ADVOCACY, VALUES AND COST/BENEFIT ANALYSIS

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With increasing frequency, both in public and intercollegiate debate, cost/benefit analysis (CBA) has been advocated as the proper approach to decision making. In both its broadest or narrowest definition, CBA involves a systematic weighing of the relevant costs and benefits of decisions. While this procedure appears to be only reasonable, this apparently neutral and simple formula for evaluating decisions masks hidden assumptions and has profound implications for both the public and debate communities.

This investigation identifies premises that serve as a foundation for CBA. Particularly important are the consequences of the cost/benefit approach for the consideration and discussion of values in public and CEDA debate forums. It is our position that CBA, in the attempt to replace consent with reason, typically omits vital steps in the debate over values.

CBA AND PUBLIC POLICY DEBATE

The movement to CBA results from the nature of political disputes in modern society. Existing political institutions have not discovered easy ways to resolve arguments among competing interest groups. Exploring the world of environmental conflict resolution, Barry Rabe (1988) declared:

> The American political system is poorly-equipped to resolve conflicts when passions run deep and interests are well-entrenched on both sides. Such problems are rare in distributive or developmental policies, in which elected officials are only too happy to authorize revenues or services for designated constituencies. But they are common in redistributive or regulative policies, where some constituencies are likely to be disadvantaged by any decision (p. 586).

Particularly in times of fiscal restraint, government lacks the resources to placate all or most important interest groups. Rather, budget limits or cutbacks dictate that group is pitted against group with increasing frequency.

Central to the intergroup conflict is the absence of a common set of value priorities. Environmental disputes rarely occurred when American society almost uniformly valued economic development well above protection of nature. Such

shared value sets are rare today. In reference to natural resource controversies, Fremont Lyden (1988) concluded that "it is clear that society no longer brings a uniform set of values to the decision making process" (p. 844). Current disputes in other fields, from medical research on animals to abortion, demonstrate the same conflicts among basic value choices.

History of CBA

With the signing of Executive Order 12291, Ronald Reagan made cost/benefit analysis a vital element in almost all regulatory action. Reagan's decision matched Lyndon Johnson's sixteen years earlier including CBA in the budgetary process. "Cost-benefit analysis," notes Robert Zinke (1987), "has been the cornerstone of regulatory reform efforts of the last three presidents" (p. 63).

The origins of CBA extend further back than these administrative requirements. In the United States, federal application of cost/benefit analysis began with the River and Harbor Act of 1902 which stipulated use of CBA by the Corps of Engineers. While early uses of CBA primarily concerned natural resource decisions, recent applications have considered everything from military spending to occupational safety and health regulation.

Cost/benefit analysis, or comparable modes of analysis, have moved from the regulatory arena into many decision making realms. Henry Steiner (1987) documents the growing use of cost/benefit analysis in the judicial system (p. 19). Some have gone so far as to argue that all decisions incorporate the economic model at the heart of CBA:

> It should go without saying that all decisionmaking persons or groups attempt to economize, in the true sense of the word. That is, they try to make the "most" as they conceive of the "most" of whatever resources they have (McKean, 1970, p. 253).

Tom Beauchamp (1979) even advocates that CBA should not merely inform decision makers, but rather "it is actually a method of deciding, for its conclusion should also serve as the conclusion of the deliberation" (p. 279).

Limits to CBA Application

While both policy analysts and debaters frequently speak of cost/benefit analysis, it is rare when they use identical meanings for the term. Richard Liroff (1982) explains the broad range of definitions for CBA:

> At one extreme, some use a narrow definition, referring to the calculation in dollar terms, premised on formal economic theory, of all gains and losses from an action. At the opposite extreme, some view cost-benefit analysis as a systematic cataloging of all the positive and negative consequences of an action. Somewhere in the middle are those who define the term as a technique that measures impacts in dollars or other quantified values and that also provides systematic recognition of unquantifiable values and significant qualitative impacts (p. 2).

The latter definition is consistent with use of the term in this article and most applications of CBA, though the assumptions identified below apply to the majority of uses of the technique.

Three fundamental assumptions appear to underlie the use of CBA. CBA is considered most appropriate when problems are independent, when most values can be objectively measured, and when costs and benefits can be made commensurable. The following evaluation of the practical application of CBA describes limitations relevant to these assumptions.

Problem Independence

James Gleick's national bestseller, Chaos (1987), popularized the notion of the Butterfly Effect - "that a butterfly stirring the air today in Peking can transform storm systems next month in New York" (p. 8). In biological systems, researchers have shifted from the discussion of "food chains" to "food webs," complex interrelationhips among all system components (Parrish, 1989, p. 6). Such interconnectedness belies the idea that problems or policies can be discretely separated from one another.

This separation is necessary, however, for CBA to be successfully applied. CBA requires that limits be placed on the potential effects of an action or there can be no certainty that all important costs and benefits are included in the decision making calculus. Even some advocates of CBA recognize this inherent limitation. As James Campen (1986) notes, "economists, like ecologists, know that everything is connected to everything else and that actually tracing through all of the consequences of any particular action is thoroughly impractical" (p. 31). Not only does the facade of problem independence mean that CBA may ignore important costs or benefits that are removed from the immediate situation, but it also directs attention to piecemeal responses. By attempting to constrain the limits of what are to be evaluated as cost and benefits, CBA tends to narrowly define problems and to ignore the need for fundamental social transformations. "Basic change must be presumed to be always less preferred than a series of marginal ones" (Byrne, 1981, p. 210).

Objective Measurement

As Campen (1986) notes, "The core of any benefit-cost analysis is the actual measurement of the benefits and costs of the alternatives being analyzed" (p. 31). The difficulties in objectively measuring values are legion. Inaccurate measurement of either costs or benefits, however, yields less than useful results from CBA. Three particular limitations to objective measurement are worth detailing.

1. Lack of Objectivity. A vigorous indictment of the true lack of objectivity in economic models comes from Larry Tribe (1972):

> After all, ideology has often sought to masquerade as analysis, deriving a power it could never justly claim from the garb of neutrality it has at times contrived to wear. In the past decade, I believe, the masquerade has reached new levels of sophistication and effectiveness (p. 66).

The reasons that CBA involves enormous discretion include the necessarily subjective selection of what qualifies as a cost or benefit, a process that Beauchamp and Childress (1979) and Green (1975) suggest reflects "the value judgments of those who perform the analysis" (p. 799). In addition, there is further discretion in selecting the measure to be used. For example, MacIntyre (1979) cites what must be the arbitrary choice among at least four fundamental methods for measuring the value of life (p. 272).

2. Lack of Proper Measures. Appropriate measures are not always available for many values. For example, Krutilla and Fisher (1975) conclude, "In confronting the need to evaluate preservation benefits, we find that there are a number of aspects of such benefits that we do not know how to estimate quantitatively" (p. 124). The typical measure used to assess the value of any cost or benefit is the individual's willingness to pay. Fisher, Chestnut and Violette (1989) indicate there is consensus among CBA analysts for use of this method of measurement (p. 88). James Campen (1986), however, isolates several places where this measure is seriously flawed:

> The survival of an animal species, the preservation of wilderness areas, the avoidance of manmade ecological change all have values that cannot be accurately measured by people's willingness to pay for such consequences and that exist independently of this willingness to pay (p. 64).

The willingness to pay standard assumes there is no value outside that assigned by human beings. If a society is unwilling to pay to save an endangered specie of fish from extinction caused by construction of a dam, then the specie is without value.

Campen also makes the important point that our personal economic preferences do not truly or accurately reveal our political preferences or our

perceptions of what constitutes "a good society" (p. 161). Economist Stephen Marglin (1963) concurs in this distinction between our political and economic selves:

> The preferences that govern one's unilateral market actions no longer govern his actions when the frame of reference is shifted from the market to the political arena. The Economic Man and the Citizen are for all intents and purposes two different individuals .... Market and political preference maps are inconsistent" (p. 98).

The consequence of measurement problems is that CBA conclusions become highly suspect. In a review of three applications of CBA by the Environmental Protection Agency, the authors found that "despite the substantial effort involved in these [CBAs], they are not helpful for regulatory decision-making or policy formation" (Grubb, Whittington and Humphries, 1984, p. 145). The fundamental difficulty identified in these three CBAs was "the impossibility of applying benefit-cost techniques in areas for which the most critical benefits still cannot be calculated" (p. 148).

3. Ignoring Values. A sizeable number of values are omitted from CBA. Byrne (1981, p. 206) argues that "what is fair, moral, respectful, can only be incidental to what is of maximum net benefit." Tribe (1985) extends this list to include "respect for distributive justice, procedural fairness, and the irreducible and sometimes inalienable values associated with personal rights" (p. 597). In another work, Tribe (1972) breaks the omitted costs and benefits into three categories:

> those too widely diffused over space (or too incrementally affected over time) to be strongly championed by any single client of a policy analyst; those associated only with persons not yet existing (future generations); and those not associated with persons at all (for example, the 'rights' of wild animals)" (p. 104).

Brown (1989) provides an example of the difficulty of fully valuing the rain forest when he notes that "the cure for dreaded diseases such as AIDS and cancer may reside in some plants as yet undiscovered that grows in the rain forest - if destroyed, humankind will be forever denied such help" (p. 15). Even attempts to include such concerns in CBA accomplish little. Since these values cannot be successfully measured, Campen (1986) notes that quantifiable measures ultimately dominate the considerations, a kind of "Gresham's Law of decision-making" (p. 68).

Commensurability

Even when measures exist to quantify certain values, CBA requires that the measures be in comparable units - that they be commensurable. Tribe (1974)

contends that the "values will almost certainly be translated into smoothly exchangeable units of satisfaction, such as dollars" (p. 1331). Campen (1986) asks the critical question:

> How does one compare the significance of extra lives lost one or two generations in the future, or of additional persons undergoing extended periods of intense suffering, or of more people being able to experience a canoe trip along a river preserved in its natural state, with the significance of corresponding consequences in the present (p. 60)?

It is, in the words of Alasdair MacIntyre (1979), "so that what otherwise would be incommensurable becomes commensurable" (p. 271). The choices facing analysts are to either omit certain values or force them into inappropriate comparisons.

Political Consequences of CBA

A fear of traditional political deliberation serves to encourage use of CBA by administrative decision makers. There exists both a basic distrust of "laypeople" making decisions on multidimensional issues and a concern that political considerations will distort the results, that the maximum benefit will not ensue. Byrne (1981) argues that CBA prefers government by reason to government by consent:

> The replacement of consent with reason as the foundation of governance is intended to dispense with the inefficiency and irrationality of politics, but in fact it dispenses with democracy in favor of the administrative state. The issues that normally give rise to questions of democratic participation and consent are simply without salience in the transformed world of cost-benefit analysis (p. 204).

Public debate is a useless tool for decision making because it lacks the logical calculus that discerns the true consequences of regulatory choice. Ronald Beiner (1983) describes this political world as one where intelligence is the monopoly of technicians and experts and rationality is "beyond the competence of the ordinary individual" (p. 1).

What are the consequences of this world? To Steven Kelman (1982) placing a price on all things of value, even the "priceless," cheapens them (p. 146). To place a price on one's virtue is said to prostitute oneself. By analogy, CBA prostitutes society's political values. Nothing is inalienable; everything has a price. Stephen Elkin (1985) contends that a nation's regulatory structure defines the nature of citizenship and "the appropriate forms of relations among a people" (p. 104). In a society where desirable programs are identified by the sum of the citizens' economic preferences, moral obligations play a minimal role. The bonds that tie a society

together become merely a function of self-interest. Finally, both Campen (1986) and Eric Ashby (1980) are concerned that distancing the public from an active role in decisions will result in frustration and rage (Ashby, 1980, p. 1178).

CBA AND VALUE DEBATE

The phrase cost/benefit analysis has become relatively popular in intercollegiate debate, replacing "on balance" as the term of choice as the generic criterion for judgment in value debates. It is quite obvious, given the typical form of CBA used in public policy deliberations, that debaters do not have the time to fully employ a cost/benefit analysis within the confines of one hour. Were they to try, debaters would encounter the multitude of CBA flaws and limitations mentioned in the previous section. However, without the calculation of probabilities, defining risks, etc., that are incumbent in CBA, use of the term in intercollegiate debates is but a semantic facade. While creating the impression that debaters are providing objective/scientific measurement of the topic's values, CBA either obscures the confrontation of value positions or does no more than "on balance" in identifying the decision making structure of the debate. As such, whether in the guise of CBA or its "on balance" cousin, this tactic undermines the ability of debaters to focus on the central issues of value.

CBA, by itself, poorly serves as a criterion for value debates. Use of CBA does not, in fact, guarantee that any discussion of values will occur. Steve Verch and Brenda Logue (1982) noted this consequence when they argued that mere comparison of costs vs. benefits "is not necessarily clashing on the level of values. Values might be implied in many of these costs and benefits, but such value statements are rarely explicated and debated per se" (p. 25). Efforts to reduce debate to mere addition of comparable benefits, subtraction of costs, and comparison of the resulting totals converts the topic into a resolution of fact. To the extent that consideration of values is mandated by the topic's language and the issues inherent to the controversy, CBA contradicts that objective.

Two examples illustrate Verch and Logue's comments. On the handgun topic some debaters contended that the benefits of handgun suicides outweighed the costs due to the lives saved through transplant of body parts. A second example may be appearing in future debates. A recent RAND Corp. study documented that the premature deaths of smokers benefit society by subsidizing the pensions and nursing-home care of longer-lived nonsmokers. As University of Michigan economist Kenneth Warner concludes, "...smokers, in very crass economic terms, save society dollars by kicking the bucket early ... ." (Scott, 1989, p. 3).

In both examples focus is directed toward values where measurements can be applied - the number of lives or amount of money saved. Complete objectivity and efficiency in decision making dictates that "soft," qualitative or unquantifiable

concerns be ignored. No one asks the questions "Is it just?" or "Is it moral?" There are those who argue that conducting medical experiments on death row convicts produces more cost effective research results. While such a proposal leads to quicker, more efficient, and ultimately cheaper medical breakthroughs, additional social values must be discussed prior to acceptance of such a policy. CBA alone cannot promote discussion of the moral difficulties inherent in these conflicts.

In an attempt to reach objective decisions, debaters utilizing CBA factor themselves out of the argument, as the only important element becomes the presentation of probabilities, etc. The debaters introduce the data; the judge calculates the results. Mathematics, not argument, becomes the nucleus of the encounter. Debaters are transformed into dueling statisticians. While adoption of this approach may clearly benefit one team (the team defending measurable values) over another, a purely quantitative strategy of judgment is unrealistic. "There is a good deal of evidence," concurs Baruch Fischhoff (1977), "that the basic cost benefit model is not an accurate description of how people make decisions in actual practice" (p. 180). If debaters wish to learn argumentative or communication skills applicable to their futures, use of CBA will only impede that objective.

The solution is for debaters to recognize that CBA is but one stage in a much longer sequence of evaluative judgment. A true analysis must include interpretive, empirical, and critical elements. Unquestionably, value judgments profit from measurement, from empirical knowledge. Appraising the desirability of handgun restrictions is partly a function of knowing how many deaths occur, how many assaults are prevented. But analysis requires previous consideration, or interpretation, of the full meaning of the resolutional context to determine which values are relevant to the controversy. What is quantifiable should not make that determination. In addition, complete analysis mandates a critical assessment of the underlying values. Which values should be dominant in the consideration? The answer does not necessarily reflect the values that can be expressed with statistics.

The interpretive stage, the designation of relevant values, must not be replaced by the term, "cost/benefit analysis." That term does not say whether any participant in the debate over handguns should be concerned about constitutional rights, psychological security, or other considerations. This interpretation, which begins with a complete identification of relevant criteria, must include the debaters' conclusions as to whether certain social conditions are truly desirable. Is an equitable distribution of income in society's best interest? Must some suffer pain so that the community gains? Within the debate, both teams may be expected to clash over these interpretive questions. Consequently, the answer evolves throughout the round. Without the identification of values, however, no debater or judge can know what counts as a benefit or cost.

The critical stage, the comparison of values, provides the weighting necessary for balancing costs and benefits. Some values may be a priori. It may be argued that

no projected financial costs for a trial ought to preclude bringing an accused criminal to justice. No matter how many millions of dollars need be spent, the demands of justice will be paramount. Cost/benefit analysis provides no additional grounds for judgment. Where some type of weighting can be accomplished, precision may still be lacking. How many criminals must go free to make it worth avoiding the conviction of one innocent individual? The critical comparison of values, often accomplished through a distinct value hierarchy, gives meaning to the "on balance." This stage of value analysis is vital for efforts at CBA to come even close to the right conclusion.

CONCLUSION

Cost/benefit analysis alone provides neither public nor intercollegiate debate with the optimum method of decision making. The primary fault in both arenas is that practitioners of CBA are attempting to avoid a key to deliberations - the conflict over values. That conflict over values must occur in the realm of rhetoric and debate, not computers and calculators. Douglas Torgerson (1986) cites the argument of Giandomenico Majone on this point:

> To cope with the problem posed by technology assessment, analysis must become a sort of generalized jurisprudence. Before worrying about decision rules, utilities, optimality and all the other categories of decision analysis, one must be able to assess the adequacy of argument, the strength and fit of evidence, the relevance and reliability of data, the intrinsic limitations of scientific tools, the pitfalls lurking in every technical conclusion. To get to the "truth," the analyst will have to rely not on models and algorithms, but on advocacy and the adversary process (p. 44).

If scientists, technicians and policy analysts find in advocacy hope of better resolving contemporary controversies, where values and passions run deep, should debaters confronting value resolutions be far behind?

Both analysts and debaters have been lured to cost/benefit analysis as a means of avoiding argument. Analysts fear the corrupting influence of political advocacy. The desire to make the "right" choice has meant a diminished, often absent, role for public participation and discussion. Debaters, too, avoid argument when it is to their benefit. However, when one team selectively avoids clash on an issue, it is generally to the detriment of their opponents. No affirmative or negative should be given carte blanche by their opposition to concentrate exclusively on the empirical, ignoring the interpretive and critical stages of analysis. Under those conditions, CBA is not worth it.

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