Thinking About The Deductibility of State and Local Taxes

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INTRODUCTION

Through most of its history, federal tax law has allowed itemizers to deduct state and local property, income, and general sales taxes. Data provided by the Executive Office of the President estimated that this provision decreased federal tax revenues by about $30.8 billion in 1985. Over the last several years, Congress, the President, and the people have debated the merits of partially or totally eliminating state and local tax deductibility. The U.S. Treasury recommended complete abolition of deductibility in 1984, as did President Reagan in 1985. However, those who favored deductibility argued that its elimination would have a disastrous impact on state and local public finance. In this view, if people could not deduct state and local taxes on their federal tax returns, then they would vote to reduce these taxes. State and local public officials appear to believe this scenario. When the United States Conference of Mayors convened in 1985, the *New York Times* reported that the meeting "... ended with an unusual display of bipartisan unanimity: only one 'no' vote was audible on a resolution urging Congress to amend the [President's] tax plan to keep

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deductibility of state and local taxes ...."[1]

The landmark Tax Reform Act of 1986 embodied a compromise on this issue. It disallowed deduction of state sales taxes, but continued those for income and property taxes. More changes in the tax code are likely in the next few years, and state and local tax deductibility will probably remain a controversial issue.[2] In analyzing this controversy, two main questions arise. First, is it sensible for the tax base of the federal income tax to exclude individuals' payments of state and local taxes? Second, what would happen to state and local revenues and expenditures if deductibility were eliminated? The correct answers to both questions are controversial for two reasons. First, economic theory does not provide firm guidelines as to how "income" should be defined for purposes of taxation. Second, certain data that are required to understand how state and local governments react to changes in the federal tax structure are not available.

DO STATE AND LOCAL TAXES BELONG IN THE TAX BASE?

Defining Income. In order to determine whether an individual's state and local tax payments should be *excluded* from his taxable income, we need some kind of criterion for deciding what ought to be *included*. That is, we require a careful definition of "income." Interestingly, the statutes provide no such definition. The constitutional amendment that introduced the tax merely says "The Congress shall have power to lay and collect taxes on incomes, from whatever source derived." While the tax law does provide examples of items that should be classified as income—wages and salaries, rents, dividends, and so forth—the words "from whatever source derived" do not really provide a standard that can be used to decide whether or not the exclusion of certain items from taxation is appropriate.

Public finance economists have traditionally used their own standard, the so-called *Haig-Simons (H-S) definition:* income is the money value of the net increase to an individual's power to consume during a period.[3] This is equal to the amount actually consumed during the period plus net additions to wealth. Net additions to wealth—saving—must be included in income because they represent an increase in potential consumption. The justification for the H-S definition is that an individual's potential consumption is a good measure of his ability to pay taxes, and tax liabilities should be based on ability to pay.

Using this criterion requires including all sources of potential increases in consumption, regardless of whether the actual consumption takes place, and regardless of the form in which the consumption occurs. At the same time, it requires that any decreases in an individual's potential to consume should be subtracted in determining income. For example, if certain expenses have to be incurred to earn income, these should be subtracted. If the gross revenues from an individual's business are $50,000 but business expenses were $40,000, then the individual's potential consumption has only increased by $10,000.

Another important implication of this criterion is that nondiscretionary expenses should be deductible from income. If you have no choice over some expense and it is not contributing to

[1] "What Happens if Washington Changes the Rules?" *New York Times* (June 23, 1985) p. E5.

[2] There are also claims that removing deductibility would lead to an unfair increase in the tax burden on middle-income taxpayers. The distributional implications of deductibility, both across states and across income classes, are discussed in Daniel R. Feenberg and Harvey S. Rosen, "The Deductibility of State and Local Taxes: Impact Effects by State and Income Class," *Growth and Change* (April 1986) pp. 11-31, and Daphne Kenyon, "Implicit Aid to State and Local Governments through Federal Tax Deductibility," mimeo, U.S. Department of the Treasury, Office of Tax Analysis (1986).

[3] Named after Robert M. Haig and Henry C. Simons, economists who wrote in the first half of the 20th century.

your ability to consume, then it should not be included as part of your income for tax purposes. A classic example is extraordinary uninsured medical expenses. Consider the case where two people earn $60,000 each, and one has had to pay $20,000 in hospital bills for treatment of a heart attack, while the other has not. Despite the fact that their earnings are equal, their abilities to pay are not. According to the H-S criterion, it would make sense to allow the heart attack victim to deduct his $20,000 in medical expenses, so that he is treated as if his ability to pay were $40,000. In fact, U.S. tax law does follow this model; it allows individuals to deduct unreimbursed medical expenses that exceed 7.5 percent of their total incomes.

What does the H-S criterion tell us about the deductibility of state and local taxes? The key question is whether payments of state and local taxes are "like" medical expenses. If they represent nondiscretionary decreases in people's ability to pay, then they should not be counted as part of income. If, on the other hand, state and local taxes are discretionary, then according to the H-S criterion, there is no reason to permit an individual to deduct them.

Are State and Local Taxes Discretionary? Suppose that people have no control over their state and local taxes, and they reap few benefits from these taxes. Then, according to the H-S definition, state and local taxes are nondiscretionary and ought to be deductible. This view is quite a popular one. For example, during the public debate over deductibility, people from high tax states like New York argued that it would be "unfair" to disallow deductibility, because they would be hurt compared to citizens of low tax states (like New Hampshire). Implicit in this view is that New Yorkers do not derive much benefit from their taxes. Otherwise, why should the taxes be regarded as a burden that reduces their ability to pay?

A very different view of state and local taxes was espoused by economist Charles Tiebout (rhymes with "me too") in an article published in 1956. To understand Tiebout's hypothesis, it helps to begin by thinking about the options available to people who disapprove of some action being taken by the U.S. federal government (like giving aid to the Contras or funding Planned Parenthood). Only in extreme cases do we expect people to leave the country because of federal government policy. Because of the large monetary and psychic costs of emigrating, a more realistic option is to stay home and try to change the policy. On the other hand, most citizens are not as strongly attached to their local communities. If you dislike the policies being followed in Ardmore, Pennsylvania, the easiest thing to do may be to move a few miles away to Haverford.

Tiebout argued that people take advantage of their mobility to "vote with their feet" and locate in the community that offers the bundle of public services and taxes they like best. Much as a person satisfies his desire for private goods by purchasing them on the market, he satisfies his desire for publicly provided goods like education by the appropriate selection of a community in which to live. The taxes he pays are simply fees for these goods. Ultimately, according to Tiebout, people distribute themselves across communities on the basis of their demands for publicly provided goods. Each individual receives his or her desired level of these goods and cannot be made better off by moving (or else the individual would).

If Tiebout's view of the world is correct, there is no more reason to allow an individual to deduct his state and local taxes than there is to deduct his expenditures on cottage cheese. Both represent payments for something the individual wants.[4]

[4]Another assumption of the Tiebout model is that spending in one community affects the welfare only of its own members. If there are beneficial spillover effects, then deductibility might be viewed as a way to encourage such desirable activities. However, a more efficient way to do this is for the federal government to provide matching grants for the relevant activities.

Tiebout's provocative hypothesis has stimulated a huge amount of research. Some of this research has criticized his model for being based on unrealistic assumptions. For one thing, people are not perfectly mobile; they are attached to communities by jobs, personal ties, and other commitments. Even if people could move around costlessly, there are probably not enough communities so that each family can find one with a bundle of services that suits it perfectly. Moreover, contrary to what the Tiebout model implies, we observe many communities within which there are massive income differences and hence, presumably different desired levels of public goods provision. Just consider any major city.

However, we should not dismiss the Tiebout mechanism too hastily. There is a lot of mobility in the American economy. A persistent pattern is that in any given year, about 17 percent of Americans have residences different from those they had the year before, according to the U.S. Bureau of the Census. Moreover, within most metropolitan areas, there is a wide range of choice with respect to type of community. In the Philadelphia metropolitan area alone there are some 300 municipalities from which to choose. Certainly, casual observation suggests that across suburbs there is considerable residential segregation by income, and that exclusionary zoning is practiced widely. In addition, it is not hard to find popular accounts of classic Tiebout-type behavior. Recently in California, for example, a number of communities voted to increase their taxes in order to pay for more police protection.

Where does this leave us? The Tiebout model is quite relevant for people who live in suburban settings, but for citizens of big cities it does not seem to apply. And it is surely stretching the theory to argue that it is relevant to an individual's choice of a state (as opposed to a community). It would be nice to know what proportion of state and local taxes can properly be regarded as Tiebout-type user fees, but such data are not available. Therefore, we are left concluding that the question of whether state and local taxes should be included in the tax base does not have a clear answer.

Legislators, of course, have to go ahead and make decisions even when these issues are unresolved, as the recent Tax Reform Act attests. The reform eliminated deductibility for state sales taxes but retained it for local property taxes. If the H-S criterion guided this choice, then legislators must have believed that sales taxes are more like discretionary user fees than are property taxes. However, since it is easier to move from one nearby community to another than from one state to another, it is likely that just the opposite is the case.

Regardless of how one comes down on this question of what should or should not be deductible, it is still important to know how state and local public finance would react if deductibility were eliminated. Indeed, even if one believed, based on the Haig-Simons point of view, that the deduction should be removed, doing so might not be socially desirable if it leads to drastically reduced revenues for state and local governments. Economists have approached the issue of measuring the effects of removing deductibility in a number of ways, and they have come up with differing answers. We can begin to sort through these results by analyzing the impact of removing deductibility when all state and local taxes are levied on households, and then turn to the complications that arise when businesses are taxable as well.

HOW DEDUCTIBILITY AFFECTS INDIVIDUALS' AND COMMUNITIES' DECISIONS

In a world in which the Tiebout model held exactly, everyone in a community would want the same amount of public spending. This, however, is not a good description of reality. Within a community, generally there is some disagreement about the best level of public expenditure. Therefore, some kind of public choice process is required to take the citizens' preferences and translate them into a decision for the community. In the current context, this suggests that thinking about the impact of removing deductibility on

public spending requires two steps. The first is to find out how removal affects each individual's demand for public expenditure; the second is to determine how these changes translate into a collective decision.

The Individual's Decision. What factors determine how much public expenditure an individual citizen demands? For concreteness, think about the commodity "public education." Like any other commodity, the quantity that a person demands depends on his income, the price per unit of education, his demographic status (children or not), and so forth. As the price per unit of education and the individual's income change, so does the amount of his desired level of public expenditure on education. In particular, other things being the same, when the price goes up, the quantity desired by the individual decreases by some amount. This observation is crucial because there is a direct link between the individual's price for publicly provided goods and the deductibility of the taxes used to finance them. To see why, consider Smith, whose marginal federal income tax rate is 28 percent, and who itemizes deductions on her income tax return. Then each dollar of taxes that Smith pays for state and local expenditure costs her only 72 cents. Why? Because state and local taxes are deductible, each dollar of these taxes lowers her taxable income by one dollar. Given a 28 percent tax rate, one dollar less of taxable income saves Smith 28 cents in taxes. Hence, the effective price of one dollar of public expenditure is one dollar minus 28 cents, or 72 cents. More generally, for an itemizer, the "effective price" of a dollar of state or local public expenditure is one minus her marginal tax rate.

Suppose now that deductibility were eliminated. How would this affect Smith's demand for local public goods? Without the deduction, each dollar of public expenditure costs Smith exactly one dollar. In effect, then, removing deductibility raises her effective price for a dollar of public expenditure from 72 cents to one dollar, an increase of about 39 percent. Now, assume for illustrative purposes that whenever the price of publicly provided goods increases by 10 percent, the quantity demanded by Smith falls by 3 percent. (In the jargon of economists, this means that the price elasticity of demand for publicly provided goods is -0.3.)[5] Therefore, Smith's demand for public goods falls by 11.7 percent (0.3 x 39).

To summarize, for an individual who itemizes, the elimination of deductibility raises the effective price (also referred to as the "tax price") of publicly provided goods by an amount that depends on her marginal tax rate. This translates into a decreased demand for the publicly provided good. The precise amount of the decrease depends upon the responsiveness of quantity demanded to a change in price.

Note that for someone who does not itemize, the story is quite different. The elimination of deductibility does not change the effective price of public spending—it is one dollar with or without deductibility.

The Community's Decision. Imagine that deductibility has been eliminated. The itemizers in the community will want less public spending than they did previously, although the amounts will differ from person to person. The demands of non-itemizers will not be affected. What will the community do? The answer depends on how public decisions are made. Although there is no definitive model of how the public decision-making process works, it is still useful to consider one popular view of this process, the "median voter model."

Imagine a community in which decisions on public expenditure are based on majority voting. Each voter has a most preferred level of public expenditure, which is based in part on his effective price of publicly provided goods. The "median voter" is the voter whose preferences are in the middle of the set of all voters' prefer-

[5]For an explanation of the concept of elasticity, see Richard Voith, "Commuter Rail Ridership: The Long and The Short Haul," this *Business Review* (November-December 1987) pp. 13-23.

ences. By definition, as many voters want more expenditure than the median voter as do less. Under a broad set of conditions, the outcome of majority voting reflects the preferences of the median voter. This is called the "median voter theorem." (See THE MAJORITY VOTES WITH THE MEDIAN VOTER.) If the median voter theorem applies, then to determine how the community decision changes when deductibility is removed, all we have to do is find how the median voter's choice changes.

To illustrate, suppose that a community is comprised entirely of itemizers, two-thirds of whom have a marginal tax rate of 28 percent and identical preferences for public goods, while one-third have a marginal tax rate of 33 percent and are similarly identical. In this community, the median voter is one of the taxpayers in the 28 percent bracket. If deductions were removed, the median voter's cost of each dollar of local taxes would go up 28 cents. And if, as in our earlier example, a 10 percent increase in the effective price reduces the quantity of the public good demanded by 3 percent, then the median voter's desired amount of public goods falls by 11.7 percent. If the community's decisions are guided by the median voter rule, community expenditures fall by just that amount.

The analysis increases in complexity when we make the more realistic assumption that not all voters itemize. Indeed, according to the Internal Revenue Service in 1985, only about 39 percent of all tax returns were itemized. As noted above, the elimination of deductibility does not change the effective price for public spending facing a non-itemizer—it is one dollar with or without deductibility. Thus, if community decisions are governed by the median voter model and the median voter is a non-itemizer, then the elimination of deductibility will have no impact on public spending at all.

How likely is the median voter to be an itemizer? The likelihood of voting increases with income, but as income increases, so does the propensity to itemize. Hence, we expect itemizers to vote in disproportionately large numbers, a conjecture that is borne out by voter surveys.[6] On this basis, a number of investigators have argued that it is safe to assume that the median voter is an itemizer, and local expenditure would fall if deductibility were eliminated.

BY HOW MUCH WILL LOCAL EXPENDITURES FALL?

For illustrative purposes we assumed that a 10 percent increase in the effective price of publicly provided goods led to a 3 percent decrease in the quantity demanded. In order to get at the actual size of the effect of nondeductibility on local expenditures, investigators have to examine community expenditures, and how they vary with the tax prices their citizens face. In some cases, such calculations have been done assuming that only households are taxpayers; in others, that businesses also pay taxes.

If Only Households Are Taxpayers. Given the median voter rule, a natural statistical strategy is to gather data on the per capita expenditures in a number of jurisdictions, and see how these expenditures vary with the tax prices faced by the citizens in the jurisdictions. (Of course, it is necessary to take into account other factors that might influence the amount of public spending, such as the size of the jurisdiction, its median income, and so forth.) A number of papers have followed this strategy. In one influential study, Martin Feldstein and Gilbert Metcalf found that a 10 percent increase in the tax price leads to about a 5 percent decrease in state and local spending.[7] For a city like Pittsburgh, for example, whose general government expenditure was $278 million in 1984, public expenditure would fall by $13.9 million (0.05 x $278 million), if

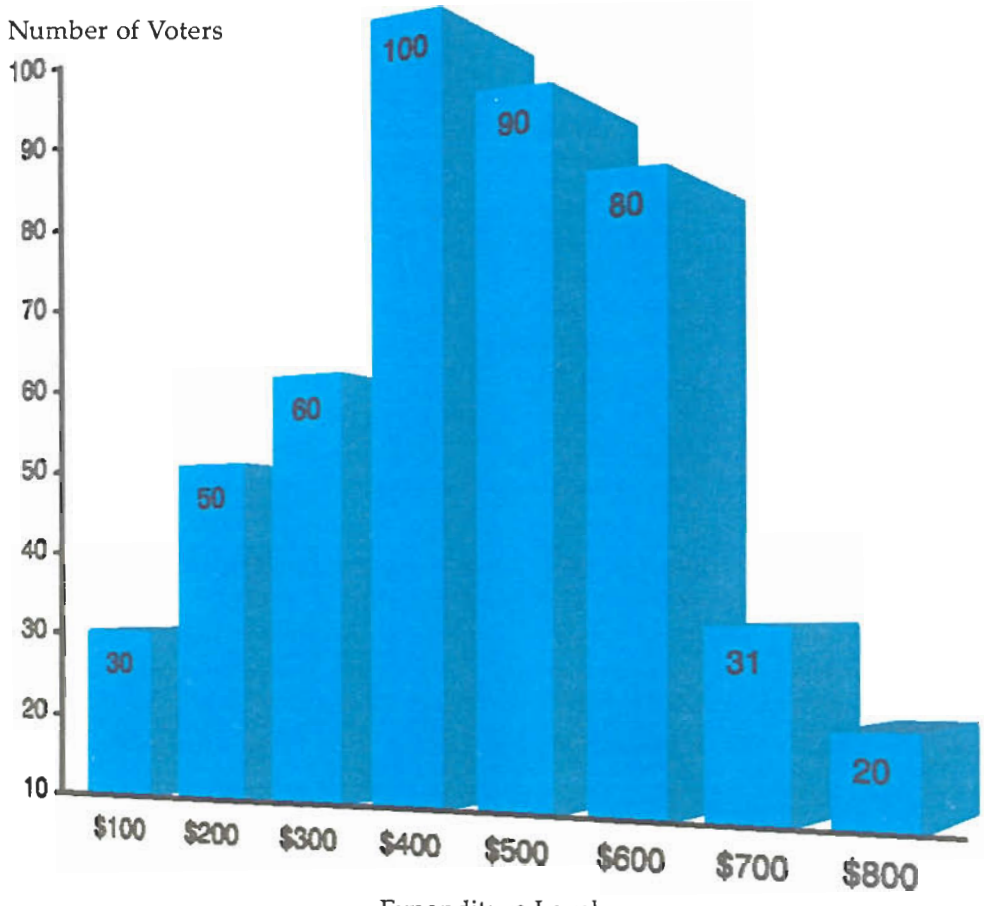
[6]See Helen F. Ladd, "Federal Aid to State and Local Governments," in *Federal Budget Policy in the 1980's*, ed. by Gregory V. Mills and John L. Palmer (Washington, D.C.: Urban Institute Press, 1984) pp. 165-202.

[7]See Martin S. Feldstein and Gilbert Metcalf, "The Effect of Federal Tax Deductibility on State and Local Taxes and Spending," *Journal of Political Economy* (August 1987) pp. 710-736.

THE MAJORITY VOTES WITH THE MEDIAN VOTER

The median voter theorem has a nice graphical representation. In the figure, the horizontal axis indicates the possible public expenditure levels in a hypothetical community with 461 members. The vertical axis shows the number of people in the community who most prefer each expenditure level. For example, 30 people most prefer $100 worth of expenditure, 50 people $200 worth of expenditure, and so on. According to the diagram, half the voters (230 people) want $400 or less of expenditure, and half want $400 or more. By definition, then, the median voter wants $400 of expenditure.

Now suppose that there is a vote between a $400 level of expenditure and any other level, say $600. Each voter supports the expenditure level that is closest to his or her most preferred level. The $600 proposal will, therefore win the votes of all people who want $600 or more, as well as some of the votes between $600 and $400. Because $400 is preferred by the median voter, one half of the voters lie to the left of $400. Therefore, the $400 proposal will receive all of these votes and some of those to the right of $400, guaranteeing this proposal a majority. Given the model's assumptions, no proposai can beat the expenditure level favored by the median voter.



eliminating deductibility increased the tax price by 10 percent.

A problem with Feldstein and Metcalf's analysis is that, from a statistical point of view, their estimates of the impact of the effective price of public spending on fiscal behavior are not very "significant." That is, a very wide range of responses is consistent with the data. Moreover, other empirical studies have obtained different estimates. For example, Douglas Holtz-Eakin and Harvey Rosen found that a 10 percent increase in the effective price would lead to an 18 percent decrease in public expenditure, a rather larger magnitude.[8] And in this scenario, Pittsburgh's expenditures would fall by about $50 million (.18 x $278 million).

Why do the studies differ? There are two major reasons. First, different samples are used. Feldstein and Metcalf consider both states and municipalities; Holtz-Eakin and Rosen look only at municipalities. Second, there are no publicly available data on the actual tax prices in various jurisdictions. Investigators have to try to guess at the relevant tax prices by looking at data on, say, average income in the jurisdiction. Unfortunately, different reasonable procedures for estimating tax prices can lead to quite different substantive results. In short, data limitations have made it impossible to reach a consensus on how much local spending would change if deductibility were eliminated.

If Businesses Also Are Taxpayers. The discussion so far has implicitly assumed that the only sources of state and local revenues are deductible taxes paid by individuals. In fact, governments have access to other sources, such as business taxes. Perhaps the removal of deductibility on individuals' tax returns would merely induce state and local governments to shift more of the tax burden from individuals to firms.

In the same study mentioned above, Feldstein and Metcalf examined the statistical relation between each state's use of business taxes and taxes on individuals that are nondeductible, and the average effective price of public spending in that state. They found that states with higher effective prices do indeed rely more heavily on business and nondeductible taxes. According to their estimates, if deductibility on individual tax returns were eliminated, the increased taxes on businesses and nondeductible sources would tend to counterbalance the decreased taxes from individuals. In other words, ignoring the possibilities for substitution among different revenue sources would lead to serious overestimates of the effect of removing deductibility on state and local spending.

Just as in the case of expenditures, however, there is no consensus on the extent of revenue substitution. Walter Hettich and Stanley Winer used different data and statistical techniques from Feldstein and Metcalf, and estimated that barely any revenue substitution would occur.[9] In any case, not all communities will be able to substitute business taxes for individuals' taxes to the same degree. Communities with very little commercial property cannot be expected to rely too heavily on business taxation, especially in light of the fact that businesses also can "vote with their feet" if their tax burdens become too onerous.

The possibility that at least some communities can substitute among various tax instruments has important implications for federal tax revenues. From the federal point of view, presumably a major motivation for eliminating deductibility is to increase revenues. However, if removing deductibility would induce states and localities to change their revenue structures along the lines suggested by Feldstein and Metcalf, then the federal government might not

[8]See Douglas Holtz-Eakin and Harvey S. Rosen," Tax Deductibility and Municipal Budget Structure," NBER Working Paper No. 2224 (April 1987).

[9]See Walter Hettich and Stanley Winer, "A Positive Model of Tax Structure," *Journal of Public Economics* (1984) pp. 67-87.

gain much revenue from this policy change. The key factor is that businesses would still be allowed to subtract state and local taxes in the computation of their federal taxable income. If businesses have to pay higher taxes to state and local governments, then their net income drops, and their federal tax liability goes down. Thus, while federal personal income tax collections increase, collections from businesses decline. The net effect is hard to predict; Feldstein and Metcalf argue that under certain circumstances, the federal government could even lose money if deductibility were eliminated.

CONCLUSION

The policy debate over the deductibility of state and local taxes raises two related questions. First, in principle should state and local taxes be included in the base of an income tax system? Second, if deductibility were eliminated, what would be the impact on state and local public finance? The answers to both questions are inextricably linked to the issue of how public sector taxes and expenditures are determined. Unfortunately, there is no consensus on the nature of the decisionmaking process of state and local governments. Nevertheless, the research does suggest that we can reject two extreme views: that removing deductibility would have no effect at all, and that it would decimate the state and local public sector.