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BUDGET REFORM AND THE THEORY OF FISCAL FEDERALISM

BY

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AND

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GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

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The federal budget reforms currently debated will substantially alter the structure of U.S. fiscal federalism. This paper analyzes the stroking differences between the analytical arguments made to evaluate these current proposals and those made to evaluate the fiscal reforms of the 1960's and 1970's. The paper identifies three strands of recent theoretical analysis which put current proposals in a favorable light -- the general equilibrium theory of tax incidence, the Tiebout models of public goods allocation, and the Leviathan models of government bureaucracy.

The analysis also points out the inconsistencies among these theories and suggests that they have very different implications.

BUDGET REFORM AND THE THEORY OF FISCAL FEDERALISM

John M. Quigley and Daniel L. Rubinfeld*

No matter how they are ultimately enacted, the federal budget reforms debated for the past two years will substantially alter the structure of fiscal federalism in the United States. Among the serious proposals are: (1) the consolidation and reduction of categorical and matching grant programs; (2) the elimination of the provision which allows state and local taxes to be deducted as personal expenses under the federal internal revenue code; and (3) the demise of general revenue sharing. To a large extent, of course, these specific proposals are motivated by the desire to reduce federal deficits or to reduce the size of the public sector of the economy. Not incidentally, however, the proposals are endorsed by a "revisionist" theory of fiscal federalism, the topic of this paper.

Much of the debate about tax and budget reform has been partisan, political and ideological in nature. The professional discussion of these components of the "New Federalism" among economists has been more muted, but not without contention. Of course, it is hardly surprising that professional economists disagree about the individual merits of proposed policy reforms, yet it is striking to note how the nature of the analytical arguments made and the rationales used to evaluate such reforms have changed over the past two decades. The state-local public finance of the 60's was marked generally by an emphasis on the advantages of the federal government as a raiser of revenue and as a corrective mechanism for market failures at the state and local levels. The state-local public finance of the 80's is marked, in contrast by a skepticism about the ability of the federal government to perform these functions, and also

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by a renewed emphasis on the presumed allocative efficiency arising from a system of multiple governments in which voting with one's feet is a serious option.

The current budget reform policy debate serves as a useful focal point for a selective review of analytical developments in local public economics. Recent developments do represent a shifting emphasis, but in our view, do not discredit the earlier consensus. A taxonomy of recent developments includes: (1) Tiebout models, which view the state-local public sector in the context of a static long-run equilibrium model devoid of politics, but in which individuals are mobile among numerous jurisdictions; (2) Leviathan public choice models, in which those making tax and budgetary choices (or setting agendas for voters) have substantial economic and political power over inputs, outputs, or agendas; (3) general equilibrium models of taxation applied to local government, especially the application of the Harberger model to study the incidence of property taxes. A final development, which represents an embryonic framework for study, is based on dynamic game-theoretic models in which state and local governments compete, but in which limited information and the presence of externalities make the existence of equilibrium problematic, and its efficiency questionable.

I. CATEGORICAL AND MATCHING GRANTS

Historically, a substantial proportion of all federal grants-in-aid to state and local governments has consisted of categorical or matching grants, rather than general purpose or block grants. However, since 1980 there has been a concerted effort both to consolidate matching programs into block grants, and to reduce the magnitude of federal grants programs (Inman, 1985). For example, categorical aid in 1983 was $28.8 billion dollars, a marked decrease from its

1972 level (in 1983 dollars) of $44.2 billion. Block grants had increased, however, from $6.7 billion to $12.9 billion.

Prior to the 1960's, the public finance equivalent to the Coase Theorem was dominant. According to that view, most externalities involved interactions between neighboring jurisdictions and were well understood by those involved. Under such circumstances, it was plausible to conclude that any gains from trade due to externalities could be realized directly by negotiation. Direct federal intervention was unnecessary, since a process of bargaining under conditions of full information generates efficient outcomes.

The Coasian view gave way to an interventionist prescription when the externalities involved were perceived to be operating on a larger scale across many jurisdictions, generating externalities that were not bilateral in nature. As a result, the strong federal budgetary reliance on categorical and matching grants during the 1960's and 1970's was supported strongly by the economics literature at the time. Models of federalism tended to view the economic choices of jurisdictions as if made by a single individual, in which the behavior of the mayor or the median voter is modelled analogously to the behavior of a consumer in the private economy (Oates, 1972). According to this model, the median voter responds to the price reductions of matching grants according to the standard analysis of income and substitution effects. Because there are spillovers among jurisdictions, however, this system of matching grants is capable of improving social welfare by removing the distortions due to externalities. Matching rates for local spending are chosen to equal the fraction of local output which spills out to other localities. Underlying this strong interventionist view are two assumptions: i) there is full information about the level of the externalities as well as production and consumption op-

portunities; and ii) local government choice is governed by the price and income elasticities of citizen demand for public output.

By the 1980's the decentralized solution to the problem of interjurisdictional externalities had been brought under direct attack. In part this attack arose from the recognition that levels of externalities are difficult to measure, and that it is even more difficult to legislate matching rates that resemble the rate of spillout. More generally, however, the model of a passive, optimizing local decision-making had become suspect. The broad set of matching grant programs had generated a new industry -- grantsmanship -- in which local bureaucracies expend substantial resources and negotiating effort to obtain categorical funds or favorable matching rates.

Of more theoretical importance, however, by the 1980's much of the public choice literature attacked the median voter or decisive decision-maker model on a broad scale. Leviathan -- the self-aggrandizing politician or decision-maker whose objective is to maximize budget size rather than citizen-utility -- was growing. At the local level, Leviathan's power is exerted in a number of different forms, from control over entry (Buchanan, 1965), to direct control over budgets and the information presented to citizens , (Niskanen, 1971), to referenda agenda-setting (Romer and Rosenthal, 1980), and through the exertion of public employee market power over wage rates (Courant, Gramlich, and Rubinfeld, 1979a). Initial attempts to model Leviathan suffered from a failure to take into account the possible responses of citizens who might be inappropriately treated. However, more recent modelling of the monopoly models of government has shown that neither the possibility of repeated referenda, nor the prospect of citizen migration to other jurisdictions can fully eliminate

Leviathan's disproportionate power (Courant and Rubinfeld, 1981; Epple and Zelenitz, 1981).

The theoretical evaluation of matching grant programs to local government under the "old" and the "new" public choice models of government behavior could not be more apposite. Under the former view, the central question is to determine the appropriate matching rates to increase allocative efficiency, while conceding that lack of information puts us in a second-best world. According to the latter view, attempts at such "fine tuning" (to use an ancient metaphor) are difficult at best, and more likely to be counterproductive, given the Leviathan behavior of recipient governments.

II. GENERAL REVENUE SHARING

Notwithstanding, the macroeconomic arguments for revenue sharing, "fiscal drag", the microeconomic case was grounded in the traditional public finance-taxation literature which favored federal, as opposed to local, tax instruments on grounds of vertical equity, allocative efficiency, and even x efficiency. According to the prevailing view of the 1960's the federal income tax is mildly progressive, while the local property tax is a regressive excise on housing (Netzer, 1966). Moreover, heavy reliance on revenues from a single excise tax instead of a broadly based income tax generates larger deadweight losses. Finally, federal taxation was argued to be desirable on administrative grounds. In contrast to the relative efficiency of the Internal Revenue Service in collecting revenues, local property tax administration was argued to be costly, and to involve assessment practices which generated substantial horizontal inequities. (Heller, *et al*, 1968).

Finally, general revenue sharing to localities was viewed as an instrument to promote horizontal equity, since its allocation could be determined on a formula basis to reduce disparities in tax-price levels or to reward tax effort (Musgrave, 1961). The most visible horizontal inequity occurred in the financing of local schools, it was argued. Under a local property tax base, identical households in different jurisdictions may pay substantially different unit prices for local schooling, due to the variation in average house values and non-residential property across school districts. The same argument could be applied among states to reduce differentials in the cost of government or in wealth-determined spending levels.

The federalism literature of the past decade, in contrast, has provided an alternative set of economic models and arguments which support the elimination of the revenue sharing program altogether. One important development adds a note of discord to the horizontal equity arguments for revenue sharing. The use of grants to equalize tax-prices among jurisdictions only makes sense as a policy if there is something to be equalized. The recent literature on tax-capitalization suggests that there may not. According to the capitalization view, jurisdictions with substantial non-residential property are more desirable as residences, other things equal, than jurisdictions with low levels of non-residential property. Mobility and the ensuing capitalization cause property values to rise in high-tax-base jurisdictions and to fall in those with low tax bases. As a result, tax-prices differ among jurisdictions, but so do the "entry-fees", the premiums paid for residence in different jurisdictions. In equilibrium, the entry fees plus the capitalized value of the tax-price differentials will equalize among jurisdictions, so that the equity imperative for tax equalizing revenue-sharing is gone (Hamilton, 1976).

More striking is the alternative view of vertical equity. According to the general equilibrium analysis of the property tax, the local property tax is best seen as a national levy on real capital (Mieszkowski, 1972). Like any broad-based tax, on elastically supplied capital, a real property tax will be progressive in its incidence. According to this view, the system of local property taxation may be quite desirable on equity grounds.

Alternatively, the modern "Tiebout view" of the property tax is as a local benefits tax. This benefits taxation view of the local public sector grew out of the Tiebout's suggestive analogy (1956), but was really not articulated until much later. According to Tiebout's long-run equilibrium model, mobility can under certain conditions generate an efficient outcome in the market for publicly provided goods, produced at minimum average cost. This, of course, vitiates general revenue sharing -- if the property tax is a benefits tax, then its progressivity is irrelevant. To the extent that one cares about incidence and vertical equity, the pattern of consumption of local public goods and not the national distribution of the ownership of capital, is relevant under the Tiebout view.

A third argument against revenue sharing again relies on Leviathan, but in a somewhat different form. According to the "flypaper" theory, as coined by Arthur Okun, money (from the federal government) sticks where it hits, e.g., local bureaucrats are likely to control and to spend more revenue sharing funds than they would spend out of an equivalent increase in local resources. Empirical evidence supporting the flypaper argument (Gramlich, 1972), and theoretical papers showing how "flypaper" might be consistent with a limited information equilibrium (Courant, Gramlich, and Rubinfeld, 1979b, Oates, 1979), all suggest that revenue sharing could contribute to budget maximization rather

than utility maximization. Once again, the public finance literature of the most recent decade appears to provide support for the proposed restructuring of our federal system.

III. DEDUCTIBILITY

State and local taxes have always been deductible from personal income for purposes of federal income taxation as have most excise taxes. The economic justification for deductibility arises directly from the role of federalism in treating ability-to-pay taxation. As long as state and local taxes are seen primarily as ability-to-pay taxes, then according to the classical Haig-Simons view of taxation, the appropriate federal tax base is individual income less the ability-to-pay taxes imposed by other governments (Break, 1980). The reasoning is clear. Only discretionary income should be taxed, if state and local taxes are raised in a non-discretionary manner, these taxes should not be included in the base available to the federal government. The absence of discretion arises in part because, according to the traditional view, individuals do not have the option to avoid taxes, and in part because the benefits obtained from public services bear little if any relationship to taxes paid.

Implicit in this argument for deductibility is the view that local publicly provided goods and services are largely public, in the sense that they are non-rivalrous, not congested, and to a substantial extent, not excludable. In contrast, a substantial body of empirical public finance literature concludes that an alternative perspective is more appropriate. According to this newer view, most locally provided goods are available at constant costs. Roughly speaking, public goods are private goods which are provided collectively because exclusion is difficult, and because it is cheaper administratively to manage

the provision publicly rather than privately (Borcherding and Deacon, 1972, Bergstrom and Goodman, 1973). The ease of administration arises in substantial part when the primary source of taxation is the local property tax, and the benefits of local public services are roughly proportional to house values.

To the extent that one is willing to view the local property tax as a benefits tax, the traditional argument for deductibility makes no sense. If state and local taxes are benefits taxes, and individuals are mobile among jurisdictions, then choices of public goods are just like choices among private goods. Therefore, state and local taxes are discretionary payments and should be subject to taxation at the federal level. If they are deductible, the tax system generates substantial inequity; the federal subsidy increases with income, and richer jurisdictions are likely to make larger tax efforts. Federal taxation is, in fact, necessary for an efficient, non-distorting set of local taxes to be levied -- deductibility would generate inefficiencies by lowering the effective tax-price of local public goods, thereby leading to overspending at the local level. Efficiency requires "many" communities and benefit taxation, which can be achieved if entry is restricted to require tax payments to equal the average cost of publicly provided goods (Hamilton, 1975).

As a number of authors have suggested, however, the efficient Tiebout equilibrium exists only under circumstances in which the publicly provided good is essentially a private good. The Tiebout model does not specify the source of taxation to finance the public good, but it might as well be a system of private user charges, which make the link between payment and benefits generated explicit. Therefore, the Tiebout model supports the argument for the elimination of deductibility, because its removal will encourage local jurisdictions to

switch to user charges or to the direct private provision of many services now provided collectively.

IV. CONCLUDING COMMENTS

We have suggested strongly that the widely discussed proposals for restructuring our federal system are supported by several strands of recent academic research. It seems clear to us that this intellectual support could not have been given two decades ago. The current deductibility of non federal taxes is challenged by models, in which local taxes are benefit taxes for publicly provided private goods, and by general equilibrium models of local taxes, in which property taxes are more progressive than income taxes. Arguments for general revenue sharing based on tax price equity are similarly challenged by Tiebout models in which variations in tax rates are fully capitalized into property values.

Categorical and matching grant programs, as well as revenue sharing and deductibility, are challenged by Leviathan models in which budget maximizers use price reductions or income increases to increase the public sector by more than is consistent with the price and income elasticities of citizen demands.

All three of these strands of theoretical analysis argue strongly for the kinds of fiscal reforms currently proposed. It would be seriously misleading, however, to ascribe to these newer theories a coherent, or even a consistent, view of the state-local public economy. The conflicts and inconsistencies among these recent developments are striking. On tax incidence, for example, the "new view" of the property tax is inconsistent with the Tiebout view, despite the general equilibrium character of both theories.

The Tiebout and Leviathan models are thoroughly inconsistent with each other and have very different normative implications. Decentralization is desirable from the point of view of both models. In Tiebout models, decentralization allows government functions to be matched with the jurisdictions that are best able to perform those functions; in Leviathan models, decentralization provides an important constraint on the growth of government, Yet, the very mobility which leads to the Tiebout result that local taxes are benefit taxes and that tax variations are capitalized also implies that Leviathan bureaucrats will be unsuccessful. Conversely, the lack of ready alternatives which permits Leviathan government to extract resources from the citizenry means that tax prices will not, in general, be equalized by capitalization and that local taxes will not be benefit taxes. You can't have it both ways.

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