

FISCAL DISPARITIES ACROSS STATES, FY 2002*

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STATES VARY BOTH IN THEIR NEED TO PROVIDE basic public services and in their ability to raise revenues to pay for those services. The representative revenue system (RRS) and representative expenditure system (RES) frameworks measure these disparities across states by comparing each state's revenue capacity, revenue effort, and expenditure need to the average capacity, effort, and need in states across the country. Because different states assign tax authority and expenditure responsibilities to different levels of government, the RSS and the RES combine information about revenues raised and expenditure needs across all levels of government in each state.¹

The RSS and RES use a methodology based on the underlying economic and demographic conditions found in the states, rather than actual revenue and expenditure levels. A state's *revenue capacity* measures the resources its state and local governments can tap to finance public services. A state's *expenditure need* gauges the extent to which its state and local governments face conditions that raise or lower the cost of, and need for, public services. *Fiscal capacity* assesses each state's ability to raise revenues relative to its expenditure needs.

WHY USE FISCAL CAPACITY AS A MEASURE?

Actual revenue and expenditure collections do not give a complete picture of a state's fiscal capacity, because they are affected by policy decisions including differences in state tax rates, exemptions, eligibility rules, and compliance policies. The RRS and RES frameworks provide an estimate of fiscal capacity for each state that is independent of these policy decisions. Rather, these systems examine what revenues a state *would raise* over similarly defined revenue

bases if the tax rates and charges levied were set at the average rate for all 50 states. Similarly, expenditure need calculates what spending would be if a given state provided an average level of state and local services.

The representative approach improves upon alternative measures of fiscal capacity, such as personal income or gross state product (GSP), by taking into account differences across revenue and expenditure items.² Compared with the representative approach, those alternate measures of fiscal capacity are easier to compile and compute, yet do not necessarily give a complete picture of a state's fiscal position. For example, on the revenue side, GSP measures treat the myriad of economic activities in a state as equally taxable. In practice, certain economic activities are more easily taxed (for example, natural resource extraction taxes, which are often paid by nonresidents) or are unable to be taxed due to federal regulations (for example, Internet activity). On the expenditure side, straight per capita methods based on overall population often assume that each individual in a state or region requires the same level of public goods and services. In practice, certain populations (for example, school-age children) require more state and local expenditures.

The representative system approach recognizes that a state's characteristics and its particular mix of economic activities can significantly influence its fiscal capacity. For instance, different tax bases are subject to different levels of taxation across the states; thus, certain economic bases are more plausible sources of taxes than others. In addition, the cost of financing a given level of public goods and services depends not only on the size of a state's economic base and its population level, but also on economic, demographic, and geographical characteristics.

FISCAL CAPACITY MEASURES AND TERMINOLOGY

Measuring *fiscal capacity* requires constructing an estimate for the revenues and expenditures a state would have, had it followed standard rev-

*The views expressed in this paper are those of the authors and do not necessarily reflect the positions or policies of the D.C. Office of Revenue Analysis.

enue and expenditure policies that prevail across the nation. On the revenue side, the *tax capacity* of a given state is the amount of taxes the state would have collected if it had applied a set of *representative tax rates* (which we calculate as the national average rate for each type of tax) times the applicable taxable base. The taxable base varies for each type of tax and is standardized across states, so could differ from the state's own calculation of its tax base. The *revenue capacity* of each state includes tax capacity as well as potential non-tax revenue from such sources as user charges, lotteries, income from sale of property, and interest income; again, we assume that a state levies charges and collects other revenues at representative levels. A state is said to have a high *revenue (tax) effort* if its actual revenues (tax collections) exceed its revenue (tax) capacity.

On the expenditure side, a state's *expenditure need* is the amount the state and its local governments would have spent per capita had they provided each service to the relevant population at the nation's average level, adjusting for cost differences. We use "workload measures" to account for these economic, demographic, and geographic differences. For example, for basic education, the "workload measure" is determined based on (1) the number of school-age children likely to attend public schools, (2) the number of school-age children living in poverty, and (3) the mix of elementary and secondary students in a state. A state's education expenditure will depend on the average spent in all 50 states, allocated across individual states based on the above factors. The state's overall expenditure need is the sum of the needs across different expenditure items. A state with high *expenditure effort* spends, per capita, more than its expenditure need.

A state's *fiscal capacity* is the ratio of its revenue capacity to its expenditure need. A state with low fiscal capacity has a relatively small revenue base, or a relatively high need for expenditures (for example, it might have many school-age children, a large proportion of its population living in poverty, or a high crime rate), or more likely, a combination of limited revenue resources and high need. Low fiscal capacity does not necessarily imply an unbalanced fiscal position—a state can be fiscally sound if it is covering any shortfall through federal transfers or grants, or (in the short run) debt issuance. But low fiscal capacity generally points to some vulnerability, typically in the form of low

service levels, high tax effort, or—as illustrated in the case of Hurricane Katrina—less ability to cope with shocks to the economy. Louisiana, Mississippi, and Alabama—the three states hit hardest by Katrina—are among the states with the lowest revenue capacity, highest expenditure need, and lowest fiscal capacity. Differences across states in fiscal capacity reveal the degree of *fiscal disparity* within the nation. The *fiscal gap at capacity* is the difference between revenue capacity and expenditure need.

FINDINGS

As in previous years, this study finds the Middle Atlantic and New England states have the greatest revenue capacity per capita. States in these regions also tend to have low expenditure need; thus, their fiscal capacities rank among the top in the nation. South Central states have the lowest revenue capacity and relatively high expenditure need. Therefore these states are, with few exceptions, at the bottom of the fiscal capacity rankings (Table 1).³

In terms of *revenue capacity* for 2002,⁴ Connecticut, Delaware, Massachusetts, Alaska, and New Jersey are in the top five, while Mississippi, West Virginia, Arkansas, Alabama, and Oklahoma are at the bottom. Alaska and New York are at the top of *revenue effort* rankings, while Tennessee, South Dakota, Massachusetts, and New Hampshire have relatively low revenue effort (Figure 1, Table 2). Results for tax effort are consistent with findings from the 1999 and 1997 studies: states tend to be consistently in the top or bottom of the rankings.⁵

Alabama, Mississippi, Louisiana, New Mexico, and Texas have the highest expenditure needs, while Iowa and New Hampshire have the lowest (Figure 2, Table 2). FY 2002 rankings have given more emphasis to education expenditure needs for elementary school students and children in poverty than the 1999 and 1997 studies. This change in methodology, as well as changes in economic conditions, introduced some new states to the top 10, namely Arkansas (ranked 18th in 1999), West Virginia (ranked 23rd) and South Carolina (ranked 29th).

Connecticut, Massachusetts, New Hampshire, Delaware, New Jersey, Nevada, Hawaii, and Minnesota kept their position in the top 10 states with the highest fiscal capacity, and with oil prices bouncing back to their 1997 levels, Alaska reap-

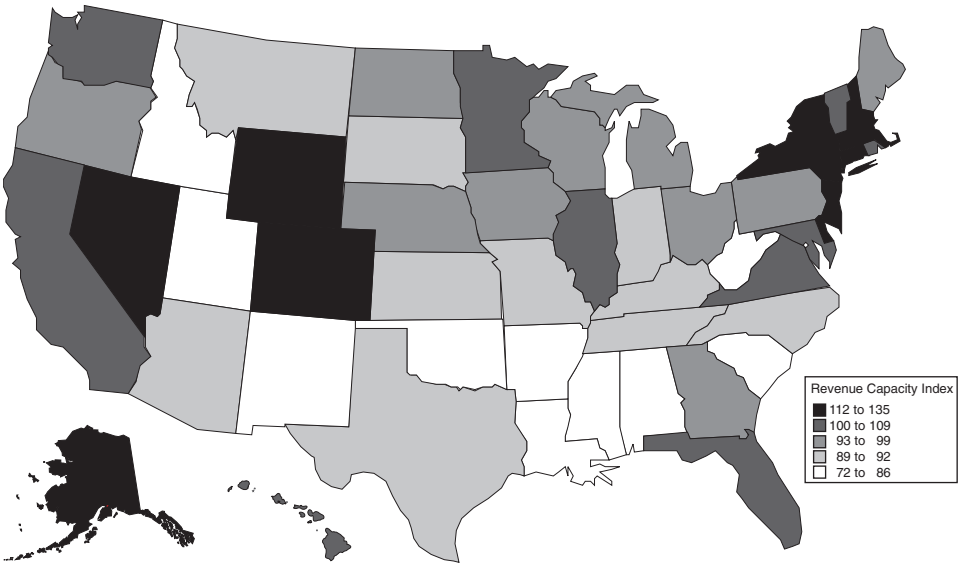
Table 1
RRS and RES Summary Indices, by Census Division, FY 2002

	<i>Revenue capacity index</i>	<i>Revenue effort index</i>	<i>Expenditure need index</i>	<i>Expenditure effort index</i>	<i>Fiscal capacity index</i>
New England	123	88	94	114	131
Middle Atlantic	109	111	98	123	111
East North Central	97	100	100	98	97
West North Central	97	100	95	102	102
South Atlantic	97	96	99	92	98
East South Central	85	95	106	82	80
West South Central	88	98	107	80	82
Mountain	97	95	99	93	98
Pacific	107	102	101	108	106

Source: Authors' calculations.

Note: National average = 100.

Figure 1: Revenue Capacity Index Scores by State, FY 2002



peared in the top 10 in 2002 (Alaska had ranked 26th in 1999). Mississippi, Arkansas, West Virginia, Louisiana, Alabama, South Carolina, New Mexico, and Oklahoma repeatedly appeared among the 10 states with the lowest fiscal capacity (Figure 3, Table 2).

POLICY OPTIONS

Differences in state revenue capacity and expenditure need might be offset by federal inter-

vention in equalizing grants. Indeed, the federal government might view supplementing revenues for states with low fiscal capacity as part of its redistributive role, since a widely embraced goal of many nations possessing a federalist form of government is to narrow interstate or interprovincial fiscal disparity.

We find little relation between the amount of federal aid received by states and their fiscal capacity. The correlation between federal grants and the fiscal gap at capacity is 0.10. Overall, federal

Table 2
RRS and RES Summary Data for Fiscal Year 2002

	Revenue Capacity			Revenue Effort		Expenditure Need			Expenditure Effort		Fiscal Capacity	
	Per Capita	Index	Rank	Index	Rank	Per Capita	Index	Rank	Index	Rank	Index	Rank
United States	\$4,659	-	-	100	-	\$6,007	100	-	100	-	100	-
Alabama	\$3,820	82	46	103	18	\$6,492	108	4	85	44	76	46
Alaska	\$5,496	118	5	155	1	\$5,995	100	21	220	1	118	9
Arizona	\$4,147	89	39	89	43	\$6,128	102	15	77	49	87	38
Arkansas	\$3,557	76	48	101	22	\$6,539	109	3	74	50	70	49
California	\$5,059	109	11	102	20	\$6,211	103	13	108	16	106	18
Colorado	\$5,282	113	8	93	40	\$5,610	93	38	108	16	122	7
Connecticut	\$6,272	135	1	87	46	\$5,772	96	30	121	6	141	1
Delaware	\$5,678	122	3	105	12	\$5,557	93	38	120	7	131	4
Florida	\$4,730	102	17	93	40	\$5,666	94	36	92	32	109	15
Georgia	\$4,346	93	29	95	35	\$6,297	105	7	86	40	89	36
Hawaii	\$4,848	104	15	99	27	\$5,216	87	50	129	4	120	8
Idaho	\$3,915	84	43	101	22	\$5,880	98	22	86	40	86	39
Illinois	\$4,843	104	15	94	37	\$6,126	102	15	96	26	102	23
Indiana	\$4,308	92	33	99	27	\$5,908	98	22	90	34	94	30
Iowa	\$4,368	94	26	104	14	\$5,491	91	46	107	18	103	21
Kansas	\$4,224	91	36	102	20	\$5,846	97	25	94	29	94	30
Kentucky	\$4,219	91	36	92	42	\$6,141	102	15	86	40	89	36
Louisiana	\$3,846	83	44	114	4	\$6,631	110	2	81	45	75	47
Maine	\$4,342	93	29	112	6	\$5,593	93	38	110	13	100	26
Maryland	\$5,007	107	13	98	29	\$5,688	95	34	103	20	113	12
Massachusetts	\$5,994	129	2	86	47	\$5,709	95	34	116	8	136	2
Michigan	\$4,527	97	22	101	22	\$6,255	104	9	97	25	93	32
Minnesota	\$5,057	109	11	108	8	\$5,553	92	45	125	5	118	9
Mississippi	\$3,352	72	50	112	6	\$6,800	113	1	79	47	64	50
Missouri	\$4,346	93	29	89	43	\$5,816	97	25	88	37	96	29
Montana	\$4,208	90	38	94	37	\$5,798	97	25	96	26	93	32
Nebraska	\$4,430	95	24	104	14	\$5,619	94	36	100	22	101	25
Nevada	\$5,217	112	9	89	43	\$5,489	91	46	99	23	123	6
New Hampshire	\$5,482	118	5	76	50	\$5,282	88	49	94	29	134	3
New Jersey	\$5,651	121	4	98	29	\$5,797	97	25	109	15	125	5
New Mexico	\$3,946	85	42	107	11	\$6,460	108	4	95	28	79	44
New York	\$5,240	112	9	122	2	\$6,052	101	19	139	2	111	13
North Carolina	\$4,282	92	33	96	33	\$6,113	102	15	88	37	90	34

North Dakota	\$4,402	94	26	103	18	\$6,248	104	9	98	24	90	34
Ohio	\$4,380	94	26	105	12	\$5,814	97	25	101	21	97	27
Oklahoma	\$3,835	82	46	104	14	\$6,059	101	19	86	40	81	43
Oregon	\$4,629	99	21	95	35	\$5,605	93	38	116	8	106	18
Pennsylvania	\$4,418	95	24	104	14	\$5,609	93	38	106	19	102	23
Rhode Island	\$4,701	101	19	98	29	\$5,603	93	38	113	10	109	15
South Carolina	\$3,861	83	44	101	22	\$6,291	105	7	92	32	79	44
South Dakota	\$4,349	93	29	85	48	\$5,745	96	30	89	36	97	27
Tennessee	\$4,139	89	39	83	49	\$6,271	104	9	80	46	86	39
Texas	\$4,271	92	33	94	37	\$6,456	107	6	79	47	86	39
Utah	\$3,985	86	41	108	8	\$6,181	103	13	90	34	83	42
Vermont	\$4,662	100	20	97	32	\$5,493	91	46	112	11	110	14
Virginia	\$4,750	102	17	96	33	\$5,764	96	30	94	29	106	18
Washington	\$4,871	105	14	101	22	\$5,791	96	30	110	13	109	15
West Virginia	\$3,552	76	48	113	5	\$6,227	104	9	88	37	73	48
Wisconsin	\$4,482	96	23	108	8	\$5,566	93	38	112	11	103	21
Wyoming	\$5,370	115	7	115	3	\$5,894	98	22	131	3	117	11

Source: Authors' calculations.

Figure 2: Expenditure Need Index Scores by State, FY 2002

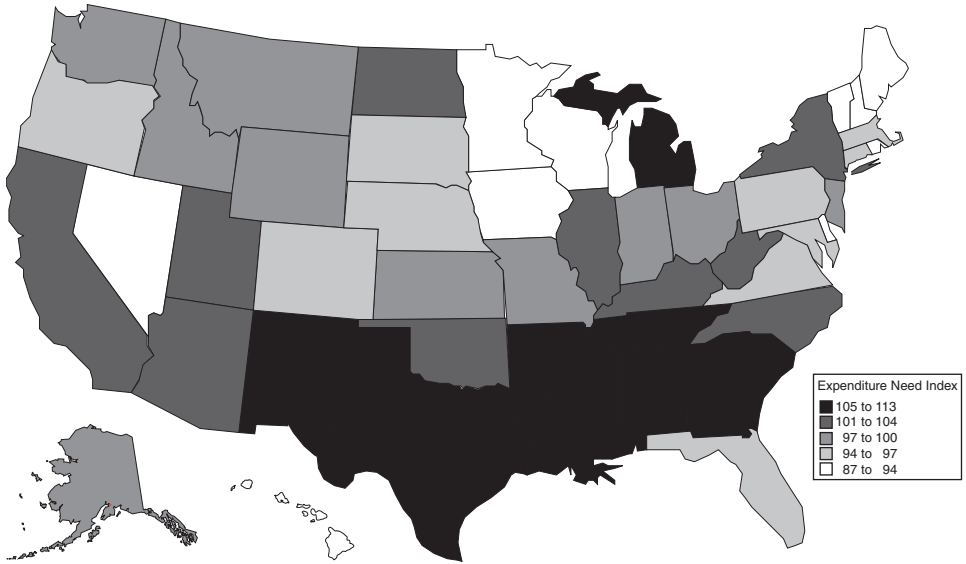
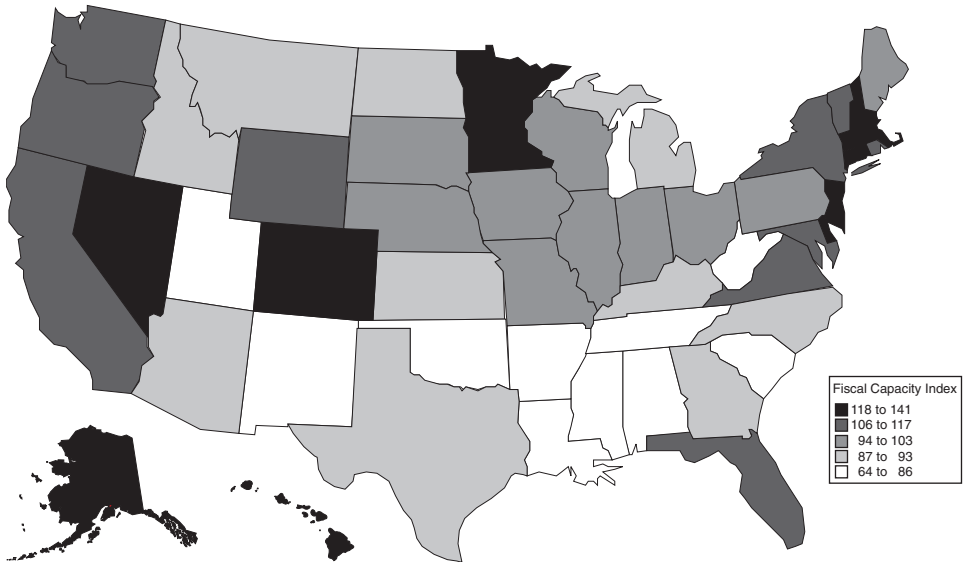


Figure 3: Fiscal Capacity Index Scores by State, FY 2002



money does not appear to be primarily distributed to offset differences in states' abilities to raise revenues or provide services. While some federal grants are based on fiscally equalizing factors (for example, federal education funds are based on the number of children in poverty), other programs require matching funds for states to be eligible for federal grants. Given the current level of federal funds allocated to state and local governments, 91 percent of the gap between revenue capacity and expenditure need across the states could be covered if federal funds were reallocated using the fiscal capacity measures presented in this paper.

However, it is important to note that the benchmarks used in these indices are simply the national averages and they are not necessarily optimal levels. In addition, the rankings depend on the average dependence of states on specific revenue sources and current expenditure levels. This composition does not necessarily represent an optimal distribution and can change over time. For example, states have increased the amount of expenditures on health care as costs and demographic variables have changed. To characterize above-average index numbers as "excessive" or below-average index numbers as "deficient" would be misleading. Any policy maker seeking to make inferences based on these indices must remember that they measure the fiscal conditions of the states relative to the national average and not necessarily an optimal level.

Notes

- * This article reprints the Tax Policy Center Issues and Options Brief No. 16, January 2007 and is based on a larger study carried out by the Urban-Brookings Tax

Policy Center and the New England Public Policy Center at the Federal Reserve Bank of Boston. For more details see Yilmaz et al. (2006).

- ¹ Thus, *state* here includes the state and all local governments, including counties, municipalities, townships, special districts, and school districts.
- ² There are additional alternative measures of fiscal capacity including using total taxable revenues. For a broader discussion of the advantages and disadvantages of these different measures, see Box 4 in Yilmaz et al. (2006) and Tannenwald (1999).
- ³ For state by state detailed information, see Table 2.
- ⁴ Because the FY 1999 and FY 1997 studies did not include user charges and other non-tax revenue sources, comparing revenue capacity and revenue effort estimates over time is not possible; instead, comparisons are between tax capacity and tax effort. For more details, see Yilmaz et al. (2006).
- ⁵ Comparisons across studies must be qualified, since methodologies change over time. But the comparison of rankings as presented in this paragraph, and the distribution of index numbers, is less problematic than the comparison of the actual index numbers. Yilmaz et al. (2006) elaborate on the limitations of comparisons of a state's ranking over time.

References

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