

Tax Increases in the Tenth District: Where Will the Money Come From?

By Glenn H. Miller, Jr.

Strong pressures for increased spending in the 1990s are likely to force state and local governments in the Tenth District to increase taxes (Miller 1990). Policymakers will try to hold the line on spending, make spending programs more efficient, and hope that better economic times produce more tax revenues. But these may prove to be unsatisfactory or inadequate responses to the mounting demands for public spending. Moreover, in an era of “fend-for-yourself federalism,” state and local governments must rely less on fiscal aid from the federal government and more on their own resources. It is unlikely, then, that state and local governments will be able to avoid raising taxes. In such a situation, what revenue sources can state and local governments turn to?

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This article describes the principal revenue sources for state and local governments in the district and considers some possible directions the search for additional revenue might take. The first section shows the district depends more on general sales taxes and user charges, and less on property and personal income taxes, than the nation as a whole. The second section examines how heavily state and local governments in the district are tapping their available resources and shows they are underusing personal income taxes as a revenue source relative to most other states. The article concludes that district governments might boost revenues by increasing personal income taxes.

Revenues of District State and Local Governments in the 1980s

As pressures mount to increase public spending, it is important to know where state

and local governments are now getting their revenues. This section examines the sources of revenue in the district, how the sources changed during the 1980s, and how they compare with the sources used in the nation as a whole.

What is revenue?

This article defines revenue as general revenue received by state and local governments from their own sources. In order to focus on revenue sources under the control of state and local governments, the definition excludes fiscal aid received from the federal government, such as shared revenues and grants-in-aid. The definition also excludes some classes of receipts not closely tied to public purposes served by general government activities—utility revenue, liquor store revenue, and insurance trust revenue.¹

Revenue data from both state and local governments are consolidated in this article. Consolidation facilitates interstate comparisons because functions performed and financed by one level of government in some states may be the responsibility of another level of government in other states. In order to adjust for population size differences among jurisdictions, comparisons across states are made in terms of revenue per capita.

District revenue growth in the 1980s

Overall, growth in aggregate state and local government revenues in the district was not much different from growth in the nation in the 1980s.² Allowing for both population growth and inflation from 1978 to 1988, real per capita revenue of state and local governments in the district grew at an average rate of 3 percent per year (Table 1).³

Revenue from taxes grew more slowly than total revenue in the district, while revenue from

miscellaneous revenue and current charges, or user fees, grew faster than total revenue.⁴ Revenues from individual income taxes and general sales taxes grew faster than receipts from other tax sources.

District per capita taxes trail the national average

Per capita revenue grew in the 1980s at the same pace in both the district and the nation. Despite solid growth in the 1980s, per capita revenue in the district trailed the national average at decade's end. State and local government revenue in the district averaged \$2,262 per capita in 1988, compared with a national average of \$2,480 (Table 2). But per capita revenue varied considerably across district states, ranging from \$1,873 in Missouri to \$3,738 in Wyoming. Put another way, per capita revenue in district states ranged from 76 percent of the national average in Missouri to 151 percent in Wyoming. Per capita revenue was above the national average in the district's three westernmost states, Colorado, New Mexico, and Wyoming, and below the national average in Kansas, Missouri, Nebraska, and Oklahoma.

Per capita revenue from taxes in the district fell short of the national average in 1988. Overall, district tax receipts per person were just 86 percent of the national average. Wyoming was the only district state with state and local government per capita tax receipts larger than the national average.

For most classes of taxes in 1988, per capita revenue in the district was below the national average. Among major tax sources, only revenues from motor fuels taxes and motor vehicle license taxes exceeded the national average. (This comparison parallels the fact that transportation was the only major function where district spending exceeded the national average in 1988.) Motor fuels taxes in the

Table 1

Real Per Capita State and Local Revenue, 1978-88

(Average annual growth in 1982 dollars)

	<u>Tenth District</u>	<u>United States</u>
Total*	3.0	2.9
Taxes	2.0	1.9
Property	.5	.7
General sales	2.9	3.1
Motor fuels	.2	—
Motor vehicle license	—	.6
Individual income	5.7	3.6
Corporate income	-1.9	1.7
Other	1.2	1.4
Current charges	3.6	3.9
Miscellaneous revenue	8.6	9.0

* General revenue from own sources.
Source: Bureau of the Census, *Census of Governments*.

district were 114 percent of the national average, and Missouri and Kansas were the only district states with motor fuels tax revenues below the national average.

Per capita revenue from user charges in 1988 was larger in the district than in the nation. Four district states exceeded the national average—Colorado, Nebraska, Oklahoma, and Wyoming. District revenue was larger than the national average for both education charges and hospital charges. All district states had revenue from education charges above the national average. Revenue from hospital charges was higher in Kansas, Nebraska, Oklahoma, and Wyoming than the national average.

District revenue sources

The way total revenue is distributed across various sources shows how state and local governments choose to finance public services. Choices may vary from state to state, depending on differences in economic structure, policy objectives, and preferences of citizens and public officials.

Not surprisingly, taxes are the major source of state and local government revenue in the district (Table 3). Still, district governments depend less on taxes than governments elsewhere in the nation. In 1988, taxes provided 67 percent of district revenue, compared with the

Table 2

Per Capita State and Local Government Revenue, 1988

(Amounts in dollars)

	US	District	Colo.	Kans.	Mo.	Nebr.	N. Mex.	Okla.	Wyo.
Total revenue*	2,480	2,262	2,543	2,384	1,873	2,331	2,587	2,096	3,738
Taxes	1,773	1,522	1,686	1,676	1,372	1,557	1,469	1,406	2,042
Property	538	425	604	583	296	644	163	266	914
General sales	428	421	435	397	437	326	581	376	394
Motor fuels	72	82	91	68	66	103	92	96	77
Motor vehicle license	39	46	29	32	39	37	65	76	86
Individual income	360	296	352	331	330	270	201	258	0
Corporate income	97	44	45	78	44	46	33	26	0
Other	240	209	131	186	161	131	335	309	572
Current charges	385	393	454	377	306	504	353	417	589
Education	110	137	180	135	111	160	128	131	134
Hospitals	106	126	96	118	98	220	102	143	333
Miscellaneous revenue	323	347	402	332	195	271	765	273	1,107
Interest earnings	193	237	219	227	135	199	520	207	938

* General revenue from own sources.
Source: Bureau of the Census, *Census of Governments*.

national average of 72 percent.

In both the district and the nation, the leading producers of tax revenue are property taxes, general sales taxes, and individual income taxes. Property taxes and general sales taxes each produced about 19 percent of state and local government revenue in the district in 1988; individual income taxes produced about 13 percent. The revenue share produced in the district by general sales taxes is larger than the national average, whereas the shares produced by property taxes and individual income taxes are smaller.

Among district states, the revenue shares produced by different taxes vary widely, especially for the three largest revenue producers. In 1988, the property tax share ranged from 6 percent of total revenue in New Mexico to 28 percent in Nebraska. The general sales tax share ranged from 11 percent in Wyoming to 23 percent in Missouri. For states with income taxes, the individual income tax share of total revenue ranged from 8 percent in New Mexico to 18 percent in Missouri; Wyoming has no income tax.

Another difference among district states in revenue shares appears in the "other taxes"

Table 3

Percentage of State and Local Government Revenue by Source, 1988

	US	District	Colo.	Kans.	Mo.	Nebr.	N. Mex.	Okla.	Wyo.
Total revenue *	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Taxes	71.5	67.3	66.3	70.3	73.2	66.8	56.8	67.1	54.6
Property	21.7	18.8	23.8	24.5	15.8	27.6	6.3	12.7	24.4
General sales	17.3	18.6	17.1	16.6	23.3	14.0	22.4	17.9	10.5
Motor fuels	2.9	3.6	3.6	2.9	3.5	4.4	3.6	4.6	2.0
Motor vehicle license	1.6	2.0	1.1	1.4	2.1	1.6	2.5	3.6	2.3
Individual income	14.5	13.1	13.8	13.9	17.6	11.6	7.8	12.3	.0
Corporate income	3.9	.0	1.7	3.3	2.3	2.0	1.3	1.2	.0
Other	9.7	9.2	5.2	7.8	8.6	5.6	12.9	14.7	15.3
Current charges	15.5	17.4	17.9	15.8	16.4	21.6	13.6	19.9	15.8
Education	4.4	6.1	7.1	5.6	5.9	6.9	5.0	6.3	3.6
Hospitals	4.3	5.6	3.8	5.0	5.2	9.4	3.9	6.8	8.9
Miscellaneous revenue	13.0	15.3	15.8	13.9	10.4	11.6	29.6	13.0	29.6
Interest earnings	7.8	10.5	8.6	9.5	7.2	8.5	20.1	9.9	25.1

* General revenue from own sources.
Source: Bureau of the Census, *Census of Governments*.

revenue source, which includes severance taxes and excise taxes on alcohol and tobacco. In 1988, New Mexico, Oklahoma, and Wyoming—states with significant energy sectors and other mining activity—had revenue shares for “other taxes” in double-digit percentages, while the four other district states had smaller shares for this category.

Tax mixes thus differ considerably from state to state in the district. For example, New Mexico had the lowest revenue shares for property and individual income taxes in 1988, but the next-to-highest share for general sales taxes.

Nebraska had the highest share for property taxes but the next-to-lowest shares for general sales and individual income taxes. Such variations reflect differences in how states choose to finance their government activities and what resources are available to them for taxation.

While the 1988 data in Tables 2 and 3 are the most recent available, district governments have made several tax changes since then. District states made few major tax changes in fiscal years 1988 and 1989, but three states made major tax changes in 1990.⁵ Both Nebraska and Oklahoma increased their personal income,

corporate income, and sales taxes. New Mexico increased its sales tax and made several changes in its personal income tax code. Nebraska and Oklahoma rank among the top ten states according to projected percent increases in state tax collections resulting from 1990 enactments (National Conference of State Legislatures).

Current charges, or user fees, are a more important revenue source in the district than in the nation as a whole. Current charges produced 17.4 percent of district total revenue in 1988, compared with a national average of 15.5 percent. In every district state except New Mexico, the share of total revenue from current charges was larger than the national average.

Miscellaneous revenue was also a larger share of revenue in the district than in the nation in 1988. New Mexico and Wyoming both had a 30 percent share of total revenue in the miscellaneous category. These large shares for miscellaneous revenue were due primarily to substantial interest earnings of state and local governments in both states.

Summary

After a decade of solid growth, per capita revenue of state and local governments in the Tenth District remained below national average per capita revenue in 1988. Among revenue sources, taxes are less important in the district than in the nation, while current charges are more important.

Among tax revenue sources, state and local governments in both the district and the nation as a whole rely principally on the same three taxes—general sales taxes, property taxes, and individual income taxes. State and local governments in the district depend more heavily on general sales taxes as a revenue source, and less heavily on property taxes and individual income taxes, than the nation as a whole.

Fiscal Effort and the Search for More Revenue

State and local governments have limited options in meeting the mounting demands for spending, especially in an environment of “fend-for-yourself federalism.” One possible tactic would be simply to hold the line on spending increases, but this may be unsatisfactory because deteriorating public services could harm both citizens’ well-being and economic growth. Governments could also try to make spending programs more efficient. While this goal is worth pursuing, savings might be inadequate to meet pressures for spending increases. Governments might also depend on economic growth spurring enough revenue growth to cover spending increases. But district economic growth has lagged behind U.S. growth in recent years, and the U.S. Department of Commerce projects income growth in district states to trail growth in the nation during the 1990s. State and local governments thus may be left with tax increases as a last resort.

If increasing taxes is necessary, where can policymakers turn? Are there sources where district state and local governments might have room to raise revenue without overreaching in comparison with other states?

Choosing a revenue source: capacity and effort

For state and local governments that decide to raise taxes to pay for increased public services, is there some framework that might help in evaluating revenue sources? One such framework is the Representative Revenue System (RRS), developed by the Advisory Commission on Intergovernmental Relations (ACIR). The RRS is built around two key measures. Revenue capacity measures a

government's ability to raise revenue from both tax and nontax sources.⁶ *Revenue effort* measures the extent to which governments are using the revenue sources available to them.⁷

The RRS is formulated in comparative terms, so that a jurisdiction's revenue capacity and revenue effort are expressed relative to those of other jurisdictions and a national average benchmark. Both capacity and effort are expressed in per capita terms and as indexes, where the national average equals 100. Thus, a state with a capacity index of 106 has the capacity to produce per capita revenue 6 percent greater than the national average. Similarly, a state with a revenue effort of 91 is using less than average effort to draw revenue from its overall revenue potential.

The RRS has two important features that add to its usefulness to state and local government officials. First, it is comprehensive. It provides a measure of revenue capacity that reflects all the sources of revenue used in the real world. In this way, the RRS is superior to personal income, long used as a measure of revenue capacity. Personal income, unlike the RRS, excludes a number of important revenue sources, such as corporate income and wages paid to nonresident commuters. Second, the RRS (but not personal income) takes account of the ability of governments to "export taxes."⁸ A state or local government exports taxes when it successfully moves the burden of part of its total tax bill to nonresidents. A hotel tax that falls on convention or tourist trade is one example; a severance tax is another. The RRS includes all taxes, even if they affect nonresidents.⁹

Comparisons across states using the RRS provide information on the relative strengths of state-local fiscal systems by revealing the relative revenue-raising abilities and revenue efforts of each state. The aggregate capacity and effort indexes compare the overall fiscal strengths of states relative to each other and to

the national average. Disaggregated capacity and effort indexes help analyze a state's revenue system in terms of its relative strengths or weaknesses in particular tax bases.

Measures of revenue capacity and effort and their uses focus on the relative fiscal well-being of taxing jurisdictions. That is, most comparisons of state-local fiscal systems using the RRS relate to the well-being of the governments involved rather than to their residents or their private sectors. In interpreting effort indexes, for example, care should be taken not to confuse tax effort with tax burden. Effort relates to governments while burden relates to taxpayers—not at all the same thing when much of the burden of some state and local taxes falls on nonresidents.

District revenue capacity

With a few notable exceptions, the revenue capacity of state and local governments in the district is generally below the national average. Table 4 shows estimates of 1988 RRS capacity indexes for the seven Tenth District states, both overall and for five important revenue sources. Estimates are shown on a relative per capita basis with the national average equal to 100. Apart from the state of Colorado and the severance tax source, in virtually all instances Table 4 shows revenue capacities in district states falling below the national averages in 1988. In terms of overall capacity, Wyoming and Colorado both had revenue-producing potential above the national average. Wyoming ranked ninth and Colorado fourteenth among the 50 states plus the District of Columbia in overall capacity to generate revenue. The other five district states had overall revenue capacity below the national average and ranked in the lower half of all states in terms of overall revenue capacity.

Colorado and Wyoming ranked high in

Table 4
Revenue Capacity, Tenth District States, 1988*

	Revenue Sources											
	Overall		Sales		Personal income		Property		Severance		User charges	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Colorado	106	14	100	20	98	19	126	8	110	13	100	19
Kansas	91	30	87	40	86	26	87	31	253	10	96	22
Missouri	89	32	94	29	91	23	78	41	9	29	94	25
Nebraska	89	34	91	33	77	35	94	23	22	27	90	32
New Mexico	88	35	82	46	63	43	76	44	669	3	76	46
Oklahoma	87	37	86	42	69	38	88	30	610	4	81	38
Wyoming	118	9	87	39	81	33	115	10	2,324	2	82	37

* Relative per capita capacity, Representative Revenue System, U.S. = 100.
Source: Advisory Commission on Intergovernmental Relations.

revenue capacity for different reasons. Colorado's overall revenue capacity was greater than the national average due to capacity measures of 100 or more for five of the six major revenue sources and an index only slightly less than 100 for the sixth. Wyoming, on the other hand, had an overall revenue capacity substantially above the national average because of the exceptionally large size of its severance tax capacity.

Indeed, the existence of significant resources available for severance taxation stands out among the five individual revenue sources. The relative importance of those resources is substantial in Wyoming, New Mexico, Oklahoma, and Kansas. Those four states—rich in minerals, especially energy products—ranked in the top ten in severance tax capacity among all states in the nation. Colorado's severance tax capacity was also greater

than the national average, ranking thirteenth among all the states.

District revenue effort

While the revenue capacity of state-local fiscal systems in the district is generally below the national average, revenue effort in district states is generally above the national average. Table 5 shows estimates of 1988 revenue effort for Tenth District states, overall and for individual revenue sources. In terms of overall effort, Nebraska, Wyoming, Kansas, and New Mexico all used their tax bases more intensively than the national average. These four states ranked in the top one-third of all states with regard to overall revenue effort. Oklahoma and Colorado had overall revenue efforts only slightly below the national average, ranking

Table 5
Revenue Effort, Tenth District States, 1988*

	Revenue Sources											
	Overall		Sales		Personal income		Property		Severance		User charges	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Colorado	94	36	99	25	100	33	89	26	23	25	120	19
Kansas	104	15	104	21	107	28	125	17	71	19	107	28
Missouri	86	47	105	18	101	32	71	39	0	0	84	41
Nebraska	106	12	82	36	98	34	127	16	40	22	147	6
New Mexico	103	17	170	2	89	35	40	49	158	7	124	16
Oklahoma	95	33	108	15	104	29	56	45	107	13	131	13
Wyoming	105	14	103	23	0	47 [†]	147	7	113	12	185	3

* Relative per capita effort, Representative Revenue System, U.S. = 100.
[†] Five states without a personal income tax tied for forty-seventh place in the ranking.
 Source: Advisory Commission on Intergovernmental Relations.

thirty-third and thirty-sixth, respectively. Missouri's overall revenue effort ranked forty-seventh.

Disaggregated effort data can be useful in analyzing a particular state's revenue system and evaluating its tax practices and opportunities. A state's mix of revenue sources and its reliance on certain sources as shown by the RRS can easily be compared with those of other states and with the national average. "Policymakers can see at a glance how, relative to other revenue sources and other state-local systems, a state is 'underutilizing' or 'overworking' particular revenue sources *relative to the national average*" (Advisory Commission on Intergovernmental Relations, p. 16). Such information may be especially useful at a time of regional economic change and interstate competition for economic development, when awareness of what other

states are doing is desirable.

Considerable diversity exists among district states in their efforts to tap the individual revenue sources shown in Table 5. Those sources include the severance tax base, especially significant in the mineral-rich Tenth District, and user charges, for which district states have shown a strong predilection. Most district states with large severance tax capacities exert substantial effort in taxing those resources. And with regard to user charges, all district states except Missouri have revenue effort greater than the national average. Five district states are among the top 20 states in user charge effort.

The five revenue sources shown in Table 5 include the three major state-local tax sources—the general sales tax, the property tax, and the personal income tax. District states generally rank high in sales tax effort, with five states

above the national average and one state virtually at that level. Moreover, all six of these states ranked in the upper half of all states in the nation with regard to sales tax effort. Property tax effort varied widely among district states. While three states showed effort above the national average, Oklahoma and New Mexico ranked forty-fifth and forty-ninth, respectively, among all states in property tax effort. In terms of personal income tax effort, four district states were at or above the national average. But the national average was strongly influenced by a significant number of states with very low effort levels, including several with no income tax. Consequently, more valid interstate comparisons of personal income tax effort may be made by examining how states rank according to that measure. When ranked according to personal income tax effort, all seven district states fell in the bottom half of the nation's states.

Personal income taxes as a source of more revenue

Using effort indexes to examine relative strengths or weaknesses in using particular revenue sources can help in evaluating what sources of additional revenue might be tapped. Every district state has relatively low personal income tax effort, suggesting personal income taxes might be a good source for increasing revenues. Most district states already make intensive use of user charges and general sales taxes, and not all states have severance tax capacity. Property tax effort varies widely from state to state, and property tax relief continues to be a major political issue. While comparative revenue effort is not the only way of approaching the question of where to find more revenue, the relatively low personal income tax effort in district states makes this revenue source a prime target for more intensive use. Advocates of this approach should assess it in

the light of a number of other factors, however.¹⁰

Several factors on the 1990s fiscal agenda for state and local governments should be considered as additional revenue is sought. Among them are balance in revenue structures, the responsiveness of tax yields to economic growth, and interstate tax competition. While full discussion of these factors is beyond the scope of this article, each will be addressed briefly in the context of the search for additional revenue and the possible use of personal income tax increases as the preferred revenue source.

Acquiring additional revenue through personal income tax increases could improve the balance in state-local revenue structures. While significant differences exist from state to state, for the district as a whole, property taxes and general sales taxes each were 19 percent of state and local government general revenue from own sources in 1988, user charges were 17 percent, and personal income taxes were 13 percent. More use of personal income taxes would generally move district tax structures toward greater balance.

While the merits of strictly balancing revenue sources are debatable, it is clear the balance should not be too far out of line (Stocker). Balancing tax structures, however, should not go so far as to overwhelm beneficial features of current district state-local fiscal systems. For example, the district's relatively heavy use of current charges is a feature likely to become more important in all states in the 1990s. User charges permit more reliance on market mechanisms in delivering government services in situations where such a method of allocation is appropriate. Nor should balance be sought at the expense of benefits arising from special characteristics of the district economy. The ability to export part of their tax burden is one such benefit to district governments. For example, heavy use of severance taxes by minerals-rich district states is a significant

means of tax exporting. Moreover, some district states like Colorado and New Mexico are important tourist destinations. This feature makes possible some tax exporting by means of retail sales taxes and other more directly traveler-oriented taxes.

The responsiveness of tax yields to economic growth is another factor to be considered when jurisdictions search for additional revenue. Total revenue or revenue from individual taxes may grow faster or slower than the economy grows, depending on a jurisdiction's tax mix and the characteristics of individual taxes. The responsiveness of various taxes to income growth has been estimated by many analysts. The yield of the personal income tax is believed to grow faster than the growth of personal income. Sales tax yields are believed to increase at about the same pace as income grows, while the yields of property taxes and excise taxes are viewed as growing slower than income growth.

A jurisdiction thus might be attracted to the personal income tax as its preferred source of additional revenue partly because of that tax's greater responsiveness to economic growth. That characteristic could make the personal income tax a good source of revenue to help meet the mounting demand for public services in the 1990s. At the same time, overall tax systems would become more responsive to changes in income growth as personal income taxes become a larger share of total revenues.

There is a downside to such an increased responsiveness of a tax system, however, because greater responsiveness makes total revenue more subject to the effects of short-run economic fluctuations. This greater instability in revenues occurs because the relationship of tax yields to changes in income growth cuts both ways. Just as revenue grows faster than income when the economy is healthy, so does revenue growth slow more than income growth if the

economy weakens. Thus, a tax system moving toward more use of the personal income tax is likely to provide more revenue growth when the economy is strong. But such a move is likely to introduce more instability into revenues over a business cycle and to weaken revenue yields in economic downturns.

While raising more revenue by increasing personal income taxes could improve the balance of revenue structures in the district, higher income taxes also might have a harmful effect on the tax competitiveness of district states. Interstate tax competition is a key part of the larger economic development competition between states for footloose industry and high-income people. In addition to providing a wide range of tax concessions, jurisdictions seek to recruit or retain businesses and their high-income owners and managers by keeping their income tax liabilities in line. Conventional wisdom holds that a jurisdiction's heavy reliance on personal income taxes discourages economic development there. But as one analyst notes: "This claim is controversial and, in any case, argues only against *heavy* reliance, not against *average* reliance" (Gold, p. 107). Tenth District state-local fiscal systems have relatively low levels of personal income tax effort and nearly all of them collect a smaller share of their total revenue from personal income taxes than the national average. These comparisons suggest that an average or lower reliance on personal income taxes gives district state and local governments room to consider them as sources of additional revenue.

Conclusion

Strong pressures for increased spending in the 1990s are likely to force district state and local governments to increase taxes. Holding the line on spending, making spending programs more efficient, and hoping that better

economic times produce more revenues may be unsatisfactory or inadequate responses to mounting demands for public spending. If state and local governments cannot avoid raising taxes, they must decide what revenue sources to turn to.

A survey of revenue structures shows district state and local governments depend more on general sales taxes and user charges, and less on property taxes and personal income taxes, than the nation as a whole. Moreover, measures of revenue effort show that district states are

underusing personal income taxes as a revenue source relative to most other states. For this reason, district state and local governments might consider turning to personal income tax increases as a source of additional revenues. At the same time, however, they should consider the effects of such a step on other items on their fiscal agendas for the 1990s, including balance in revenue structures, the responsiveness of tax yields to economic growth, and interstate tax competition.

Appendix

The Representative Revenue System: Construction and Concerns

The representative revenue system, or RRS, is widely used and is generally considered to be superior to personal income as an indicator of fiscal capacity and effort. Yet the RRS also has some shortcomings. This appendix describes how the RRS is constructed and discusses some concerns that have been raised about the measure. To simplify the discussion somewhat, the appendix focuses on describing the construction of the representative tax system (RTS)—the basic building block of the RRS. The RTS estimates yields from tax sources only, while the RRS estimates yields from both tax and nontax sources.

Construction

The RTS approach to estimating fiscal capacity requires construction of a standard system of tax rates and bases that is “representative” of actual state-local tax systems. Because standardized tax base definitions and average tax rates are used, the RTS’ estimated tax yields differ across states only due to differences in the resources available to be taxed. The approach estimates the tax yield that would result if every state-local fiscal system taxed each of 27 separate tax categories (or tax bases) at national average rates. The 27 estimated yields are then aggregated for each state to provide estimates of every state’s overall tax capacity. National average yield estimates are also calculated for the 27 individual taxes and for the overall aggregate. The yield estimates for the indi-

vidual taxes and the overall aggregates, for every state and for the nation, are divided by that jurisdiction’s population. The resulting per capita tax capacity estimates are then put into index form, with the national average equal to 100. These sets of numbers show the capacity of each state-local fiscal system to raise revenues relative to other state-local systems and to the nation, for the 27 individual taxes and for the overall aggregate.

The tax bases and tax rates used in constructing the RTS are not actual statutory bases and rates. The statutory base for any tax inevitably varies from state to state. Because the RTS requires tax yields to be estimated on a uniform basis for all states, every tax base must be defined on some standardized basis. The standardized tax bases are as closely related as possible to actual statutory bases. For example, retail sales are the base for general sales taxes and fuel consumption is the base for motor fuels taxes. In some cases, however, the standardized bases are proxies not generally used as actual state and local tax bases. For example, federal income tax liability serves as the standardized base for personal income taxes.

Standardizing tax bases is the first step toward comparing tax capacity across state-local fiscal systems using the RTS; standardizing tax rates is the second step. A national average tax rate is calculated for each of the 27 tax sources included in the RTS. No attempt is made to average all the actual statutory rates applied by state and local governments to their own bases. Rather,

the standard rates used in the RTS are calculated by dividing the total revenue collected in all states from a particular tax source by the total estimated base for that source, as defined for use in the RTS. For example, in 1988 all state and local governments together received \$108 billion in general sales tax receipts. As defined for use in the RTS, the base for this tax source (retail sales and receipts of selected service industries) was \$1,793 billion. The national average rate for general sales taxes was thus 6.02 percent.

To produce estimates of potential tax yield, or capacity, for every state, each state's RTS tax bases are multiplied by the national average tax rates. Overall capacity estimates for each state are calculated by adding its capacity estimates for all tax sources. Dividing all capacity estimates by each jurisdiction's population gives per capita capacities for each state and for the nation. To obtain indexes of tax capacity, all the state capacity estimates—overall and for each tax source—are related to the national capacity estimates, expressed as 100. An index value of 110 indicates that a state's per capita tax-raising potential, or capacity, is 10 percent above the average tax-raising capacity of all states combined.

Concerns

Many analysts believe the RRS is superior to personal income as a measure of revenue capacity. Others suggest the RRS is not an ideal measure. Concerns about the RRS involve the independence of RRS capacity estimates from actual fiscal choices, the taxability of revenue sources, and the breadth of the concept of fiscal capacity

present in the RRS measure.

Independence of a state-local fiscal system's actual revenue policies from those of a hypothetical, or representative, fiscal system is viewed as essential in estimating fiscal capacity. The measure's advocates note the RRS benefits from "being a measure of 'potential' revenues independent of actual fiscal choices" (Fastrup, p. 44). But some critics suggest that independence has not been attained—that RRS capacity estimates measure economic and fiscal choices of governments and their citizens as much as they do revenue potential, even though fiscal capacity indexes should reflect only the latter (Barro, p. 196).

Other critics hold that the RRS measure of capacity does not take adequate account of the taxability of revenue sources. Taxability relates to the behavior of businesses and persons in response to taxing and spending by governments. The likely interaction between a state's tax rate and the base for that tax may be overlooked when using the RRS measures of capacity. For example, Wyoming, with no personal income tax, is estimated by the RRS to have a substantial revenue capacity for that tax. But if Wyoming chose to tax personal income at the representative national average rate of 20 percent, businesses and households might respond in ways that prevented the state from reaching its estimated capacity. One of the most important responses affecting taxability reflects the mobility of taxable resources, or tax bases. In this example, some persons living in Wyoming, or planning to move there, might reconsider their decisions following such an increase in the personal income tax rate. On the other hand, some tax bases—natural resources such as coal fields,

for example—are immobile, and for that reason have much greater taxability. In the case of Wyoming, this characteristic helps explain the high level of revenue capacity for the state's severance tax.

Still other critics believe the RRS should not be used as a measure of state-local fiscal capacity because it lacks specific attention to jurisdictions' relative needs for public services and the relative cost of providing those services. Without such explicit attention to expenditure needs and relative costs, these critics say, RRS measures show only revenue capacity and do not warrant the broader description of measures of fiscal capacity. They argue that focusing exclusively on the ability to raise revenue without adjusting for the cost of services that jurisdictions provide gives an incomplete and distorted characterization of state-local fiscal capacities. Two states with similar revenue-raising ability may not have similar fiscal capacity if one has a much larger school-age population or many more low-income families. These critics thus find the RRS lacking as an ideal fiscal capacity measure: "A measure of revenue-raising ability alone is a seriously incomplete indicator of the overall ability of a state or local government to finance its service responsibilities. Only when revenue-raising capacity is related to the costs of the public-service responsibilities of a government can it be said that its general fiscal situation is accurately represented" (Rafuse, p. 135).

Some analysts note the presentation of RRS capacity measures in per capita terms goes a long way toward meeting the objection that expenditure needs are ignored. Dividing estimated tax capacities by resident populations does more than facilitate comparisons between jurisdictions by introducing a scaling factor. "Division by population can be seen as a method of relating the ability of a government to raise revenue to its costs of providing public services, where those costs are measured by population. In fact, population has long been regarded in the literature of state-local finance as a reasonable, simple measure of the relative costs of public services, often referred to as 'needs'" (Rafuse, p. 134).

Total population may be the most important factor in the differences between jurisdictions in expenditure needs, but it is not the only factor even though per capita estimates assume it is. Information on the age structures of populations can help in understanding differences between jurisdictions in public spending for particular services such as education. Data on differences between states in prices of public service inputs would also be useful, but are not available. In any case, measures of revenue-raising ability narrowly defined can be useful for comparisons between jurisdictions whether or not the user believes the measures to be ideal indicators of overall fiscal capacity, broadly defined to allow for differences in needs.

Endnotes

¹ Utility revenues are receipts from the sale of commodities or services by government owned and operated water, electric, gas, and transit systems. Liquor store revenues are the amounts received from sales by government liquor stores. Insurance trust revenues are receipts from contributions required of employers and employees for financing social insurance programs operated by governments and the earnings on assets held for such systems.

² This article uses 1978 as the base year in charting revenue growth. The year 1978 is a good benchmark year for state and local government finance for two reasons. First, 1978 marked the beginning of increasing citizen resistance to rising public spending and increasing taxes. This resistance was ushered in by the adoption in California of Proposition 13, which put constitutional limits on the state's spending growth. Similar measures were adopted subsequently in other states, and the threat of taxpayer revolt remains a factor in tax and spending decisions. Second, federal outlays for grants-in-aid to state and local governments peaked in 1978. Since then, state and local governments have had to make spending decisions based on greater dependence on their own resources.

³ A significant part of the increase in district own-source revenues offset a reduction in intergovernmental revenues from the federal government. Federal fiscal aid to district state and local governments declined at an average rate of 1.9 percent per year from 1978 to 1988, on a real per capita basis.

⁴ Current charges are amounts received from the public for specific services benefiting the people charged and are often called user charges. Charges for education and hospital services make up about two-thirds of all current charges. Hospital charges increased faster in the district from 1978 to 1988 than total current charges and much faster than education charges. Interest earnings—the largest share of miscellaneous revenue—increased faster than total miscellaneous revenue.

⁵ In 1988 and 1989 most district states increased their motor fuels taxes, some explicitly for underground storage tank cleanup. Personal income taxes were reduced or reformed in Kansas and Nebraska, and Kansas increased its sales tax. New Mexico permanently suspended income tax rebates made in partial reimbursement of sales taxes paid on food and medicine. Missouri increased its sales and corporate income taxes in order to make refund payments to federal pension recipients.

⁶ The revenue capacity of a state is defined in the RRS as “the revenue the state and its local governments could raise

with a set of taxes and tax rates ‘representative’ of actual policies prevailing, on average, throughout the nation” (Rafuse, p. 139). The RRS reflects those tax sources that state and local governments use in the real world, by estimating the dollar yield from taxing those goods, services, and factor returns that actually are taxed by all jurisdictions. The RRS estimates how much each state-local fiscal system could receive, not from its own actual tax policy, but from a hypothetical—or representative—tax policy constructed from the actual taxing practices of all state-local systems in the aggregate. “A central feature of [the RRS] is that it is designed to be representative of the overall tax system of the states. This is achieved by including all of the various taxes in the system and by weighting each tax in accordance with the extent to which it is used collectively by states and local governments. It is achieved further by a process of standardization, whereby the revenues of each state are estimated for each revenue source by applying a standard (average) tax rate to a standard (typical) tax base” (Advisory Commission on Intergovernmental Relations, p. 10).

⁷ Revenue effort compares actual revenues received with estimated potential yields under the RRS and is calculated by dividing actual revenue by estimated capacity, both overall and for individual revenue sources.

⁸ The RRS approach to measuring revenue capacity was developed in an attempt to correct some of the flaws in the personal income approach. Personal income has fallen into disfavor as a measure of revenue capacity mainly due to its lack of comprehensiveness and its failure to take account of tax exporting. Personal income measures income received by persons residing in a jurisdiction. As such, it is not a complete measure of a jurisdiction's economic resources available for taxation. Excluded, for example, are corporate income (except that paid to residents in dividends) and compensation paid to nonresidents working in the jurisdiction. Using personal income alone as a measure of revenue capacity also fails to take account of tax exporting. The ability to engage in tax exporting varies widely among tax jurisdictions, as does its practice, and tax exporting may be an important tool of tax policy. Tax exportation occurs primarily in two ways. One way is through the taxation of economic transactions or activities involving nonresidents—for example, retail sales taxes on purchases by nonresidents, hotel taxes paid by nonresident tourists or business travelers, earnings taxes on wages and salaries received by commuters into the taxing jurisdiction, or taxes on investment returns to nonresidents from invest-

ments located in the taxing jurisdiction. Another way is through the deductibility from federal taxable income of some state and local taxes. When federal tax liability is reduced by such deductions, state and local taxes are in effect shifted to taxpayers throughout the rest of the country.

⁹ The RRS automatically records receipts from taxes exported by a jurisdiction. For example, the RRS sales tax base necessarily includes retail purchases made by nonresident tourists and job commuters. However, the RRS does not incorporate the tax exporting due to the deductibility from federal taxable income of some state and local taxes.

¹⁰ For one thing, changes in tax systems due to increasing personal income taxes should be measured against the traditionally accepted objectives of a good tax structure: equity, or fairness in the distribution of the tax burden; neutrality, or minimum interference with economic decisions and behavior in otherwise efficient markets; and simplicity, or effective and understandable tax administration. Policymakers and other citizens should keep these objectives in mind as they search for sources of additional revenues for the 1990s (Miller 1989, pp. 26-30).

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