

Economists and the Resolution of Natural Resource Use Conflicts

by

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Discussion: Economists and the Resolution of Natural Resource Use Conflicts

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Bonnie Colby and Joel Hamilton have produced stimulating papers on some very difficult questions. As populations and incomes rise, conflicts over the use of natural resources and environmental amenities will only increase. It behooves economists to contribute to understanding and resolving these conflicts.

Colby's central questions are: can we (economists) evaluate efforts to resolve or reduce environmental conflicts; and if so, how? Her discussion is organized around three major topics: what criteria can and should be used applied to define a "successful" conflict resolution process; how can one use methods and techniques developed in the program and project evaluation (benefit-cost analysis) literature to evaluation of conflict resolution processes; and can economists play a role in the conflict resolution process as neutral advisors? A major contribution of the paper is a delineation of over two dozen potential criteria for judging a successful conflict resolution process. Hamilton's paper asks somewhat narrower, but no less difficult questions. Hamilton examines the role public agencies can play in the resolution of environmental conflict. In his investigation he calls upon his own experience as an economic advisor, thereby implicitly raising the question Colby had asked about the role economists might play in environmental conflict resolution. In Hamilton's discussion he develops a conceptual scheme of some dimensions of conflict resolution and discusses the role of government agencies in two case studies of environmental conflict.

Rather than discuss the specific points made in these papers, I propose to discuss three general issues which seem to be at the heart of these discussions. First, why is it so difficult to understand and evaluate conflict resolution processes? Second, how can we determine which performance criterion should be used in the evaluation of conflict resolution methods? Third, what role can and should the economist play in the conflict resolution process?

The Institutional Complexity Problem

The methods and techniques of economic program and project (benefit-cost) evaluation were developed for some very difficult, but relatively well defined problems. Benefit cost analysis developed as an operational application of efficiency tests to water and other resource allocation issues. The methods developed sought to answer the question: would it improve national income to build such and such a project from among a list of potential projects. More recently the tools have been applied to a broader range of projects and programs, but still the question takes a relatively straightforward form. (This is not to say the benefit cost analysis is not fraught with operation and conceptual issues, but that is another story.)

However, a conflict resolution process is an institutional process, not a well-defined project or program¹. Institutional analysis is inherently more difficult than project analysis. Generally, a project is defined by a goal or objective and a set of procedures (means) for reaching that objective. Thus, we build a dam or a coal fired plant to generate electricity. Knowing what the goal and the procedures are, helps us identify the elements of the project and assign them places in our evaluation - beneficial or negative effects. Thinking about institutional processes is much more difficult. What are the elements of these processes and what places should they be assigned in our evaluation. Following is a small list of some of the difficulties in institutional analysis that surfaced in the two papers.

In the standard economic analysis of programs and projects, one implicitly assumes a fairly simple institutional model in which one agent or group of agents produces a product that another agent uses. One can therefore identify who the relevant agents are and what their “stake” is. In more complicated institutional analysis it is much more difficult to identify agents, understand their relationships, and assign them their proper roles. Are some agents consuming something produced by some other set of agents? Who is producer, who consumer, and what is the product? Most importantly, who are the winners and the losers?

Let’s start with Hamilton’s problem with agencies. Hamilton asks what might be the role of public agencies in the conflict resolution process. He considers agencies in the roles of adjudicator and of neutral agent. Colby presents agencies in the role of stakeholder. What is interesting is that, in both cases, the agencies are presented as agents rather than collections of agents. In micro-economic theory we have firms and consumers, identified agents. Here, instead we have complex agents. Moreover, it may be that these complex or composite agents have multiple and perhaps mixed motives. An agency may be adjudicator (administrative regulations), neutral party and stakeholder simultaneously. Perhaps more accurately, parts of an agency, may have these different roles and motivation.

This raises the question: who are the agents, the stakeholders and other parties, in the conflict resolution process? Standard economic theory is methodological individualistic - though obviously families and firms can comprise more than one individual. Consumers and firms are taken to be the atoms of behavior. Can organizations like the Power Council or the Supreme Court be said to have a “utility function.” Game theory and transaction costs theory offer some insights in helping to understand the interior workings of more complex organizations. My own thought is that we must not only allow for composite actors, but we must include an hierarchy of agents: an agent of one level (individual) may be a member of an agent of a higher level, who, in turn, is a participant in negotiation with other composite agents.

¹Of course, the distinction between a project and an institutional process is not really so clean. Projects are more than bricks and mortar means to achieve some stated benefit (goal). Even a simple construction project is performed by real firms and these firms may behave differently in different circumstances and times because they are institutional different.

A related point is that the conflict resolution process does not take place within the confines of the classic market structure. Hamilton offers us three institutional forms for conflict resolution: fiat/physical coercion; rights/adjudication; interests/negotiations. Only the last looks something like the standard economic setting. We have a more complex institutional setting, and, one of our tasks is to choose among these institutional structures (see discussion below).

One might ask, why does this institutional complexity matter? Do we require a comprehensive theory of social organizations just to evaluate one relatively clearly defined process -- resolving conflicts. I think so, but I am not sure. It seems to me that it is difficult to define the problem when you don't have an analytic framework which describes the process you are trying to evaluate. It seems to me that you are doomed to some level of ad hoc analysis without this framework. Frameworks like the threefold structure in Hamilton's paper are needed in order to understand the problem and identify its elements.

Another general issue is how do we identify the "product" produced by the conflict resolution process. In ordinary benefit cost analysis we want to know if something is efficiently produced and allocated. But the product produced in conflict resolution is the "resolution" of the conflict. But a resolved conflict is clearly not a physical thing or even a particular social state (like more education or better health). It is entirely a subjective and normative thing. Identifying this "product" takes us to the next problem, that of defining the proper performance criteria.

Normative analysis and the performance criteria problem

Suppose one were to start with the proposition that a conflict resolution process is supposed to get society to the "right choice." Conflict resolution is essentially a collective choice process to determine the right action. Determination of the right action is, in fact, the "product" produced by the conflict resolution process. But this product is not defined. In fact, the whole point of the conflict resolution process is to "aggregate preferences" into an agreed action! If one could define what the correct social action is, then one could compare the result generated by the conflict resolution process to the correct social choice. But moral philosophy and Arrow teach us that defining a correct social choice is at best untidy, at worst "impossible²." Moral philosophy provides us with no single definition of "the good." Arrow notes that as one changes the social choice rules, one changes the outcome defined to be correct. One way out of this conundrum is to import a correct choice from an external moral dictator. But, if we are to appeal to such an external source, then we don't need a conflict resolution process at all! On the other hand, if we don't know what the correct social choice is, then how do we evaluate whether or not the process has performed well?

²Of course, it is not social choice which is impossible - social decisions are made everyday. What Arrow's theorem finds to be "impossible" is to find a unique and "correct" social choice from an aggregation of individual preferences which while meeting certain ethical and behavioral properties.

So, a fundamental problem in evaluating conflict resolution processes is to define the goal of the conflict resolution process, yet we know that inherently there is no single, tidy answer to what that goal may be. In fact, the largest part of Colby's paper is a discussion of a large list of potential performance criteria. Our problem is that we don't know which of these to use in evaluating the conflict resolution process. If we don't know what the goal of the process is, it is impossible to evaluate the process. Therefore, we must willy-nilly adopt some goal. Colby's implicit solution is a kind of conditional normativism whereby one defines one or more putative goals. Once the goals are defined, we can start to analyze whether the process has performed well, contingent upon the goal selected. In listing over two dozen possible performance criteria, Colby's study indicates just what the dimensions of the problem are.

A second problem is that process matters. Suppose there were agreement on the goals. One might think, end of problem - literally. Since the point of conflict resolution is to come to an agreed choice of social action, if one has agreement on the goals, the job of conflict resolution is largely done. Economists tend to be consequentialists. We assume that if goals are defined, then the problem of achieving the goals is a kind of technical problem - selecting the best means of getting to the goal. But people care about the process by which the goals are chosen. Consider a mental experiment. Suppose an agreement is worked out in a gathering to which you are not a participant. You may resent the process even if you agree with the choice approved at the meeting. The battle cry of the American Revolution was, no taxation without representation. Certainly, who participates will influence the outcome, but participation also matters for its own sake. In fact, from some points of view, the only thing that matters is whether and how all legitimate parties participate. Any decision which is reached is accepted if all legitimate stakeholders have been included. This is the principle behind the rights-based approach delineated in Hamilton's three fold typology of methods of conflict resolution. The principle that, if rights and rules are just, then whoever wins is justly allocated the "goodies" is also the central moral premise of the "Austrian" school of economists. In the rights-based conflict resolution process, outcome, per se, is not good or bad. The "winning" choice is accepted if the process used to get there was legitimate (just). So, how does one compare the performance of a rights-based approach with another approach that is focused on outcomes? For instance, suppose a "good" outcome (all are better off) is imposed by an agency - a benevolent dictator -- but imposition (coercion) is considered to be a "bad" process. Is this a good or bad resolution of the problem?

Another complication in evaluating conflict resolution processes concerns interdependence of utilities. In many cases it may be possible to resolve conflicts if the stakeholders are neutral towards each other. Neutrality, or no interdependence between utilities is the standard economic assumption. But it is clear that negotiated or "alternative" conflict resolution processes are more likely to achieve success if there is some level of good-will among participants. Moreover, it is also clear that negative interdependence can make agreement less likely. In the extreme case, suppose, for instance, that some stakeholders are vindictive towards other stakeholders. They would be willing to accept a little worse outcome for themselves rather than see their "enemies" made better off. How does one evaluate the success of such negotiations? If the goal of some

stakeholders is to block an outcome that is “good” for others, then *lack* of “success” in resolving the conflict is a mark of success of the process – at least to the vindictive group!

So, given the necessity of defining a goal, and the difficulty in choosing a right goal, what should the performance criteria be? The natural inclination of economists is to adopt a consequentialist, efficiency (or cost-effectiveness) based performance criteria. Adopting an efficiency (or related) goal favors adopting a negotiation approach to conflict resolution. We know from the first fundamental theorem of welfare economics that, under appropriate circumstances, negotiated outcomes will be Pareto optimal or efficient. In fact, the only thing that keeps one from an a priori conclusion that all efforts to move to a negotiated solution are good, is a concern for transaction costs (or, perhaps, distributional issues). Without transaction costs, economic goals would imply that empirical analysis of conflict resolution processes is unnecessary. But, some of the above discussion has hinted that not all stakeholders will necessarily agree with the economist. Thus, stakeholders who value rights and participation, or stakeholders who are benevolent or vindictive may favor other conflict resolution mechanisms.

The thrust of much of this discussion concerns the difficulty in defining an appropriate value perspective from which to evaluate conflict resolution processes. I think this problem is at the heart of why Colby found the plethora of performance criteria, and, in another way, why Hamilton’s three-fold classification (or something like it) of conflict resolution processes is so important. We face a dilemma. On the one hand no convincing case can be made for a single goal and a single performance criteria because of some of the problems discussed above. On the other hand, systematic evaluation of alternative modes of conflict resolution will ultimately require that some coherent (but not definitive) statement be made about goals and criteria. What seems to be needed then, is an ethical framework which will give a coherent framework to Colby’s list of performance goals.

The role of economists

Both Hamilton and Colby speak to the role of economists as participants in the conflict resolution process. Colby suggests an interesting institutional innovation: that economists be appointed as neutral consultants. [Can an analogy be made to a court appointed water master?] Both Hamilton and Colby portray economists in other roles: generally as advocacy consultants working for particular stakeholders. The discussion raises the interesting question: can economists be “neutral” - and the related question, can advocacy consultants be simultaneously good advocates and good economists? Moreover, how does one treat an economist who is working on behalf of “society” in the form of either a general social principle (for example, efficiency) or as an economist for a public agency ostensibly dedicated to the “public interest.” My own experience suggests this is a difficult issue, but it is at the heart of what many policy and

applied welfare economists do³.

In order to address these questions one must sort out a confusion about terms such as neutrality and objectivity. These words have multiple meanings which vary considerably by context. Both terms, objective and neutral, may mean either value-free or value-neutral. (Objective may also mean non-subjective, observable.) There is a big difference between value-free and value-neutral. Value-free means that no normative value judgements are involved. Value-neutral means that value judgements are balanced; one value position is not favored over another. To answer questions about the neutrality of economists one must be clear about the terms. Often economists are asked to be neutral (objective) in both senses.

However, one must stipulate that economists (any scientist) can never be entirely neutral or objective in the sense of value-free. In fact, any science requires some value judgements, but this is a discussion that takes us far afield. For instance, a scientist must judge whether a model is accepted as confirmed or not (Rudner). I shall not pursue the topic further except to make the very important point that a “good” economist is defined by following the standards of his or her profession and part of those scientific values are to make one’s scientific procedures free of influence from normative values. If an economist is following, to the extent possible, the standards of the profession, than the economist can be said to be “professional” or “objective” in the following sense: the activities of the economist are replicable and consistent with established economic methods and techniques. The economist is neutral in the sense that normative values do not influence his or her professional analysis.

Of course, Colby is asking for something more in her proposed institutional innovation. First, we need to understand that policy economics is value based in a manner that is stronger than the “all scientists must make value judgements” sense mentioned above. Policy economics is different from what might be called disciplinary economics in that it must incorporate a normative value system in some fashion. Medicine is related to biology and engineering to physics and chemistry in a similar way. There is a goal (normative value judgement) underlying the analysis. In policy economics, there is normative point of view, usually (but not always) constructed around economic efficiency in the same way that medicine is built around the goal of human health.

Let us also distinguish a sub-group of policy economists labeled *advocacy economists*. *Advocacy economists* take an even stronger normative point of view than the general policy economist. They are looking at the problem from the point of view of particular parties, not the general, social ethical view of, for example, efficiency. However, I believe that an economist can be a good professional policy economist and even a good advocacy economist, if he or she understands and follows the professional standards and procedures of the economics discipline while still pursuing the point of view of the client. Normative values frame the way the questions are asked and the direction of the analysis, but they should not bias the economist’s disciplinary

³I have, most recently, been involved in a benefit cost analysis of a controversial environmental regulation restricting agricultural burning working for a state agency.

analysis, even where the economist is engaged in value-based (policy) research.

Based on this analysis, Colby's neutral economist might initially be thought of as taking one of two forms. The first type of neutral policy economist takes the point of view of a general social ethical principle - usually efficiency (the "Austrian" economists adhere to a different general social ethical principle). This analyst is value-neutral in the sense in the sense of unbiased or balanced: he or she is not swayed by particular interests, though he or she is engaged in value based research. The second type of neutral economist is a chameleon; going from point of view to point of view upon request, and in an unbiased manner. In fact, the chameleon economist would have to be a super chameleon, because he or she would have to simultaneously work from the multiple points of view of all the relevant stakeholders - otherwise risking perceived action in support of one side or another. In order to work, I think that Colby's neutral economist would have to aspire to both value neutrality and to the chameleon quality. He or she would have to keep in mind the general social goals like efficiency as well as understanding and adequately representing each point of view. This requires considerable maturity and credibility. However, I think it is possible, and I too, would endorse Colby's proposal.

Citations

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