

Third Edition

SHORT LOAN

# POLICY ANALYSIS

Concepts and Practice

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## POSTSCRIPT AND PROLOGUE

The chapters that follow provide you with the concepts and tools to perform an analysis such as the one you have just reviewed. Not all policy analysis takes this form: It can be as informal as spoken advice in a corridor to a policymaker or as formal as a legislatively-required regulatory impact analysis. But all good policy analysis necessarily includes the sort of thinking that this report represents. Read on. Enjoy. Or, at least endure!

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## What Is Policy Analysis?

The product of policy analysis may be advice as simple as a statement linking a proposed action to a likely result: passage of bill A will result in consequence X. It may also be more comprehensive and quite complex: passage of bill A, which can be achieved with the greatest certainty through legislative strategy S, will result in aggregate social costs of C and aggregate social benefits of B, but with disproportionate costs for group one and disproportionate benefits for group two. At whatever extremes of depth and breadth, policy analysis is intended to inform some decision, either implicitly (A will result in X) or explicitly (support A because it will result in X, which is good for you, your constituency, or your country).

Obviously, not all advice is policy analysis. So to define it, we need to be more specific. We begin by requiring that the advice must relate to public decisions and be informed by social values. That is not to say that policy analysts do not work in private organizations. Businesses and trade associations often seek advice about proposed legislation and regulations that might affect their private interests—when their employees or consultants consider the full range of social consequences in giving such advice, they are providing policy analysis. Of course, the majority of policy analysts are to be found in government and non-profit organizations where day-to-day operations inherently involve public decisions, as well as in consultancies that serve these public and private organizations. Because our interest centers on policy analysis as a professional activity, our definition requires that policy analysts, in either public or private settings, have clients for their advice who can participate in public decision-making. With these considerations in mind, we hazard the following simple definition: *policy analysis* is client-oriented advice relevant to public decisions and informed by social values.

A plethora of definitions of policy analysis already exists.<sup>1</sup> Why introduce this one? One answer is that it helps us keep our focus on the purpose of this book: developing the practical approaches and conceptual foundations that enable the reader to become an effective producer and consumer of policy analysis. We emphasize development of a professional mind-set rather than the mastering of technical skills. If we keep central the idea of providing useful advice to clients, then an awareness of the importance of learning the various techniques of policy analysis and of gaining an understanding of political processes will naturally follow.

Another answer is that this definition also emphasizes the importance of social values in policy analysis. Social values can come into play even when advice seems purely predictive. By looking at consequences of policies beyond those that affect the client, the analyst is implicitly placing a value on the welfare of others. Good policy analysis takes a comprehensive view of consequences and social values. As will become clear in subsequent chapters, we believe that economic efficiency deserves routine consideration as a social value not only because it measures aggregate welfare fairly well but also because it tends to receive inadequate weight in political systems.

An appropriate starting place for our study is an overview of the profession of policy analysis. How does policy analysis differ from the older professions to which it is related? Where are policy analysts to be found and what do they do? What skills are most essential for success?

## POLICY ANALYSIS AND RELATED PROFESSIONS

If you are a student in a public policy analysis program, then you probably already have a good sense of what policy analysis is all about—you have by your educational choice purposely selected the profession. Yet you may instead aspire to another profession, such as public administration, business management, city and regional planning, law, or public health, in which you may nevertheless be required to play the role of policy analyst from time to time. Perhaps you are reading this book as a student in an academic program in political science, economics, or political economy. We hope to put policy analysis in perspective by comparing it with some of the related professions and activities with which you may be more familiar.

<sup>1</sup>Some examples: "Policy analysis is a means of synthesizing information including research results to produce a format for policy decisions (the laying out of alternative choices) and of determining future needs for policy relevant information." Walter Williams, *Social Policy Research and Analysis* (New York: American Elsevier Publishing Company, 1971), p. xi; and "Policy analysis is an applied social science discipline which uses multiple methods of inquiry and argument to produce and transform policy-relevant information that may be utilized in political settings to resolve policy problems." William N. Dunn, *Public Policy Analysis* (Englewood Cliffs, N.J.: Prentice-Hall, 1981), p. ix. These definitions, as do most, lack the client orientation that distinguishes policy analysis as a professional activity. Descriptions of policy analysis closest to our definition are given by Arnold J. Melster, *Policy Analysis in the Bureaucracy* (Berkeley: University of California Press, 1976) and Norman Beckman, "Policy Analysis in Government: Alternatives to 'Muddling Through,'" *Public Administration Review*, Vol. 37, no. 3, 1977, pp. 221-22. For an extended discussion of the policy sciences, a broader conception of policy analysis, see Gary D. Brewer and Peter Delavan, *The Foundations of Policy Analysis* (Homewood, Ill.: Dorsey Press, 1983), pp. 6-17.

A comparison of policy analysis with five other paradigms—academic social science research, policy research, classical planning, journalism, and the "old" public administration—appears in Table 2.1. We focus our attention on similarities and differences in characteristics such as major objectives, client orientation, common style, time constraints, and general weaknesses. The comparison of paradigms emphasizes differences. As our discussion indicates, however, the professions of planning and public administration have moved much closer to the policy analysis paradigm in recent years.

The common experience of higher education gives us all at least some familiarity with academic research in the social sciences. Its major objective is the development of theories that contribute to a better understanding of society. Because the client for the research is "truth," at least as recognized by other scholars, the social science disciplines have attempted to develop rigorous methods for logically specifying theories and empirically testing hypotheses derived from them. Progress in the social sciences proceeds as much from the idiosyncrasy of researchers as from the demands of the larger society. The new theory or clever empirical test earns respect from social scientists whether or not it is immediately relevant to public policy. Nevertheless, the accumulation of empirical evidence, and the associated rise and fall of competing theories eventually influence the "world views" of policy makers outside of the academy.<sup>2</sup> Although academic research only fortuitously contributes to the debate over any particular policy issue, the development of social science knowledge forms a base for more narrowly specified research of greater potential relevance.

This research, which often directly employs the methods of the social science disciplines, can be described as *policy research*.<sup>3</sup> Whereas academic research looks for relationships among the broad range of variables describing behavior, policy research focuses on relationships between variables that reflect social problems and other variables that can be manipulated by public policy. The desired product of policy research is a more-or-less verified hypothesis of the form: If the government does X, then Y will result. For example, academic research into the causes of crime might identify moral education within the family as an important factor. Because our political system places much of family life outside the sphere of legitimate public intervention, however, there may be little that the government can do to foster moral education within the home. The policy researcher, therefore, may take moral education as a given and focus instead on factors partially under government control, such as the certainty, swiftness, and severity of punishment for those who commit crimes. The policy researcher may then be willing to make a prediction (a hypothesis) to be tested

<sup>2</sup>Within disciplines, acceptance of new theories that better explain empirical anomalies often occurs only after repeated failures of the older theories over an extended period. See Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970). For a discussion of a paradigm shift in political context, see Peter A. Hall, "Policy Paradigms, Experts, and the State: The Case of Macroeconomic Policy-Making in Britain," in Stephen Brooks and Alan C. Gagnon, eds., *Social Scientists, Policy, and the State* (New York: Praeger, 1990), pp. 53-78.

<sup>3</sup>For a discussion of policy research, see James S. Coleman, *Policy Research in the Social Sciences* (New York: General Learning Press, 1972). Policy research, expanded to include the study of the policy process, is sometimes referred to as policy science. Harold D. Lasswell, "The Emerging Conception of the Policy Sciences," *Policy Sciences*, Vol. 1, no. 1, 1970, pp. 3-30.

Table 2.1 Policy Analysis in Perspective

	Major Objective	"Client"	Common Style	Time Constraints	General Weakness
Academic Social Science Research	Construct theories for understanding society	"Truth" as defined by the disciplines; other scholars	Rigorous methods for constructing and testing theories; usually retrospective	Rarely external time constraints	Often irrelevant to information needs of decision makers
Policy Research	Predict impacts of changes in variables that can be altered by public policy	Actors in the policy arena; the related disciplines	Application of formal methodology to policy-relevant questions; prediction of consequences	Sometimes deadline pressure, perhaps mitigated by issue recurrence	Difficulty in translating findings into government action
Classical Planning	Defining and achieving desirable future state of society	"Public interest" as professionally defined	Established rules and professional norms; specification of goals and objectives	Little immediate time pressure because deals with long-term future	Wishful thinking in plans when political processes ignored
The "Old" Public Administration	Efficient execution of programs established by political processes	"Public interest" as embodied in mandated program	Managerial and legal	Time pressure tied to routine decision making such as budget cycles	Exclusion of alternatives external to program
Journalism	Focusing public attention on societal problems	General public	Descriptive	Strong deadline pressure—strike while issue is topical	Lack of analytical depth and balance
Policy Analysis	Systematic comparison and evaluation of alternatives available to public actors for solving social problems	Specific person or institution as decision maker	Synthesis of existing research and theory to predict consequences of alternative policies	Strong deadline pressure—completion of analysis usually tied to specific decision	Myopia resulting from client orientation and time pressure

## Policy Analysis and Related Professions

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by future events) that if the probability of arrest for a certain crime is increased by 10 percent, then the frequency of that crime will go down by, say, 5 percent.

A fine line often separates policy research and policy analysis. The strength of client orientation distinguishes them in our scheme. Policy researchers are less closely tied to public decision makers. While one or more decision makers may be interested in their work, policy researchers usually view their motivation primarily as members of an academic discipline. Sometimes their main motivation for doing policy research is personal financial gain or the excitement of seeing their work influence policy; perhaps more often they do it to gain resources or attention for their academic research programs. Because they place primary importance on having the respect of others in their academic disciplines, policy researchers are often as concerned with the publication of their work in professional journals as with its use by decision makers.

Disciplinary orientation contributes to a general weakness in policy research because the translation of research findings into policies that can be directly implemented often requires attention to practical considerations of little academic interest. Returning to our example, the policy researcher's prediction that an increase in the probability of arrest will decrease the crime rate is only the first step in developing and evaluating a policy option. How can the arrest rate be increased? How much will it cost? What other impacts will result? How can it be determined if the predicted reduction in the crime rate has actually occurred? The answers to questions such as these require information of a specific nature, often of little disciplinary interest. Consequently, policy researchers often leave these sorts of questions to policy analysts, who will actually craft policy options for decision makers.

A very different paradigm is classical planning, a reaction to the apparent disorder and myopia resulting from private market behavior and pluralistic government. The general approach of planning is, first, to specify goals and objectives that will lead to a better society and, second, to determine the most efficient way of achieving them. Necessary for effective planning is a centralization of authority for the creation and execution of the plan.

As extreme cases, the poor performances of the centrally planned economies of Eastern Europe during the Soviet era point to the inherent weaknesses of the planning paradigm. One weakness is the difficulty of specifying appropriate goals and objectives. The five-year plan may clearly specify what is to be produced, but it is unlikely that the production will closely match the wants of consumers. The other is the massive problem of cognition caused by the need to collect and process information for the comprehensive direction and monitoring of numerous economic actors. Although central economic planning has had little currency in the American context, the planning paradigm has been important in narrower applications.

Urban planning in Great Britain and the United States developed from the belief that control of the use of land could be an effective tool for improving the aesthetics and efficiency of cities. The comprehensive master plan, which embodied professional norms about appropriate patterns of land use, became the statement of

goals and objectives. Zoning and land-use ordinances were to serve as the mechanisms for implementing the master plans.

The impact of urban planning has been limited, however, by the autonomy of local governments that do not fully accept the professionally specified goals and objectives, by the dynamic of local economic growth that often takes unanticipated forms, and by a narrow emphasis on physical structure rather than broader issues of social behavior. Recognizing the incongruence of the classical planning paradigm with the reality of democratic politics, many planners have urged their profession to adopt a more active interventionist role in public decision making.<sup>5</sup> Consequently, many urban and regional planning schools now require coursework in policy analysis.

A more recent manifestation of the planning paradigm was *systems analysis*, which attempted to extend the techniques of operations research beyond narrow applications. The basic approach of systems analysis involves the construction of quantitative models that specify the links among the multitude of variables of interest in social or economic systems. The analytical objective is to maximize, or at least achieve lower bounds on, certain variables that represent goals by altering other variables that can be manipulated by government. By identifying the many possible interactions, the systems analyst hopes to avoid the myopia of incremental political decision making.

But systems analysis has tended to be both overambitious and reductionist.<sup>6</sup> Rarely is there adequate theory or data for the construction of reliable comprehensive models. Further, not all important factors are readily subject to quantification. In particular, the appropriate weights to place on the multiple goals that characterize public issues are usually not obvious; the analyst's choice may cloak value judgments in apparent objectivity. Additionally, the mystique of quantification may give simplistic models more attention than they deserve. Witness, for example, the public attention given to the report of the Club of Rome on the limits to world growth<sup>7</sup>—a report based on a model with virtually no empirical links to the real world.<sup>8</sup> An apparently rigorous model, it purported to show that continued economic growth would soon be unsupportable, leading to a dramatic decline in world living standards.

<sup>5</sup>For example, see Jerome L. Kaufman, "The Planner as Interventionist in Public Policy Issues," in Robert W. Burchell and George Stenfield, eds., *Planning Theory in the 1980s: A Search for Future Directions* (New Brunswick, N.J.: The Center for Urban Policy Research, 1978), pp. 179-200.

<sup>6</sup>For critiques of systems analysis, see Ida R. Hoos, *Systems Analysis in Public Policy: A Critique* (Berkeley: University of California Press, 1972); and Aaron Wildavsky, "The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting," *Public Administration Review*, Vol. 26, no. 4, 1966, pp. 292-310. For a comparison of systems analysis and policy analysis, see Yehzekiel Diner, "Policy Analysis: A New Professional Role in Government Service," *Public Administration Review*, Vol. 21, no. 3, 1967, pp. 197-203.

<sup>7</sup>Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (New York: Universe Books, 1974).

<sup>8</sup>For critiques of the Club of Rome approach, see William D. Nordhaus, "World Dynamics: Measurement Without Data," *Economic Journal*, Vol. 83, no. 332, 1973, pp. 1156-1183; Chi-Yuen Wu, "Growth Models and Limits-to-Growth Models as a Base for Public Policymaking in Economic Development," *Policy Sciences*, Vol. 5, no. 2, 1974, pp. 191-211; and Julian L. Simon and Herman Kahn, eds., *The Resourceful Earth: A Response to Global 2000* (New York: Basil Blackwell, 1984).

Despite numerous arbitrary and questionable assumptions, the Club of Rome report was embraced by many whose worldview associated continued economic growth with unavoidable environmental degradation. The formality of the model tended to divert attention from its implicit assumptions.

A more focused application of systems analysis is the *planning, programming, budgeting system* (PPBS), which shares some characteristics with policy analysis. The basic approach of PPBS is to identify all programs that have common objectives so that budget allocations to those programs can be compared in terms of their effectiveness in achieving the objectives. PPBS is like policy analysis in that it is directed at influencing specific decisions in the budget cycle. It differs in its attempt to force comprehensive and quantitative comparisons over a wide range of programs. After some apparent success in the Defense Department, President Lyndon Johnson ordered its use throughout the federal government in 1965. In 1971, however, its use was formally abandoned by President Richard Nixon's Office of Management and Budget. Even this limited form of planning placed too great a strain on available knowledge and analytical resources.<sup>9</sup>

The goal of the "old" public administration was more modest than that of planning: the efficient management of programs mandated by the political process. Its advocates sought to separate the management function from what they saw as the corruption of politics. The words of Woodrow Wilson provide an unequivocal statement of the basic premise of the old public administration: "... administration lies outside the proper sphere of politics. Administrative questions are not political questions. Although politics sets the tasks for administration, it should not be suffered to manipulate its offices."<sup>10</sup> The ideal is a skillful and loyal civil service free from political interference and dedicated to the implementation and efficient administration of politically mandated programs according to sound principles of management. In other words, the science of management was insulated from the art of politics.

Both the old public administration and policy analysis are intended to bring greater expertise into public endeavors. Once organizational structures for programs have been created, public administrators turn their attention to the routine decisions concerning personnel, budgets, and operating procedures that help determine how well the programs will meet their mandated goals. Although policy analysts must concern themselves with questions of organizational design and administrative feasibility, they seek to influence the choice of programs by the political process. One focuses exclusively on doing well what has been chosen; the other also considers the choice of what is to be done.

Public administration has gradually come to include policy analysis among its professional activities. One reason is that the large bureaus and vague legislative mandates associated with an expanded public role in society require administrators

<sup>9</sup>Consider the following assessment: "Although it may fail for many other reasons, such as lack of political support or trained personnel, it always fails for lack of knowledge, when and if it is allowed to get that far" in Aaron Wildavsky, *Budgeting: A Comparative Theory of Budgetary Processes* (Boston: Little, Brown, 1975), p. 354. Also see Allen Schick, "A Death in the Bureaucracy: The Demise of Federal PPB," *Public Administration Review*, Vol. 33, no. 2, 1973, pp. 146-156.

<sup>10</sup>Woodrow Wilson, "The Study of Administration," *Political Science Quarterly*, Vol. 2, no. 1, 1887, pp. 197-222.

to choose among alternative policies—they thus become consumers and producers of policy analysis relevant to their own agencies. Another reason lies in the usual absence of a clean separation between politics and administration. Woodrow Wilson's vision notwithstanding, the administrator must be able to secure resources and defend implementation decisions within the political process. Policy analysis may help accomplish these tasks.

The "new" public administration explicitly abandons the notion that administration should be separate from politics.<sup>11</sup> Its practitioners seek to influence the adoption as well as the implementation of policies. Professional training, therefore, must include methods both for predicting the consequences of alternative policies so that informed choices can be made and for effectively participating in the political process so that the choices can be realized. Training in public administration thus often includes course work in policy analysis even though its primary focus remains management and operational decision making.

Comparing policy analysis with journalism may at first seem strange. Journalists typically concern themselves with recent events; they are rarely called upon to make predictions about the future. When they write about public policy, the need to attract a wide readership often leads them to focus on the unusual and the sensational rather than the routine and the mundane. Narratives with victims, heroes, and villains catch readers' interest more effectively than nuanced discussions of competing social values. Their contribution to the political process, therefore, is more often introducing policy problems to the public agenda than providing systematic comparisons of alternative solutions. Nevertheless, policy analysts and journalists share several goals and constraints.

Tight deadlines drive much of journalists' work. Because news quickly becomes stale, they often face the prospect of not being able to publish unless they make the next edition. Similarly, the advice of policy analysts, no matter how sophisticated and convincing, will be useless if it is delivered to clients after they have had to vote, issue regulations, or otherwise make decisions. Rarely will it be the case of better late than never.

Tight deadlines lead journalists and policy analysts to develop similar strategies for gathering information. Files of background information and networks of knowledgeable people often serve as extremely valuable resources. They may enable journalists to put events quickly in context. They play a similar role for policy analysts, but may also provide information useful for assessing technical, political, and administrative feasibility of policy alternatives when time does not permit systematic investigation.<sup>12</sup> Policy analysts, like journalists, wisely cultivate their information sources.

Finally, communication is a primary concern. Journalists must be able to put their stories into words that will catch and keep the interest of their readers. Policy analysts must do the same for their clients. Effective communication requires clear

<sup>11</sup>Consider the following: "New Public Administration seeks not only to carry out legislative mandates as efficiently and economically as possible, but to both influence and execute policies which more generally improve the quality of life for all." H. George Frederickson, "Toward a New Public Administration," in Frank Marini, ed., *Toward a New Public Administration* (Scranton, Pa.: Chandler, 1971), p. 314.

<sup>12</sup>On the value of accumulated studies, see Martha S. Feldman, *Order Without Design* (Palo Alto, Calif.: Stanford University Press, 1989).

writing—analysts must be able to explain their technical work in language that can be understood by their clients. Also, because the attention and time of clients are scarce resources, writing must be concise and convincing to be effective.

In summary, we gain a perspective on policy analysis by comparing it to related professions. Like policy research, policy analysis employs social science theory and empirical methods to predict the consequences of alternative policies. Like journalism, policy analysis requires skills in information gathering and communication. Policy analysis is neither so narrow in scope as the old public administration nor so broad in scope as classical planning. Yet planners and public administrators who explicitly recognize participation in the political process as professionally legitimate may at times become advice givers to various political actors, thus playing the role of policy analysts.

## POLICY ANALYSIS AS A PROFESSION

Until the 1980s, few of those actually doing policy analysis would have identified themselves as members of the policy analysis profession; even fewer were filling positions labeled "policy analyst." Many who do policy analysis held, and continue to hold, positions as economists, planners, program evaluators, budget analysts, operations researchers, and statisticians. In recent years, however, the policy analysis profession has emerged as an established profession. Positions labeled policy analyst are now more common in government agencies, and often these positions are filled by people who have been trained in graduate programs in policy analysis. Many practicing analysts trained in a variety of disciplines have joined with academics to form a professional organization, the Association for Public Policy Analysis and Management.<sup>13</sup> Nevertheless, the profession is still young and those who consider themselves members represent only a fraction of those actually practicing the craft of policy analysis.

Practicing policy analysts work in a variety of organizational settings, including federal, state, and local agencies and legislatures; consulting firms; research institutes; trade associations and other organizations representing interest groups; and business and nonprofit corporations. We focus here primarily on the U.S. context, but policy analysts can be found in similar settings in all the major industrialized countries.<sup>14</sup> The way analysts practice their craft is greatly influenced by the nature of their relationships with their clients and by the roles played by the clients in the political process. Because these relationships and roles vary greatly across organizations, we should expect to see a wide range of analytical styles. We consider the various analytical styles and their ethical implications in detail in the next chapter. For now, let us look at a few examples of organizational settings in which policy analysts work.

<sup>13</sup>Association for Public Policy Analysis and Management, PO Box 18766, Washington, D.C. 20036-8766. Information about membership and annual conferences can be obtained at the following World Wide Web address: [qnetnet.usa/~apppam/www/](http://qnetnet.usa/~apppam/www/)

<sup>14</sup>For international comparisons, see William Dutton, ed., *Advising the Bureaucracy* (New York: Praeger, 1991).

First, consider the U.S. federal government. Where would we find policy analysts? Beginning with the executive branch, we could start our search right in the White House, where we would find small but influential groups of analysts in the National Security Council and Policy Development staffs. As presidential appointees in politically sensitive positions, they generally share closely the philosophy and goals of their administration. Their advice concerns the political, as well as economic and social, consequences of policy options. They often coordinate the work of policy analysts in other parts of the executive branch.

The Office of Management and Budget (OMB) and, to a lesser extent, the Council of Economic Advisors (CEA) also play coordinating roles in the federal government. Analysts in OMB are responsible for predicting the costs to the federal government of changes in policy. They also participate in the evaluation of particular programs. The major role that OMB plays in the preparation of the administration budget gives its analysts great leverage in disputes with the federal agencies; it also often leads the analysts to emphasize budgetary costs over social costs and benefits.<sup>15</sup> Analysts on the CEA do not play as direct a role in the budgetary process and therefore retain greater freedom to adopt the broad perspective of social costs and benefits. Without direct leverage over the agencies, however, their influence derives largely from the perception that their advice is based on the technical expertise of the discipline of economics.<sup>16</sup>

Policy analysts work throughout the federal agencies. In addition to small personal staffs, agency heads usually have analytical offices reporting directly to them.<sup>17</sup> These offices have a variety of names that usually include some combination of the words "policy," "planning," "administration," "evaluation," "economic," and "budget."<sup>18</sup> For example, at various times, the central analytical office in the Department of Energy has been called the "Office of the Assistant Secretary for Policy and Evaluation" and the "Policy, Planning, and Analysis Office." Often, the heads of agency subdivisions have analytical staffs that provide advice and expertise relevant to their substantive responsibilities. Later in this chapter, we briefly consider policy analysis in the Department of Health and Human Services to illustrate the sorts of functions analysts perform in federal agencies.

Policy analysts also abound in the legislative branch. Both the Congress as a whole and its individual members serve as clients. Policy analysts work for Congress

<sup>15</sup>For a discussion of the institutional role of OMB, see Hugh Heclo, "OMB and the Presidency: The Problem of Neutral Competence," *Public Interest*, no. 38, 1975, pp. 80-98. For a history of OMB, see Larry Bernstein, *The Office of Management and Budget and the Presidency 1921-1979* (Princeton, N.J.: Princeton University Press, 1979).

<sup>16</sup>Herbert Stein, "A Successful Accident: Recollections and Speculations about the CEA," *Journal of Economic Perspectives*, Vol. 10, no. 3, 1996, pp. 3-21.

<sup>17</sup>For example, on the role of analysts at the State Department, see Lucian Pygallares and Diane T. Berliner, "Policy Analysis at the Department of State: The Policy Planning Staff," *Journal of Policy Analysis and Management*, Vol. 8, no. 3, 1989, pp. 379-94. Also see Robert H. Nelson, "The Office of Policy Analysis in the Department of the Interior," pp. 395-410 in the same issue.

<sup>18</sup>As recently as the mid-1970s only a small fraction of the offices responsible for doing policy analysis actually had "policy" or "policy analysis" in their names. Arnold J. Melster, *Policy Analysis in the Bureaucracy* (Berkeley: University of California Press, 1976), pp. 173-77.

in the General Accounting Office (GAO),<sup>19</sup> the Congressional Budget Office (CBO), the Congressional Research Service (CRS), and, until its recent elimination, the Office of Technology Assessment (OTA).<sup>20</sup> The analytical agendas of these offices are set primarily by the congressional leadership, but sometimes by the requests of individual congressional members as well. Of course, members of congress have their own personal staffs, including legislative analysts. Most of the analysts and formulation of legislation, however, is done by committee staffs that report to committee chairs and ranking minority members.<sup>21</sup> Committee staffers, often recruited from the campaign and personal staffs of members of congress, must be politically sensitive if they are to maintain their positions and influence. Congressional staff involved with legislation—and therefore to some extent working as policy analysts, even though often trained as lawyers—number in the thousands.<sup>22</sup>

How influential is policy analysis in policy formation and choice in Congress? Based on his detailed study of communication surrounding four policy issues in the areas of health and transportation, David Whiteman concludes: "The results . . . clearly indicate that policy analysis clearly does flow through congressional communication networks. In three of the four issues examined, analytic information played a significant role in congressional deliberations."<sup>23</sup> Much of the communication takes place through discussions between congressional staffers and analysts in government offices and think tanks rather than as formal written reports.

Turning to state governments, we find a similar pattern. Governors and agency heads usually have staffs of advisors who do policy analysis. Most states have budget offices that play roles similar to that of OMB at the federal level.<sup>24</sup> Personal and committee staffs provide analysis in the state legislatures; in some states, such as California, the legislatures have offices much like the Congressional Budget Office to analyze the impact of proposed legislation.

<sup>19</sup>The General Accounting Office and the Bureau of the Budget, the forerunner of OMB, were established in 1921 with the creation of an executive budget system. During much of its history, GAO devoted its efforts primarily to auditing government activities. In the late-1960s, however, GAO became a major producer of policy analysis in the form of program evaluations with recommendations for future actions. Because GAO must serve both parties and both legislative houses, and because its reports are generally public, it faces stronger incentives to produce politically neutral analyses than OMB. For a comparative history of these "twins," see Frederick C. Mosher, *A Tale of Two Agencies: A Comparative Analysis of the General Accounting Office and the Office of Management and Budget* (Baton Rouge: Louisiana State University Press, 1984).

<sup>20</sup>For an account of the elimination of the OTA and a comparison with the larger congressional support agencies that survived, see Bruce Bimber, *The Politics of Expertise in Congress: The Rise and Fall of the Office of Technology Assessment* (Albany: State University of New York Press, 1996).

<sup>21</sup>See Carol H. Weiss, "Congressional Committees as Users of Analysis," *Journal of Policy Analysis and Management*, Vol. 8, no. 3, 1989, pp. 411-431.

<sup>22</sup>Michael J. Malbin, *Unlected Representatives* (New York: Basic Books, 1980), pp. 252-56.

<sup>23</sup>David Whiteman, *Communication in Congress: Members, Staff, and the Search for Information* (Lawrence: University of Kansas Press, 1995), p. 181.

<sup>24</sup>For a survey, see Robert D. Lee, Jr., and Raymond J. Staffeldt, "Executive and Legislative Use of Policy Analysis in the State Budgetary Process: Survey Results," *Policy Analysis*, Vol. 3, no. 3, 1977, pp. 395-405.

At the county and municipal levels, legislative bodies rarely employ persons who work primarily as policy analysts.<sup>25</sup> Executive agencies, including budget and planning offices, usually do have some personnel whose major responsibility is policy analysis. Except in the most populous jurisdictions, however, most analysis is done by persons with line or managerial duties. Consequently, they often lack the time, expertise, and resources for conducting analyses of great technical sophistication. Nevertheless, because they often have direct access to decision makers, and because they can often observe the consequences of their recommendations firsthand, policy analysts at the local level can find their work professionally gratifying despite the resource constraints they face.

What do public agencies do if their own personnel cannot produce a desired or mandated analysis? If they have funds available, then the agencies can purchase analysis from consultants. Local and state agencies commonly turn to consultants for advice about special issues, such as the construction of new facilities or major reorganizations, or to meet evaluation requirements imposed by intergovernmental grant programs. Federal agencies not only use consultants for special studies, but also as routine supplements to their own staff resources. In extreme cases, consulting firms may serve as "body shops" for government offices, providing the services of analysts who cannot be hired directly because of civil service or other restrictions.<sup>26</sup>

The importance of the relationship between client and analyst is extremely apparent to consultants. Usually, the consultants are paid to produce specific products. If they wish to be retained in the future by their clients, then they must produce analyses that the clients perceive as useful. Consultants who pander to the prejudices of their clients at the expense of analytical honesty are sometimes described as "third guns" or "beltway bandits." Consultants best able to resist the temptation to pander are probably those who have a large clientele, provide very specialized skills, or enjoy a reputation for providing balanced analysis; they will not suffer greatly from the loss of any one client, and they will be able to find replacement business elsewhere if necessary.

Researchers in academia, "think tanks," and policy research institutes also provide consulting services. Although their work is usually not directly tied to specific policy decisions, researchers at places like the Rand Corporation, the Brookings Institution, the American Enterprise Institute for Public Policy Research, the Urban Institute, Resources for the Future, the Institute for Defense Analysis, and the Urban Institute for Research on Public Policy (Canada) sometimes do produce analyses of narrow interest for specific clients. It is often difficult in practice to determine whether these researchers better fit the policy analysis or the policy research paradigms presented above. With the explosion in the number of think tanks in recent years, more and more issues attract policy analyses from think tanks.<sup>27</sup> Many of the newer think

<sup>25</sup>There are some exceptions. See Gale C. Whitbeck, *Assessment of State and Local Government Evolution Practices: An Evaluation Unit Profile* (Denver: Denver Research Institute/University of Denver, March 1977).

<sup>26</sup>For a study of the use of consultants by the federal government, see James D. Mayer, *Consultants Can Help* (Lexington, Mass.: Lexington Books, 1979).

<sup>27</sup>For instance, *The Capital Source* (Washington, D.C.: The National Journal, Fall 1997) lists 114 think tanks in the Washington area (pp. 73-75) from the Alan Gurrmecher Institute, which focuses on population issues, to the World Bank Institute, which focuses on development issues.

## A Closer Look at Analytical Functions

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tanks with strong ideological identifications, however, have predispositions toward particular policies that often interfere with the professional validity of the analyses they provide.

Finally, large numbers of analysts neither work for, nor sell their services to, governments. They often work in profit-seeking firms in industries heavily regulated by government, in trade associations and national labor unions concerned with particular areas of legislation, and in nonprofit corporations that have public missions in their charters. For example, consider a proposal to make health insurance premiums paid by employers count as taxable income for employees. Private firms, trade associations, and labor unions would seek analysis to help determine the impact of the proposed change on the pattern and cost of employee benefits. The American Medical Association would seek analysis of the impact on the demand for physician services. Health insurance providers, such as Blue Cross and Blue Shield, commercial insurers, and health maintenance organizations, would want predictions of the effect of the change on the demand for their plans and the cost of medical care. These interests might also ask their analysts how to develop strategies for supporting, fighting, or modifying the proposal as it moves through the political process.

It should be obvious from our brief survey that policy analysts work in a variety of organizational settings on problems ranging in scope from municipal refuse collection to national defense. But what sorts of functions do analysts actually perform in their organizations?

## A CLOSER LOOK AT ANALYTICAL FUNCTIONS

At the beginning of this chapter, we pointed out that the nature of policy analysis can vary widely. In the subsequent chapters, we set out a framework for doing comprehensive policy analysis—how an individual analyst should go about producing a structured analysis that assesses problems presented by clients and systematically compares alternatives for solving them. This is the most appropriate pedagogic approach because it encompasses the range of functions that analysts commonly perform. By mastering it, analysts not only prepare themselves for performing the inclusive functions but also gain a useful framework for putting what they are doing into perspective.

Rather than describe these inclusive functions in the abstract, we present a brief overview of some of the policy analytic functions identified by the Department of Health and Human Services (DHHS). We single out DHHS for two reasons. First, it is a very large federal agency with responsibilities that demand the full range of analytical functions. Second, DHHS has written down what it sees to be the important functions of its policy analysts.

DHHS is very large by any measure. It oversees many specialized agencies, such as the Food and Drug Administration, the National Institutes of Health, the Health Care Financing Administration, and the Centers for Disease Control and Prevention, to name just a few. In fiscal year 1997, it administered spending of over \$340 billion, issued more grants than any other federal agency, and employed more than 130,000 people nationwide in its constituent units. As such, it is one of the largest federal agencies in the world. DHHS is also one of the most complex agencies in the world. It is the central coordinating office for the Office of the Secretary (OS), the central coordinating office for the

employs approximately twenty-four hundred people. The purpose of the OS includes providing independent advice and analysis concerning program issues, analyzing trade-offs among programs, and developing common policies across agencies. While much of what the OS does involves administration and monitoring, there is no clear separation of these tasks from policy analysis.

Although policy analysts can be found throughout DHHS, it is useful to focus on the Office of the Assistant Secretary, Planning and Evaluation (ASPE), because it has the clearest and most direct mandate for doing policy analysis. (The Office of the Assistant Secretary, Management and Budget has closely related policy analysis responsibilities, but with greater emphasis on budgetary and cost issues; the two offices often work together on policy analysis projects.) ASPE analysts perform a variety of functions. An ASPE orientation document specifically alerts new analysts to four major functions that they will be likely to perform.<sup>28</sup>

First, analysts play a "desk officer" function that involves coordinating policy relevant to specific program areas and serving as a contact for the line agencies within DHHS that have responsibilities in these areas. For example, a desk officer might cover biomedical research issues and work closely with analysts and other personnel at the National Institutes of Health. Desk officers serve as the eyes and ears of the department, "going out to the agency, talking with the staff about issues and options before they reach decision points, and knowing what issues are moving and what are not."<sup>29</sup> Desk officers are also expected to reach outside of DHHS to identify concerns and ideas from academics and those who deal with the programs in the field. By staying on top of issues, desk officers can provide quick assessments of proposed policy changes in their areas.

Second, analysts perform a policy development function. This is important to DHHS because ASPE resources "constitute some of the few flexible analytic resources in the Department."<sup>30</sup> Policy development often involves special initiatives within DHHS, but it can also be done through task forces that include personnel from other departments. These initiatives often result in policy option papers or specific legislative proposals.

Third, analysts perform a policy research and oversight function. "ASPE spends approximately \$20 million a year in both policy research and evaluation funds" to carry out this core function.<sup>31</sup> It is important to emphasize that DHHS, like many other government agencies, contracts out a considerable amount of policy-relevant research, therefore analysts at ASPE are both consumers and producers of policy research and analysis. ASPE analysts also participate in reviews of the research plans of other agencies, help formulate and justify plans for allocating evaluation funds, and serve on agency panels that award research contracts and grants.

Fourth, analysts perform a "firefighting" function. Fires can be "anything from a request from the White House to review the statement of administration accomplishments on welfare reform . . . to preparing an instant briefing for congressional

<sup>28</sup> Assistant Secretary, Policy and Evaluation, "All About ASPE: A Guide for ASPE Staff," no date.

<sup>29</sup> *Ibid.*, E-1.

<sup>30</sup> *Ibid.*, E-2.

<sup>31</sup> *Ibid.*, E-2.

staff because a key committee is preparing to mark up a bill, to helping . . . [the] Office of the Secretary prepare for a meeting with a key outside group tomorrow."<sup>32</sup> The term "firefighting" conveys the urgency of the task—analysts drop whatever else they are doing until the fire is put out.

These four categories of functions show the great variety of tasks that analysts are routinely called upon to perform. Some of these tasks are ongoing, others are episodic. Some have short deadlines, others extend for long periods. Some are internal to the analysts' organizations, others require interaction with external analysts and decision makers. Some involve topics of great familiarity, others present novel issues. What sorts of basic skills help analysts prepare for this diversity of tasks?

## BASIC PREPARATION FOR POLICY ANALYSIS

Policy analysis is as much an art and a craft as a science.<sup>33</sup> Just as the successful portraitist must be able to apply the skills of the craft of painting within an aesthetic perspective, the successful policy analyst must be able to apply basic skills within a reasonably consistent and realistic perspective on the role of government in society. In order to integrate effectively the art and craft of policy analysis, preparation in five areas is essential.

First, analysts must know how to gather, organize, and communicate information in situations in which deadlines are strict and access to relevant people is limited. They must be able to develop strategies for quickly understanding the nature of policy problems and the range of possible solutions. They must also be able to identify, at least qualitatively, the likely costs and benefits of alternative solutions and communicate these assessments to their clients. Chapter 10 focuses on the development of these basic informational skills.

Second, analysts need a perspective for putting perceived social problems in context. When is it legitimate for government to intervene in private affairs? In the United States, the normative answer to this question has usually been based on the concept of *market failure*—a circumstance in which the pursuit of private interest does not lead to an efficient use of society's resources or a fair distribution of society's goods. But market failures, or widely shared normative claims for the desirability of social goals other than efficiency, such as greater equity in the distributions of economic and political resources, should be viewed as only necessary conditions for appropriate government intervention. Sufficiency requires that the form of the intervention not involve consequences that would inflict greater social costs than social benefits. Identification of these costs of intervention is facilitated by an understanding of the ways collective action can fail. In other words, the analyst needs a perspective that includes *government failure* as well as *market failure*. The six chapters of Part II provide such a perspective. Chapters 4, 5, 6, and 7 analyze the various market failures and other rationales that have been identified; Chapter 8 discusses the systematic ways that government interventions tend to lead to undesirable social

<sup>32</sup> *Ibid.*, E-2.

<sup>33</sup> For an excellent statement of this viewpoint, see Aaron Wildavsky, *Speaking Truth to Power: The Art and Craft of Policy Analysis* (Boston: Little, Brown, 1979), pp. 385–406.

outcomes, and Chapter 9 reviews generic policy solutions for correcting market and government failures. These chapters provide a "capital stock" of ideas for categorizing and understanding social problems and proposing alternative policies for dealing with them.

Third, analysts need technical skills to enable them to predict better and to evaluate more confidently the consequences of alternative policies. The disciplines of economics and statistics serve as primary sources for these skills. Although we introduce some important concepts from microeconomics, public finance, and statistics in the following chapters, those readers who envision careers in policy analysis would be well advised to take courses devoted to these subjects.<sup>34</sup> Even an introduction to policy analysis, however, should include the basics of benefit-cost analysis, the subject of Chapter 12. Chapters 15 and 16 illustrate the application of benefit-cost analysis and related techniques.

Fourth, analysts must have an understanding of political and organizational behavior in order to predict, and perhaps influence, the feasibility of adoption and successful implementation of policies. Also, understanding the worldviews of clients and potential opponents enables the analyst to marshal evidence and arguments more effectively. We assume that readers have a basic familiarity with democratic political systems. Therefore, practical applications of theories of political and organizational behavior are integrated with subject matter throughout the text, but particularly in the context of thinking strategically about attaining goals (Chapter 13), information-gathering skills (Chapter 10), and government failure (Chapter 8), and in the case studies (especially Chapter 15).

Finally, analysts should have an ethical framework that explicitly takes account of their relationships to clients. Analysts often face dilemmas when the private preferences and interests of their clients diverge substantially from their own perceptions of the public interest. Approaches to the development of professional ethics for policy analysts is the subject of the next chapter.

<sup>34</sup>There are three reasons why a solid grounding in economics and statistics is important for the professional policy analyst: (1) the techniques of these disciplines are often directly applicable to policy problems; (2) researchers who use economic models and statistical techniques are important sources of policy research—the ability to interpret their work is therefore valuable; and (3) analytical opponents may use or abuse these techniques—self-protection requires a basic awareness of the economists' and statisticians' uses.

## Toward Professional Ethics

The policy analyst with a philosopher-king as a client would be fortunate in several ways. The analyst could prepare advice with the knowledge that it would be thoughtfully evaluated on its merits by a wise leader who placed the welfare of the kingdom above considerations of private or factional interest. Good advice would be adopted and implemented solely on the word of the king, without resort to complicated political or organizational strategies. Thus, as long as the king was truly wise, benevolent, and powerful, the analyst could expect that only reasoned and reasonable differences of opinion would come between recommendations and action. In other words, the analyst would not have to fear conflict between the professional ideal of promoting the common good and the practical necessity of serving a client.

Although we often discuss policy analysis as if all clients were philosopher-kings, reality is never so kind. In the Western democracies, many cooks contribute to the policy broth. The distribution of authority by constitution or tradition to elected officials, bureaucrats, legislators, and magistrates guarantees many their place at the kettle. Prevailing norms of democratic participation ensure that they receive a variety of advice and demands from their fellow citizens to whom they are accountable, either directly or indirectly, at the ballot box. Presidents and prime ministers may enjoy more favored positions than other participants; but, except for very mundane or exceptional circumstances, even they generally lack authority to select and to implement policies by simple directive.<sup>35</sup> Even in political systems where the authority of the chief executive verges on the dictatorial, the limits of time and attention imposed

<sup>35</sup>Commenting on the U.S. executive, Richard E. Neustadt concludes, "Command is but a method of persuasion, not a magic." *The Executive* (New York: Basic Books, 1960), p. 10. Richard E. Neustadt, *The Executive* (New York: Basic Books, 1960), p. 10.

by nature necessitate the delegation of discretion over many routine decisions to other officials.

Analysts must expect, therefore, that their clients will be players in the game of politics—players who not only have their own personal conceptions of the good society but who also must acknowledge the often narrow interests of the good situations if they hope to remain in the game. The reality that, outside the classroom, policy analysis cannot be separated from politics has important practical and ethical implications. Analysis that ignores the interests of the client may itself be ignored or successfully implemented. In the extreme, if efficacy were the only professional value, "good" analysts would be those who helped their clients become better players in the game of politics. But other values, not always explicitly stated, lead to broader ethical considerations. Analysts should not only care that they influence policy, but that they do so for the better.

Much of the growing literature in the area of ethics and public policy concerns the values that we should consider in attempting to select better policies.<sup>2</sup> It reminds us that no single value, such as economic efficiency, can provide an adequate basis for all public decision making. We focus here on professional ethics rather than the comparative merits of substantive policies. Our objective in the following sections is to sketch a framework for thinking about the ethical responsibilities of the professional policy analyst. To do so, we must pay attention to the nature of the relationships between analysts and clients and the various contexts in which they evolve.<sup>3</sup> Even if we fail to develop explicit and universally accepted ethical guidelines, we will at least become acquainted with the most common analytical environments, and the dilemmas they sometimes raise for practitioners.

## ANALYTICAL ROLES

Policy analysis, like life itself, forces us to confront conflicts among competing values. Often conflicts arise inherently in the substantive question being considered. For example: Should a policy that would yield a great excess of benefits over costs for society as a whole be selected even if it would inflict severe costs on a small

<sup>2</sup>See, for example, Charles W. Anderson, "The Place of Principles in Policy Analysis," *American Political Science Review*, Vol. 74, no. 3, 1979, pp. 711-23; Robert E. Goodin, *Political Theory and Public Policy* (Chicago: University of Chicago Press, 1982); Peter G. Brown, "Ethics and Policy Research," *Policy Analysis*, Vol. 2, no. 2, 1976, pp. 325-40; Joel L. Fleishman and Bruce L. Payne, *Ethical Dilemmas and the Education of Policymakers* (New York: Hastings Center, 1980); Douglas J. Amy, "Why Policy Analysis and Ethics Are Incompatible," *Journal of Policy Analysis and Management*, Vol. 3, no. 4, 1984, pp. 573-91; Thomas C. Schelling, "Economic Reasoning and the Ethics of Policy," *Public Interest*, no. 63, 1981, pp. 37-61; and Daniel Callahan and Bruce Jennings, eds., *Ethics, the Social Sciences, and Policy Analysis* (New York: Plenum, 1983).

<sup>3</sup>For the contrast between a genuine discourse about values in a consensual environment and the potential manipulation of this discourse in adversarial processes, see Durand MadRes, Jr., "Guidelines for Policy Discourse: Consensus versus Adversarial," in Frank Fischer and John Forrester, eds., *The Argumentative Turn in Policy Analysis and Planning* (Durham, N.C.: Duke University Press, 1993), pp. 291-316.

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group of people? Our answers will depend on the relative weights we give to the values of efficiency (getting the greatest aggregate good from available resources) and equity (fairness in the way it is distributed). These values, along with others, such as the protection of human life and dignity and the promotion of individual choice and responsibility, provide criteria for evaluating specific policy proposals.

Rather than focusing on values from the unique perspectives of particular policy issues, here we consider values relevant to the general question of how analysts should conduct themselves as professional givers of advice. Three values seem paramount: *analytical integrity*, *responsibility to client*, and *adherence to one's personal conception of the good society*. Conflicts among these values raise important ethical issues for analysts.

To understand better the nature of these values and the contexts in which they become important, we consider three conceptions of the appropriate role of the analyst.<sup>4</sup> Each role gives priority to a different one of the three values, relegating the remaining two to secondary status. We can anticipate, therefore, that none of the three roles provides an appropriate ethical standard in its pure form in all circumstances. Our task will be to search for appropriate balance.

*Objective technicians* hold analytical integrity as their fundamental value. They see their analytical skills as the source of their legitimacy. The proper role for the analyst, in their view, is to provide objective advice about the consequences of proposed policies. Objective technicians feel most comfortable applying skills within recognized standards of good practice. Therefore, they prefer to draw their tools from the disciplines of economics, statistics, and operations research, all of which employ well-established methods. They realize that they must often work under severe time constraints and data limitations. Nevertheless, they want to believe that researchers in the disciplines would approve of their work as methodologically sound under the circumstances.

As asserted in Table 3.1, objective technicians view clients as necessary evils. Clients provide the resources that allow objective technicians to work on interesting questions. In return, clients deserve the most accurate predictions possible. The political fortunes of clients should take second place behind analytical integrity in the preparation, communication, and use of analyses. Analysts should try to protect themselves from interference by not becoming too closely associated with the personal interests of their clients. In general, they should select institutional clients, because such clients are likely to provide greater opportunities for preparing and disseminating objective analyses. For example, one is likely to face fewer interferences with analytical integrity working for the Congressional Budget Office, which must be responsive to Congress as a whole, than working directly for a member of Congress who must run for reelection every two years.

The objective technician believes that values relevant to the choice of policies should be identified. When no policy appears superior in terms of all the relevant val-

<sup>4</sup>Our approach here benefits from Arnold J. Meltsner, *Policy Analysis in the Bureaucracy* (Berkeley: University of California Press, 1976), pp. 18-49, who developed a classification of styles to understand better how analysis is actually practiced; and from Frank Jenkins-Smith, "Professional Roles for Policy Analysis: A Critical Assessment," *Journal of Policy Analysis and Management*, Vol. 2, no. 1, 1982, pp. 88-100, who developed the three roles we use.

Table 3.1 Three Views on the Appropriate Role of the Policy Analyst

	Fundamental Values		
	Analytical Integrity	Responsibility to Clients	Adherence to One's Conception of Good
Objective Technician	Let analysis speak for itself. Primary focus should be predicting consequences of alternative policies.	Clients are necessary evils; their political fortunes should be secondary considerations. Keep distance from clients; select institutional clients whenever possible.	Relevant values should be identified, but trade-offs among them should be left to clients. Objective advice promotes good in the long run.
Client's Advocate	Analysis rarely produces definitive conclusions. Take advantage of ambiguity to advance clients' positions.	Clients provide analysts with legitimacy. Loyalty should be given in return for access to privileged information and to political processes.	Select clients with compatible value systems; use long-term relationships to change clients' conceptions of good.
Issue Advocate	Analysis rarely produces definitive conclusions. Emphasize ambiguity and excluded values when analysis does not support advocacy.	Clients provide an opportunity for advocacy. Select them opportunistically; change clients to further personal policy agenda.	Analysis should be an instrument for progress toward one's conception of the good society.

ues, however, trade-offs among competing values should be left to the client rather than be implicitly imposed by the analyst. The analyst contributes to the good society, at least in the long run, by consistently providing unbiased advice even when it does not lead to the selection of personally favored policies.

The client's advocate places primary emphasis on his or her responsibility to the client. He or she believes that analysts derive their legitimacy as participants in the formation of public policy from their clients, who hold elected or appointed office, or who represent organized political interests. In return for access, clients deserve professional behavior that includes loyalty and confidentiality. Like physicians, analysts should "do no harm" to their clients; like attorneys, they should vigorously promote their clients' interests.

To some extent, the client's advocate views analytical integrity in the same way attorneys view their responsibility in the adversarial system. Analysts have a primary responsibility never to mislead their clients through false statements or purposeful omissions. Once clients have been fully informed, however, analysts may publicly interpret their analyses in the best possible light for their clients. Because analysts rarely produce definitive conclusions, analysts can emphasize the possible rather than the most likely when doing so favors their clients. The client's advocate

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believes that analytical integrity prohibits lying, but it requires neither full disclosure of information nor public correction of misstatements by clients.

Clients' advocates must relegate their policy preferences to a secondary position once they make commitments to clients. Therefore, their selection of clients matters greatly. When analysts and clients share similar worldviews, less potential exists for situations to arise that require analysts to help promote policies that are inconsistent with their conceptions of the good society. Upon discovering that their clients hold very different worldviews, analysts may nevertheless continue such relationships if they believe that they will be able to make their clients' outlooks more like their own over periods of extended service. In fact, they may believe that they have a responsibility to educate before switching to new clients.

Issue advocates believe that analysis should be an instrument for making progress toward their conception of the good society. They focus on values inherent in policy outcomes rather than on values, like analytical integrity and responsibility to the client, associated with the actual conduct of analysis. They see themselves as intrinsically legitimate players in the policy process. They may also see themselves as champions for groups or interests, such as the environment, the poor, or the victims of crime, that they believe suffer from underrepresentation in the political process.

Issue advocates select clients opportunistically. Clients unable or unwilling to promote the advocates' personal policy agendas should be abandoned for clients who can and will. Analysts owe their clients only those duties spelled out in the contractual arrangements defining the relationships; loyalty to one's conception of the good society should take priority over loyalty to any particular client.

Like the client's advocate, the issue advocate believes in taking advantage of analytical uncertainty. When analysis does not support one's policy preferences, the issue advocate questions the simplifying assumptions that must inevitably be employed in dealing with complex issues, or challenges the choice of criteria used to evaluate alternatives. (The latter will almost always be a possible strategy when one does not agree with conclusions.) Through issue advocates desire the respect of other analysts, especially when it contributes to effectiveness, they may be willing to sacrifice respect to obtain important policy outcomes.

## VALUE CONFLICTS

One can imagine each of these extreme roles being ethically acceptable in specific circumstances. For example, analysts on the White House staff enjoy privileged positions with respect to information and political access. An important factor in their selection was, undoubtedly, their perceived loyalty to the president. In accepting these positions, they were implicitly if not explicitly committing themselves to a high degree of discretion in confidential matters. Except in the most extreme cases where failure to act would lead with reasonable certainty to significant violations of human rights or constitutional trust, honoring confidentiality and otherwise behaving as the client's advocate seem to be ethically defensible. In contrast, a consultant hired by the Nuclear Regulatory Commission to analyze the risks associated with alternative policies for nuclear waste disposal might appropriately act as an objective technician, placing analytical integrity above all other values.

even argue that the consultant has an ethical duty to speak out publicly if the commission were to misrepresent the study to obtain a political outcome radically different from that which would otherwise have resulted.

In general, however, the analyst need not adopt any of the three roles in its extreme form. Rather than selecting one of the three fundamental values as dominant and sacrificing the other two as circumstances demand, the analyst should attempt to keep all three under consideration. The ethical problem, then, involves deciding how much of each value can be sacrificed when conflicts arise.

In any situation, the range of ethical behavior will be bounded by the minimal duties the analyst owes to each of the values. The development of professional ethics, either collectively or individually, may be viewed as an attempt to discover these minimal duties. In the discussion that follows, we consider some of the common situations in which value conflicts arise and minimal duties must be determined. We begin by considering the range of actions the analyst has available for responding to severe conflicts in values.

### Responses to Value Conflicts: Voice, Exit, and Disloyalty

The most serious ethical conflicts for policy analysts usually pit responsibility to the client against other values. A variety of factors complicate ethical judgment: continued access to the policy issue, the status of current and future employment, the personal trust of the client, and the analyst's reputation. Many of these factors involve implications that go well beyond the particular ethical issue being considered. For example, loss of employment directly affects the economic and psychological well-being of analysts and their families, as well as the sort of advice that will be heard on the issue at hand. It will also contribute to the sort of advice that will be offered in the analysts' organizations on similar issues in the future. We must be careful, therefore, to look for consequences beyond the particular issue at stake.

So far we have spoken of the analyst as if he or she were the direct employee of the client. Some analysts, such as consultants reporting directly to project managers or political appointees on the personal staffs of administrators and legislators, have clearly defined persons as clients. Analysts usually have immediate supervisors who can generally be thought of as clients. These supervisors, however, often operate in organizational hierarchies and therefore often have their own clients, who will also be consumers of the analysts' advice. Limiting the definition of the client to the immediate supervisor would unreasonably absolve analysts from responsibility for the ultimate use of their products. At the same time, we do not want to hold analysts accountable for misuse totally beyond their control. For our purposes, we consider the client to be the highest-ranking superior who receives predictions, evaluations, or recommendations attributable to the analyst. Thus, an analyst working in a bureau may have different persons as clients at different times. Sometimes the client will be the immediate supervisor; other times the client will be a higher-ranking official in the bureau.

Note that we have purposely adopted a narrow, instrumental conception of the client. There is some temptation to look for an ultimate client: analysts themselves as moral persons, the social contract as embodied in the constitution, or the public inter-

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est as reflected in national laws.<sup>5</sup> To do so, however, would assume away the essence of the professional role. Instead, we see personal morals, the constitution, and laws as the sources of other values that often conflict with responsibility to client.<sup>6</sup>

What are the possible courses of action for analysts when demands by their clients come in conflict with their sense of analytical integrity or their conception of the good society? We can begin to answer this question by considering the concepts of voice and exit developed by Albert O. Hirschman. In his book, *Exit, Voice, and Loyalty*, Hirschman explores how people can react when they are dissatisfied with the organizations in which they participate.<sup>7</sup> They may exercise voice by working to change the organization from within, or they may simply exit, leaving the organization for another. For example, parents dissatisfied with the quality of education provided by their local school district might exercise voice by attending school board meetings or even by standing for election to the board. Alternatively, they may put their children in private schools or move to another community with a better school district. In Hirschman's framework, loyalty helps determine how much voice is exercised before exit is chosen. Attachment to the community and commitment to public education, for example, will influence the parents' choice between voice and exit. We find it useful to use Hirschman's concepts of voice and exit, and to add a third concept, disloyalty. An action is disloyal when it undercuts the political position or policy preferences of the client. Note that we thus abandon Hirschman's use of loyalty. Rather than being a contributing factor to the choice between voice and exit, we specify loyalty as another dimension of action.

Analysts can exercise various combinations of voice, exit, and disloyalty when they confront value conflicts. The logical possibilities are presented in Figure 3.1, where voice, exit, and disloyalty are represented by circles. Actions involving more than one of the dimensions are represented by intersections of circles. For example, we label voice alone as "protest," "leak" combines protest with disloyalty. We specify seven different actions for purposes of discussion.

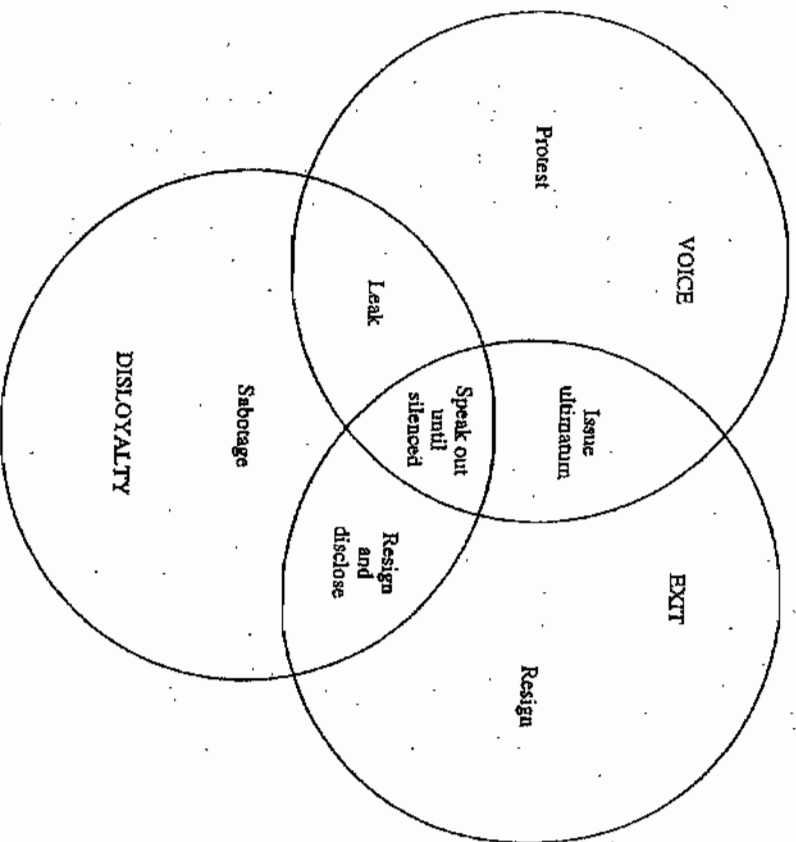
Consider the following situation: You work in a government agency as a policy analyst. You have just been assigned the job of developing an implementation strategy for a policy that you believe is bad. After careful deliberation, you decide that the policy is sufficiently bad that you feel it would be morally wrong for you simply to follow orders. Under what conditions might you feel ethically justified in choosing each of the actions listed in Figure 3.1?

You might try to change the policy through protest within the agency. You would probably begin by informally discussing your objections to the policy with

<sup>5</sup>Many writers have chosen to approach professional ethics with the question, Who is the real client? See, for example, E. S. Quade, *Analysis for Public Decisions* (New York: American Elsevier, 1975), pp. 273-75.

<sup>6</sup>John A. Rohr argues that public officials have a responsibility to inform their actions by studying the constitutional aspects of their duties through relevant court opinions and the substantive aspects through legislative histories. John A. Rohr, "Ethics for the Senior Executive Service," *Administration and Society*, Vol. 12, no. 2, 1980, pp. 203-16; and *Ethics for Bureaucrats: An Essay on Law and Values* (New York: Marcel Dekker, 1978).

<sup>7</sup>Cambridge, Mass.: Harvard University Press, 1970.



**Figure 3.1** Alternative Responses to Value Conflicts

your supervisor. If your supervisor lacks either the inclination or the authority to reverse the policy, then you might next make your objections formally through memoranda to your supervisor, your supervisor's supervisor, and so forth, until you reach the lowest-ranking official with authority to change the policy. At the same time, you might speak out against the policy at staff meetings whenever you have the opportunity. You might also request that the assignment be given to someone else, not only because you would feel morally absolved if someone else did it, but because the request helps to emphasize the intensity of your objections. At some point, however, you will have exhausted all the avenues of protest within the agency that are recognized as legitimate.

Although you remained loyal to the agency, your protest probably involved personal costs: the time and energy needed to express your opinions, the personal offense of your superiors, perhaps the loss of influence over the policy in discussion, and the financial consequences of the protest itself. If you were successful

ethical problem. If you were unsuccessful, then you must make a further assessment comparing the values you can achieve by remaining loyal to the agency with the values you give up by participating in the implementation of the bad policy.

A very different approach would be to resign when asked to prepare the implementation strategy. You decide that contributing to implementation would be so ethically objectionable that it justifies your leaving the agency. Your personal costs will depend largely on your employment opportunities outside the agency. If you are highly skilled and have a good reputation, then it may be possible for you to move directly to a comparable position. If you are less skilled and not well regarded in the professional network, then you may face unemployment or underemployment for a time.

But what are the ethical implications of your action? Only if your skills were essential to implementation would resigning stop the bad policy. If the policy goes forward, then the ethical value of your resignation is questionable. Although you were able simultaneously to remain loyal to the agency and to avoid contributing directly to the implementation, you forfeited whatever influence you might have had within the agency over the policy. You also may have betrayed the terms of your employment contract as well as some of the personal trust placed in you by your superiors and colleagues, and you may have jeopardized other worthy projects within the agency by withdrawing your contributions. If you believe that either the policy is very bad or you would have had a good prospect of overturning it from within the agency, then running away by resigning seems to lack fortitude.

Combining voice with the threat of exit by issuing an *ultimatum* is likely to be ethically superior to simply resigning. After employing the various avenues of protest within the agency, you would inform your superior that if the policy were not reversed you would resign. Of course, you must be willing to carry out your threat, as well as bear the costs of greater personal animosity than you would face from simple resignation. You gain greater leverage in your protest against the policy, but you lose influence over future decisions if you actually have to execute your threat.

deviating your personal decision to resign, there may be a larger social issue at stake. Why do you find the policy so objectionable while others approve of it? Perhaps the answer is that you have a better-developed ethical sense; you are more principled. Is it good for society in the long run to have people such as yourself leave important analytical positions?<sup>9</sup> On the other hand, the reason for disagreement may be that both you and your superiors hold morally justifiable values that happen to conflict. Although we may have some concern about maintaining diversity within our public agencies, the danger of selective attrition seems less serious when it results from legitimate differences of moral opinion rather than from a clash between expediency, say, and basic principles.

Now consider actions that involve *disloyalty* to your client. You might leak your agency's plans to a journalist, member of congress, interest group leader, or other person who can interfere with them.<sup>9</sup> You are taking your protest outside the agency and doing so surreptitiously. Even if you are not a pure Kantian, anytime you

For an elaboration of this point, see Dennis F. Thompson, "Political Justice," *Journal of Law, Economics, & Organization*, vol. 15, no. 1 (1999), pp. 1-25. In our discussion, *harmless* refers to *harmless* and *harmless*.

do not act openly and honestly, you should scrutinize closely the morality of your actions. Further, an important moral tenet is that one take responsibility for one's actions.<sup>10</sup> By acting covertly, you hope to stop the bad policy without suffering any adverse personal consequences from your opposition beyond the moral harm you have done to yourself by betraying the trust of your client and by acting dishonestly.

You should not view the violation of confidentiality, by the way, solely as a betrayal of personal trust. Confidentiality often contributes to organizational effectiveness. The expectation of confidentiality encourages decision makers to seek advice beyond their closest and most trusted advisers and to consider potentially desirable alternatives that would attract political opposition if discussed publicly.<sup>11</sup> Your decision to violate confidentiality has implications not just for your client, but also for the expectations others have about the confidentiality they will enjoy when considering good as well as bad policies.

You can at least avoid the dishonesty by speaking out publicly. One possibility is that you resign and disclose your former client's plans to potential opponents. Although you are being honest and taking responsibility for your actions, disclosure, by violating the confidentiality you owe to your client, is still disloyal. You also forfeit the opportunity of continuing your protest within the agency. Another possibility is that you speak out until silenced. This approach, often referred to as *whistle-blowing*, keeps you in your agency for at least a while. Your agency will probably move quickly to exclude you from access to additional information that might be politically damaging. You must expect that eventually you will be fired, or, if you enjoy civil service protection, exiled to some less responsible assignment that you will ultimately wish to leave. Therefore, your approach combines voice and disloyalty with eventual exit.

Under what conditions is whistle-blowing likely to be ethically justified? Peter A. French proposes four necessary conditions: First, you must exhaust all channels of protest within your agency before bringing your objections to the attention of the media, interest groups, or other units in the government. Second, you must determine that "procedural, policy, moral, or legal bounds have been violated." Third, you must be convinced that the violation will "have demonstrable harmful immediate ef-

fects upon the country, state, or citizens." Fourth, you must be able to support specific accusations with "unequivocal evidence."<sup>12</sup>

French's conditions merit justifiable whistle-blowing to fairly exceptional circumstances. We might question whether they should all be viewed as necessary. For example, if great harm were at stake, we might view whistle-blowing as ethical even if the evidence brought forward falls short of unequivocal. We should also recognize that the conditions call for great judgment on the part of the potential whistle-blower, especially with respect to anticipating the harmful effects of inaction, and therefore constitute only general guidelines. Nevertheless, they seem appropriately to demand a careful weighing of all values including loyalty.

Consider again the appropriateness of leaking. In addition to whatever conditions you believe justify whistle-blowing, you must also have a moral reason for acting covertly. In some extreme situations, perhaps involving the reporting of criminal acts in democracies or the supporting of human rights in totalitarian states, you might feel justified in acting covertly because your life or that of your family would be jeopardized by open protest. You might also justify acting covertly if you were convinced that you could prevent serious harm that might occur in the future by remaining in your position.

Finally, you might consider sabotage—disloyalty without voice or exit. In designing the implementation plan for the policy you abhor, you might be able to build in some subtle flaw that would likely force your agency to abandon implementation at some point. For example, you might select a pilot site in the district of a powerful member of Congress who will strongly oppose the policy once it becomes apparent. But such sabotage is morally suspect not only because it involves covert action, but also because it operates through obstruction rather than persuasion. Only the most extreme conditions, including all those needed to justify leaking plus the absence of any reasonable avenues for protest, justify sabotage. It is hard to imagine situations in democratic regimes that produce these conditions.

### Some Examples of Value Conflicts

Clients, because they have political interests related to their own policy preferences, the missions of their agencies, or their own personal advancement, may refuse to accept the truthful reports of their analysts. In some situations clients may put pressure on analysts to "cook up" different conclusions or recommendations. In other situations, clients may simply misrepresent their analysts' results to other participants in the decision-making process. What are the minimal duties of analysts in these situations?

**Demands for Cooked Results.** Most analysts desire at least the option to act as objective technicians. Faced with the task of evaluating alternative courses of action, they want the freedom to make reasonable assumptions, apply appropriate techniques, report their best estimates, and make logical recommendations. Unfortunately, clients sometimes hold strong beliefs that lead them to reject their analysts'

<sup>10</sup>For a discussion of this point and whistle-blowing, see Sissala Bok, *Secrets: On the Ethics of Confidentiality and Revelation* (New York: Pantheon, 1982), pp. 175, 210–29.

<sup>11</sup>For a discussion of this point and whistle-blowing, see Sissala Bok, *Secrets: On the Ethics of Confidentiality and Revelation* (New York: Pantheon, 1982), pp. 175, 210–29.

<sup>12</sup>Peter A. French, *Ethics in Government* (Englewood Cliffs, N.J.: Prentice Hall, 1983), pp. 134–37.

findings not on the basis of method, but solely on the basis of conclusions. If the client simply ignores the analysis, then the analyst will undoubtedly be disappointed but generally faces no great ethical problem—the analyst is simply one source of advice and not the final arbiter of truth. The ethical problem arises when the client, perhaps feeling the need for analytical support in the political fray, demands that the analyst alter the work to reach a different conclusion. Should the analyst ever agree to “cook” the analysis so that it better supports the client’s position?

A purist would argue that analytical integrity requires refusal; issue an ultimatum and resign if necessary. Can less than complete refusal ever be ethical?

We should keep in mind that, because analysis involves prediction, analysts rarely enjoy complete confidence in their conclusions. Careful analysts check the sensitivity of their results to changes in critical assumptions and convey the level of confidence they have in their conclusions to their clients. We can imagine analysts developing plausible ranges of results. For example, although the analyst believes that the cost of some program is likely to be close to \$10 million, the most conservative assumptions might lead to an estimate of \$15 million and the most optimistic assumptions to an estimate of \$5 million. After making the range and best estimate clear to the client, would it be ethical for the analyst to prepare a version of the analysis for public distribution that used only the most optimistic assumptions?

Analysts who view themselves as clients’ advocates might feel comfortable preparing the optimistic analysis for public use; those who see themselves as issue advocates might also if they share their clients’ policy preferences. After all, analysis is only one of many political resources, and it rarely encompasses all the relevant values. For analysts viewing themselves as objective technicians, however, the question is more difficult. Limiting the analysis to optimistic assumptions violates their conception of analytical integrity. In honest analysis, the assumptions drive the results rather than vice versa. Nevertheless, objective technicians may feel justified in going along if they are confident that their clients’ political opponents will draw attention to the slanted assumptions.<sup>13</sup> When objective technicians believe that the aggregate of analysis reaching the political forum will be balanced, their acquiescence appears less serious in terms of ethics and more serious in terms of professional reputation.

Indeed, if we focus solely on consequences, might not analysts have a responsibility to slant their analysis to counter the slanted analyses of others? Imagine that the person making the final decision lacks either the time or the expertise to evaluate the technical validity of the analyses that are presented. Instead, the decision maker gives the results of each analysis equal weight. In our example, the final decision would be based on the average of the cost estimates presented by the various analysts. If one analyst gives a pessimistic estimate and another gives a realistic estimate, then the final decision will be biased toward the pessimistic. If the second analyst gives an optimistic estimate instead, then the final decision may be less biased. The

broader consequences of compromising the procedural value of analytical integrity, however, may be to increase the professional acceptability of slanted analyses, and thus make it less likely that analysts will adopt the role of neutral technician in the future. Perhaps attacking the methodology of the slanted analysis directly rather than countering it, even if less effective for the issue at hand, would be better in the long run from the perspective of the social role of the professional policy analyst.

**Misrepresentation of Results.** Analysts have less ethical room in which to maneuver when their clients try to force them out of the range of the plausible. Defense of analytical integrity would seem generally to require protest backed up with the threat of resignation. The analysts’ predicament, however, becomes much more complicated when their clients do not actually try to force them to cook up results, but rather misrepresent what they have already done.

An analyst facing such misrepresentation is in a position similar to the defense attorney in a criminal case in which the client insists on being given the opportunity to commit perjury as a witness. By actively participating in the perjury, the attorney would be clearly violating his or her responsibility as an officer of the court. A more interesting problem arises if the client switches attorneys, conceals the truth, and then commits the perjury. Hearing of the testimony, the first attorney knows that perjury has been committed. Must he or she inform the court? One value at stake is the integrity of judicial fact-finding. Another is the confidentiality of the communication between defendant and attorney that encourages defendants to be truthful so that their attorneys can give them the most vigorous defense. Although there seems to be a consensus among the U.S. legal profession that actually participating in perjury is unethical, there does not appear to be a consensus about the responsibility of attorneys when they know that former clients are committing perjury.<sup>14</sup>

Confidentiality probably plays a more important social role in the relationship between defense attorney and defendant than between analyst and client. The former contributes to a system of justice that rarely convicts or punishes the innocent; the latter to more inquisitive and open public officials. Further, the public official’s obligation to honesty arises from a public trust as well as private virtue so that public dishonesty, unjustified by other overriding values, lessens the force of confidentiality. Therefore, the analyst’s ethical burden seems to go beyond refusal to participate actively in the misrepresentation of the analysis.

Before taking any action, however, the analyst should be certain that the misrepresentation is intentional. Usually this involves confronting the client privately. Upon hearing the analyst’s concern, the client may voluntarily correct the misrepresentation through private communication with relevant political actors or other intermediaries. The client might also convince the analyst that some other value, such as national security, justifies the misrepresentation. If the analyst becomes convinced, however, that the misrepresentation is both intentional and unjustified, then the next step (following the guidelines for whistle-blowing) should be to determine the amount of direct harm that will result if the misrepresentation is left unchanged. If little direct harm is likely to result, then resignation alone may be ethically

<sup>13</sup>More generally, this example suggests that the appropriate role for the analyst will depend on the policy environment. In closed fora, where the analysis is most likely to be decisive, the role of neutral technician seems most socially appropriate. In more open fora, where all interests are analytically represented, advocacy may be the most socially appropriate role. For a development of this line of argument, see Hank C. Jenkins-Smith, *Democratic Politics and Policy Analysis* (Princeton: Princeton University Press, 1980), pp. 30, 31, 32.

<sup>14</sup>For a back to back see *Journal of Criminal Law* (St. Paul: Wilson, West, 1980), pp. 30, 31, 32.

acceptable. If the direct harm appears substantial, then the analyst bears a responsibility to inform the relevant political actors as well.

## ETHICAL CODE OR ETHOS?

Professions often develop ethical codes to guide the behavior of their members. The codes typically provide guidelines for dealing with the most common ethical predicaments faced by practitioners. The guidelines usually reflect a consensus of beliefs held by members of professional organizations.<sup>15</sup> Established and dominant professional organizations with homogeneous memberships enjoy the best prospects for developing ethical codes that provide extensive and detailed guidance.<sup>16</sup> Although a professional organization for policy analysts exists (the Association for Public Policy Analysis and Management), it is young, still relatively small, and seeks to serve a very diverse membership with strong ties to other, more established, professions. Not surprisingly, it has not yet tried to develop an ethical code. Even when it becomes more established, the great diversity of its members and the organizational contexts in which they work suggest the difficulty of developing a code that directly speaks to a wide range of circumstances.<sup>17</sup>

Students of the policy sciences, however, have suggested some general guidelines that deserve consideration. For example, Yehzekel Dror proposes that policy scientists not work for clients who they believe have goals that contradict the basic values of democracy and human rights, and that they should resign rather than contribute to the realization of goals with which they fundamentally disagree.<sup>18</sup> Obviously, the analyst who chooses only clients with similar worldviews and value systems is less likely to face conflicts between the values of responsibility to client and adherence to one's conception of good than analysts who are less selective. Unfortunately, analysts often find themselves in situations where selectivity is impractical. All analysts face the problem of inferring the values and goals of potential clients from limited information; in addition, analysts employed in government agencies may find themselves working for new clients when administrations change. We have al-

<sup>15</sup>For empirical assessments of the degree of consensus over what constitutes ethical behavior within two policy-related professions, see: Elizabeth Howe and Jerome Kauffman, "The Ethics of Contemporary American Planners," *Journal of the American Planning Association*, Vol. 45, no. 3, 1979, pp. 243-53; and James S. Bowman, "Ethics in Government: A National Survey of Public Administrators," *Public Administration Review*, Vol. 50, no. 3, 1990, pp. 345-53.

<sup>16</sup>The American Society for Public Administration adopted a general set of moral principles, which evolved into a code of ethics for members in 1984. The code, which was revised in 1994, can be found on the back cover of *Public Administration Review*. It provides specific admonitions generally relevant to policy analysts under five general headings: Serve the Public Interest; Respect the Constitution and the Law; Demonstrate Personal Integrity; Promote Ethical Organizations; and Strive for Professional Excellence.

<sup>17</sup>For a discussion of some of the problems of developing an ethical code, see Guy Benveniste, "On a Code of Ethics for Policy Experts," *Journal of Policy Analysis and Management*, Vol. 3, no. 4, 1984, pp. 361-72, which deals with the conduct of scientists and others who provide expert advice on policy questions.

<sup>18</sup>Yehzekel Dror, *Designs of Policy Science* (New York: American Elsevier, 1971), p. 119.

## Ethical Code or Ethos?

ready discussed the reasons why resignation is not always the most ethical response to value conflicts between analysts and clients.

Most of Dror's other proposals seem relevant to policy analysis. For example, he proposes that clients deserve complete honesty, including explicated assumptions and unendorsed alternatives, and that analysts should not use their access to information and influence with clients to further their private interests. But these sorts of admonitions would follow from the moral system most of us would accept as private persons. In fact, some would argue that the moral obligations in most professions are not strongly differentiated from those of the nonprofessional.<sup>19</sup> A reasonable approach to professional ethics for policy analysts, therefore, may be to recognize a responsibility to the client and analytical integrity as values that belong in the general hierarchy of values governing moral behavior.

Rather than waiting for a code of ethics, perhaps we should, as Mark T. Lilla argues, work toward an ethos for the new profession of policy analysis.<sup>20</sup> As teachers and practitioners of policy analysis, we should explicitly recognize our obligations to protect the basic rights of others, to support our democratic processes as expressed in our constitutions, and to promote analytical and personal integrity.<sup>21</sup> These values should generally dominate our responsibility to the client in our ethical evaluations. Nevertheless, we should show considerable tolerance for the ways our clients choose to resolve difficult value conflicts, and we should maintain a realistic modesty about the predictive power of our analyses.

<sup>19</sup>See, for example, Alan H. Goldman, *The Moral Foundations of Professional Ethics* (Totowa, N.J.: Rowman and Littlefield, 1980).

<sup>20</sup>Mark T. Lilla, "Ethics, 'Ethics,' and Public Service," *Public Interest*, no. 63, 1981, pp. 3-17.

<sup>21</sup>See J. Patrick Dohal, "Integrity in the Public Service," *Public Administration Review*, Vol. 50, no. 3, 1990, pp. 354-366, for a discussion of commitments to regime accountability, personal responsibility, and prudence as moral resources for exercising discretion.

cally costly and difficult to implement, especially for single-parent families with young children.

Cash grants can also influence choices about living arrangements and family structure. For example, Aid to Families with Dependent Children often makes it financially possible for young unmarried mothers to set up their own households. The less generous are state benefit levels, the more likely it is that these mothers will stay with their parents.<sup>17</sup> Indeed, the opportunity to gain independence may encourage some teenage girls to have children. The general point is that the availability of cash grants may influence a wide range of behaviors.

## CONCLUSION

A variety of generic policies can be used to address market and government failures. Table 9.6 indicates the generic policy categories that are most likely to provide candidate solutions for each of the major market failures, government failures, and distributional concerns. In many cases, more than one generic policy can provide potential solutions for the same problem. But the solutions are never perfect. They must be tailored to the specifics of the situation and evaluated in terms of the relevant goals.

Our discussions of general problems and generic policy solutions lay the foundations for actually doing policy analysis. An understanding of market and government failure helps us to understand the nature of public policy problems. Being aware of the generic policies and their collateral consequences helps us to begin our search for solutions to our specific policy problems. In the next chapter, we turn to the process of policy analysis that enables us to use these foundations effectively.

# Landing on Your Feet: How to Confront Policy Problems

The previous chapters have been concerned with the conceptual foundations of policy analysis: how to diagnose problems, how to identify possible policy alternatives, how to think about efficiency and other policy goals, and how to measure some of the costs and benefits of either intervening in markets or altering existing public interventions. Upon these foundations, the analyst must build a structure, one that is useful and appropriate for the context. In this chapter we focus on the construction process: How should one plan and execute a policy analysis? Our answer keeps central the notion that policy analysis as a process involves *formulating* and *communicating* useful advice.<sup>1</sup>

Getting started on a written analysis is often difficult. We emphasize, therefore, how to go about developing a strategy for doing analysis (in other words, the "analysis of the analysis," or, if you like, "meta-analysis"). We suggest, however, that, before you begin trying to do analysis, you analyze yourself.

## ANALYZING YOURSELF: META-ANALYSIS

Your self-analysis should influence the way you go about doing policy analysis. You may base the self-analysis either on your first attempt at a policy analysis (the preferred method), or on your experience in writing academic papers (less preferable).

<sup>1</sup>Some pieces we find particularly helpful on the process of policy analysis include: Eugene Bardach, *The Eight-Step Path of Policy Analysis* (Berkeley, Calif.: Berkeley Academic Press, 1986); Christopher Lantieri and Robert Nelson, "Ten Commandments for Policy Economists," *Journal of Policy Analysis and Management*, Vol. 1, no. 1, 1981, pp. 97-117; James M. Verdier, "Advising Congressional Decision-Makers: Guidelines for Economists," *Journal of Policy Analysis and Management*, Vol. 3, no. 3, 1984, pp. 421-38; and Robert D. Behn and James Vaupel, "Teaching Analytic Thinking," *Policy Analysis*, Vol. 2, no. 4, 1976, pp. 663-92.

<sup>17</sup>David T. Ellwood and Mary Jo Bane, "The Impact of AFDC on Family Structure and Living Arrangements," *Research in Labor Economics*, Vol. 7, annual, 1985, pp. 137-207.

Subsequent sections of this chapter lay out the seven steps in the rationalist, or linear, mode. Later we will return to how nonlinear strategies can be translated into practical techniques for conducting analysis. Before proceeding through these analytic steps, we must first reiterate the importance of the client orientation.

## THE CLIENT ORIENTATION

In the introductory chapters, we emphasized that policy analysis is client-driven, and we considered some of the ethical issues relating to the relationship between analysts and clients. Our concern here is more with the practical consequences of having a client. The first client heuristic may seem obvious, but it is often neglected: You must address the issue that the client poses. Academic experiences (especially in non-quantitative courses) often do not prepare one for this reality because one has considerable discretion as to topic and approach. This is reasonable because when a professor is the client, he or she is most interested in your cognitive development. Real clients are more interested in getting their question answered. An important heuristic flows from this unpleasant fact: *It is almost always better to answer with uncertainty the question that was asked than to answer with certainty a question that was not asked.* Another heuristic follows as a corollary: *Good analysis does not suppress uncertainty, whether with respect to facts or theories.*

We all like neatness, and most of us have been rewarded for unambiguous answers. In policy analysis, however, it is more effective to highlight ambiguities than to suppress them. Remember that if your client does not hear of these ambiguities from you, he or she will normally hear of them from analytic, or political, opponents—a much more unpleasant way for your client to be informed. As an analyst, you bear an essential responsibility to keep your client from being blind-sided as a result of your advice.

Highlighting ambiguity should not be seen as an excuse for vague, wishy-washy, or poorly researched analysis. Indeed, you will have to work harder to arrange the competing theories and facts intelligently. Additionally, highlighting ambiguity does not absolve you from drawing analytic conclusions. For example, if, for a given policy problem, it is unclear whether there is a market failure, you should succinctly summarize evidence on both sides of the issue and then reach your conclusion. Thus your client will be aware of both the arguments and your conclusion. It is particularly important to make your client aware of the weaknesses of the relevant data and evidence. Although the "facts" used in policy debates are often inaccurate or at least unverified, they nonetheless can remain unchallenged. This has been referred to as the "vitality of mythical numbers."<sup>3</sup> To pick one example, Douglas Besharov has demonstrated the wholesale deceptive use of statistics in analyses of the child abuse problem.<sup>4</sup>

Students (and most others as well) tend to fall into one of two broad categories of thinkers and writers: linear and nonlinear.<sup>2</sup> Linear thinkers tend to solve problems by moving sequentially through a series of logical steps. Nonlinear thinkers tend to view problems configurationally, moving back and forth over steps as various pieces of the puzzle become apparent and begin to fall into place. We should stress that, for our purposes, neither is better or worse—both have strengths and weaknesses. Your particular weakness (or strength) may not have been revealed in other courses that were more structured and dealt with greater substantive certainty.

This last point is crucial. Your formal schooling has made you familiar with course assignments, especially problem sets in mathematics, statistics, and economics, where right and wrong answers can be specified. Policy analysis is rarely so certain. This does not mean that there are not good or bad analyses, but that your answer, the recommendation you make to a client, rarely by itself determines the quality of your analysis. Good analysis asks the right questions and creatively, but logically, answers them. The approach that you choose should allow you to eliminate, minimize, or at least mitigate your particular weaknesses in thinking and writing.

How can you diagnose your weaknesses? We have found that students who are linear thinkers and writers tend to suffer from "analysis paralysis." Linear thinkers, not surprisingly, like to start at the beginning of an analytic problem and then work step by step through to the end, following what is sometimes called a rationalist approach. If they cannot complete these steps sequentially, however, they tend to become paralyzed. In contrast, many others do not like to approach analysis sequentially. They have many ideas that they wish to get down on paper, yet they often have difficulty communicating these ideas in a well-organized, sequential mode, which, put bluntly, often results in written products that look like a regurgitated dog's dinner.

The first meta-analysis rule is that *linear thinkers should adopt nonlinear thinking strategies, while nonlinear thinkers should adopt linear writing strategies.* The format of this book should assist linear thinkers in adopting a nonlinear thinking approach because it compartmentalizes the analytic process. For example, you do not need to understand the problem fully to sketch out some generic policy alternatives. The previous chapters of the book, together with the next section, should also assist nonlinear thinkers in organizing analyses so that they can be communicated more clearly. Nonlinear thinkers can, and should, continue to think nonlinearly, but they must write linearly and comprehensively. Linear thinkers, on the other hand, will find that they will be more productive and less vulnerable to analysis paralysis if they also adopt nonlinear work strategies. Therefore, the second meta-analysis rule is that *analysts should simultaneously utilize linear and nonlinear modes when conducting policy analyses.*

<sup>2</sup>There is growing evidence that the distinction between the linear and the nonlinear corresponds to the differential abilities of the right and left sides of the brain. The evidence suggests that the left hemisphere is used for logical, sequential processes, while the right hemisphere is used for processes requiring intuition and creativity. Jan Ehrenwald has proposed that "geniuses" are those individuals best able to "shift gears" from one hemisphere to the other as required. See Jan Ehrenwald, *Anatomy of Genius: Split Brains and Global Minds* (New York: Human Sciences Press, 1984).

<sup>3</sup>See Max Singer, "The Vitality of Mythical Numbers," *Public Interest*, no. 23, 1971, pp. 3-9. See also Peter Reuter, "The Social Costs of the Demand for Quantification," *Journal of Policy Analysis and Management*, Vol. 5, no. 4, 1986, pp. 807-12.

<sup>4</sup>Douglas Besharov, "Unfounded Allegations—A New Child Abuse Problem," *Public Interest*, no. 83, 1986, pp. 18-33.

What should you do if you become convinced that your client has asked the wrong question? We offer no definitive advice on how to deal with this difficult situation. One clear rule, however, is that you must *fully explain to your client why you believe that he or she has asked the wrong question*. Clients are often ambiguous about their goals, and they sometimes appear to have goals that you may consider inappropriate. You may be able to help your client ask a better question by identifying ambiguity and by indicating why you believe that certain goals are inappropriate. In general, you should try to do so at the early stages of your analytical effort rather than waiting until you deliver what your client expects to be the answer to the original question.

Clients often ask questions that are not wrong, but rather just poorly formulated. Many times you will be presented "symptoms" that your client finds troubling. ("My constituents are complaining about the rising cost of day care.") Other times you may be presented with a policy alternative rather than a policy problem. ("Should the state subsidize liability insurance for day care centers?") Your task as an analyst is to reformulate expressions of symptoms and statements of policy alternatives into coherent analytical frameworks. ("Does the day-care industry under current regulations provide an efficient and equitable supply of services? If not, why not?") The following discussion of problem analysis provides guidance for doing so.

## STEPS IN THE RATIONALIST MODE

The word *analysis* comes from the Greek word meaning to break down into component parts. Teachers of policy analysis usually specify the components of the analytical process as a series of steps along the lines of the following: Define the problem, establish evaluation criteria, identify alternative policies, display alternatives and select among them, and monitor and evaluate the policy outcomes.<sup>5</sup> Such lists usually begin with "defining the problem" so that all the following steps can be described as "solving the problem." These formulations, we believe, often incorrectly suggest to the inexperienced student that defining, or explaining, the problem is a relatively short and simple part of the analytical process. In practice, analysts usually encounter the greatest difficulty and often expend the most time in trying to define, explain, and model the problem in a useful way.<sup>6</sup> These tasks are very important because they largely determine which goals and methods should be used to judge the desirability of alternative solutions. This, in turn, tends to drive the selection of policy alternatives.

<sup>5</sup>For a discussion of the importance of stripping away the prescriptive elements of problem definition, see Eugene Baruch, "Problems of Problem Definition in Policy Analysis," *Research in Public Policy Analysis and Management*, Vol. 1, 1981, pp. 161-71.

<sup>6</sup>See for example, Carl V. Patton and David Sawicki, *Basic Methods of Policy Analysis and Planning* (Englewood Cliffs, N.J.: Prentice Hall, 1986), p. 26. Others provide lists that include implementation as a step. For example, Grover Starling, *The Politics and Economics of Public Policy: An Introductory Analysis With Cases* (Homewood, Ill.: The Dorsey Press, 1979), p. 10.

<sup>7</sup>For an in-depth and thoughtful treatment of problem definition in the organizational context, see David Dery, *Problem Definition in Policy Analysis* (Lawrence: University Press of Kansas, 1984).

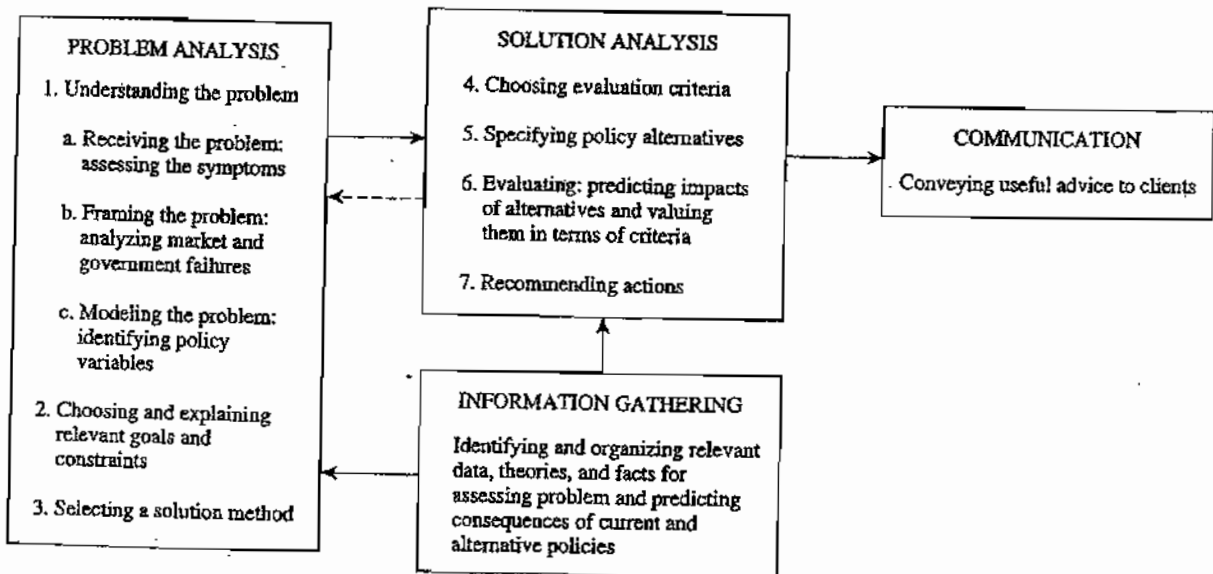


Figure 10.1 A Summary of Steps in the Rationalist Mode

A better perceptual balance is achieved by representing the policy analysis process as in Figure 10.1, which breaks the process into two major components: problem analysis and solution analysis. Both are vital. For example, an analysis that devotes most of its pages to analyzing the problem inevitably will not be credible in terms of the policy alternatives it presents or the reasons for choosing among them. Therefore, such an analysis may portray the nature of the problem convincingly, but not the solution. Because most clients seek solutions, such an imbalance typically diminishes the value of an analysis. Conversely, your recommendation will carry little weight unless you convince the client that you have framed the problem correctly, thought carefully about the potentially relevant goals, and considered a range of alternatives.

Our experience suggests that some students (and analysts) suffer in the extreme from looking only at solutions. Those suffering from such "recommendationitis" try to cram their complete analysis into their recommendations. If you suffer from this syndrome (or the tendency to cram all your analysis into any one step of the analytical process), then you are probably a nonlinear thinker who should take especially seriously the steps in the rationalist mode.

You will find it necessary to gather information throughout your problem and solution analyses. Both documents and people serve as sources. As a student, you already have considerable experience in locating documents in libraries and on the Internet. You probably have less experience in eliciting information directly from people. To help you develop your skills in information gathering, we provide an overview of strategies for gathering information in Appendix 10A, "Gathering Information for Policy Analysis." We recommend that you skim Appendix 10A before you begin the next section, and read it more carefully after you complete the body of this chapter. We think you will find it very useful to reread Appendix 10A before you begin your first "live" analysis.

## PROBLEM ANALYSIS

Problem analysis consists of three major steps: (1) understanding the problem; (2) choosing and explaining relevant policy goals and constraints; and (3) choosing a solution method.

### Understanding the Problem

Understanding a policy problem involves assessing the conditions that concern your client, framing them as market or government failures, and modeling the relationship between the conditions of concern and variables that can be manipulated through public policy.

**Assessing the Symptoms.** Clients generally experience problems as conditions that some group perceives as undesirable. They tend to specify problems to analysts in terms of these undesirable conditions, or symptoms, rather than as underlying causes. The analyst's task is to assess the symptoms and provide an explanation (model) of how they arise.

## Problem Analysis

Assessing symptoms involves determining their empirical basis. In a narrow sense, this means trying to locate data that help you put the symptoms in quantitative perspective. For example, if your client is concerned about automobile accidents in your county caused by drunk drivers, then you might try to locate data to help you estimate the number of such accidents, how the number has changed over time, what percentage of total accidents they comprise, and other measures that help you determine the magnitude, distribution, and time trend of the symptom. In a broader sense, you should become familiar with current public discussion about the symptom (read the newspaper!) and the history of existing policies that are generally perceived as being relevant to it. For example, you may find that, although there has been a steady decline in the number of alcohol-related accidents in recent years, a particularly tragic accident has focused public attention on the dangers of drunk driving. Viewed in the perspective of the favorable trend, drunk driving may seem less deserving of attention than other conditions of concern to your client.

Your assessment of symptoms generally appears as background in your problem analysis. It conveys the relative importance and urgency of the problem, and it begins to establish your credibility as someone who is knowledgeable about it. Yet simply assessing symptoms provides an inadequate basis for your analysis. You must identify causal relationships that link the symptoms to factors that can be changed by public policy. In other words, you must frame and model the problem.

**Framing the Problem.** Potentially, any positive, or predictive, social science model can be used as the basis for problem analysis. The major focus of explanation here is a specification of the expected deviation between individual self-interest (utility maximization) and aggregate social welfare. While we believe that this focus is usually the best starting point for framing policy problems, several caveats should be noted.

First, we must avoid the danger of reductionism in such an approach. Although for many purposes, we can treat wealth maximization and utility maximization as synonymous, saying that people maximize utility is not the same as saying that people care only about money. Clearly, they care about many other things as well. Also, as we saw in the examination of nontraditional market failures, economics tends to treat preferences as fixed, and therefore deals primarily with utility articulation rather than utility formation. Other social sciences have devoted considerably more effort to examining how preferences are formed. Consequently, considerable room exists for the other social sciences, including anthropology, psychology, and sociology, to play a part in framing the issues of market and government failure.<sup>8</sup>

<sup>8</sup>Amirai Etzioni has eloquently argued that policy analysis should not be restricted to economic analysis. He offers, by way of comparison, medical knowledge which ectectically incorporates political, social, cultural, psychic, and environmental factors. See "Making Policy for Complex Systems," *Journal of Policy Analysis and Management*, Vol. 4, no. 3, 1985, pp. 383-95. See also Jack Hirschleifer, who has argued, "There is only one social science. . . . Ultimately, good economics will also have to be good anthropology and sociology and political science and psychology." In "The Expanding Domain of Economics," *American Economic Review*, Vol. 75, no. 6, 1985, pp. 53-68, at p. 53.

Second, and this is obviously related, we have not claimed that efficiency is the only appropriate goal of public policy. Therefore, any realistic problem-analysis framework must enable the analyst to integrate other goals or constraints into the analytical process. The framework should also allow the analyst to set out the goals in a coherent way: "... good policy analysis ... requires a clear statement and defense of the value judgments that combine with the analysis to lead to specific conclusions."<sup>9</sup> In the next section, we suggest how to incorporate these goals into policy analysis. We believe, however, that you should begin by focusing your attention on efficiency. Figure 10.2 shows how to approach the question of efficiency through consideration of market and government failures.

As Figure 10.2 indicates, the first step involves deciding whether there is market failure. This requires that you decide whether a market operates to accommodate individual preferences. This may itself be a difficult decision as there is a complex continuum from free, unfettered markets to the complete absence of markets. We recommend the following working rule: If prices legally exist as signaling mechanisms (no matter how extensively regulated), treat the situation as if it involves an operational market. Where prices are not legally permitted—for example, if only black market transactions take place—start with the assumption that the market is not operational. Of course, if, on closer inspection, the transaction costs in a black market appear to be the result primarily of enforcement or the absence of legal contract enforcement, then legalization itself may be adequate to create what we call an operational market.

If the market is operational (the bottom half of Figure 10.2), then the analyst next considers the theory, evidence, and facts relevant to market failure. A close familiarity with the content of Chapters 5 and 6 provides a basis for such an investigation. If neither theoretical arguments nor empirical evidence suggest market failure, then it is reasonable to assume that the existing market allocates scarce resources in the most efficient way. Even though there is an operational market, however, there may still be extant government interventions that create inefficiencies; in other words, there may be situations where eliminating government interventions would improve market allocations.

The housing market illustrates some of these considerations. In any given jurisdiction there may or may not be an operational market. Though rent control regimes in some jurisdictions are so binding that markets cannot function, in most jurisdictions in most Western countries, there are operational housing markets. Economists typically conclude that housing markets are not subject to serious market failures,<sup>10</sup> although they do acknowledge the seriousness of distributional problems.<sup>11</sup> But they

<sup>9</sup>Helen Ladd goes on to point out that economic analysis often forgets this: "The failure of some of the authors to spell out and defend their value judgments in some cases leaves the misleading impression that the policy conclusion follows logically from the analysis alone." Review of John M. Quigley and Daniel L. Rubinfeld, *American Domestic Priorities: An Economic Appraisal*, in *Journal of Economic Literature*, Vol. 24, no. 3, 1986, pp. 1276-77, at p. 1277.

<sup>10</sup>Lawrence B. Smith, "Housing Assistance: A Re-evaluation," *Canadian Public Policy*, Vol. 7, no. 3, 1981, pp. 454-63.

<sup>11</sup>Michael J. Wolfson, "Property Rights to Rent Regulated Apartments: A Path Towards Decentralization," *Journal of Policy Analysis and Management*, Vol. 9, no. 2, 1990, pp. 260-65.

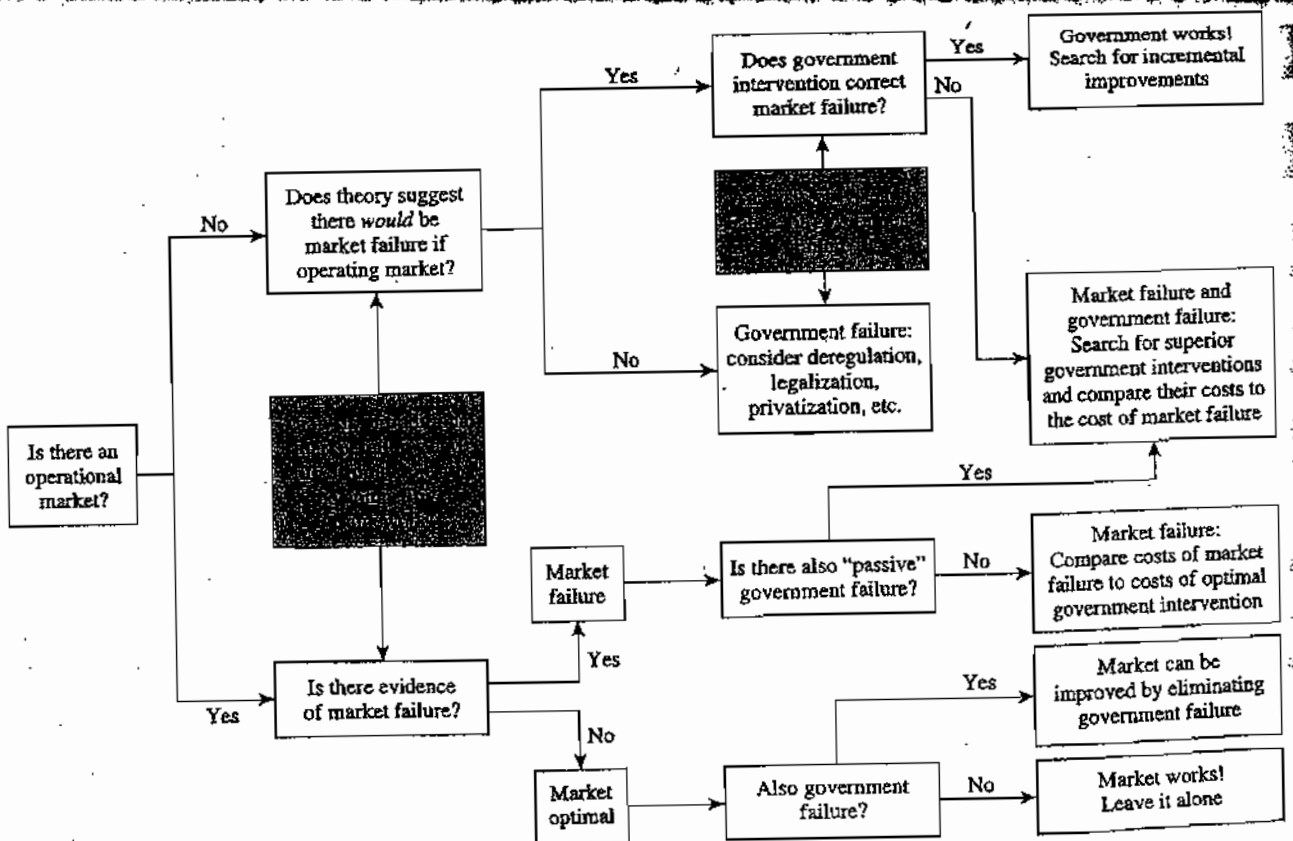


Figure 10.2 A Procedure for Linking Market and Government Failure to Policy Interventions

also frequently argue that housing prices are artificially inflated by inappropriate government interventions such as large-lot zoning. In this case, the operational market can be made more efficient by removing the restrictions. If there is no evidence of market failure and no government interventions, then the market works from the perspective of efficiency.

If theory and evidence suggest market failure in an operational market, there is a *prima facie* case for government intervention. Further, one could argue that the presence of market failure is evidence that there must also be government failure: the failure to correct market failure. The failure of government to intervene is best described as *passive government failure*. It can include outcomes that are attributable to the government not diagnosing market failures correctly as well as situations in which the lack of intervention derives from more concrete causes, such as the influence of organized interest groups that successfully block efforts to correct market failure. For example, the government may either fail to recognize some industrial emission as an externality problem or, recognizing it, fail to intervene because a polluting industry is able to lobby successfully to block taxes or other policies that would internalize the externality.

If a market is not operational, then the analyst should work through Figure 10.2, asking if a market could operate efficiently if facilitated by an appropriate framework; in other words, the concept of market failure has relevance here even though no market is currently operational. Notice that, as this is a "what if" question, direct evidence usually does not exist to inform the answer. In these circumstances, the analyst must draw upon the theory of market failure, evidence available from other jurisdictions (for example, other cities, states, and countries), or analogous problems.

If the analysis suggests that a market could operate without serious flaws, then the analyst can assume *a priori* that significant efficiency losses are associated with the existing government intervention, whether it be an outright prohibition of market activity, a displacement of private supply by public provision, or simply a failure to establish property rights or other rules needed to facilitate private transactions. Thus, if there is no operational market and no evidence of market failure, then one can logically conclude that there is *prima facie* evidence of government failure. Evidence indicating the cause of government failure, such as interest group rent seeking, further bolsters the case. This line of analysis leads to the examination of such options as deregulation, privatization, and legalization. Finally, there may be persuasive evidence that there would be market failure if a market were allowed to operate. The question, then, becomes whether the extant government intervention is efficient. If the intervention is of the appropriate kind, then the conclusion must be that government works. The only question is whether this intervention can be improved through better implementation or management. Though these incremental questions can have great practical importance, they do not raise the same strategic policy issues. If the intervention appears inappropriate, then the working assumption is that both market failure and government failure are relevant. This conclusion indicates the desirability of explaining why the current government intervention fails and searching for alternative interventions that may be superior.

If the analyst does not identify a government failure, then she is concluding that the existing government intervention corrects the market failure to the greatest extent practical. In other words, if it is not possible to find changes in current policy

that could increase efficiency, don't panic, the current policy is at least efficient; therefore, the question is whether other values are at stake.

Notice the relative simplicity of the analysis if the only goal is the maximization of aggregate social welfare. In the absence of market failure, government intervention will almost always be inefficient. Multiple goals make such a simple analysis inappropriate, however. It may be worth bearing losses in net social surplus (in other words, enduring some inefficiency) in order to achieve other social goals.

Most importantly, decision makers usually care about distributional considerations, whether in terms of socioeconomic, racial, or other status characteristics. You should explicitly decide whether distributional concerns are relevant to your particular policy problem. While in most situations you will be familiar with client preferences, other times the client may be unaware of the facts and evidence relating to particular target groups. In the latter case, you may wish to argue to the client that greater equity should be a goal. After making a decision on equity, you should consider other goals and constraints. For instance, does the client expect that public revenue would or should be generated? Thus, the absence of market failure is not, in and of itself, determinative. Government intervention that interferes with nonfailing markets is not necessarily undesirable as other goals may justify the losses in efficiency.

Before considering how to deal with goals, it is worth reiterating that your analysis of market and government (nonmarket) failures plays a vital role in *framing* your subsequent solution analysis. John Brandl, an economist and former member of the Minnesota Senate, has succinctly summarized the value of such an approach for the decision maker:

To view an issue as an instance of market (or nonmarket) failure is to transform what was bewildering into a solvable problem. An immense variety of issues can be approached in this fashion. Tuition policy becomes pricing policy; airplane noise is an externality; a utility is a natural monopoly; research yields public goods. This application of economic theory is much more than a translation of English into jargon. In each case the economist has advice to offer aimed at rectifying the wrong implicit in market imperfection. (Currently a new economic theory . . . is being created to explain . . . non-market institutions.)<sup>12</sup>

**Modeling the Problem.** The framing of problems in terms of market and government failures often leads directly to models linking policy variables to the conditions of concern. For example, consider a mayor concerned about the rising cost of landfilling solid waste. An analyst who viewed the problem in terms of market and government failures might frame the problem as one of an institutionally created negative externality: because residents pay for refuse collection based on the assessed value of their property rather than on the volume of refuse that they generate, they perceive the price that they pay to dispose of an additional unit of garbage (their marginal private cost) to be virtually zero rather than the actual cost that the city must bear to collect and landfill it (the marginal social cost). A model of the problem follows: The larger the marginal private cost of disposal seen by residents,

<sup>12</sup>John E. Brandl, "Distilling Frenzy from Academic Scribbling," *Journal of Policy Analysis and Management*, Vol. 4, no. 3, 1985, pp. 344-53, at p. 348.

something until you have some explanation of what is going on. For example, your client may not recognize the efficiency costs (and therefore the importance of efficiency as a goal) of a particular government intervention until you have explained it. It may seem surprising that a client might not reveal goals to his or her policy analyst, but there may be good reasons for such a tactic. Wise decision makers realize that explicit goals often crystallize conflict and opposition. It may be that your client wishes to use you as a "stalking horse" in presenting and explicating controversial but worthy goals.

How should you formulate goals in these situations? Whether or not your client has suggested a particular goal or set of goals, you should explicitly consider the relevance of efficiency and equity. Clearly, in this book, the focus on both market and government failure suggests that policy analysis should always be centrally concerned with aggregate social surplus, or efficiency. Indeed, some policy analysts (mostly economists) argue that, in general, aggregate efficiency should be the primary concern of policy analysis and that distributional and other goals are rarely appropriate in evaluating alternative policies. They argue that seeking efficiency leads to the largest total of goods and therefore provides the greatest opportunity for redistribution. They advocate that distributional goals be met through explicitly redistributive programs, such as the tax system.

While we sympathize with the view that policy analysts should provide a voice for efficiency, especially because there is rarely an organized constituency in the political arena for maximizing aggregate social welfare, we presume that other goals are also important. Henry Rosen makes the case for routinely including equity considerations:

Should equity issues be dealt with in each policy decision, or should they be dealt with through a separate income redistribution policy? . . . In specific cases there usually is no way to identify all of the gainers and losers, and the information costs of attempting such identifications are often high. Moreover, the mechanisms for compensating losers are weak or nonexistent. . . . An analysis which omits distributional effects and discusses only aggregate efficiency deals with a part of the decision maker's problem, and only a small part.<sup>16</sup>

Essentially similar arguments have been made for including other goals of public policy. We cannot tell you in general whether a particular goal should be included in your analysis, but we urge you to assume *a priori* that other goals as well as efficiency are relevant. This approach forces you to present reasoned arguments for either including or excluding a particular goal.

Whether or not you ultimately decide to include equity and other goals in the solution analysis, we also encourage you to take seriously the question of other appropriate goals, whether substantive or instrumental. Thus, if your analysis is not

going to include goals that various stakeholders in the policy environment hold important (implicitly or explicitly), you should explain why. In the next section, we argue that equity, or any other goal, can be usefully viewed in terms of tradeoffs with efficiency. Yet the fact remains that analytic technique cannot tell your client or you what you should want. Ultimately, the client, the analyst, and the political process must decide how much efficiency should be given up to achieve a given amount of redistribution or some other objective.

As introduced in Chapter 7, other goals can be broken down into two broad categories: substantive and instrumental. Substantive goals represent values, like equity and efficiency, that society wishes to secure for their own sake. These include considerations of human dignity, self-perception, and self-actualization. For instance, a Hastings Center report on organ transplants argued that, apart from efficiency, the relevant goals of public policy should include "the moral values and concerns our society has regarding individual autonomy and privacy, the importance of the family, the dignity of the body, and the value of social practices that enhance and strengthen altruism and our sense of community."<sup>17</sup>

Instrumental goals are conditions that make it easier to achieve substantive goals. Commonly relevant instrumental goals include political feasibility and budget availability. Keep in mind that such instrumental goals are often stated as constraints rather than as goals. A constraint is simply a goal that must be satisfied up to some specified level, beyond which it has no value. Once again, the appropriateness of including political feasibility as a policy goal can be disputed. As one perceptive commentator has put it, "[T]he motive may be defensive or offensive—to prevent the abuse of their analysis, or to make their analytic voices more influential—but analysts still need to increase their political sophistication."<sup>18</sup> A clear example of political feasibility as an instrumental goal (or constraint) arose in debates over the 1986 U.S. tax reform bill. While many analysts argued that mortgage interest deductibility is both inefficient and inequitable, it was undoubtedly retained because any attempt to eliminate the deduction would have made the whole concept of tax reform politically unfeasible.

Policy analysis is the art of the possible. Resource constraints, therefore, are of central importance. While budgetary limitations are usually the preeminent resource constraint, other resource constraints such as administrative infrastructure and availability of skilled personnel may also be critical. More generally, the list of constraints should include any resources that are essential for either maintaining the status quo or implementing alternative policies.

Your list of goals for a given problem might include efficiency, equity, human dignity, political feasibility, and budget availability. It is impossible, however, to describe the relevant goals for all policy problems. As you research a problem, you should always be aware of the importance of identifying potential goals. As you become familiar with specific policy areas, you will become aware of the typical goals that are advocated. For example, in considering energy policy, security against the

pursued as ends, or insofar as their consequences include the alterations of the ultimate ends sought by various persons in the society." L. Tribe, "Technology Assessment and the Fourth Discontinuity," *Southwestern California Law Review*, Vol. 46, no. 617, 1973, p. 637.

<sup>16</sup>Henry Rosen, "The Role of Cost-Benefit Analysis in Policy Making," in Henry M. Paulsen and Eugene P. Seskin, eds., *Cost-Benefit Analysis and Water Pollution Policy* (Washington, D.C.: Urban Institute, 1975), pp. 367-68.

<sup>17</sup>The Hastings Center, *Ethical, Legal, and Policy Issues Pertaining to Solid Organ Procurement: A Report on Organ Transplantation*, October 1985, p. 2.

<sup>18</sup>Robert D. Behm, "Policy Analysis and Policy Politics," *Policy Analysis*, Vol. 7, no. 2, 1981, pp. 199-226, at p. 216.

economic costs of oil supply disruptions is often an important policy goal that sometimes conflicts with short-run efficiency.

**Clarifying the Tradeoffs Between Goals.** Selecting goals per se may be relatively noncontroversial. After all, it is easy to agree that distributional considerations should play some role in almost any policy problem. It is the tradeoff between goals that is, in practice, more difficult and controversial. Additionally, the posited relationships between means (policy alternatives) and ends (goals) are also likely to be tenuous because they often require highly uncertain predictions.

It should be becoming clear that specifying goals and the appropriate tradeoffs among them is an important output of policy analysis. This is not the only way in which goals are important outputs, however. The process of explaining relationships between goals and policies may itself alter the choice of goals.

Figure 10.3 illustrates a situation in which two goals, efficiency and equity, are represented on the axes. Assume that the decision maker wants both greater equity and efficiency, but values additional units of each less at higher levels of attainment. He or she will have an indifference curve like  $I_A$  in the figure. Imagine that the decision maker is limited to choices of policy outcomes that lie within the feasible policy frontier indicated by the curve  $F_1F_2$ , so that the highest utility can be achieved by

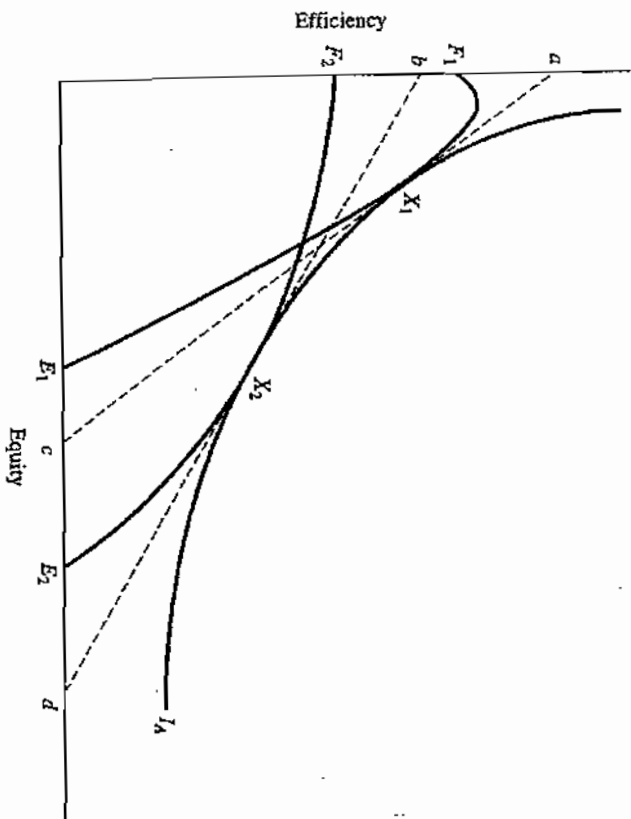


Figure 10.3 Goal Tradeoffs and Policy Feasibility

## Problem Analysis

point  $X_1$  on indifference curve  $I_A$ . At point  $X_1$ , the marginal tradeoff between equity and efficiency equals the slope of the line  $ac$ , which is tangent to the indifference curve and the policy frontier at  $X_1$ .

In most analytical situations, the actual position of the policy frontier is not known until after considerable analysis has been done. For example, after information is gathered and analyzed, the policy frontier might be discovered to be  $F_2F_2$  rather than  $F_1F_1$ . If  $F_2F_2$  is the policy frontier, then the decision maker would choose point  $X_2$  on  $I_A$ , implying a marginal tradeoff between equity and efficiency given by the line  $bd$ . Thus, information on the nature of the policy frontier, which depends on the set of feasible policies identified, determines the marginal tradeoffs that are possible between equity and efficiency. The focus of much public policy research and analysis is on clarifying such tradeoffs. For example, in the area of welfare policy, an important consideration is the tradeoff between benefit levels and work effort by recipients. Notice that preferences, per se, are not changed by providing such information (the decision maker's preferences are still represented by the indifference curve), but the levels of efficiency and equity selected do change, along with the rates at which the decision maker would be willing to make marginal trades between them.

The lesson is that the set of feasible policies, which usually must be identified by the analyst, determine the desirable tradeoffs among goals. Therefore, we have an important heuristic: *The weights placed on goals are more commonly an output of, rather than an input to, policy analysis.*

**The Distinction Between Goals and Policies.** Probably the most confusing semantic difficulty you will come across in policy analysis is in the distinction between goals (the values we seek to promote) and policies (the alternatives and strategies for promoting them). This semantic confusion arises because, in everyday language, policies (concrete sets of actions) are often stated as goals: "Our goal is to add 100,000 barrels of oil per day to the strategic petroleum reserve," or "Our goal is to reduce class size to eighteen students." While this everyday use of such language is harmless, it can easily derail the neophyte analyst. Goals should be used to evaluate alternative policies, but if a policy is stated as a goal, how can one evaluate it? Indeed, stated this way, any policy is self-justifying. In order to avoid this confusion, one must keep in mind a clear separation between goals and policies. We suggest that you do this by following another of our heuristics: *Start by formulating goals as abstractly as possible and policy alternatives as concretely as possible.* Keep in mind that goals must ultimately be normative, a reflection of human values. Policy alternatives, on the other hand, are the concrete methods to achieve these goals; they should seek to promote progress toward all the relevant goals.

In the context of choosing implementation strategies, it is often reasonable to take already-decided policies as goals. For example, if the head of the state health department has already made a final decision that 90 percent of school age children will be vaccinated against some disease this year, then this policy may be reasonably taken as a goal by those in the department who must decide how the vaccinations will be accomplished. Other goals, such as minimizing cost and maximizing population immunity, should be raised in connection with the choice of implementation strategies. Indeed, one might question the wisdom of the policy if it were made without consideration of these instrumental goals.

At this level of analysis, the distinction may appear in analysis proceeds, the distinction often becomes cloudy. In spite of the very abstractness of goals, we must attempt to find operative proxies to measure their achievement. For example, we may be ultimately interested in efficiency, but we are willing to pay and ultimately by dollars. It is often easy to come up with criteria, in fact, proxies for measuring the achievement of objectives. We suggest that you overtly ask yourself, equity, human dignity) lies behind the criteria and objective to become increasingly difficult as one moves to such "nutritional, police patrol, and emergency services often found at county levels. Indeed, clients sometimes claim that these technical in nature and do not involve such value-laden questions of equity.

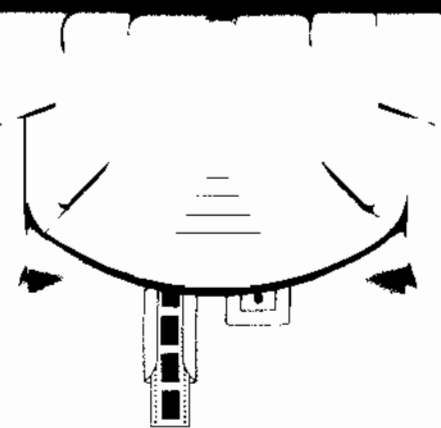
Our experience suggests, however, that such problems work to assure that the criteria and objectives used comes. For instance, researchers have found little evidence that patrol levels by police have measurable effects on the total city.<sup>19</sup> Therefore, maximizing hours of police patrol may be an underlying goal is reducing the costs of crime.

### Choosing a Solution Method

You must decide which goals are relevant to your begin to consider solutions systematically. Figure 10.4 distinguishes circumstances: First, efficiency is the only relevant goal. Second, other goal are relevant. Third, efficiency and two or more other goal are relevant. The number of relevant goals determines the appropriate solution method. There are five basic approaches to policy analysis: (1) qualitative benefit-cost analysis, (2) modified cost-effectiveness analysis, and (3) multigoal policy analysis when each approach is most appropriate.

**Benefit-Cost Analysis.** As indicated in Figure 10.4, benefit-cost analysis should be your primary solution method when you have the only relevant goal. Conceptually, benefit-cost analysis has been either flipped through our chapter on benefit-cost (CBA) or ready been exposed to benefit-cost analysis elsewhere, then hear it described as being relatively simple. Consider, however, analysis attempts to do. It reduces all the impacts of a program to a common unit of impact, namely dollars. Of course, once all impacts are in dollars they can be aggregated—a dollar is a dollar is a dollar.

<sup>19</sup>For a general review, see Lawrence W. Sherman, "Patrol Strategies and Crime: A Review of the Literature," in *Crime and Public Policy* (San Francisco: Institute for Crime and Justice Research, 1985), pp. 145-63.



be willing to pay dollars to have something, presumably it is a benefit; if they would pay to avoid it, it is a cost. Once all the impacts have been reduced to dollars, the evaluation rule is relatively straightforward: Choose that alternative that generates the largest aggregate net benefits (in dollars). Thus, in benefit-cost analysis, although we have different "goals," in the conventional usage of the word, they can all be reduced to positive efficiency impacts (benefits) or negative efficiency impacts (costs) that, in turn, can all be measured in dollars, or monetized.

As we will see in the chapter on benefit-cost analysis, market prices often do not reflect marginal social costs because of the distortions caused by market failures and government interventions. There are also many classes of impacts such as waiting time that usually cannot be monetized through estimations based on direct observation of markets. Considerable skill and judgment must be exercised to assess the costs and benefits of these impacts in a reasonable way.

Keep in mind that you will need some practice before you will feel comfortable deciding if all the relevant goals can really be viewed as elements of efficiency. Consider an example. You are confronted with a problem: a crowded freeway. Let us suppose for the sake of simplicity that your client is interested in policy alternatives that will reduce commuting time and save fuel. Superficially, these are different goals (and they certainly may differ in importance to different clients), but both can be translated into a common impact: dollar-cost savings. As we will see, this is conceptually straightforward, although in practice quite difficult.

**Qualitative Benefit-Cost Analysis.** As shown in Figure 10.4, even when you decide that efficiency is the only relevant goal, you must still determine whether all efficiency impacts can be reasonably monetized. If not, then *qualitative benefit-cost analysis* is the appropriate solution method. Like standard benefit-cost analysis, it begins with a prediction of impacts. Some of the impacts may be expressed in natural units (say, for example, hours of delay or tons of pollutants), while others may be qualitative (for example, a despoiled scenic view). If you are unable to monetize one or more of these impacts, then you cannot directly calculate the dollar value of net benefits. Instead, you must make qualitative arguments about the orders of magnitude of the various nonmonetized impacts.

Often impacts cannot be monetized because of technical difficulties in making valuations. When standard procedures do exist for inferring such values, limitations of time, data, and other resources frequently make monetization impractical. Even highly-skilled professional economists sometimes resort to qualitative benefit-cost analyses when they write about policy issues. Rather than attempt difficult and time-consuming valuations, they fall back on theoretical arguments to put orders of magnitude on efficiency impacts.

Nevertheless, some quantitative benefit-cost analyses are available in most policy areas.<sup>20</sup> Elements from these studies can often be used as a source of quantitative estimates of costs or benefits, or at least as a guide for estimating their orders

<sup>20</sup>See "A Selected Cost-Benefit Analysis Bibliography," in Anthony E. Boardman, David H. Greenberg, Alden R. Vining, and David L. Weimer, *Cost-Benefit Analysis: Concepts and Practice* (Upper Saddle River, N.J.: Prentice Hall, 1996), pp. 445-72.

of magnitude. When you begin working in a new policy area, some effort in becoming familiar with relevant benefit-cost analyses is likely to be a good investment.

When you cannot confidently monetize important efficiency impacts to within even orders of magnitude, you may find it useful to work with the nonmonetized impacts as if they were separate goals. For example, you may have to decide how to compare certain program costs with highly uncertain benefits. Thus, your qualitative benefit-cost analysis takes the form of the multigoal analysis we describe below.

**Modified Benefit-Cost Analysis.** It might seem reasonable to assume that if a client is only concerned with equity, or any other single, non-efficiency goal, then efficiency is irrelevant. Yet a moment's thought should convince you that the exact opposite is true. Again, this can be most clearly illustrated for the case where equity is putatively the only goal. Any intervention in the market to finance redistribution (absent utility interdependence and market failure) must inevitably result in some deadweight loss. Even if we are primarily concerned with achieving a given redistribution, we should seek to minimize the deadweight loss; in other words, we should attempt to carry out the redistribution as efficiently as possible. In our conception of policy analysis, therefore, analysis almost never involves a single goal unless that goal is efficiency.

In a particular analysis, you may conclude that efficiency and one other goal (most frequently equity) are appropriate. As indicated in Figure 10.4, you can employ modified benefit-cost analysis if you are able and willing to monetize impacts on both efficiency and the other goal. In other words, you must be willing to assign dollar values to various levels of achievement of the other goal. For example, if the other goal is equality of the income distribution, modified benefit-cost analysis involves weighting costs and benefits accruing to different income groups, resulting in *distributionally weighted benefit-cost analysis*.<sup>21</sup> The advantage of such an approach should be clear. By incorporating distributional issues into a benefit-cost analysis, you can come up with a single metric for ranking alternatives. This is obviously attractive. The disadvantage should also be clear from our discussion above: namely, that the metric is only achieved by forcing efficiency and equity to be commensurable. As we will see below, you must implicitly engage in such an exercise in order to recommend a particular policy. The danger of modified benefit-cost analysis is that it merges the distributional weights into the aggregate net-benefit measure. Consequently, special care must be taken to communicate clearly to the client the significance of the particular weights used.

**Cost-effectiveness Analysis: Achieving Goals Efficiently.** *Cost-effectiveness analysis* is appropriate where both efficiency and the other goal can be quantified, but where the other goal cannot be monetized (see Figure 10.4). Put another way, the two goals are still treated as noncommensurable. Contrast this with modified benefit-cost analysis, where both goals are measured in dollars and thus commensurable.

<sup>21</sup>See "Distributionally Weighted Cost-Benefit Analysis," in Anthony E. Boardman, David H. Greenberg, Alden R. Vining, and David L. Weimer, *Cost-Benefit Analysis: Concepts and Practice* (Upper Saddle River, N.J.: Prentice Hall, 1996), pp. 411-27.

We can approach cost-effectiveness analysis in one of two ways. The first method, often called the *fixed budget* approach is to choose a given level of expenditures (say, \$10 million) and find the policy alternative that will provide the largest benefits (that is, the greatest achievement of the non-efficiency goal). The second method, which might be called the *fixed effectiveness* approach, is to specify a given level of benefit (however defined) and then to choose the policy alternative that achieves the benefit at the lowest cost. Both of these methods are cost-effectiveness procedures.

Keep in mind the crucial distinction between benefit-cost analysis and cost-effectiveness analysis. Benefit-cost analysis can assess both (1) whether any of the alternatives is worth doing (that is, whether social benefits exceed social costs), and (2) how alternatives should be ranked if more than one generates net social benefits. Cost-effectiveness cannot tell the analyst whether a given alternative is worth doing (this requires a benefit-cost analysis), but if a decision is made to redistribute or achieve some other goal, it can help in deciding which policy alternative will do so most efficiently (with minimum losses of social surplus).

Edward Granlich and Michael Wolfkoff have provided an excellent illustration of both this distinction and how to do cost-effectiveness studies. They suppose that we wish to raise the income of some group of people. They compare a negative income tax alternative, minimum wage legislation, and a public employment plan. Each intervention involves costs that may or may not exceed benefits. For example, the negative income tax is likely to discourage some individuals from working who would normally do so. The public employment plan is likely to attract low-income individuals. In short, all may generate net costs (that is, fail the benefit-cost test). If we are determined to go ahead with some program for redistributive purposes, however, which would make most sense? Granlich and Wolfkoff adopt the fixed budget approach and seek to find the most beneficial policy alternative, given an arbitrary \$5 billion expenditure. Notice, in this context, benefit is used in a special sense. It does not refer to aggregate social welfare, but rather counts benefits going to specific low-income groups. Given this, the authors developed a weighting scheme that ranks these impacts. They found that the negative income tax was much more successful at redistributing income per \$5 billion expenditure than either minimum wage laws or public employment.<sup>22</sup>

**Multigoal Analysis.** When three or more goals are relevant, multigoal analysis is the appropriate solution method. As indicated in Figure 10.4, it is also the appropriate method when one of two goals cannot be quantified. It is usually the most appropriate solution method, and it should be the assumed approach until the explicit conditions set out in Figure 10.4 for one of the other methods are confirmed.

Because all of the other solution methods can be viewed as special cases of multigoal analysis, the remaining steps in the rationalist mode (all within the solution analysis phase) lay out how to conduct multigoal analysis. Specifically, they indicate how and when goals can be converted to criteria, objectives, and constraints and how alternatives can be formulated and compared.

<sup>22</sup>Edward M. Granlich and Michael Wolfkoff, "A Procedure for Evaluating Income Distribution Policies," *Journal of Human Resources*, Vol. 14, no. 3, 1979, pp. 319-50.

## SOLUTION ANALYSIS

Policy problems rarely involve only one value. Multigoal policy analysis, therefore, usually serves as the appropriate solution method. As we have indicated, however, sometimes efficiency will appear to be the only relevant goal, so that you can evaluate current and alternative policies solely with benefit-cost analysis. Other times, you may decide that only efficiency, and one other goal are relevant, so that cost-effectiveness analysis seems appropriate. Yet even in these cases, it is usually best to begin with the presumption that some other goals may be relevant. If your initial assessment that either benefit-cost or cost-effectiveness analysis alone provides an appropriate evaluation rule remains unchanged, then you can easily treat either of these solution methods as a special case of multigoal analysis. Our discussion of solution analysis, therefore, deals with the general case of multiple goals.

At the heart of multigoal analysis is the systematic comparison of alternative policies in terms of goals. As this and the next chapter make clear, we believe that a very simple device greatly facilitates this process: the construction of a matrix that displays the impacts of alternatives in terms of goals.

Table 10.1 illustrates the structure of a goals/alternatives matrix. The column to the furthest left presents the goals determined during problem analysis. Solution

Table 10.1 Simple Structure of a Goals/Alternatives Matrix

Goals	Criteria	Policy Alternatives		
		Policy I (status quo)	Policy II	Policy III
Goal A	Criterion A1	predicted impact and its valuation	predicted impact and its valuation	predicted impact and its valuation
	Criterion A2	predicted impact and its valuation	predicted impact and its valuation	predicted impact and its valuation
	Criterion A3	predicted impact and its valuation	predicted impact and its valuation	predicted impact and its valuation
Goal B	Criterion B1	predicted impact and its valuation	predicted impact and its valuation	predicted impact and its valuation
	Criterion B2	predicted impact and its valuation	predicted impact and its valuation	predicted impact and its valuation
Goal C	Criterion C1	predicted impact and its valuation	predicted impact and its valuation	predicted impact and its valuation

analysis deals primarily with constructing the rest of the matrix. The first step in solution analysis is specifying relevant criteria for assessing how well each policy alternative contributes to each of the goals. These are shown in Table 10.1 as the second column. Sometimes a single criterion, perhaps even the initially specified goal itself, will provide an adequate basis for assessment—this is illustrated by Goal C, which has only one criterion associated with it. In other cases, more than one criterion will be required to assess progress toward a goal adequately—Goal A, for example, is shown as having three criteria associated with it.

The second step in solution analysis is the detailed specification of policy alternatives that can potentially promote the policy goals. In Table 10.1, the three policy alternatives label the rightmost columns. Note that Policy 1 is identified as the status quo. It is usually appropriate to include current policy as an alternative to avoid the risk of recommending a best alternative that is worse than the current policy.

The third step is filling in all the cells of the matrix with valuations of the predictions of the impact of each policy alternative on each criterion. These predictions will sometimes be quantitative, as when market information allows us to assess impacts of policies on efficiency in terms of changes in social surplus. Other times, the predicted impacts will be qualitative, and made in such terms as "poor," "good," and "excellent."

The fourth step involves recommending one of the alternatives and explaining the basis for the choice. As one alternative rarely dominates the others in terms of all the goals, the explanation for the recommendation will almost always require an explicit recognition of tradeoffs among the goals.

The following sections elaborate on these four steps.

### Choosing Criteria: Converting Goals to Objectives and Constraints

The first step in solution analysis involves moving from general goals to more specific criteria for evaluating the desirability of alternative policies. Criteria can be stated as objectives or constraints. For example, the general goal of equality in the distribution of some service might be operationalized by an objective such as "minimize the variance in service consumption across income groups." Alternatively, it might be operationalized as a constraint such as "families with incomes below the poverty line should be given full access to the service."

A good criterion provides a basis for measuring progress toward achieving a goal. Not every goal can be reasonably quantified as a single objective or constraint, however. For example, the goal of police investigation is to contribute to the arrest, conviction, and punishment of those who have committed crimes. Police departments often try to operationalize this goal by the objective, "maximize the number of reported offenses for which a suspect has been identified." These identifications, sometimes called *clearances*, accumulate with little cost to the police when someone arrested for one offense confesses to many others. If too much weight is placed on getting clearances, then investigators may help suspects get lenient sentences in return for admissions that clear reported offenses. The end result may be what Jerome Skolnick describes as a reversal of the hierarchy of penalties found in the substantive

law, whereby those who have committed more crimes receive less-severe punishments.<sup>23</sup> Further, investigators may also be tempted to make inappropriate arrests.

Rather than emphasize a single objective that cover all the important dimensions of a goal, you should try to specify criteria that cover all the important dimensions. With respect to investigation, for instance, maximizing the number of convictions and the sum of sentences given to those convicted as well as clearances might together serve as an appropriate set of criteria. Of course, having three objectives rather than one forces you to consider the appropriate weights for deciding which policy is best for achieving the underlying goal. This added complexity is an unavoidable complication of trying to provide an appropriate basis for assessing progress toward a broad goal.

As these examples suggest, you should exercise considerable care in selecting criteria to measure the achievement of goals. Always ask yourself: How closely do high scores on the criteria correspond to progress toward goals? Asking this question is especially important because analysts and clients tend to focus attention on those criteria that can be easily measured.<sup>24</sup> A sort of Cresham's law operates: *easily measured criteria tend to drive less easily measured criteria from analytical attention*. This tendency may lead us astray when the easily measurable criteria fail to cover all the important dimensions of the goal. For example, casualties inflicted on the enemy is one criterion for measuring success in war. It may be secondary to other criteria—the relative morale of the opposing sides, their respective capabilities for protracted struggle, or the control of disputed populations—for measuring progress toward the goal of ultimate victory. Yet during the height of the Vietnam War, "body counts" became the primary measure of U.S. success because they could be easily reported as a number on a weekly basis. This emphasis made search-and-destroy missions appear relatively more effective than efforts to establish stable political control over the population, even though the latter might very well have contributed more to the chances of victory.<sup>25</sup>

Overemphasis on easily measurable criteria is not the only danger you must guard against in moving from goals to criteria. The policy arena in which you operate may place pressures on you to select a skewed set of criteria. As we discussed in Chapter 8, the political process often gives more weight to impacts that are concentrated, tangible, certain, and immediate than to impacts that are diffuse, intangible, uncertain, and delayed. For example, public discussions of trade policy tend to emphasize employment effects in easily identifiable domestic industries directly competing with imports over diffuse employment effects in the larger economy (including firms that use imported inputs to produce goods for export) that result from changes

<sup>23</sup>Jerome H. Skolnick, *Justice Without Trial: Law Enforcement in Democratic Society* (New York: John Wiley, 1966), p. 174-79.

<sup>24</sup>As Vincent N. Campbell and Daryl C. Nicholas state, "... there is a tendency to undermine the purpose of stating objectives (to make clear what you want) by stating only those things that can be measured easily." "Setting Priorities Among Objectives," *Policy Analysis*, Vol. 3, no. 4, 1977, pp. 561-78, at pp. 561-62.

<sup>25</sup>Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough? Shaping the Defense Program, 1961-1969* (New York: Harper & Row, 1971), pp. 295-305.

in import prices. One of your responsibilities as an analyst is to propose criteria that provide a more comprehensive treatment of effects.

Some goals are so difficult to operationalize that they themselves are best taken as criteria. For example, improving community relations is almost certainly a relevant goal in evaluating alternative patrol policies for police departments. Although you might think of measuring changes in community relations by looking at changes in the number of citizen complaints, such a quantification may miss much less tangible but perhaps more important aspects of community relations, like the willingness of people to cooperate with police in investigations. Further, you may have no reasonable basis for predicting changes in the number of citizen complaints that would result under alternative policies. Rather than adopt quantitative measures as criteria, it may be better to keep community relations as a qualitative criterion. You would then rate policies with terms such as "excellent," "good," or "poor."

Limited time, information, or resources also may lead you to keep broad goals as criteria. If you have no hope of quantifying the impacts of alternative policies in the time available, you have to make qualitative assessments. Nevertheless, you should spend at least some time thinking about possible ways of operationalizing your general goals to make sure that you have not overlooked quantitative measures readily at hand. Also, you may find thinking about more specific criteria useful in deciding whether a more thorough analysis would likely be productive in the future. Of course, do not let yourself be distracted from completing a qualitative, but timely and useful, analysis when quantitative criteria are not available.

In conclusion, we state what should be your cardinal rule for selecting criteria: *The set of criteria should capture all the important dimensions of the relevant goals.* While quantitative objectives and constraints are highly desirable as criteria because they facilitate more precise *ex ante* comparisons of effects, and because they suggest yardsticks for *ex post* evaluations of adopted policies, they should not be used unless they satisfy the cardinal rule. Obviously, you should choose qualitative criteria that closely match goals over quantitative criteria that match goals poorly or incompletely.

### Specifying Policy Alternatives

We have already presented a set of generic policy solutions in Chapter 9. They provide "templates" for examining policy alternatives. The specification of policy alternatives is one component of policy analysis where nearly everyone agrees one can, and should, be creative. When told this, many of our students have replied, "Give us a hint." Here we attempt to do so.

There are a variety of sources for developing policy alternatives: existing policy proposals; policies implemented in other jurisdictions; generic policy solutions, as outlined in the previous chapter; and custom-designed alternatives.

Existing policy proposals, including the status quo policy, should be taken seriously. Not because they necessarily represent the best set of alternatives, but rather because other analysts have found them to be plausible responses to policy problems. Proposals already on the table sometimes are the product of earlier analyses; other times they represent attempts by interest groups or by policy entrepreneurs to draw attention to policy problems by forcing others to respond to concrete proposals.

als. (Indeed, you can sometimes work backwards from policy proposals to infer some of the perceptions and goals of the proposers.)

In some contexts, we can borrow policy alternatives from other jurisdictions.<sup>26</sup> How have other cities, states, or countries handled policy problems similar to the one that your jurisdiction faces? In particular, have any parallel jurisdictions appeared to have handled a problem particularly well? If so, the policies adopted by those jurisdictions can be a source of policy alternatives.

Once you have identified a policy that appears to have been successful elsewhere, you can create many additional alternatives through the process of tinkering.<sup>27</sup> The idea behind tinkering is to decompose an alternative into its essential components, identify different designs for the components, reassemble the designs into alternatives, and then select those combinations that look most promising. For example, imagine that you found a recycling program in a neighboring city that appeared to be working well. It involves four components: (1) residents separating newspapers and metal cans from their regular refuse, (2) residents putting these materials at the curbside in a standard container provided by the city on regular refuse collection days, (3) the city refuse department collecting these materials, and (4) the refuse department packaging and selling them to recyclers. It is easy to imagine variations on each of these components. Residents, for instance, could be required to separate only newspapers, or perhaps plastics and glass as well from their regular refuse. They could be required to drop them off at a recycling center rather than placing them at the curb. The city could contract with a private firm to collect the materials. Reassembling the variations on the components, a new alternative would be to require residents to deliver only newspapers to a central location operated by a private recycler.

As we discuss in Chapter 13, your efforts to predict the course of implementation of a policy alternative may require you to tinker in order to avoid problems that are likely to be encountered. Thus, in the course of your analysis, you are likely to identify new alternatives that result from tinkering with alternatives that you have subjected to substantial analysis.

It is rare, although not impossible, that you will end up considering a set of purely generic policy alternatives. Nonetheless, generic policy solutions often provide a good starting point for design. For example, if you frame the apparent overexploitation of a resource as an open-access problem, then it is natural to look first at such generic policy solutions as private ownership, user fees, and restrictions on access. Although the particular technical, institutional, political, and historical features of the problem may limit their direct applicability, the generic solutions can provide a framework for crafting and classifying more complex alternatives.

Once you develop a portfolio of generic alternatives, you can begin to modify them to fit the particular circumstances of the policy problem. For example, an open-access resource like salmon has value to sport and commercial fishermen. Selling exclusive harvesting rights to a private firm might create appropriate incentives for effi-

<sup>26</sup>See Anne Schneider and Helen Ingram, "Systematically Finding Ideas: A Comparative Approach to Policy Design," *Journal of Public Policy*, Vol. 8, no. 1, 1988, pp. 61-80.

<sup>27</sup>See David L. Weimer, "The Current State of Design Craft: Borrowing, Tinkering, and Problem Solving," *Public Administration Review*, Vol. 53, no. 2, 1993, pp. 118-20.

cient long-term management of the salmon. The firm would probably find it difficult to control sport fishing, however, because it would face high transaction costs in using the civil courts to protect its property rights against individual poachers. A hybrid policy that reserved an annual catch of fixed size for licensed sportsmen might deal more effectively with the poaching problem by bringing the police powers of the government to bear. Modified alternatives of this sort can often be formed by combining elements of generic solutions or by introducing new features.

Finally, in the course of your analysis, you may come up with a unique, or custom-made, policy alternative; its elements may be lurking in the literature or it may be the product of your imagination.<sup>28</sup> As we discuss in Chapter 13, "backward mapping" can sometimes be used to produce such custom-made designs. Certainly this is one area of policy analysis in which you should stretch your imagination. Much of the intellectual fun of policy analysis arises in trying to come up with creative alternatives. Be brave! You can always weed out your failures when you begin your systematic comparison of alternatives. Indeed, you may not be able to identify your failures until you begin your comparative evaluation.

As an example of a creative policy alternative, consider a proposal by Richard Schwandt and Aidan Vining for improving the supply for body organs for transplant operations.<sup>29</sup> They propose a future delivery system for transplant organs whereby people could sell their organs to the government for a cash payment today in return for promising delivery upon death. They argue that such a system would both increase supply and encourage its efficient allocation.

Be warned that your creative alternatives are likely to be controversial, so be prepared to take the heat! (Sometimes you can launch trial balloons in order to get a sense of how hostile the reception will be. For example, you might try to get informal reactions to alternatives during interviews with people who have interests in the policy area.)

Keeping these sources in mind, we can suggest some heuristics for crafting policy alternatives.<sup>30</sup> First, you should not expect to find a dominant or perfect policy alternative. Policy analysis generally deals with complex problems and, most importantly, multiple goals. It is unlikely that any policy is going to be ideal in terms of all goals. Rarely is the best policy also a totally dominant policy.

Further, do not contrast a preferred policy with a set of "dummy" or "strawman" alternatives. It is often very tempting to make an alternative, which for some reason you prefer, look more attractive by comparing it to unattractive alternatives—almost anyone can look good if compared to Frankenstein's monster. This approach usually

<sup>28</sup>For some examples of sources for such custom design, see David L. Weimer, "Claiming Races, Broiler Contracts, Hierarchies, and Habits: Ten Concepts for Policy Design," *Policy Sciences*, Vol. 25, no. 2, 1992, 135-59.

<sup>29</sup>For more details, see Richard Schwandt and Aidan R. Vining, "Proposal for a Future Delivery Market for Transplant Organs," *Journal of Health Politics, Policy and Law*, Vol. 11, no. 3, 1986, pp. 483-500.

<sup>30</sup>Several of the ideas in the section are drawn from Peter May, "Hints for Crafting Alternative Policies," *Policy Analysis*, Vol. 7, no. 2, Spring 1981, pp. 227-44. Also see Ernest R. Alexander, "The Design of Alternatives in Organizational Contexts," *Administrative Science Quarterly*, Vol. 24, no. 3, 1979, pp. 382-404.

does not work and, moreover, it misses the very point of policy analysis. It rarely works because even relatively inexperienced clients are usually aware of the extent policy proposals advanced by interested parties. Your credibility can be seriously eroded if the client realizes that the alternatives have been faked. It misses the point of policy analysis because such an approach assumes that the critical component of analysis is the recommended alternative. As we have stressed, however, the process of policy analysis is equally important. You achieve the process goal of policy analysis by considering the best possible set of alternatives. Of course, comparing viable candidates makes determination of the best policy alternative more difficult and less certain, but, as we have already pointed out, it is better to have an ambiguous reality than a false certainty.

Another heuristic may help you to avoid dummy alternatives: Don't have a "favorite" alternative until you have evaluated all the alternatives in terms of all the goals. This may seem too obvious to state. Yet many neophyte analysts sprinkle their analyses with hints that they have accepted or rejected a policy alternative before they have formally evaluated it. Make your primary ego and intellectual investments in the analysis and only marginally in the particular recommendation.

Having ensured that your policy alternatives are not strawmen, you should ensure that your alternatives are mutually exclusive: they are, after all, alternative policies. Alternatives are obviously not mutually exclusive if you could combine all the features of alternative A with all the features of alternative B and come up with alternative C. In such circumstances, A and B may be too narrow and perhaps should be eliminated from the set of alternatives. For example, imagine a series of alternatives that specify fees for different classes of users of a public facility. If the adopted policy is very likely to set fees for all the classes, then it probably would be appropriate to combine the set of fees into a single alternative that can then be compared to other combinations that also cover all the classes of users.

You almost always face an infinite number of potential policy alternatives. If one of your policy alternatives is to build 10,000 units of low-income housing, mutually exclusive alternatives include building 9,999 units or 10,001 units. An infinite number of policy alternatives is a few too many. Given clients' limited attention span (and analysts' limited time), somewhere between three and seven policy alternatives is generally a reasonable number.<sup>31</sup> Keep in mind that one of the alternatives should be current policy—otherwise you introduce a bias for change.

It is preferable to provide a reasonable contrast in the alternatives examined. Unless there are important discontinuities, it is analytically wasteful to make three of your alternatives 9,999 housing units, 10,000 housing units, and 10,001 housing units. The alternatives should provide real choices.

You should avoid "kitchen sink" alternatives—that is, "do-everything" alternatives. Such alternatives are often incomprehensible and unfeasible. If you find yourself proposing a kitchen sink alternative, take a close look at all the constraints your client faces. Does your client have the budgetary, administrative, and political resources the alternative requires? If not, then it is probably not a valid alternative.

<sup>31</sup>On the question of attention span, see George A. Miller, "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information," *Psychological Review*, Vol. 63, no. 2, 1956, pp. 81-97.

You failed to recognize this because you omitted instrumental goals that encompass these constraints.

More generally, *alternatives should be consistent with available resources, including jurisdictional authority and controllable variables*. If your client is a mayor, there is usually little point in proposing alternatives that require new federal resources. If you believe that such an alternative should be formulated, then you must recast it as a call for mobilization, coordination, or lobbying. In other words, it must be oriented around a set of steps that your client can take to generate the appropriate federal action.

Remember that *policy alternatives are concrete sets of actions*. (Remind yourself of the distinction between goals and policies.) Generic policy solutions are abstract statements. Thus, while it is useful for analytic purposes to think of a given alternative as the "demand-side subsidy alternative," this abstraction should be converted to a concrete proposal (for example, housing voucher worth X, going to target population Y) in your policy analysis. You will not be able to predict consequences unless you provide clear and detailed specifications of your alternatives. The alternatives should be clearly specified sets of instructions so that the client knows exactly what he or she is choosing and how it will be executed. To prepare these instructions, you must determine what resources will be needed during implementation and how these resources are to be secured from those who control them. In effect, you must be able to create a scenario that shows how the policy can be moved from concept to reality. (In Chapter 13, we deal with this important aspect of analysis in greater depth.)

### Predicting and Valuing: Putting Goals and Alternatives Together

Once you have specified the relevant evaluation criteria and policy alternatives, you must bring them together in a way that facilitates choice. You face three tasks: (1) predicting, or forecasting, the impacts of the alternatives; (2) valuing the impacts in terms of criteria; and (3) comparing alternatives across disparate criteria.

You should confront these tasks explicitly. By doing so, you make clear the assumptions inherent in your analysis. For example, consider benefit-cost analysis: A prediction of impacts underlies the estimation of the stream of future costs and benefits. Valuation is relatively simple because all the impacts are already expressed in dollars, which, with appropriate discounting, can be weighted to produce a common metric representing the value of a dollar at the present time. Because efficiency is the only relevant goal, the choice rule is simply to select the alternative that gives the greatest excess of discounted benefits over discounted costs.

In the decisions we make in our everyday lives, we often predict, value, and choose implicitly and incompletely. Indeed, our goals and alternatives often remain unspecified. When decisions are routine, our experience allows us to take these shortcuts with little risk of serious error. When the decision problems are novel or complex, however, we run the risk of missing important considerations when we do not explicitly value all of our alternatives in terms of all of our goals.

To be more specific about how to evaluate alternatives systematically, we focus our attention on filling in and comparing the cells of the goals/alternatives matrix introduced in Table 10.1. For reasons that we discuss in the following section, it

is often advisable to prepare an impacts/alternatives matrix as a preliminary step to valuation.

**Predicting Impacts.** Before you can evaluate alternatives in terms of criteria, you must predict their impacts. Here is where your model of the policy problem (Step 1 of problem analysis) becomes especially important. Your model helped you understand and explain current conditions, which are observable. It should also help you predict what will happen in the future under current policy. For example, assure that the policy problem is rush-hour traffic congestion in the central business district and that your model shows that crowding results because people base their commuting decisions on the private costs and benefits of the various transit modes. Because drivers do not pay for the delay costs that their presence inflicts on everyone else driving in the central business district during rush hour, too many people commute by automobile from the perspective of total social costs and benefits. Your model suggests that changing conditions, such as growing employment in the central business district, which alter the costs and benefits of various transit modes, will affect future congestion. By projecting changes in conditions, therefore, you can predict future congestion levels under current policy. You would make predictions about congestion under alternative policies by determining how they would alter the costs and benefits of different transit modes. Higher parking fees, for instance, would raise the private costs of commuting by automobile.

Consider how you might actually go about making the link between higher parking fees and congestion. Ideally, you would like to know the price elasticity of demand for automobile commuting in your city. That is, by how many percentage points will automobile use for commuting change as a result of a one-point percentage change in price? Starting with estimates of the current price and level of automobile commuting, you could use the elasticity to predict levels under various parking fee increases. It is unlikely that you would have the authority, time, or resources to run an experiment to determine the elasticity. You may be able to take advantage of natural experiments, however. For example, your city may have raised parking fees for other reasons in the past. What effect did this have on automobile use? Do you know of any other cities that raised parking fees? What happened to their congestion levels? If you cannot find answers to these questions, then you might be able to find some empirical estimates of the price elasticity of automobile commuting in the literature on transportation economics. As a last resort, you might ask some experts to help you make an educated guess, or simply make a best guess yourself.

Policies almost always have multiple impacts. We recommend a two-stage procedure for making predictions. First, use your model, your specification of the alternative, and your common sense to list as many different impacts as you can. For example, with respect to a parking fee increase, what will be the impact on automobile use for commuting? On the price and quantity of private parking in and near the central business district? On city revenues from parking fees and parking tickets? On the use of other transit modes? On off-peak driving in the central business district? On resident and commuter attitudes toward city hall? Each of the impacts you identify should be relevant to at least one of your criteria. If an impact does not seem relevant to any of your criteria, then your set of criteria is probably too narrow and should be expanded. For instance, once you start thinking about how commuters might respond to the higher parking fees, you may realize that some will park in nearby resi-

dential neighborhoods and ride public transit to the downtown. If you had not already considered on-street parking congestion in nearby residential neighborhoods as an evaluation criterion, then you should add it to your list under the appropriate goal.

Second, go through your criteria to make sure that you have a prediction for each one. If a policy does not seem to have an impact relevant to a particular criterion, then predict "no difference from current policy." The key point is that you should predict and value the effects of each alternative on every criterion. After you have worked through all the alternatives, you will be able to compare them across each of the evaluation criteria.

You can force yourself to be comprehensive in your prediction of impacts by constructing a matrix that lists alternatives on one dimension and impacts on criteria on the other. The cells of the matrix serve as a worksheet for making predictions. Table 10.2 shows what your worksheet might look like for the parking congestion problem. The columns are labeled with the three alternatives: current policy, a doubling of parking fees at city-owned lots in the central business district, and the establishment of bus-only lanes on certain major traffic arteries. Only by filling in all the cells do you make a complete set of predictions. As you gather more information, you can refine the cell entries until you are either satisfied with their accuracy or you have no hope of improving them further with available time and resources.

Do not try to suppress the uncertainty in your predictions. You need not fill in cells with single numbers (point estimates). Instead, ranges (perhaps confidence intervals) may be appropriate. For example, you may be fairly confident that the average number of vehicles entering the central business district at rush hour on workdays will be very close to fifty thousand under current policy over the next year because this has been the average over the last two years. In contrast, you may be very uncertain about the average number of vehicles that would enter if parking fees were doubled. Perhaps you believe it unlikely that the number would be either less than forty-five thousand or greater than forty-eight thousand. Rather than fill the appropriate cell with a specific number, you should indicate this range. Later you can use these upper and lower bounds to come up with "best" and "worst" cases for each alternative.

Many times your uncertainty will be so great that a qualitative rather than quantitative entry is appropriate. For instance, consider the criterion, "Change in CBD business activity," in Table 10.2. Although it would be natural to measure this change in dollars, you probably have no basis for making quantitative predictions. Cell entries such as "slight increase" or "moderate decrease" may be the most realistic predictions you can make.

Often it is necessary to make predictions that depend on assumptions about the future. For example, Robert Hahn makes assumptions about the costs of technology and fuel costs to compare the cost-effectiveness of a variety of policies intended to reduce emissions from vehicles.<sup>32</sup> For each set of assumptions, he calculates the dollar cost of reducing the sum of emissions of reactive organic gases and

<sup>32</sup>Robert W. Hahn, "Choosing Among Fuels and Technologies for Cleaning Up the Air," *Journal of Policy Analysis and Management*, Vol. 14, no. 4, 1995, pp. 532-54.

Table 10.2 Worksheet for Predicting Impacts of Alternative Policies for Dealing with Central Business District (CBD) Traffic Congestion

Goals	Criteria	Alternatives		
		Current Policy	Double CBD Parking Fees	Create Express Bus Lane
Access to CBD	Number of rush-hour vehicles (per workday)	50,000	45,000 to 48,000	44,000 to 48,000
	Average rush-hour delay for vehicles (minutes)	12	6 to 10	14 to 18
	Number of commuter-bus riders (per workday)	30,000	31,000 to 33,000	32,000 to 36,000
	Average rush-hour delay for bus commuters (minutes)	12	6 to 10	2 to 4
Fiscal Health	Revenues from parking fees and bus fares in excess of current policy (millions of dollars per year)	0	13.00 to 20.80	-0.52 to -0.13
	Direct costs in excess of current policy (millions of dollars per year)	0	0.12	3.50
Citywide Social and Economic Well-Being	Change in CBD business activity	none	slight decrease?	slight increase?
	Change in profits of private parking firms (million of dollars per year)	0	13.0	-1.6 to -.09
Public Acceptability	Parking congestion in nearby residential neighborhoods	moderate	high	moderate
	Public Acceptability	diffuse complaints	drivers and CBD business owners oppose	drivers oppose; bus riders favor

nitrogen oxides by one ton. As fuel costs are directly relevant to most of the alternatives he considers, it makes sense to assess the cost-effectiveness of each alternative in terms of an assumption about fuel prices. More generally, when the prediction of impacts requires some assumptions relevant to the impacts of more than one alternative, it is appropriate to produce a goals/impact matrix for each combination of assumptions considered. This insures that comparisons among alternatives are made under the same conditions.

**Valuing Impacts.** A prediction matrix typically expresses impacts in units that are not readily comparable. By introducing a common metric for several impacts, you can make them directly comparable. In this way, the impact criteria can be reduced to a smaller number of evaluation criteria. Benefit-cost analysis serves as an extreme example—it requires that all impacts be valued in dollars. More generally, some, but not all, impacts can be expressed in the same units. You should try to make the impact criteria as comparable as possible without distorting their relationships to the underlying goals. By combining impact criteria that are truly commensurate, you may be able to specify a more manageable set of evaluation criteria.

We illustrate the valuation process by returning to the prediction matrix shown in Table 10.2. Four criteria are associated with the goal, access to the central business district (CBD): the number of vehicles entering the CBD during rush hour; the average delay those vehicles face; and the number of commuter-bus riders and automobile-commuter to be equivalent to an hour of delay faced by a bus-commuter. We can calculate the total commuter-hours of delay under each of the alternatives. We would thus have a single criterion associated with the general goal of access to the CBD.

The criterion, commuter-hours of delay, is still not directly comparable to the other criteria in Table 10.2. Note that the criteria under the goal, fiscal health, are measured in dollars and, therefore, could be combined to form a single criterion we could call "net program costs." If we wanted to compare directly commuter-hours of delay with net program costs, then we would have to find a way of putting a dollar value on delay. One approach, often used by economists, is to assume that people value leisure time, which delay reduces, at about half of their wage rate.<sup>35</sup> You can make a dollar estimate of the value of improved access relative to current policy by multiplying the reduction in hours of delay by one-half of the average after-tax wage rate for the city. You might call the resulting criterion, "monetized value of reductions in delays."

For example, using an average wage rate of eight dollars per hour, the dollar cost of delay would be \$16.6 million per year under current policy (80,000 commuters per day times 0.20 hours per commuter per day times \$4 per commuter per

hour times 260 days per year), between \$8.1 million and \$14.1 million per year under alternative two (the doubling of parking fees), and between \$11.8 million and \$14.0 million per year under alternative three (the creation of express bus lanes). Compared to current policy, therefore, alternative two would reduce the monetized cost of delay by between \$2.5 million and \$8.5 million; alternative three would reduce the monetized cost of delay by between \$2.6 and \$4.8 million.

You could next add your estimate of avoided delay costs to net program costs to create a new criterion, "net monetized benefits," which implicitly assumes a one-to-one trade-off between the dollar measures of access to the CBD and fiscal health. Is "net monetized benefits" an appropriate amalgamation of the two goals? From the perspective of the city government, the answer might very well be no for a number of reasons. First, the delay encountered by bus commuters may not be as important to the city council as delay encountered by drivers because a higher proportion of the latter are city residents. Second, the city council may be unwilling to trade program costs and revenues, which show up in the budget, dollar-for-dollar against monetized delay costs, which are diffuse and indirect. Indeed, if bus service were provided by an independent agency, the city council undoubtedly would want to see a separate listing of bus fares and parking fees in the revenue estimates.

"Net monetized benefits" would not be an appropriate criterion from the social welfare (efficiency) perspective. While program expenditures generally represent payments for real resources that could have been used to produce goods elsewhere in society, program revenues include transfers of money from parking fees to the city. These transfers would not be counted in a standard benefit-cost analysis done from the perspective of society as a whole. (We explore such issues in greater depth in Chapter 12.)

Given these considerations, "net monetized benefits" would not be an appropriate criterion for valuing impacts in terms of the goals of "access to the CBD" and "fiscal health." You might reasonably report it as one of your summary measures, however, as long as you keep "monetized value of reductions in delays" and "net program costs" as separate evaluation criteria.

In summary, you should look for ways to make impact criteria comparable. In doing so, however, you should not lose sight of the underlying goals. Remember that your purpose in valuing impacts is to facilitate, rather than obscure, explicit comparison.

**Comparing Alternatives Across Incommensurable Criteria.** Choosing the best alternative is trivial when you have either a single criterion or an alternative that ranks highest on all criteria. Unfortunately, reality is rarely so kind. Although you may sometimes be pleasantly surprised, you should expect to find different alternatives doing best on different criteria. Your task is to make explicit the tradeoffs among criteria implied by various choices, so that your client can easily decide the extent to which she shares the values you brought to bear in choosing what you believe to be the best alternative. In other words, you should continue to be overt about values in the final phase of evaluation.

You should also be explicit about uncertainty. Rarely will you be able to predict and value impacts with great certainty. The scores you give alternatives on the evaluation criteria usually constitute your best guesses. If your predictions are based on statistical or mathematical models, then your best guesses may correspond to

<sup>35</sup>Economists generally use 40 to 50 percent of the average after-tax rate as the value of an hour of commuting time saved. Reductions in losses of work time are usually valued at the after-tax wage rate. For an overview of the value of time and other common "shadow prices" see Anthony E. Boardman, David H. Greenberg, Alden R. Vining, and David L. Weimer, "Plug-In Shadow Price Estimates for Policy Analysis," *Annals of Regional Science*, Vol. 31, no. 3, 1997, pp. 299-324.

sample means or expected values and you may be able to estimate or calculate variances as measures of your confidence in them. More often, your best guesses and your levels of confidence in them will be based on your subjective assessment of the available evidence. In situations in which you are generally confident about your best guesses for the major evaluation criteria, a brief discussion of the range of likely outcomes may suffice.

We have already discussed some ways of organizing your evaluation when you are not very confident about your best guesses. When lack of confidence springs from uncertainty about relevant conditions in the future, you can construct a number of scenarios that cover the probable range. You can then choose the best alternative under each scenario. If one appears to dominate under all scenarios, then you can choose it with some confidence. If no alternative dominates, then you can make your choice either on the basis of the best outcomes under the most likely scenarios or on the basis of avoiding the worst outcomes under any plausible scenario. In either case, you should discuss why you think your approach is the most appropriate one.

Sometimes your confidence in your best guesses will vary greatly across alternatives. You may be very certain about your valuations of some alternatives, but very uncertain about others. One approach is to conduct a "best case" and "worst case" evaluation for each of the alternatives with very uncertain outcomes. You must then decide which case is most relevant for comparisons with other alternatives. Another approach is to create a new evaluation criterion, perhaps labeled "likelihood of regret," that gauges how probable it is that the actual outcome will be substantially less favorable than the best guess. You could then treat this new criterion as just another incommensurable goal.

No matter from what source, as the number of criteria deserving prominence rises, the complexity of comparison becomes greater. In the face of such complexity, it may be tempting to resort to a more abstract decision rule. For instance, you might begin by scoring the alternatives on a scale of one to ten for each of the criteria (say ten points for fully satisfying the criterion, zero points for not satisfying it at all). One possible decision rule is to select the alternative that has the highest sum of scores; another is to select the alternative with the highest product of scores.

Although rules such as these can sometimes be useful, we recommend that you not use them as substitutes for detailed comparisons of the alternatives. Simple decision rules tend to divert attention from tradeoffs and the values implied in making them. Also, they invariably impose arbitrary weights on incommensurate criteria. In other words, we urge caution in their use because they tend to obscure rather than clarify the values underlying choice.

One abstract decision rule that we believe is often appropriate for simplifying choice is the *go, no go rule*. To apply it, you must set a threshold level of acceptability for each criterion. For example, if a criterion is "minimize  $\text{SO}_2$  emissions," the threshold might be a reduction of at least 8.0 million tons per year from the levels in some base year. Once you have established thresholds for all the criteria, you simply eliminate those alternatives that fail to pass any of the thresholds. If a single alternative remains, then you can accept it as the only one that has a "go" on every criterion. If two or more alternatives remain, then you can focus your attention on them, making detailed comparisons in terms of trade-offs among criteria. The difficult case arises when no alternative, including current policy, gets a "go" on every

criterion. You must then either develop better alternatives or lower some of the threshold levels!

## Presenting Recommendations

The final step in the rationalist mode of analysis is to give advice. Specifically, you should clearly and concisely answer three questions: First, what do you believe your client should do? Second, why should your client do it? And third, how should your client do it? Answers to the first two questions should come directly from your evaluation of alternative policies. Your answer to the third should include a list of the specific actions that your client must take to secure adoption and implementation of the recommended policy.

We offer several heuristics to help guide your presentation of recommendations. First, your recommendations should follow from your evaluation of the alternatives (step 6). While this may seem obvious, we think it is worth stating. Sometimes what seem to be good ideas for policy solutions take form only as your deadline gets near. Resist the temptation to introduce these new alternatives as recommendations. The proper approach is to redo your specification and evaluation of alternatives so that the new candidate is systematically compared with the others. Otherwise, you risk giving advice that you may later regret. One reason that we advocate working in a nonlinear way toward completion of the steps in the rationalist mode is that doing so increases the chances that good ideas arise early enough to be treated seriously.

Second, you should briefly summarize the advantages and disadvantages of the policy that you recommend. Why should your client accept your recommendation? What benefits can be expected? What will be the costs? Are there any risks that deserve consideration? By answering these questions you appropriately draw your client's attention to the consequences of following your advice.

Finally, you must provide a clear set of instructions for action. Exactly what must your client do to realize the policy that you recommend? Sometimes the set of instructions can be very short. For example, if your client is a legislator, then the instruction, "vote for bill X," may be adequate. Often, however, adoption and implementation of your recommendation require a much more complex set of actions by your client. For example, imagine that you recommend to the director of the county social services department that funds be shifted from one day-care vendor to another. When and how should approval be secured from the county manager? Is it necessary to consult with the county's legal department? When and how should the vendors be notified? When and how should participating families be notified? Should any members of the county legislature be briefed in advance? Which staff members should be assigned to monitor the transition? These questions may seem mundane. Nonetheless, with a little thought, you should be able to imagine how failing to answer any one of them might jeopardize the successful implementation of the recommended policy.<sup>34</sup>

<sup>34</sup>Your list of questions should come from thinking of all the possible things that could go wrong during implementation. Some observers describe people particularly skilled in anticipating the actions of interested parties as having "dirty minds." Martin Levin and Barbara Fernan, "The Political Hand: Policy Implementation and Youth Employment Programs," *Journal of Policy Analysis and Management*, Vol. 5, no. 2, 1986, pp. 311-25. In Chapter 13, we try to help you cultivate a "dirty mind."

The format of your policy analysis plays an important part in determining how effectively you communicate your advice to your client. Clients vary greatly in their levels of technical and economic sophistication; you should write your analysis accordingly. Generally, however, clients share several characteristics: (1) they usually want to play some role in shaping the analysis (but they do not want to do the analysis); (2) they are busy and they face externally driven timetables; and (3) they are nervous about using the work of untested analysts when they have to "carry the can" for it in the policy arena. These generalizations suggest some guidelines on how to present your work.

### Structuring Interaction

Often you can involve your client in the analysis productively by sharing a preliminary draft. You should do so early enough so that you can make use of your client's comments, but not so early that you appear confused or uninformed. By trying to prepare full drafts of your analysis as regular intervals over the course of your project, you force yourself to identify the major gaps that you must yet fill. Giving your client the opportunity to comment systematically on one of these intermediate drafts will usually be more effective than ad hoc oral interactions. Of course, if you believe that your client is a better listener than a reader (perhaps because you can only claim your client's time and attention through an appointment), you may find oral progress reports, perhaps structured by a prepared agenda, to be more effective. Be flexible! Use whatever type of communication seems to work best in the particular context you face.

You can improve the effectiveness of your written interaction by carefully structuring your draft. You should follow two general guidelines: First, decompose your analysis into component parts; and second, make the presentation within the components clear and unambiguous. These guidelines are not only appropriate for your final product, but they also promote effective communication at intermediate stages by allowing your client to focus on those components that seem weak or unconvincing. Decomposition and clarity also tend to crystallize disagreement between you and your client. Although this may seem like a disadvantage, it usually is not. By crystallizing disagreement at an early stage of your project, your draft analysis helps you determine which of your client's beliefs might be changed with further evidence and which are rigid. In this way, your preliminary drafts and other structured interaction with your client reduce the chances that your analysis will ultimately be rejected.

The steps in the rationalist mode shown in Figure 10.1, provide a general outline for decomposing your analysis. While your final analysis must be written as if you began with the problem description (step 1) and moved sequentially to your recommendations (step 7), you should not necessarily try to write (as opposed to present) the components of your preliminary drafts in strict order lest you encounter the "analysis paralysis" we mentioned earlier. Obviously, the steps cannot be treated as if they were completely independent. For example, the operational criteria you choose for evaluating your alternatives (step 4) cannot be finalized until you have

specified the relevant goals (step 2). But very early in your project, you should try to write a draft of each of the components as best you can. This effort forces you to think configuratively and anticipate the sort of information you will need to make the final draft effective. This may be particularly valuable in helping you move from problem to solution analysis so that you do not end up with an overdeveloped description of the status quo and an underdeveloped analysis of alternative policies.

### Keeping Your Client's Attention

Clients are typically busy people with limited attention spans. Reading your analysis will be only one of many activities that compete for your client's attention. You bear the burden of producing a written analysis that anticipates your client's limited time and attention.<sup>35</sup>

While most of our suggestions stress presentational issues, *timeliness* is by far the most important element. If you are trying to inform some decision, then you must communicate your advice before the decision must be made. Sometimes clients can delay decisions. Often, however, the need to vote, choose a project, approve a budget, or take a public stand places strict deadlines on clients and therefore on their analysts. While you should always strive for excellence, keep in mind that an imperfect analysis delivered an hour before your client must make a decision will almost always be more valuable to your client than a perfect analysis delivered an hour after the decision has been made.

You can facilitate more effective communication with busy clients by following a few straightforward rules: *Provide an executive summary and a table of contents; set priorities for your information; use headings and subheadings that tell a story; be succinct; and carefully use diagrams, tables, and graphs.*

Your analysis should not read like a mystery. Rather than holding your client in suspense, tell your client your recommendations at the very beginning in an executive summary. The executive summary should be a concise statement of the most important elements of your analysis including a clear statement of your major recommendations. In a short analysis of a few pages, your first paragraph can serve as an executive summary, with a statement of your recommendation at the end of the paragraph where one would normally look for a topic sentence. An analysis of more than a few pages should have a separate executive summary that stands on its own. That is, it should be a statement that conveys the essence of your advice and the basis upon which it is based.

A table of contents enables your client to see at a glance where your analysis is going. It presents the structure of your decomposition so that your client can focus on aspects of particular interest. Together with the executive summary, the table of contents enables your client to skip portions of your analysis without losing the major points. While we all want people to read what we write, you should consider

<sup>35</sup>For an interesting discussion of policy communication in organizational contexts, see Arnold J. Meltsner and Christopher Bellavita, *The Policy Organization* (Berkeley Hills, Calif.: Sage Publications, 1983), pp. 29-57.

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