THE ROLE OF ECONOMIC ANALYSIS IN LOCAL GOVERNMENT DECISION MAKING—A PUBLIC CHOICE PERSPECTIVE

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Abstract. Conventional economic theory suggests that economists' contribution to local government is primarily with respect to the production function type of knowledge. A characterization of local government decision making exposes some limitations on applicability of economic analysis of that kind. Public choice perspectives to local government help to redefine and elaborate the role of economic analysis in instructing local government decision making.

INTRODUCTION

Increasingly economists in both extension and research assignments within the Land Grant University system are being called upon to examine issues of importance to local units of government. For many economists the framework for the analysis of local government problems comes out of conventional neoclassical economic production theory.

This paper will first describe the basis for and agenda of local government problems which are included under the conventional production economic analysis. The next section will attempt to realistically characterize the decision making of local government using the analysis of the first section. The intent is to illustrate some of the limits of the conventional analysis in the political economy of local government. A third section suggests another economic perspective to the analysis of local government decisions—the public choice view. Finally, the agenda of local government problems for economists and the approaches to these suggested by the public choice perspective are discussed in the "Conclusions and Implications" section of the paper.

The purpose of the paper is to add a conceptual perspective to what many economists involved in local government already do and to suggest a framework of analysis for the political economy of local government which is broader than that of conventional production theory for those who struggle or are frustrated with the limits of their conventional theory.

LOCAL GOVERNMENT DECISION MAKING—THE NEOCLASSICAL VIEW

Conventional economic theory prescribes several roles for the economist in analyzing local government problems as Figure 1 illustrates. In Figure 1 we have sets of efficient output combinations of leaf pickup and police patrols given two levels of fixed resources. The choice among the efficient combinations of leaf pick-up and police patrols is based theoretically on the community social welfare function (CWF). This traditional product transformation type of analysis and the state of empirical art with respect to services provided by local government indicate the following areas of endeavor for economists:

1. Economists such as Hirsch acknowledge considerable difficulty in the measurement of service outputs and so an important area of work is in the measurement of public service outputs or indicators of those.

2. To arrive at the efficient set of service combinations of Figure 1 it is necessary to understand the technical production functions which relate inputs to outputs. Thus, economists working in local government spend considerable effort in seeking to understand those relationships and the associated cost functions. This work and the economists role in it are fairly clear although very little has in fact been done as evidenced by the recent annotated bibliography, Economics of Size in Local Government by Fox, Stam, Godsey and Brown.

3. Communities grow (or decline) and such changes require adjustments in both the provision of services and the commitment of resources as indicated in Figure 1 by the outward shift of the production possibilities curve. Out of the desire to help communities cope with the adjustments in financing and providing services in such a setting, comes the efforts of (and role for) economists in growth and fiscal impact analysis and the related question of economies as size changes.

There are other things happening as the community of Figure 1 chooses the level and mix of police patrols and leaf pick-up that it wishes, but for the most part economists decline to comment on these. To most economists, the community welfare function of our figure is determined by the political process. Most of us have never seen a CWF and would probably not recognize it if we did. There are even economists who argue that its workings are likely mystical since the political process which generates it is irrational and "impossible" to predict (Arrow, Wise and Barkley). Thus most economists view the process whereby the choice among efficient output combinations is made as rather a black box and beyond their purview, although they are interested in the outcomes of the process.

A few brave souls are seeking to probe the domain of the tangency between the community welfare function and the production possibilities curve. Using a variety of programming techniques and through interaction with decision makers, they attempt to lead the policy maker through a sequence of choices in which he discovers something about his valuation of the various choices (Willis and Perlack). They presumably already have the results of their colleagues who have worked on the production and cost functions and the output measures. Once these are accomplished the remaining requirement is that the analyst have the ear of the decision maker. That aspect of policy analysis and the relationship to policy outcome likely predates the discipline of economics itself.

COMMUNITY DECISION MAKING—A CHARACTERIZATION

Consider again the community debate over police services and leaf pickup. Indeed—there are several debates:

1. There is the debate over more or less leaf pick-up between the home owners and the apartment dwellers.
2. There is the debate over more or less police between the safe community advocates and the civil libertarians.
3. There is the debate over the current levels of expenditures by the taxpayers association who want either a) the same level of service at a lower cost (they believe the town is not yet at the...
production possibility curve for the current level of expenditures) or b) lower taxes by lowering services or c) more services for the same taxes.

Then there are several coalitions to be formed:

1. There is a coalition of civil libertarians and some home owners who have made the argument that savings from a reduction of police services can be spent to increase leaf pick-up.

2. The apartment dwellers, who feel they are exposed to a higher incidence of crime than the single family areas of town, align themselves with the group seeking more police protection and have argued the opposite of those in coalition one.

3. The town manager, the union of municipal workers, and the town liberals are arguing for more of both police protection and leaf pick-up. They believe that local government services are the best buy around and that the current level of services are not adequate.

Figure 2 illustrates the domain of community decision-making as described above. The arrows in the figure make clear that there are advocates of virtually any point within the domain of the two axes and for movement in all directions given any "efficient" starting point.

The decision making process of local government is even more complex. Not only is the choice of level and mix of services subject to public debate but both the measures of output and the specific inputs employed are also subject to that same debate. That is, both the units of measurement and the character of the technical production function are products of the political process. For example, some communities debate and limit the size of the police cars to be used, the qualifications of the officers, and the use of hollow nosed bullets or "hot pursuit" in the apprehension of suspected or known criminals. Some communities employ production approaches which include delinquency deterrenry inputs and other communities collectively place little credence on those approaches. Some community interest groups contribute inputs directly to accomplish the fulfillment of their tastes for services both in level and quality. Examples of these are residential inspection patrols by volunteer senior citizens, and citizen band (CB) police watch networks among CB hobbyists. (In Massachusetts in 1977 CB watches constituted one of the most common community service projects of the women's groups affiliated with the National Association of Women's Clubs.)

To fit these dimensions of community into our conventional analysis the representation would perhaps look like that of Figure 3. This figure illustrates two additional production possibilities curves when police inputs are specified by public debate. The innermost curve illustrates the production possibility when the use of police officers with MSc degree training is specified. Similarly, the outmost curve illustrates the production possibilities when
small cars are specified by the political process. Figure 3 also illustrates that there would be different community welfare functions and thus different mixes and levels of services depending on which coalition or group is able to have their preferences prevail.

A realistic characterization of community decision making using these service examples requires that several other observations be made. Although most communities probably provide some form of police services, many will not provide leaf pickup. That is, not only are the production technology, the inputs, and the units of output measure subject to public debate, but whether to have leaf pickup at all is also a public choice.

The analysis and decision making with respect to some public services is further complicated because, like leaf pickup in my town, they are both an output and an input. Leaf pickup is valued by citizens in and of itself and is, thus, an output and it is valued by town management as an input in the production process involved in the maintenance of the sewer system.

There is one last point to be made in characterizing community decision-making. All of the discussion thus far has been in terms of levels, mix and costs of services. There is yet another array of decisions which communities make which should be acknowledged and which have substantial economic consequences. Included are all manner of rule making or regulatory activity such as zoning, liquor licensing, leash laws for dogs, and parking regulations. In some cases the establishment of regulations are intended to modify the output of a production process or the access to resources. Sometimes they serve primarily to amend the avenues of redress available to certain citizens. For example, leash laws may not be enforced but be intended only to give clarity to the legal redress available to the victim of a dog bite or other dog-related nuisances. Finally, all of these decisions, both the regulatory decisions and the service mode, level, mix, and distribution decisions, are made within the context of a set of state and federal institutions—a set of enablements and restrictions.

To summarize, public local government decision-making is characterized by conflict, interdependency, winners and losers. It is all played out within a set of rules and regulations some of which are locally chosen and some of which are the results of public choices at other levels of government. While some of the restrictions or enablements under which local governments operate are not subject to local options, they may be subject to local influence. For the most part the conflicts involve many different groupings or interdependencies with the same person being a winner on one issue, a loser on another, and minimally or not affected on yet another decision.

What is clear about local decision-making is that the conflicts which economists wish to avoid by always having "somebody being better off and no one worse off" are inevitable and unavoidable. Such conflicts are in fact the very essence of public choice and decision-making in a democratic society. As pointed out earlier it is curious that many economists and public
administrators have generally taken the incredible view that public debate and the political process are at best unpredictable, and at worst, irrational. The logic of that view is that democratic political processes are dysfunctional when compared against the standards of administrative or economic science. Why the judgment has not been that those sciences as practiced are dysfunctional to elaborating, or serving that political process, is what makes the view so incredible.

**A PUBLIC CHOICE ECONOMICS PERSPECTIVE TO LOCAL GOVERNMENT**

Some perceptions out of the public choice perspective to local government, its organization and its functions will help to both evaluate the role for economic analysis in local government as conventionally understood and suggest additional contributions for economists and economic analysis. The public choice perspective of local government is a construct based on a model of individual behavior. However, it goes beyond the traditional theory of markets and argues that individuals participate in political-government interactions as well as in market interactions.

The public choice model is explicitly democratic. As with traditional economics applied to the behavior of individuals in markets, the individual operating as citizen is assumed to be motivated by the desire to maximize her or his own utility. The public choice view thus clearly recognizes that the consumers of government provided services are also the citizens who determine the quantity and quality of the services provided. The jurisdictional boundaries of local units of government are thus seen as a major dimension of the structure of the marketplace in which citizens act to articulate their preferences (Bish, Schmid).

Within the political marketplace the conduct of one individual has an impact on others. In the process of choosing, individuals do not choose from among all the possible alternatives, but rather from among only those realistic or available opportunities—the opportunity set (Samuels). Traditional economic and welfare theory sees the individuals as maximizing within the constraints of the opportunity set. In the process of collective choice much of the decision-making has to do with constructing the opportunity set. Thus, in the political marketplace if a particular person's or group's preferences count, they will affect the opportunity set from which others must choose and as a result the preferences of some of these
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others will not count. That is, you may not lose the vote on an issue, you may simply not get to vote on the issue.

Implicit in this market view of collective choice is the perception that the primary function of democratic government is to facilitate and effectuate that collective choice. That is, the role of local government is not to deliver services but to sort conflicting perceptions and preferences and, where that is with respect to services, to provide them in the mode, mix, level and distribution that has been collectively chosen. The major implications of this notion for me are the following:

1) The political process which has been discussed is a highly diffuse and decentralized activity. My own view is that voting models (Mueller, Deacon) do not capture it because they do not capture the conversations and discussions which influence the outcome of votes. Nor do they capture the political dimensions of such factors as the parent-teacher conferences through which parents seek a redistribution of resources to address the special problems of their child and where some parents are more successful than others. There are many resource reallocations which are not subject to voting.

2) Because the process of collective choice is dynamic and because there is always too little information there is seldom a clear and unambiguous “objective function” or policy statement under which an analyst or manager can minimize, maximize, optimize. It appears that in the context of local government, and in public policy generally, there is no such thing as an optimal or deterministic solution. However, there may be some alternatives which more people will support than others and which will resolve some of the conflicts within the community.

3) The effectiveness of local government performance and the analysis of the problems of local government cannot be accomplished by using any particular “objective” set of criteria but must be based in some degree on consumer-citizen satisfaction. Therefore, while conventional output-cost analysis and scale economies may be important new information for decision-making, that information does not constitute a sufficient basis for performance evaluation. In a democratic society, performance must also include measures of the degree to which citizens feel that they have been heard.

4) Collective choice is explicitly a system of power and mutual coercion where the personal attributes of individuals contribute considerably to their respective opportunity sets and hence to their individual power. Thus it is that in a cross section study of Michigan school districts, as the numbers of residents in professional-managerial occupations increased in the community, overall mean pupil achievement scores increased; but the scores of socio-economically advantaged pupils went up the most (McDowell, 1975). This situation is Pareto better but wrong, given national values regarding the distribution of schooling opportunities and outcomes.

This marketplace view of collective choice is essentially a view that argues that government is “of, for, and by the people.” That is, government is “of, for, and by the people” who can most effectively assert their preferences. Thus, government decision outcomes are based substantially on whose interests will be served. Because different forms of organization, different production approaches and technologies will affect groups and individuals differently, some public choice analysts give considerable attention to those issues that create, explain or predict interdependencies between people. It is the interdependencies between people which cause them to act with a shared interest in one setting or another, and a number of public choice scholars argue that there are a great number of systematic interdependencies which derive from the characteristics of goods and services which are provided in the public sector (Schmid). (The same notion applies to the private sector but that is not the purpose of this paper.) Building on these notions there has developed a public choice perspective to local government which has become a new paradigm for analysis of problems of local government and the basis of a critique of traditional public administration/political science views of the same issues.

Analysts in the local government reform tradition of political science and public administration view small units as unprofessional and inefficient. The commitment of small jurisdictions to the local interests is seen as parochial and standing the way of achieving the overall public interest of the larger community. Fragmented authority and multilayered overlapping jurisdictions among numerous units of local government are diagnosed as the fundamental sources of institutional failure in the governance of many areas. From this perspective, overlapping jurisdictions imply duplication of services produced. This duplication implies waste and inefficiency in government. According to these analysts, efficiency is enhanced by eliminating the many small jurisdictions and by consolidating all authority in one jurisdiction with general authority to govern each major region as a whole. Such consolidations vest ostensibly enlightened leaders and professional administrators with authority to coordinate all aspects of regional affairs through a single integrated structure of government (Bish, V. Ostrom).

It is clear that the major function of government from this perspective is the “efficient delivery of services” and it draws for its analysis primarily on the economic notion of economies of size. This view appears to share the black box perspective to the political process with our conventional economist and simply does not comment on the role of government in the articulation and effectuation of individual preferences.

On examining the arguments of the reform tradition on local government organization, the public choice view first argues that, since economies of size are commodity and technology specific, the simultaneous optimality in size of all services for any size local unit of government is difficult to imagine. Similarly, the public choice perspective acknowledges the possibility of diseconomies to size.

In arguing on behalf of reform through consolidation, the presumption is made that if consumption of the good is to occur, the consuming unit of government must itself produce the service. The rejection of this presumption in the public choice analysis permits consideration of a host of alternative arrangements between units of local government. Inter-governmental production arrangements such as contracting, mutual aid agreements, and joint ventures make it possible to capture production economies to size without necessarily increasing the size of the consuming decision-making unit.

This separation of consumption and production activities also suggest another error in the logic of the consolidation reform argument. Since, according to that argument, the objective of consolidation is greater efficiency in production, it assumes that the goals within which that efficiency is defined are known and constant. However, in the case of publicly provided services where the goals of production are defined by the preferences of consumer-citizens, a change in the consuming unit or group will likely change the production goals. The satisfaction of consumer-citizens would seem to be more readily achieved under multiple smaller consuming units, each with its own level and mix of services, than under a single large consuming unit with a single level and mix of services. The consolidation reform objective of reducing the bickering and haggling of transactions costs between units is based on the presumption that these costs will be lower when multiple jurisdictions are subsumed under a single authority. This
assumption also has supported the basic opposition to the growing numbers of special purpose districts with their overlapping boundaries. However, in the absence of total authority and power vested in a single individual, there still will be transactions costs within consolidated or regional governmental units. Anyone who has worked in a large organization knows that a great deal of bickering and squabbling takes place over decisions within such an organization. Whether such costs will be higher or lower under governmental consolidation is difficult to predict beforehand. It is likely that negotiations or transactions within a single large governmental unit will be less visible to public scrutiny than would be the case in transactions between several smaller units. In a democratic society, this may be considered a less desirable attribute.

CONCLUSIONS AND IMPLICATIONS

In the process of sorting the conflicting interests, the public debate which leads to the collective choice includes debate over values, cause/effect relationships, and empirical facts. It is here argued that the most productive public debate occurs when values get debated explicitly and when there is little debate or disagreement over known facts and relationships. However, when there is little or no empirical knowledge on a question, when theoretical-empirical knowledge is not understood, or where values are disguised as fact, there is considerable time spent in debate on the "facts" and the implicit values rather than on explicit values. Although by implication from this paper there is not much optimizing for an optimizing economist to do on behalf of local government, there is considerable economic analysis to be done in instructing the public debate at the local level. It is also imperative that analysts who supply information for public debate be clear about the fact-value distinction and about the degree of certainty of the validity of particular pieces of information.

The theoretical constructs and arguments of the economics of public choice applied to local government as elaborated above suggest several ways where economist analysis can make important contributions:

1) Measurement of public services

The conventional economic analysis and the state of our empirical art on the question places this as an item on the agenda for economists working in local government. The public choice perspective that has been set forth does not remove this item from the list of important tasks although it does perhaps modify the perception of the task. Since, as has been argued, decisions are based in substantial degree on the perceptions of whose ox gets gored and whose interests will be served, considerably more attention must be paid in the measurement of service outputs to measurements which indicate distributional dimensions of output.

For example, for many years the measurement of schooling performance was in terms of mean achievement levels. Based on some rather elaborate analysis of this performance measure of schools, economic and educational analysts came to the rather startling conclusion that educational inputs were of little consequence in incrementing the achievement of children (Coleman). In my own community this information was used to argue for cuts in the school district budget. However, when the total distribution of educational achievement in a school or district is examined, not only are the inputs seen as incrementing achievement (though not necessarily the mean) but whose achievement growth is being served and the community responsibility in that regard can also be seen. When analysts use a particular measure of output it seems important to make explicit what its limits are and also make explicit what is hidden.

The notion that consumer-citizens will likely make personal judgments and a collective choice about services based on their perceptions of the service in consumption seems to argue for analysts giving considerable attention to the measurement of attributes of publicly provided services which are directly or closely related to citizen satisfaction. Where quantification of outputs is difficult or perhaps where it is easy but unrelated to citizen perceptions of the service, then the direct measurement of citizen opinion of the service seems to me an important contribution (E. Ostrom).

2) Production Function Analysis

While analysis of production processes and the associated cost of production information is not sufficient information for a community decision it is useful, important, and likely necessary. Since for some community services, perhaps many, the choice of production inputs and technology will likely affect some community interests, it is incumbent on the analyst to reveal some of the variety of input combinations which will generate a particular output(s).

3) Economic Impact Analysis

Economic impacts of growth and change in a community are important information for community decision making. However, since use of the information will be in terms of whose interests will be served, it will likely elevate the public debate for the analyst to make as explicit as possible as much distributional impact information as is clear within the analysis. In the context of public policy analysis whether for local communities or other levels of government, the public choice perspective makes clear that is appropriate for economists to rethink their perceptions of distributional issues.

Distributional questions are frequently discussed in the context of national income distribution with Gini ratios and other such bloodless measures without attaching people to them. Particularly in the context of economic impact analysis, it seems appropriate to talk more clearly about identifiable groups of people. It is appropriate, to point out that a particular section of town will be affected in one way, that owners of undeveloped land within a particular radius will be affected in another way, and that the elderly and others on fixed incomes will be affected in yet another way, and that renters will be affected differently than owners.

Most economic models including impact models are constructed to estimate impacts since "truth" on the question is not known or knowable. Since the estimates are based on a perception of the way that economic processes operate in a community, it may be more important to local decision making and the public debate to use numerical estimates of impacts to teach about the economic processes of the communities than it is to generate "answers."

4) Specific Institutional Analysis and Description

There is an enormous need for economic analysis of the wide range of rules or institutions which are either employed by local government or used to constrain or enable local government. In substantial degree the institutional analysis that is needed is to test whether the presumed behavior under the change in the institution will indeed be forthcoming. Perhaps a couple of examples will help clarify the point.

There is a strong belief by public administrators in academia and in state government in Massachusetts that the major instrument for the improvement of small units of local government is the employment of professional managers either on a single community or multiple community circuit rider basis. However, there is no empirical data that supports the contention that amateur led communities are more poorly run than are the professionally led communities. At the moment nobody knows.
What are the mechanisms and the consequences of increasing the voluntary contributions of citizens in the provision of services? Are there ways of eliciting voluntary contributions through partial payments for particular periods? Some of the people in the land grant university network have already started some of that work though much more needs to be done on the economics of voluntarism.

There is an enormous amount to be done in every state in understanding the full effects, both intended and unintended, of the state aid distributions and even the mechanisms for making the actual payments. In Massachusetts communities, road repairs are substantial short-term borrowing by small towns in Massachusetts is in anticipation of state reimbursements for highway related expenses. It appears on preliminary examination that this method of making payment is regressive with respect to small communities.

5) The Development and Refinement of Institutional Theory
Both the conflicts and the decisions coming out of the political market place are the result of the interdependencies between people. Institutions order the ways in which people relate to each other (Schmid). As people in our society become increasingly interdependent we need to better understand the basis of our interdependency and thus the basis for designing more effective institutions. As was pointed out earlier, several public choice economists have argued that there are a great number of systematic interdependencies which derive from the characteristics of goods. If local government or government generally is to solve the problems of citizens, we must be better able to predict the effects of institutional changes than we are now. There is, therefore, the need to add work on the theory of institutions to the analytical agenda for economists working in local government.

Perhaps the most important implication of this public choice perspective to local government is that it makes clear that the neoclassical economists' abstractions of “freedom” and “efficiency” are substantially irrelevant to community decision making at least at the local level. It argues that if economists are to contribute to local public debate and thus to public decision making in the local units of government of the nation, they will have to get on with some hard, and possibly bloody, analysis of whose interest will be or is being served.