~~chaos. The several prisoners caught in a dilemma may all recognize their plight; but before escape is possible someone must take the step of changing his own behavior in an attempt to convince others that all can be made better off in the process.~~

~~In the final analysis, I refuse to think everything is hopeless, which strictly positive analysis without the accompanying Friedman faith might lead us to believe.~~

Buchanan, James M., What Should Economists Do?
Indianapolis: Liberty Press, 1979

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Public Choice and Public Finance

In an earlier survey paper, "Public Finance and Public Choice,"[1] I traced the developments in American public finance in the years after World War II, and I demonstrated how the emergence of public-choice theory has been influential in affecting these developments. To an extent, my discussion in this paper must parallel that of my earlier effort. I shall, however, emphasize somewhat different points here. I shall first briefly discuss the public-finance origins of public-choice theory. I shall argue that public finance is, indeed, the parent discipline out of which the more generally applicable public-choice theory, now sometimes called the "economic theory of politics," emerged. Following this introductory look at the origins, my two main sections concentrate on the effects of public-choice theory on positive and normative public finance. I shall show how the introduction of public choice dramatically expands the scope for positive analysis and how it shifts the focus for

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[1] *National Tax Journal* 28 (December 1975): 383–94.

normative understanding and evaluation of fiscal institutions. In the discussion of these two main sections, several public-finance applications of public-choice theory will be mentioned, along with what seem to me to be promising directions for research.

The Public-Finance Origins of Public-Choice Theory

"Public finance" is about taxing and spending. Both of these are activities rather of governments or collectivities than of individuals as private persons. This feature alone distinguishes public finance from the other traditional subdisciplines in economics, those which concentrate largely if not entirely on the activities of nongovernmental decision-makers, on the behavior of consumers, producers, entrepreneurs, workers, etc. Viewed in this basic perspective, it would seem neither surprising nor inappropriate that, in the European tradition, public finance should have occupied a position related more closely to law than to economic theory. There is no cause for wonderment, therefore, in the fact that the important precursors of modern public-choice theory are to be found among the works of those economists who were trained within the European public-finance tradition. In a summary definition, public choice is the analysis of political decision-making with the tools and methods of economics. For specific precursors, we look to the works of Continental scholars like Sax, Mazzola, Pantaleoni, De Viti, De Marco, and, most important, Knut Wicksell, all of whom wrote before the end of the nineteenth century. The works of these scholars differed substantially one from another, but all shared a common objective, which was to bring the

public economy within the analytical framework that had seemed so successful in explaining the working of the private economy. To do this, these scholars almost necessarily were forced to pay some attention to the political decision structure within which taxing and spending choices were made.

It is interesting to speculate on why these seminal works were so much neglected for half a century, especially in Britain and America, but also to an extent on the Continent itself, only to be "rediscovered" and extended in the decades since World War II, not only in public-choice theory strictly defined but also in the theory of public goods. The unproductive state of classical political economy, Benthamite utilitarianism, and idealist political philosophy—these may be introduced as partial causes for the British neglect of the Continental literature. But the mystery remains: Why were economists generally so slow in extending their basic tools of analysis to the behavior of persons who act in public-choice rather than in private-choice capacities?

It is not surprising that several scholars who made early contributions in public-choice theory came to the subdiscipline by way of public-finance theory, and, for the most part, reflected some influence of the Continental writings mentioned. Duncan Black and I both provide good examples. Black's first book was on the incidence of income taxes, strictly within the subject matter of traditional public finance. But Black read the Italian writers in public finance, and he also read Wicksell. From this background emerged his now classic work on the theory of committees, which, of course, has general applicability extending much beyond public-finance problems. In my own case, I was trained initially as a standard public-finance economist, but a chance reading of Wicksell, followed by an examination of the Italian works, turned my attention increasingly to analysis of political decision structures, to constitutional rules, and away from the set of problems in public-finance orthodoxy. I found myself less interested in the old question, How should tax shares be allocated? and at the same time more interested in the new question, How are tax shares allocated in a democracy? There seemed to me to be little value or purpose in normative discourse about optimal or efficient taxation until we achieved a better understanding of how political structures produce fiscal outcomes. In my case, I was not specifically motivated by the scientific superiority of this sort of positive analysis over the normative discussion of the traditional question.

The Expanded Domain for Positive Analysis in Public Finance

The positive-normative dichotomy does, however, provide a useful way of classifying the impact of public choice on public finance. One of the most important effects has been that of expanding the domain for positive analysis in public finance. Public choice opens up new sets of questions to be asked; the subject matter of the discipline has been dramatically increased. It will be useful to be quite specific on this point. Several categories of positive analysis may be distinguished.

1. The Effects of Alternative Fiscal Institutions, Existing and Potential, on the Behavior of Persons and Groups in the Private Economy, in *Private Choice*.

This category offered the *only* domain for positive economic analysis in post-Marshallian public finance in the English-language tradition. Even when broadly defined, this category includes essentially the theory of shifting and incidence, applied to taxes and to public outlays. As such, and as Marshall himself recognized and noted, the subject matter is applied price theory, which is precisely where it was located in American doctoral curricula before World War II. Comparative statistics offered a plausible predictive framework for analyzing the effects of alternative tax arrangements. Within limits, the economist could predict how particular taxes would affect the behavior of persons in the market economy, and through this could predict aggregate effects on such variables as relative prices, outputs, profits, and industry structures. This positive analysis also enabled the economist to derive empirically refutable propositions. Restricted to these questions, the public-finance economist had little reason to extend his inquiry to the purposes of taxation and public outlay.

Research in this traditional area of positive public finance has continued to be developed through more sophisticated analytical techniques in the decades since World War II. Work has moved beyond the Marshallian partial equilibrium framework into general equilibrium settings, including the extension of analysis from a closed to an open economy. The area of inquiry remains important; the hard questions in incidence theory have not all been resolved, and these will continue to command the attention of economists. What public choice has done is to remove this area of analysis from its position of exclusive dominance in positive public finance. Other significant and equally legitimate applications of positive economic analysis have been opened up, areas of inquiry that were foreclosed in the Marshallian regime.

2. The Effects of Alternative Fiscal Institutions, Existing and Potential, on the Behavior of Persons and Groups in the Public Economy, *in Public Choice*.

If the effects of a designated fiscal institution—say, a specific excise tax—on the behavior of persons in private markets may be analyzed, what is to deter the intellectually curious economist from examining the effects of this tax on the behavior of persons in "public markets"? If persons pay for public goods through such a tax, might they not be predicted to "purchase" or to "demand" differing quantities from those that they would demand under alternative financing schemes? Once such questions are raised, the need for answers, along with the opportunities for productive analytical and empirical research, seems self-evident. An implicit and unquestioned assumption to the effect that the level and the composition of budgetary outlays must remain invariant under widely differing tax arrangements surely cannot be either analytically or empirically legitimate.

The whole set of questions here stems from the "publicness" of the goods and services as these are demanded and consumed and as these are supplied through political or governmental institutions. Individuals do not pay "prices" for partitionable units of these goods. They pay "taxes," which are coercively imposed through a political process, and this coercion is, in turn, made necessary by the free-rider motivation inherent in general collective action. Few persons will voluntarily pay taxes if they expect to receive the benefits from generally available public goods. But what quantity will persons, when they act collectively in public-choice capacities—as voters, actual or potential, as government employees—choose to provide and to finance? This choice depends on the bridge that is constructed between

the benefits or spending side of the fiscal account and the costs or taxing side. Differing fiscal arrangements, different tax rules, will influence the weighing of these accounts. What are the implications for budgetary levels if taxes are spread more generally than benefits? And vice versa? Will more or fewer public goods be generated under a regime of indirect taxation or under one of direct taxation? Will the number of tax sources influence the size of the budget? Fiscal perception becomes an important and relevant part of positive analysis in public finance. By necessity what has sometimes been called "fiscal psychology" merges with fiscal economics.

This area of inquiry remains perhaps less well developed than any other in positive public finance, and the potential for productive research seems almost unlimited.[2] But there is a significant methodological block to be surmounted here, one that warrants brief discussion. Tradition-bound economists react negatively to the notion that individuals may be influenced in their choice behavior by institutional structure. Economists are prone to extend their postulate of individual rationality to include the ability of persons to "see through" the institutional maze and to reject attempts to explain patterns of outcomes by resort to such things as "fiscal illusion," that institutions may be alleged to create. In my view, this attitude is based on a failure to appreciate the differing analytical settings for market and for public choice. In ordinary markets, the presumption that all persons choose rationally does little to distort empirical reality because the rationality of only a few participants who can

[2] My own book, *Public Finance in Democratic Process* (Chapel Hill: University of North Carolina Press, 1967), is largely a call for such research, along with a summary of some initial efforts.

affect results at the appropriate margins of adjustment guarantees the equivalence of outcomes as between what we might call the full rationality and the partial rationality models. The situation in "public markets" is not at all analogous. Solutions do not emerge as the outcome of the mutual interactions of many participants who make private and independent decisions. Instead, public-market solutions are the result of the interactions of many persons who are necessarily involved in the unique public or collective decision. The result reflects the choice of the median voter, or his representative, who may or may not be fully rational in the sense that informs traditional price theory. The presumption of fully informed rationality here is much more severely restrictive than in any other market setting. Fiscal economists should not be deterred by methodological criticism that is essentially without foundation from going ahead in research efforts to find out just how differing fiscal structures might indeed affect the information and perceptions of the relevant public choosers.

3. The Effects of Alternative Political or Collective-Choice Institutions, Existing or Potential, on the Behavior of Persons and Groups in the Public Economy, *in Public Choice.*

This area of positive inquiry is related to, but quite different from, that discussed above, and this area is more central to what might be termed "public-choice theory" in the narrow sense. Analysis here involves the working properties of the choice-making institutions themselves, as these might be predicted to generate taxing and spending results. Research here involves the public-finance applications of the theory of voting.

What budget characteristics can be predicted to emerge under the operation of simple majority voting rules? What

difference in the size and composition of outlays might emerge when general-fund budgeting is compared with separate-purpose budgeting, with earmarked tax sources? What differences in the willingness to issue public debt can be predicted when the effective voting franchise is expanded from local property owners to all members of the electorate? What will be the comparative levels of public spending on, say, education, when these services are provided through a set of monopoly school districts and through the market response to educational vouchers supplied directly to families? What are the effects of school-district consolidation on budget size and quality of service? What are the effects of franchising bureaucrats on the level and the growth of public spending?

These are only a few of the questions that have been, and might be, asked by those who approach public finance from the generalized public-choice paradigm. As these sample questions suggest, the domain for positive analysis here includes institutional analysis at a level where explanatory hypotheses are derived deductively from abstract models, and also at a level where the implications of these hypotheses may be tested empirically.[3]

The Modified Domain for Normative Public Finance

As the above discussion suggests, public choice has expanded the domain for positive analysis in public finance. But what about the domain for normative discourse? Here,

[3] Some of the early applications are contained in the separate papers included in the volume *Theory of Public Choice*, ed. James M. Buchanan and Robert Tollison (Ann Arbor: University of Michigan Press, 1972). For a textbook that employs a fiscal-choice paradigm, see Richard E. Wagner, *The Public Economy* (Chicago: Markham, 1973).

too, the effects of public choice are both interesting and important. As I shall demonstrate, these effects serve, in one sense, to restore legitimacy to much of the age-old discussions in normative tax theory, a legitimacy that seems absent in the public-finance extension of the norms from theoretical welfare economics.

It will be useful to commence with the latter, which may be summarized under the rubric "theory of public goods." This development, like public-choice theory, has roots in the Continental tradition, but for my narrative summary it will be useful to start with Samuelson's seminal formulation in 1954.[4] He posed the normative question: What are the necessary conditions for efficiency that must be satisfied in the public economy? Having defined these conditions in aggregative terms, Samuelson turned to a "social welfare function" to determine the final distribution of welfare among persons net of the public-goods production and subsequent benefits. There is no scope for normative tax theory, as such, in this basic Samuelson model.

Less general norms for the marginal imputation of tax shares are found in the earlier model developed by Erik Lindahl, norms which also meet the Samuelson allocative requirements. The concept of Lindahl equilibrium in the public economy has emerged to command the attention of general equilibrium theorists in the last decade, and notably those theorists who are primarily interested in establishing existence proofs and in assessing stability properties of solutions. Given an initial set of endowments, and extending the Lindahl imputation of marginal tax shares over inframarginal ranges for individual quantity evaluation, the allocation of tax payments among persons becomes unique in the Lindahl solution. Once this allocation is formally defined, there is once again no scope for normative tax theory in terms of relative evaluations of traditional tax instruments.

[4] Paul A. Samuelson, "The Pure Theory of Public Expenditure," *Review of Economics and Statistics* 36 (November 1954): 387–89.

The traditional questions in normative tax theory have, however, witnessed something of a modern revival, beyond the limits of either general equilibrium welfare theory or public-choice theory. I refer here to the work in "optimal taxation," which has come to occupy the attention of several competent young practitioners in public finance during the 1970s. In a very general sense, this work examines the old questions of normative public finance with the sophisticated tools of modern mathematical economics. Those who have worked in this area have been willing to look at the allocation of tax shares independently of globally efficient solutions to the fiscal process; they have been ready to ignore the efficiency norms derivative from the theory of public goods. Hence, despite its sophistication in technique, "optimal tax theory" is something of a methodological throwback to the pre-Wicksellian framework of Anglo-American public finance.

So much for a hurried, and necessarily incomplete, discussion of normative public finance as it stands today, independent from and outside the normative domain that is offered in the context of the public-choice paradigm. Let me now turn to the question as to how public-choice theory has changed and can change the whole setting for normative analysis in public finance.

My answer claims a great deal for public choice, but I think that its potential for productive normative work can scarcely be overly estimated. Properly introduced and interpreted, the public-choice paradigm enables us to combine the logical realism of Wicksell with the obvious political relevance of some of the traditional questions that normative tax theory has addressed.

In any community in which the government is not wholly divorced from the citizenry, the fiscal process must logically be modeled as a two-sided exchange. Taxes are payments made for benefits received. But how is it possible to envisage the collective-choice process, in the context of observed political structures, as a positive-sum game? How can we model the participation by individuals in the complex network out of which taxing and spending results finally emerge?

Here we must return directly to Wicksell, to look at his basic insights along with his normative arguments. Wicksell was interested in reform, and he recognized the essential absurdity of proffering normative advice on the assumption that some benevolent despot would listen. Wicksell stressed that fiscal results emerge from political institutions, and that if reform was to be introduced, the institutional structure must be modified. He recognized, further, that there was some substitutability between the institutions for making political choices and those for taxing and spending. As we know, he aimed most of his normative argument at political structure. He was quite willing to relax many of the rigidities of tax rules in exchange for efficiency-increasing changes in political decision rules.

In one sense, we may say that the normative public-finance implications of public-choice theory involve the other half of this Wicksellian duality. In the context of established political institutions, how can fiscal institutions

be modified so as to produce more acceptable results? How can the taxing and spending *process* be improved? This is the normative issue to be addressed, as opposed to the more direct, but also empty, issue concerning specific allocations of outlays and of tax shares.

Empirically, we observe individuals, in their public-choice capacities as voters, politicians, bureaucrats, choosing, not among tax-share allocations in each period, but among alternative tax institutions that, as they operate, will produce tax-share distributions as a result. Legislatures choose among alternative financing instruments—among such instruments as personal income taxation, progressive or proportional in rates, corporate or company taxation, turnover taxation, commodity taxation, wealth taxation, etc. In real-world settings, tax arrangements or rules, once these are settled, are expected to remain in place for a long succession of budgetary periods, in each one of which outlay allocations are made. The choice among tax institutions is, properly considered, analogous to the choice among rules, or to *constitutional* choice.

Once we begin to think of the choice among tax arrangements in constitutional terms, however, we escape the zero-sum implications that tax-share imputation in any single budgetary period necessarily invokes. It becomes conceptually possible to think about tax-sharing arrangements, which could never be accepted by all persons in the community in a single-period context, as commanding consensus at some prior constitutional stage of deliberation and argument. It becomes possible to establish criteria for potential agreement on tax institutions, including some of those that we have historically observed, in a constitutional or contractual setting. At least ideally, it is now possible to derive norms for the fiscal structure that are internal to the utility functions of the members of the community and not externally drawn from ethical principles.

I am not suggesting that the constitutional approach which the public-choice paradigm implies necessarily removes all elements of interpersonal or intergroup conflict from tax-share allocation. But the analysis does allow departure from the pure conflict model that orthodox normative theory must introduce. The question becomes: What is the structure of taxation upon which individuals might agree at some constitutional stage, in the knowledge that, once implemented, this structure is to remain in force over a succession of periods? To establish some sort of contractual agreement here, the quasi-permanency of the institutions is necessary, since only in this way can the necessary uncertainty be introduced regarding the identity of individual economic status. In the limit, the potential taxpayer-beneficiary, asked to participate in the constitutional selection process, is behind a complete veil of ignorance as regards his own future position.[5]

I shall not try here to elaborate on this constitutional approach to normative public-finance theory. I hope that my cursory comments have been able to suggest that exciting work remains to be done. I am currently working on what we call the "tax constitution," or, more broadly, the "fiscal

constitution" for a community under specific assumptions about the workings of the political process. This research has already yielded results that turn much of the traditional normative theory on its head. I shall not summarize this research here. But I should note only that it is necessary to call on the positive analysis from each of the three separate areas of inquiry listed above before any attempt is made to derive plausibly acceptable norms for fiscal reform. We must know or at least make some predictions about who bears the burden of taxes. We must know or at least make some predictions about how various taxes affect public as well as private choices. We must know or at least make some predictions about how political processes work. Only then can we even begin to ask questions about justice in taxation, the ultimate normative issue. Wicksell called his treatise a new principle for justice in taxation. Public-choice theory can, following his lead, help in the elaboration of the Wicksellian precepts.

[5] In our book *The Calculus of Consent* (Ann Arbor: University of Michigan Press, 1962), Gordon Tullock and I used the quasi-permanency of constitutional rules as a means of introducing the uncertainty necessary to produce agreement on rules. In his more general, and more explicitly normative, discussion of principles of justice, John Rawls invokes the veil of ignorance which all persons face in the original position, before basic social institutions are settled (Rawls, *A Theory of Justice* [Cambridge, Mass.: Harvard University Press, 1971]).