must, at least, keep on trying to interpret the results of their studies into the language and in terms of the values and underlying policy considerations (p. 186).

This involves risks that must be assumed, if one is to be effective in policy advice and analysis. There is a growing and thoughtful literature in economics on the problems of providing policy advice that should be more widely read and taught than it is (e.g., Cairncross, Hansen, Nelson, Schultze, Stein).

One faces a diverse set of unavoidable difficulties in moving from economic analysis to policy analysis. Sometimes the analyst is served a “fat pitch” when the policy problem is almost purely economic and one has the time and resources to do a good piece of work. Usually, however, policy problems require knowledge from multiple disciplines so the analysis must at some point involve noneconomic variables. This is why even the President’s Council of Economic Advisors has a staff most of whom work in the applied fields in economics, e.g., labor, agriculture, natural resources, health, education, welfare, industrial organization, trade, etc. Perhaps the initial and most disconcerting discovery to the neophyte policy analyst is that what you were trained to treat as a complex economic problem is, in the policy maker’s view, usually a political problem with perhaps a few bothersome economic implications. In any policy decision, something is being optimized, but from an economic point of view the result is often a 14th best solution. Even from the individual views of the major political players, it will often be a third or fourth best outcome since, given the usual constraints and multiple goals, the outcome will involve political compromise between conflicting goals.

This is well described by Charles Schultze, former Chairman of the Council of Economic Advisors (CEA) and later also Director of the Office of Management and Budget (OMB):

Forty years of observing policy debates, including 15 years of participating in them, have not dulled my amazement at how few participants have a grasp of fundamental economic principles and how differently from economists they analyze issues. Several reasons stand out for the wide divergence between the views of economists and others. First, to politicians the world is full of corner solutions; the idea of continuous cost and demand curves with nonzero elasticities is foreign to their way of thinking. Second, some important principles in macroeconomics and international trade are counterintuitive; for example, the essential reason for a country to export is to import, not to increase total employment. In periods of full employment, additional spending on “good things” like exports or investment can harm the economy. The balance between a country’s saving and domestic investment is by far the most important determinant of the trade deficit, not

“unfair” trading practices by foreign competitors. Depending on costs, there is almost always an optimal amount of “bads” that society shouldn’t try to eliminate. Precious few policy makers grasp the principle of comparative advantage.

Third, noneconomists have an almost universal desire to deal with market failures through carefully specified regulation rather than a change in incentive structures. Such specification is the natural function of lawyers, and the legal profession continues to dominate Congress. When government intervenes in the marketplace, our political leaders typically rule out the manipulation of economic incentives to deter undesirable actions because reliance on market responses injects an uncertain, partially random, and therefore “unfair” set of forces into the picture. Yet in the American political context, any use of market forces and incentives for policy purposes would be modest compared to the enormous power that our society readily cedes to the market over a huge slice of our national life (p. 27).

It is equally disconcerting to discover that the most useful economic theory in this situation is found in an introductory economics textbook (Stein, 1995, pp.73-83). This may lead one to regrets about the trauma of graduate training until you remember that it was only about the time of your Ph.D. orals or even later as a teaching assistant introducing sophomores to the mysteries of economics that you really began to understand with any sophistication the concepts in Economics 101. Schultze has also described this situation clearly:

Because microeconomic understanding among many of the players in the policy game is often so low, the injection of basic microeconomic principles, well back from the frontiers of research, can significantly raise the quality of the debate. ...for most issues it is more of a challenge to CEA members and staff to translate basic economics into language the other participants in the policy game can understand than to deploy in the debate the latest refinements of theory and econometrics (p. 28).

The young analyst also needs to be sensitive to common violations of the assumptions of conventional competitive market theory (Economics 101 can betray one). These modifications are usually taught in graduate theory courses today, but only rarely in the context of applied policy analysis. Thus, as abstract qualifications their practical significance is often missed even though any well trained economist knows that the neo-classical model is an over-simplification. The applied policy economist of any stripe works in a world of human behavior that is constrained and motivated by institutions: laws, rules, organizations, traditions and conventions, many of which do not conform to the assumptions of standard

micro theory. This is of growing significance in commercial agriculture, which is fragmenting today under the impact of a maturing industrialization into diverse market structures where many commodities are proliferating into multiple products of highly diverse characteristics, while associated institutions are differentiating.

Another former Chairman of the CEA, Herbert Stein, has described the needed skills of a policy analyst and advisor:

The qualifications for an adviser differ from those for an innovative scientist or theorist. People who invent new ideas almost invariably have a devotion to them, but an adviser should not be so devoted to some new idea that he is unable to give the president a picture of the options that economics supports.... In addition to a stock of economic knowledge, which is “slowly replenished and refreshed with a flow of ideas from the journal mill,” a successful adviser needs “knowledge of the institutions in the field of his concern; a body of relevant statistical information; a set of ideas about how the government works; a political calculus of several kinds; judgment; and communication skills.” These qualities have been sought by the people selecting members of the CEA and generally found in those who have accepted the position (Stein, 1995, p. 78).

What I Needed to Know That I Did Not Learn in Econ. 101

Ruttan points out that the primary purpose of economic and other social science knowledge (research) is the understanding and improvement of institutions. In economics the theoretical base of the neo-classical model is being examined and significantly modified today to recognize differences in institutions, market and product characteristics, and the level and distribution of information available to decision makers. This is seen in the evolving development of the new institutional economics, industrial organization theory and the intersection of the literature on risk, incomplete market (failure) theory, public choice (government failure) theory, as well as transaction cost theory and the work on the economics of information. These developments are beginning to provide a basis for more realistic analysis of policy problems with substantial economic dimensions. Some examples can be seen in the accompanying side bars, which contrast the traditional neo-classical assumptions of perfect competition with some actual market conditions that can affect policy decisions and identify some of the implications for policy.

The first side bar arrays the consequences of the assumptions of perfectly competitive markets (perfect mobility of factors, perfect knowledge and perfect rationality) against the conditions often found in real markets and some consequences that follow from those conditions. The second side bar explores the same contrast in competitive assumptions, real market conditions and consequences, but in this case for the characteristics of the goods and services produced in markets. The third side bar provides the same contrast but for market structure assumptions. These side bars provide examples of a few of the most common economic complexities that a well informed policy analyst should be sensitive to in a complex market economy.

But They Never Told Me About Politics in Econ. 101!

As if that were not enough, there are other challenges unrelated to economics that are inherent in the policy process. One is the difficulty of having sufficient information about what the real game is in which you are advising. Some decision makers are candid with their analysts about the games they are playing, so there is little need to expend energy exploring the question. But if the analyst's boss is not well plugged into the political process or is prone to playing complex political games and leaving subordinates to guess what is really at stake, the successful analyst must spend time discovering "what that game is." Lyndon Johnson, for example, frequently used White House and Executive Office advisors as pawns in his political games, feeding some of them and their misdirected analysis and advice to the other players with whom he was negotiating. In this way he hid some matters or exaggerated the conflict over the decision and extracted more from the other players in the final compromise. This ultimately demeans and erodes an analyst's credibility with other actors, some of whom one may depend on for information in doing good policy analysis. Analysts can get used up fast and cease to be of value in their role in such an environment, if they do not protect the integrity of their performance. The quality and integrity of expertise is the only reason the analyst is allowed "in the game." An analyst without a reputation for integrity has nothing to offer that a player would value.

Closely related is the problem of an inadequate data base when your boss, under pressure, insists on concrete numbers to combat someone else's "bad idea." This command will often come in the late afternoon with your response due in time for a 5:00 p.m. emergency meeting that your boss has with his superior. You find no such numbers exist nor is there any basis for an accurate estimate. Your boss insists on your best estimate! The advice you get from the "old pro's" you know says:

"Give them what they want. Your estimate (guess?) is better than any of the policy types in that meeting. Besides, *when they want it bad, they get it bad.*"

The only problem is that in the following weeks and months, if the issue involved was important, that number is likely circulating at the highest levels and is now cited as a hard, irrefutable fact. In subsequent policy battles you must, if necessary, be able to cite its authority or question its accuracy without blushing. This also demonstrates the chronic challenge any analyst faces in a politically active policy environment. There is rarely enough time to do complete professional quality research or analysis before producing the required options paper. Policy decisions are all too frequently made under great time constraints and in a cockpit whose parameters of battle are filled with uncertainties. Indeed, the uncertainty associated with other variables is often so substantial that reducing your analytic error to a statistically correct 2 percent or so is wasted effort—even if you have the time.

As a consequence, one should never expect the process of decision to be orderly, follow the formal organization for decision making, or be controlled by any one or two actors. The intended results of most policy decisions are usually swamped by the unintended consequences. Uncertainty and lack of knowledge dominate both the decision and implementation processes. In the 1980s, costs of the Payment In Kind (PIK) farm program astonished the President's Office of Management and Budget. They had suggested the PIK idea believing it would reduce budget exposure! The policy process is so messy that the common notion that outcomes arise from collusion and plots of the powerful (a popular addiction and a media fixation) is almost certain to be wrong. Policy actors may try to control an outcome—but rarely, if ever,

do they succeed. Separation of powers in U.S. governance institutions prevent it, if countervailing power and random events do not. Rather, policy outcomes are all too often dominated by various mixtures of greed, incompetence, lust for power, stupidity and ignorance—the five horsemen, not of an apocalypse, but of the policy arena.

Another shock that many young analysts experience is inherent in policy. That is its value-laden subjectivity, which, if encountered in the form of highly ideological participants, can be immune to any appeal to well established facts or the best economic analysis. While the economist does (or should) know that logically all decisions are normative and contain some value judgments, policy in the U.S. has become increasingly driven by ideology in recent times. While policy conflicts have become more ideological, *successful policy achievement* continues to be characterized by pragmatic compromise. Without pragmatism and compromise conflict continues and even escalates. It is sobering to think that even in the case of success economists as a profession are still likely to be held responsible for economic policy decision errors by those who believe with John Maynard Keynes that:

Practical men, who believe themselves to be quite exempt from intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back (p. 383).

In terms of logic, policy decisions are prescriptive (ought or should) statements about the “right” or “wrong” thing to do. Prescriptions combine relatively factual (or value-free, positive) knowledge (i.e., beliefs about what is “true” or “false”) with knowledge about values (beliefs about the “goodness” or “badness” of situations, conditions and things). This prescriptive position will be taken in the context of the constraints imposed by the existing distribution of power and resulting decision rules, as well as current organized institutions and customs. Positions taken by participants in the policy process will differ depending on differences in the knowledge content of their prescriptions. Policy combat occurs over both beliefs about value knowledge as well as positive knowledge and over the distribution of costs and benefits that might result from a policy. (Johnson, p.18-20)

In our system of democratic institutions policy combat, like power, comes down to a matter of persuasion and compromise, using whatever resources you have. In any attempt to persuade others of the rightness of your position (analysis?) the analyst must recognize that the paramount activity of politics is redistribution, not efficiency. Commutative and distributive justice arguments, however fallacious, will often dominate. One hears much rhetoric about efficiency, but it is used more often in hypocrisy as an instrument with which to club opponents, hide true objectives and confuse voters than as a genuine goal of political decisions. A cynical economist would say that politics is the art of capturing economic rents for your allies while extracting rents from your foes. As a consequence, the economist, who is not tied to an interest or a lobotomous ideology, is frequently a lonely champion of efficiency in the public use of resources.

Analysts need to be sensitive to these and similar matters in doing their analysis. In presenting their results in an options paper or oral presentation, the wise policy analyst, as Schultze suggests, will avoid any abstruse economic vocabulary and analytic apparatus, unless some economist in the audience asks directly for such. On the other hand, these moments create an opportunity to educate one's principals. Simple explanations of the basic concepts will often be in order. Using such opportunities and having a bright, receptive audience, Walter Heller, as Chairman of the Council of Economic Advisors, had President John F. Kennedy and Secretary of the Treasury Douglas Dillon reasonably conversant in the basic concepts and vocabulary of micro and macroeconomics by the end of about two years of continuous interaction. By then the Council was making few concessions in the vocabulary used in memoranda to these two policy makers.

Conclusion

Economists can abstract from real world conditions for their purposes, but policy makers have to deal with the world as they encounter it. So analysts, if they are to influence policy makers, must understand the policy environment, and accept their policy maker's perception of that

environment—except, of course, when the analyst for sufficient reason consciously challenges those perceptions. Such challenges had better have an overpowering reason and you had better be right, since advice that runs counter to your boss’s viewpoint can eventually erode your “clout” and access. The longest surviving and most effective advisors seldom give advice unless it is asked for. Policy makers vary greatly in their capacity for and interest in an economic education. Some will force analysts to explain their conclusions, others do not want to be bothered or do not have time for it, another dimension that must be assessed in serving as a policy analyst and advisor.

These are noneconomic matters that should be taught to aspiring policy analysts, but rarely are. Too frequently students are left to discover the most elemental aspects by making mistakes on the job. Much learning must inevitably be left to experience in a policy analyst or advisor’s role, but some of the important common aspects of the policy practicum can be taught. Just sensitizing students to the important characteristics of the policy process can accelerate their learning and help them avoid many of the mistakes younger economists often make when learning on the job to be effective policy analysts and advisors.

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NOTES

1. Professor Emeritus and Associate Professor respectively of Agricultural Economics, Michigan State University. The authors are indebted to Allan Schmid, Robert Myers and Lindon Robison for critical reviews of the side bar tables and to William Knudson for a critical review.
2. There is a potential interaction between market condition 2 and 7, significant levels of uncertainty plus major differences in risk bearing capability or preferences of individual firms creates a situation in which (a) economies of scale can be more than offset by the diseconomies of risk, (b) difference but stable equilibria are possible for individual firms of different design* (scale and unit cost), and thus, (c) an industry equilibrium well short of monopoly or oligopoly can occur that is stable, and is composed of a distribution of firms that look quite different from one another.

* In the neoclassical paradigm we assume that firms choose optimal levels of a variable input. In empirical fact, firms choose design parameters that describe/establish their production system.

Side Bar 1

BASIC NEO-CLASSICAL MARKET ASSUMPTIONS

ASSUMPTIONS OF PERFECT COMPETITION	MARKET CONDITIONS AFFECTING POLICY DECISIONS	IMPLICATIONS FOR POLICY
<p>1. Perfect mobility of factors and products:</p> <p style="text-align: center;">Thus, adjustment is costless.</p>	<p>1. Some factors can be specialized and long lived with few or no alternative uses, i.e., some factors are immobile, fixed in production for long periods of time.</p>	<p>1. Adjustment is often lagged and costly to owners of immobile (fixed) factors.</p>
<p>2. Perfect knowledge/certainty:</p> <p style="text-align: center;">Thus, decision errors do not occur, information has zero cost, but also has zero value.</p>	<p>2. Uncertainty is ubiquitous, and information is frequently asymmetric and costly to acquire.²</p>	<p>2. Ex post decision errors are frequent, information is needed to <u>reduce</u> uncertainty and thus information has value.</p> <p>Since uncertainty cannot be reduced to zero, institutions are necessary to deal with the remaining irreducible level of uncertainty.</p> <p>With uncertainty, past commitments tend to become psychological fixed costs for policy makers leading to biased or nonrational policy decisions.</p>
<p>3. Perfect Rationality:</p> <p style="text-align: center;">The pursuit of material welfare by individual actors and that of the whole have a pareto optimum equilibrium.</p>	<p>3. Uncertainty + bounded rationality can lead to conflicting multiple optimums.</p>	<p>3. Opportunism and strategic behavior are possible when infrequent decisions involve specialized assets (Williamson, Ch 2).</p>
<p>Real market conditions 1 + 2 + 3 imply that:</p> <p>a) transaction costs exist in making market decisions, and, therefore,</p> <p>b) existing institutional arrangements are not neutral. They both affect and are affected by the outcome of policy decisions.</p>		

Side Bar 2

CHARACTERISTICS OF GOODS/SERVICES PRODUCED

ASSUMPTIONS OF PERFECT COMPETITION	MARKET CONDITIONS AFFECTING POLICY DECISIONS	IMPLICATIONS FOR POLICY
<p>4. Perfect rivalness or divisibility of goods.</p> <p style="padding-left: 40px;">Thus, consumption by one precludes consumption by another</p>	<p>4. Nonrival/indivisible goods exist, where the marginal cost of an additional user is zero.</p>	<p>4. Differences in preferences lead to conflict over who will pay for provision of a nonrival good--i.e., who pays the fixed cost and who pays the marginal cost.</p> <p style="padding-left: 40px;">Also, conflict arises over who gets to choose the extent of variety in goods offered within the trade-off between variety and cost per unit produced--e.g., monoculture vs bio-diversity.</p>
<p>5. Perfect appropriability: which creates an exclusionary good.</p> <p style="padding-left: 40px;">Thus, producers can appropriate or capture full cost-plus of a good from the market via property rights protected by liability rules, patents, copyrights, secrecy, etc.</p>	<p>5. Non-appropriability/non-exclusionary goods exist.</p>	<p>5. Private sector producers cannot capture the cost of a good from the market and thus, underproduce or do not produce it at all.</p>

Real market conditions 4 + 5 imply that conditions for public subsidies of a good, or direct public provision of a good may exist.

However,

- a) this involves no presumption of either market or government failure (i.e., the problem is one of the nature of the good produced).**
- b) public subsidies/provision of a good, while avoiding free rider problems, creates an unwilling rider problem (Schmid).**

Side Bar 3

MARKET STRUCTURE ASSUMPTIONS

ASSUMPTIONS OF PERFECT COMPETITION	MARKET CONDITIONS AFFECTING POLICY DECISIONS	IMPLICATIONS FOR POLICY
<p>6. Atomistic (perfect) markets with large numbers of producers and consumers.</p> <p style="padding-left: 40px;">Thus, individual actors are price takers who cannot affect the market by their individual actions.</p>	<p>6. Concentration of sellers/buyers exists in some markets.</p>	<p>6. Prices may be affected by the market power of the few buyers or sellers who account for most of the market transactions.</p>
<p>7. No economies of scale.</p> <p style="padding-left: 40px;">Thus, a competitive market equilibrium exists in which the number of producers is stable, and private costs equal social costs.</p>	<p>7. Economies of scale exist and persist in some markets. Thus, no equilibrium is achieved short of one or a few firms.²</p>	<p>7. Low unit cost producers will force high cost firms out of the market leading toward concentration and oligopoly, if not monopoly in the limiting case.</p> <p style="padding-left: 40px;">Concentration creates infant industry problems, where growth becomes path dependent--i.e., once investment is committed to one technology, a scale-economy, unit-cost advantage prevents the shift to any new, improved technology.</p>
<p>8. Complete markets.</p> <p style="padding-left: 40px;">Thus, private costs equal social costs.</p>	<p>8. Market structures are incomplete.</p>	<p>8. Important external effects of production or consumption exist. Thus, total social costs may exceed total private costs.</p>
<p>Real market conditions 6 + 7 and/or 8 imply that an economic rationale for <u>public regulation</u> may exist.</p> <p>However,</p> <p>a) all market situations involve actors whose interests conflict (i.e., policy is never <u>dictated</u> by market or government characteristics alone).</p> <p>b) regulations, private property rights and public spending and production are complements and substitutes in determining whose preferences count (and who bears the costs of the consequences) when interests conflict.</p>		