

HIGHLIGHTS

- State tax revenues were superficially strong in this year's second quarter, as predicted in our last revenue report, but trouble is brewing. Some states have already made midyear budget cuts, and more widespread cuts are virtually certain as revenues deteriorate further.
- Overall, state tax collections rose 3.6 percent from a year earlier. A 1.4 percent decline in the sales tax, an 8.3 percent decline in the corporate income tax, and a 3.4 percent decline in motor fuel taxes were more than offset by income tax growth of 6.6 percent.
- The income tax growth was driven by income earned in 2007 and will be ephemeral. States should expect sharp declines in income-tax revenue later this fiscal year, especially in the important April-June quarter.
- Local government tax revenue has been slowing sharply, even though the property taxes that local governments rely so heavily upon historically have been quite stable.
- State and local governments continue to be squeezed by rising prices as well, with inflation for their purchases up 6.6 percent over the last year.

The Damage Is Just Beginning

Sales and Property Taxes Weaken; Sharp Drop in Income Taxes Appears Near-Certain

Donald J. Boyd and Lucy Dadayan

Introduction

Last quarter's Revenue Report cautioned that "Revenues may be relatively strong during the April-June quarter, but positive cash flows will largely reflect tax payments based on 2007 activity. Such strength is likely to dissipate after June. The underlying trend for states is negative; budget cuts and other gap-closing measures likely loom ahead." All of these predictions are coming true, as we describe within:

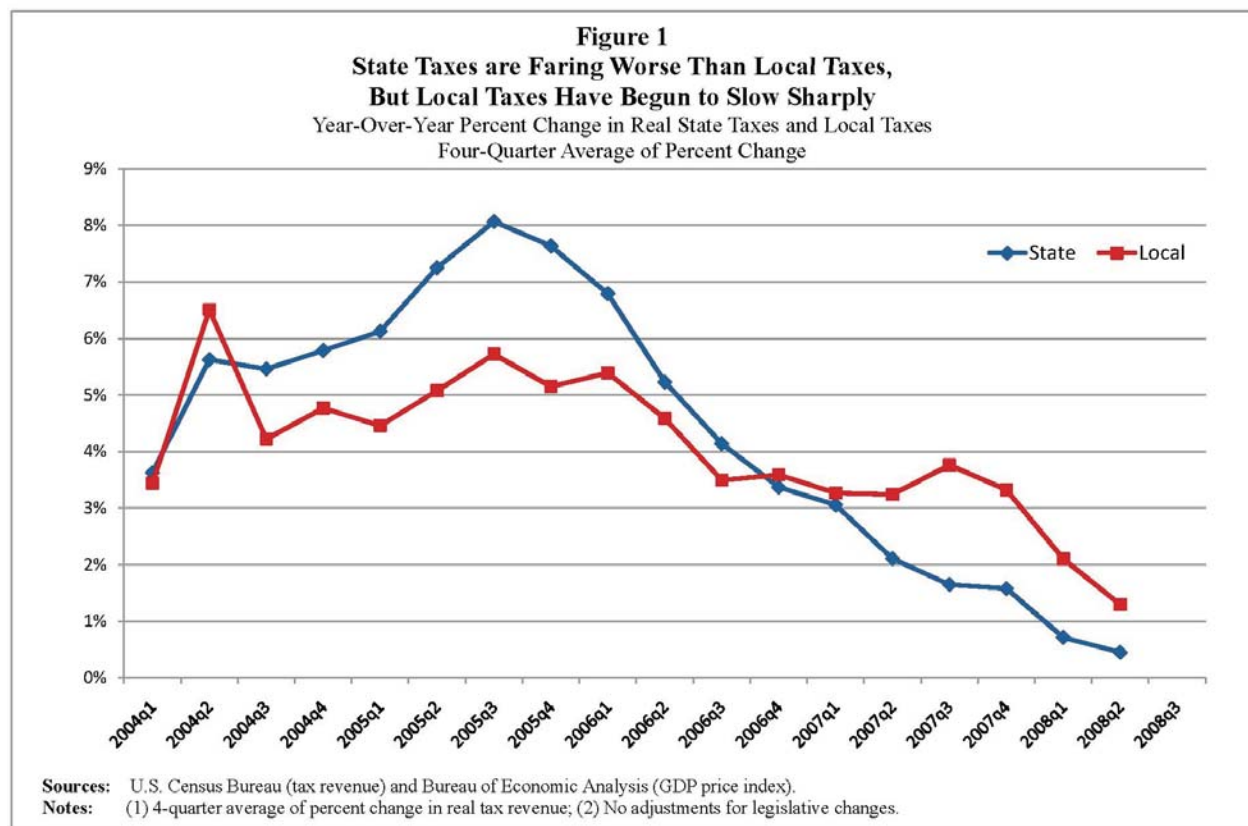
- ✓ Tax revenue was not as strong in the April-June quarter as a cursory glance at the data suggests;
- ✓ Developments since June suggest a substantial weakening in tax revenue; and
- ✓ Several states have adopted midyear budget cuts, and we expect more to do the same.

State Taxes and Local Taxes

State tax collections in the April to June quarter, as reported by the U.S. Bureau of the Census, rose 3.6 percent from the same quarter last year. And local tax collections rose by 3.2 percent. Superficially, tax collections appeared to be doing okay — certainly not the leading edge of a fiscal crisis. But below the surface, great trouble is brewing.

First, as noted in our report last quarter, April-June tax collections reflected strong payments with income tax returns for 2007 due on April 15 — "last year's

IMPORTANT NOTE: We have made two significant changes in this revenue report: (1) we are basing it upon quarterly tax data collected by the U.S. Bureau of the Census, which are now more timely than in prior years; and (2) we have changed our method of adjusting for inflation. These changes will allow us to broaden and strengthen our analysis, but they complicate comparisons between this report and previous reports. Separate appendices on these topics on pages 24 and 26, respectively, explain these changes.



economy is doing well.” But payments based on current economic activity have been much weaker.

Furthermore, even with this recent strength, the trend in state and local tax collections has been clearly downward. Figure 1 shows the four quarter moving average of year-over-year growth in state tax collections and local tax collections, after adjusting for inflation. The downward trend in both is evident. Year-over-year growth in state taxes, adjusted for inflation, has averaged 0.5 percent over the last four quarters, down from the 2.1 percent average growth of a year ago. Year-over-year growth in local taxes has slowed to 1.3 percent over the last four quarters, from 3.2 percent a year ago.

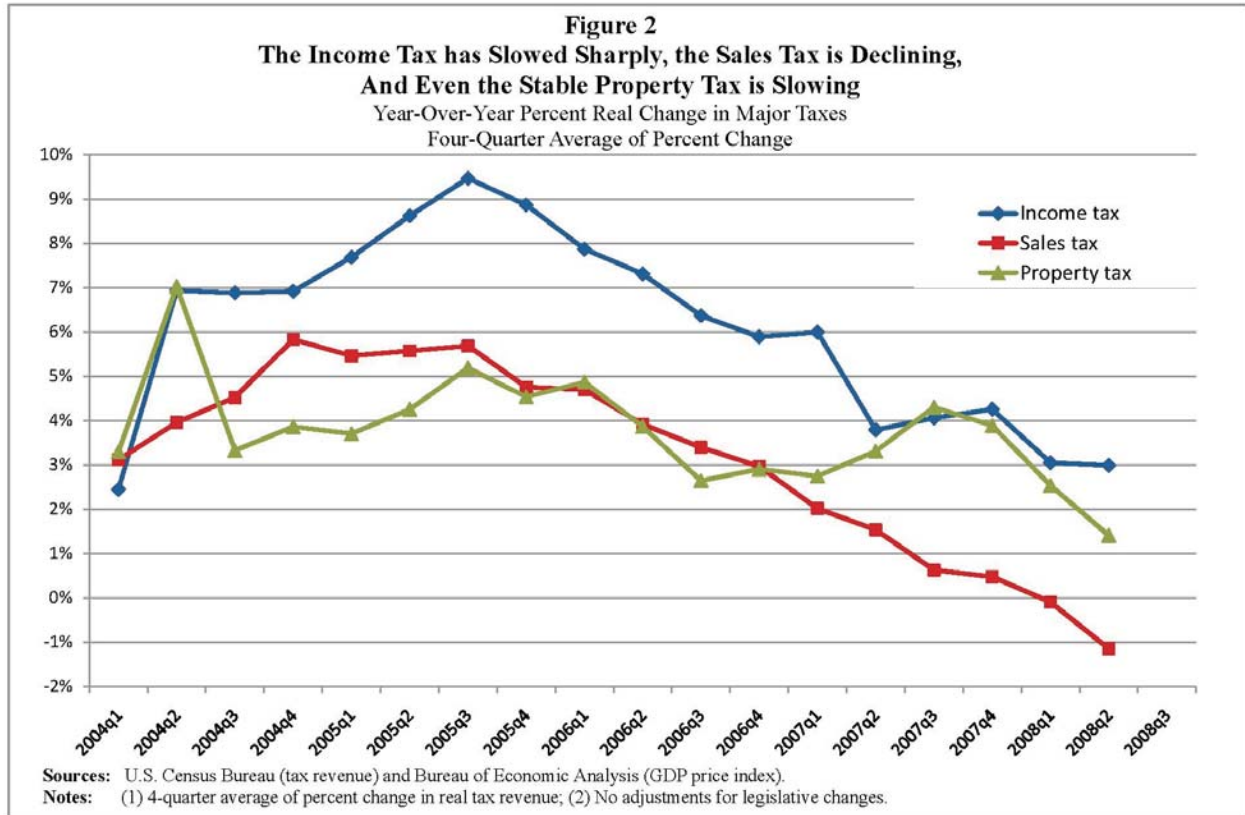
The local tax slowdown has been less pronounced than the state tax slowdown, and local taxes in recent quarters have been growing more quickly than state taxes. Most local governments rely heavily on property taxes, which tend to be relatively stable.

Figure 2 shows the four-quarter average of year-over-year growth in state and local income,

sales, and property taxes, adjusted for inflation. Both the income tax and the sales tax have been on a long downward trend. The sales tax has slowed more sharply than the income tax and the average for the most recent four quarters declined, after adjusting for inflation, relative to the same period a year earlier. The relative stability of the property tax is apparent, but what is surprising and perhaps a little frightening is the sharp drop-off in growth over the last two quarters. Local governments that rely heavily on the property tax are feeling the effects of this crisis.

State Tax Revenue

Total state tax revenue in the second quarter of 2008 increased by 3.6 percent relative to a year ago. The income tax was up 6.6 percent, while the sales tax was down 1.4 percent in the corporate income tax was down by 8.3 percent. See Tables 1 and Tables 2 for growth in tax revenue with and without adjustment for inflation, and for growth by major tax, respectively.¹



Personal Income Tax

In the second quarter of 2008, personal income tax revenue made up at least 50 percent of total tax revenue in 11 states, and at least 40 percent in 15 more states.

Personal income tax revenue grew 6.6 percent in the April-June 2008 quarter compared to the same quarter in 2007, making it the strongest quarter of the fiscal year. The strongest growth in state personal income tax revenue was in the Mid-Atlantic region, where collections grew 14.2 percent, followed by the New England states, at 7.7 percent. Collections decreased by 6.8 percent in the Southwest region and were flat in the Rocky Mountain states.

Of the 40 states with a broad-based personal income tax and for which information is available, 33 reported growth, while seven states had double-digit increases. Kentucky led the states with growth of 28 percent. Ten states showed a decline in personal income tax collections, the largest being 19 percent for Arizona, which appears to have been influenced by processing factors.

We can get a clearer picture of collections from the personal income tax by breaking this source down into major component parts for which we have data: withholding and quarterly estimated payments.²

Withholding

Withholding is a good indicator of the current strength of personal income tax revenue because it comes largely from current wages and is much less volatile than estimated payments or final settlements. Table 3 shows that withholding for the April-June 2008 quarter was 2.3 percent higher than the same quarter of 2007, and lower than growth in the three preceding quarters. Only Michigan and North Dakota reported growth of more than 10 percent.

Estimated Payments

The highest-income taxpayers generally make estimated tax payments (also known as declarations) on their income not subject to withholding tax. This income often comes from investments,

	Total Nominal Change	Inflation Rate	Adjusted Real Change
Apr-08	3.6	2.0	1.6
Jan-08	1.2	2.3	(1.1)
Oct-07	3.6	2.6	0.9
Jul-07	2.9	2.5	0.5
Apr-07	5.4	2.8	2.6
Jan-07	5.4	2.9	2.5
Oct-06	4.0	2.8	1.2
Jul-06	5.6	3.2	2.4
Apr-06	10.1	3.5	6.6
Jan-06	7.1	3.4	3.8
Oct-05	7.9	3.5	4.4
Jul-05	10.2	3.4	6.9
Apr-05	15.9	2.9	13.0
Jan-05	10.6	3.3	7.2
Oct-04	9.4	3.2	6.2
Jul-04	6.5	3.0	3.5
Apr-04	11.2	2.9	8.3
Jan-04	8.1	2.3	5.8
Oct-03	7.0	2.2	4.8
Jul-03	6.3	2.2	4.2
Apr-03	2.1	2.1	0.1
Jan-03	1.6	2.1	(0.5)
Oct-02	3.4	1.7	1.7
Jul-02	1.6	1.6	(0.1)
Apr-02	(9.4)	1.6	(11.1)
Jan-02	(6.1)	2.0	(8.1)
Oct-01	(1.1)	2.4	(3.5)
Jul-01	0.5	2.4	(2.0)
Apr-01	1.2	2.5	(1.3)
Jan-01	2.7	2.2	0.5
Oct-00	4.2	2.2	2.0
Jul-00	6.8	2.3	4.5
Apr-00	11.7	2.1	9.6
Jan-00	12.0	2.1	10.0
Oct-99	7.3	1.6	5.7
Jul-99	6.2	1.5	4.7
Apr-99	3.9	1.5	2.5
Jan-99	3.8	1.2	2.6

Sources: U.S. Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP price index).

such as capital gains realized in the stock market. A strong stock market should eventually translate into capital gains and higher estimated tax payments. Strong business profits also tend to boost these payments. And when the market declines or profits fall, these payments often decline.

The first payment for each tax year is due in April in most states. Often it is made on the basis of the previous year's tax liability and may offer little insight into income in the current year. It is not safe to extrapolate trends from this first payment, or

	PIT	CIT	General Sales	Total
Apr-08	6.6	(8.3)	(1.4)	3.6
Jan-08	3.0	(3.7)	0.1	1.2
Oct-07	4.3	(8.8)	3.5	3.6
Jul-07	6.4	(1.9)	0.7	3.0
Apr-07	8.9	1.7	3.4	5.4
Jan-07	8.7	14.8	3.4	5.4
Oct-06	4.0	12.6	4.3	4.0
Jul-06	6.3	16.5	6.2	5.6
Apr-06	18.8	1.2	5.2	10.1
Jan-06	9.3	9.6	7.0	7.1
Oct-05	6.7	33.4	6.4	7.9
Jul-05	10.2	24.5	8.3	10.2
Apr-05	19.7	64.1	9.1	15.9
Jan-05	13.1	29.8	7.3	10.6
Oct-04	8.8	23.9	10.7	9.4
Jul-04	5.8	25.2	7.0	6.5
Apr-04	15.9	3.9	9.5	11.3
Jan-04	7.9	5.4	9.1	8.1
Oct-03	7.6	12.5	3.6	7.0
Jul-03	5.4	12.6	4.7	6.3
Apr-03	(3.1)	5.2	4.6	2.1
Jan-03	(3.3)	8.3	2.4	1.6
Oct-02	0.4	34.7	1.8	3.4
Jul-02	(3.4)	7.4	2.4	1.6
Apr-02	(22.3)	(12.3)	0.1	(9.4)
Jan-02	(14.7)	(15.7)	(1.4)	(6.1)
Oct-01	(2.5)	(34.0)	1.8	(1.1)
Jul-01	(0.0)	(27.2)	2.3	0.5
Apr-01	3.7	(11.0)	(0.8)	1.2
Jan-01	4.7	(8.4)	1.8	2.7
Oct-00	6.6	(0.5)	4.4	4.3
Jul-00	10.0	8.2	4.8	6.8
Apr-00	21.2	4.2	7.1	11.7
Jan-00	17.0	11.0	12.0	12.0
Oct-99	7.3	4.7	7.2	7.4
Jul-99	6.9	4.3	6.2	6.2
Apr-99	5.2	5.5	5.0	3.9
Jan-99	5.8	(5.4)	4.9	3.8

Source: U.S. Census Bureau (tax revenue).

often even from the first several payments. In the 35 states for which we have complete data for the first payment, the median payment was 5.6 percent higher than the year earlier (see Table 4). Increases were recorded in 28 of 35 states. Eleven states reported double-digit growth, with four states having increases of more than 20 percent. Seven states — Georgia, Hawaii, Ohio, Oklahoma, South Carolina, Virginia, and West Virginia — showed year-over-year declines in the first two estimated payments combined.

General Sales Tax

Sales tax collections in the April-June 2008 quarter were down 1.4 percent from the same

	2007		2008	
	July-Sept.	Oct.-Dec.	Jan.-Mar.	Apr.-June
United States	6.0	6.6	4.0	2.3
New England	5.6	6.7	4.5	1.8
Connecticut	8.8	7.9	2.6	0.1
Maine	2.4	4.4	6.3	2.3
Massachusetts	5.2	6.5	5.6	2.6
Rhode Island	(1.4)	6.1	(0.4)	1.9
Vermont	6.3	7.3	9.5	1.0
Mid-Atlantic	7.2	5.7	3.6	2.9
Delaware	0.0	5.6	(0.3)	(0.1)
Maryland	6.6	7.8	3.3	1.9
New Jersey	8.6	2.6	3.5	ND
New York	9.2	6.0	3.1	4.3
Pennsylvania	2.1	5.5	6.9	0.4
Great Lakes	3.2	5.5	7.5	2.9
Illinois	2.3	8.1	7.2	(0.2)
Indiana	7.2	6.0	7.2	4.2
Michigan	3.5	11.0	10.0	10.9
Ohio	(1.0)	2.5	(1.0)	0.5
Wisconsin	7.4	(0.2)	15.9	0.1
Plains	5.8	7.2	6.7	3.1
Iowa	5.4	8.3	8.1	ND
Kansas	6.9	8.9	7.4	1.8
Minnesota	4.8	5.2	6.1	3.5
Missouri	5.2	8.3	7.2	2.9
Nebraska	10.4	8.2	2.9	2.6
North Dakota	3.9	9.2	11.2	12.8
Southeast	7.0	6.9	4.4	2.2
Alabama	5.6	4.3	5.5	1.8
Arkansas	7.9	11.5	10.2	5.6
Georgia	6.4	5.6	1.9	(0.7)
Kentucky	6.1	3.8	7.8	5.7
Louisiana	16.9	15.2	3.5	2.6
Mississippi	8.6	8.6	3.8	2.8
North Carolina	7.4	7.4	3.0	2.5
South Carolina	3.1	8.8	2.9	1.4
Virginia	4.7	6.4	5.2	ND
West Virginia	23.3	1.2	14.7	7.4
Southwest	3.0	2.9	(1.7)	1.6
Arizona	8.0	1.8	(1.7)	(1.0)
New Mexico	8.1	11.8	(3.2)	ND
Oklahoma	(4.5)	0.7	(1.3)	5.2
Rocky Mountain	8.5	8.7	4.1	(2.8)
Colorado	7.1	8.1	7.5	4.0
Idaho	10.9	9.1	(2.4)	(0.8)
Montana	14.6	10.1	4.8	(4.7)
Utah	8.0	9.2	1.3	(13.9)
Far West	6.0	8.1	1.3	2.4
California	7.1	8.9	0.7	2.7
Hawaii	3.5	6.6	20.9	(1.4)
Oregon	(0.3)	2.4	1.2	2.1

Source: Individual state data, analysis by Rockefeller Institute.
Note: Nine states — Alaska, Florida, New Hampshire, Nevada, South Dakota, Tennessee, Texas, Washington, and Wyoming — have no personal income tax and are therefore not shown in this table.

quarter in 2007. This is far weaker than the historical average growth over the past 10 years of 5.0 percent.

April-June 2008 (first two payments of 2008)	
Average (Mean)	5.7
Median	5.6
Alabama	8.3
Arkansas	12.9
California	0.5
Colorado	3.8
Connecticut	5.4
Delaware	4.6
Georgia	(8.7)
Hawaii	(6.6)
Illinois	6.3
Indiana	20.5
Iowa	15.1
Kansas	4.7
Kentucky	42.9
Louisiana	24.0
Maine	4.8
Maryland	5.0
Massachusetts	9.8
Michigan	11.7
Minnesota	12.5
Missouri	2.1
Montana	7.0
Nebraska	13.7
New York	34.1
North Carolina	0.7
North Dakota	6.4
Ohio	(1.9)
Oklahoma	(6.0)
Oregon	10.4
Pennsylvania	5.6
Rhode Island	11.0
South Carolina	(6.1)
Vermont	8.1
Virginia	(0.5)
West Virginia	(67.8)
Wisconsin	4.5

Source: Individual state data, analysis by Rockefeller Institute.

Sales tax revenue declined the most in the Southeast, Rocky Mountain, and Far West regions, at 4.7 percent, 4.0 percent, and 2.7 percent, respectively. Maryland had the highest increase nationally, at 14.3 percent, in part reflecting an increase in its rate from 5 percent to 6 percent in January. A total of 28 states had a sales tax decline. Ten out of 12 states in the Southeast region had a sales tax decline, and the other two (Kentucky and Louisiana) each increased by less than 0.5 percent. South Dakota, Utah, and Georgia had the largest declines at 16.6 percent, 9.6 percent, and 8.3 percent, respectively. The South Dakota decline reported in the

Table 5						
Percent Change in State Taxes						
Other Than PIT, CIT, and General Sales Taxes						
	Property tax	Motor fuel sales tax	Tobacco product sales tax	Alcoholic beverage sales tax	Motor vehicle and operators license taxes	Other taxes
Collections (millions), latest 12 months	\$12,395	\$37,567	\$16,135	\$5,253	\$21,743	\$107,806
2008q2	(0.1)	(2.1)	5.2	0.1	(1.3)	4.2
2008q1	0.1	(1.4)	6.0	0.6	(1.6)	1.5
2007q4	0.7	(1.8)	6.1	0.7	(0.7)	1.4
2007q3	0.6	(0.5)	4.0	1.6	(1.0)	(0.9)
2007q2	(0.2)	(1.1)	0.6	1.4	(0.8)	(1.1)
2007q1	1.8	(0.0)	1.8	0.6	0.5	(1.0)
2006q4	(0.1)	0.7	3.0	1.1	0.9	(0.5)
2006q3	(0.5)	(1.1)	5.6	1.3	0.7	2.1
2006q2	(0.3)	1.5	8.9	1.3	0.6	4.5
2006q1	1.0	1.6	6.9	2.5	0.1	5.4
2005q4	2.3	2.3	5.3	1.6	0.3	7.2
2005q3	3.5	3.7	4.2	(0.2)	2.1	6.3
2005q2	3.6	0.9	2.2	(0.6)	2.8	4.7
2005q1	1.5	1.4	2.9	(2.3)	3.6	5.4
2004q4	(4.4)	1.6	3.5	(1.3)	5.6	5.7
2004q3	(1.6)	1.5	3.5	0.2	6.1	7.4
2004q2	5.8	2.1	4.7	0.6	6.7	8.9
2004q1	3.1	0.4	11.4	4.1	5.7	7.6
2003q4	9.6	(1.0)	19.1	3.8	4.1	5.8
2003q3	6.8	(1.2)	28.1	2.2	3.0	3.8
2003q2	(1.4)	(0.4)	35.8	3.1	2.8	2.5
2003q1	(4.7)	0.6	27.8	0.8	3.6	2.2
2002q4	(4.6)	0.8	17.7	(0.1)	2.7	1.9
2002q3	(6.6)	0.4	5.6	2.5	2.2	2.3
2002q2	(3.4)	0.9	(6.2)	(0.5)	0.2	3.2
2002q1	5.3	1.5	(5.2)	(0.5)	(1.3)	2.2
2001q4	3.4	2.4	(1.1)	0.4	(2.8)	2.7
2001q3	1.1	3.5	3.1	(1.4)	(3.2)	1.7
2001q2	(4.8)	2.5	7.7	1.8	(0.2)	1.1
2001q1	(12.7)	1.2	8.5	1.5	2.5	3.4
2000q4	(11.4)	1.2	5.8	1.9	5.7	4.0
2000q3	(4.3)	1.3	1.7	3.2	6.8	6.4
2000q2	(2.3)	1.2	(1.3)	2.2	5.7	8.0
2000q1	2.4	2.3	(4.5)	3.1	3.2	5.5
1999q4	1.4	2.5	(5.2)	2.7	2.0	4.4
1999q3	(1.5)	1.7	(2.9)	1.7	1.5	3.6
1999q2	1.2	2.1	(1.0)	1.3	1.1	1.8
1999q1	4.5	2.5	1.3	1.5	1.2	3.0

Source: U.S. Census Bureau.

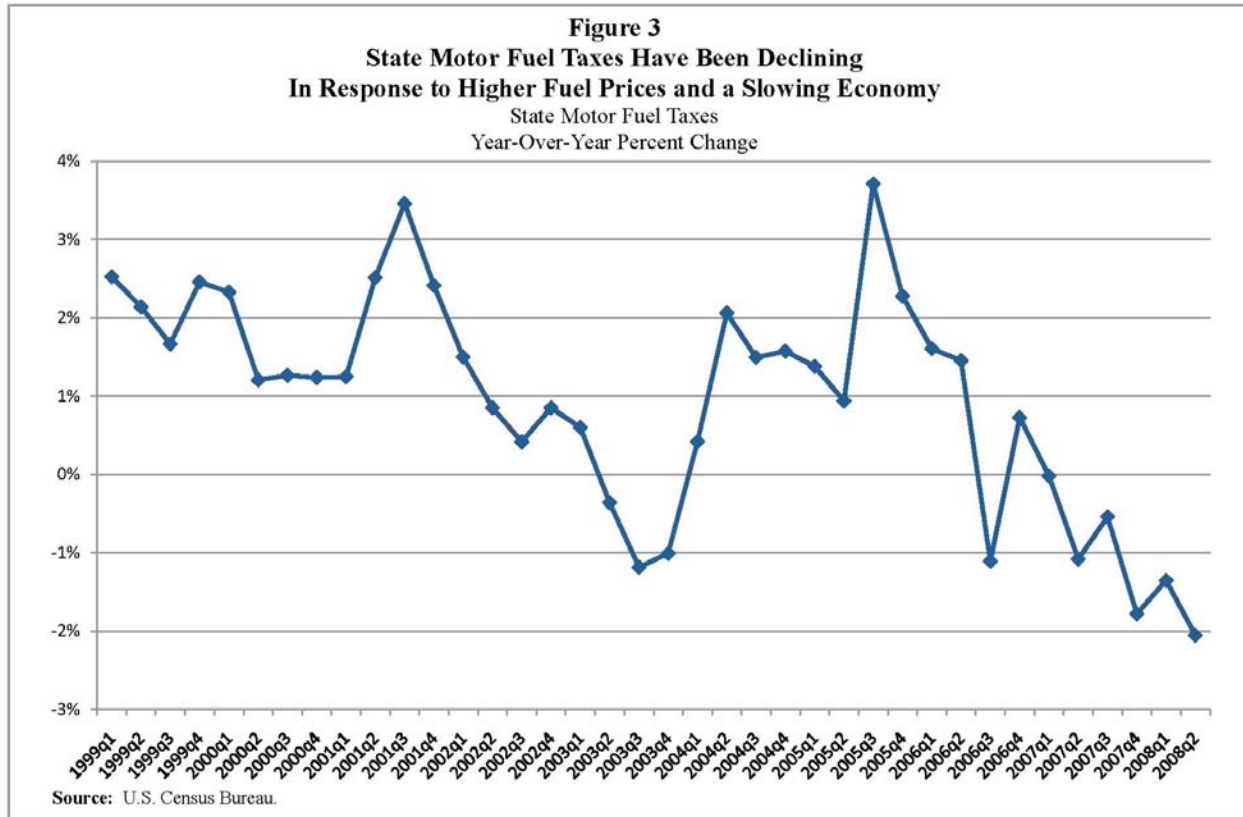
Census Bureau data was not corroborated by data collected by the Rockefeller Institute and so we suspect it may be revised in later releases of the Bureau's data.

Corporate Income Tax

Corporate income tax revenue is highly variable because of volatility in corporate profits, and volatility in the timing of tax payments. Many

states, such as Delaware, Hawaii, Montana, Rhode Island, and Vermont, collect relatively little revenue from corporate taxes, resulting in large fluctuations in percentage terms. As a result, corporate income tax is an unstable revenue source and many states report sizeable changes from quarter to quarter.

Nominal corporate tax revenue decreased 8.3 percent in the April-June quarter compared to a year earlier, the third consecutive decline. All



regions except the Plains and Rocky Mountain regions reported declines, and the Southwest region reported the largest decline at 14.5 percent. Among 44 states that have a corporate income tax and for which the quarter's information is available, 31 showed decreases in corporate tax revenue. Kentucky had the largest decline for the second quarter in a row, reflecting legislative changes and a high level of refunds.

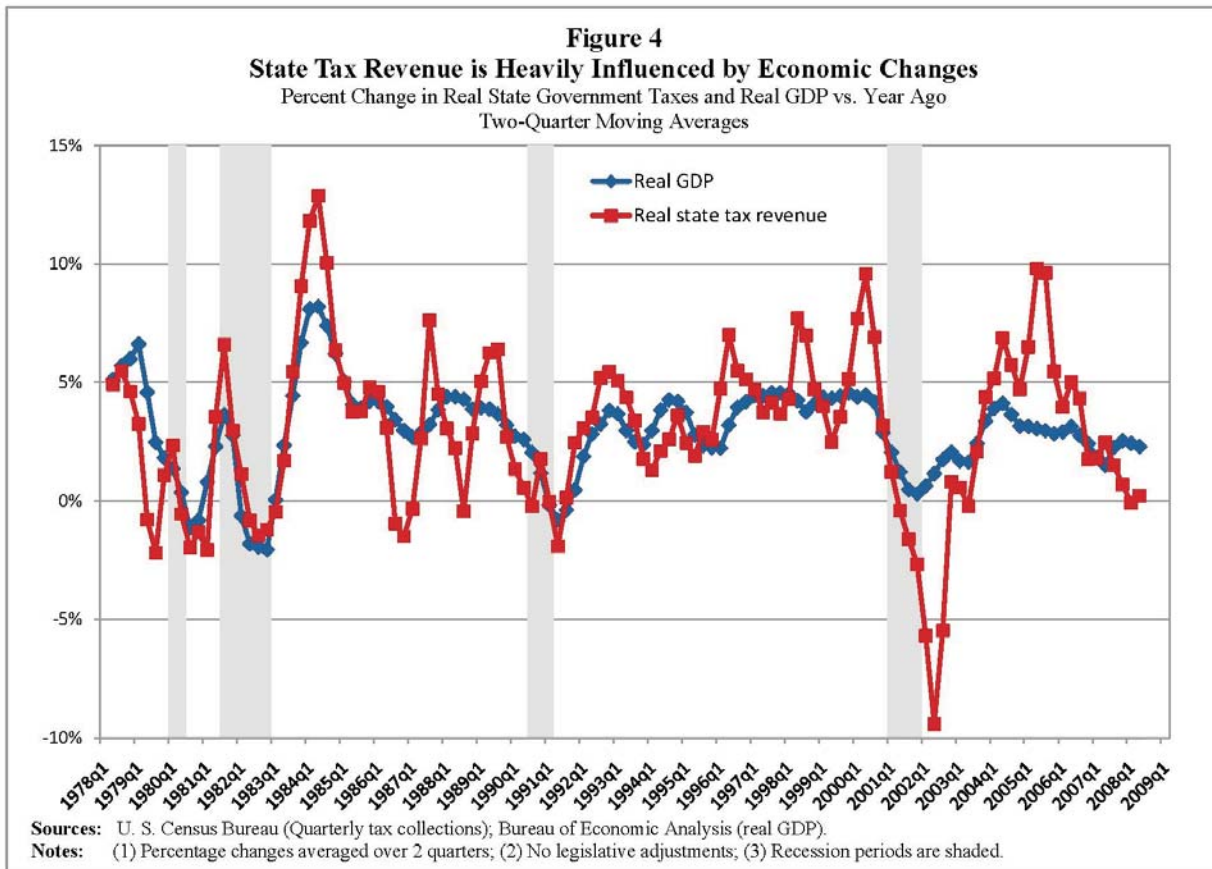
Other Taxes

Census Bureau quarterly data on state tax collections provide detailed information for some of the smaller taxes that are not broken out separately in the data collected by the Rockefeller Institute. In this first report using these data, we provide growth rates for the nation as a whole, as shown in Figure 5. In future reports we expect to provide details by state.

Perhaps the most important tax in this group is the motor fuel tax, which often is used to fund highway spending and to secure transportation bonds. Motor fuel taxes typically are levied at a

fixed rate per gallon. While motor fuel taxes do not tend to be as sensitive to economic conditions as personal income, corporate income, or sales taxes, nonetheless they do respond to changes in the economy. When fuel prices rise drivers respond by reducing their consumption. And when the economy slows, driving for business and pleasure tends to be reduced. So the current environment of high fuel prices and a weakening economy is particularly bad for motor fuel taxes.

Figure 3 shows the year-over-year growth in state government motor fuel taxes for the nation as a whole since 1999. Because these data do not incorporate adjustments for legislative changes, swings in motor fuel taxes can reflect both changes in tax rates and changes in consumption of taxable motor fuel. However, most of the movement in tax collections in this graph is likely attributable to changes in taxable consumption. The slowing growth and then decline in 2001 and 2002 are related to the 2001 recession. Similarly the slowing growth in 2006 and subsequent declines appear to be primarily the result of higher fuel taxes and the slowing economy. These declines in motor fuel tax



revenue, which parallel similar declines in federal highway taxes, complicate state efforts to fund infrastructure projects.

Underlying Reasons for Trends

State revenue changes result from three kinds of underlying forces: differences in the national and state economies, the ways in which these differences affect each state's tax system, and recently legislated tax changes. The next two sections discuss the first and third reason; see the box on *Tax Structure and Revenue Growth* for discussion of the second reason.

National and State Economies

Most state tax revenue sources are heavily influenced by the economy — the income tax rises when income rises, the sales tax increases when consumers increase their purchases of taxable items, and so on. When the economy booms, tax revenue tends to rise rapidly and when it declines, tax revenue tends to decline. Figure 4 shows year-

over-year growth in inflation-adjusted state tax revenue and in real gross domestic product. It is clear that tax revenue is highly related to economic growth, but that there also is significant volatility in tax revenue that is not explained solely by one broad measure of the economy.

By traditional measures the national economy has weakened significantly but has not yet been declared in a recession. Real gross domestic product grew at a 2.8 percent annual rate in the April-June quarter, up from 0.9 percent in the October-December quarter. Residential investment declined at a 13.3 percent rate — its tenth straight decline — and durable goods consumption, an important element of state sales tax bases, declined at a 2.8 percent rate. Other consumption, government, and net exports were strong enough to keep GDP growth positive. Preliminary monthly data for July and August suggest that GDP may have declined in the July-September quarter.³

It is helpful to examine economic measures that are closely related to state tax bases. Most states

rely heavily on income taxes and sales taxes, and growth in income and consumption are extremely important to these revenue sources. Figure 5 shows year-over-year growth in two important sources of income: wages and the portion of nonwage income typically subject to income taxes.⁴ It also shows growth in consumption of goods (excluding services because most states exclude a substantial share of services from the sales tax). All the data are adjusted for inflation. The time period covered is January 2000 through August 2008 (two months after the close of the quarter covered in this report).

Figure 6 below shows consumption of durable goods, non-durable goods, and services. The decline in consumption of durable goods is much sharper than the last recession and is the main reason for the overall decline in the consumption of goods.

Several important points are evident:

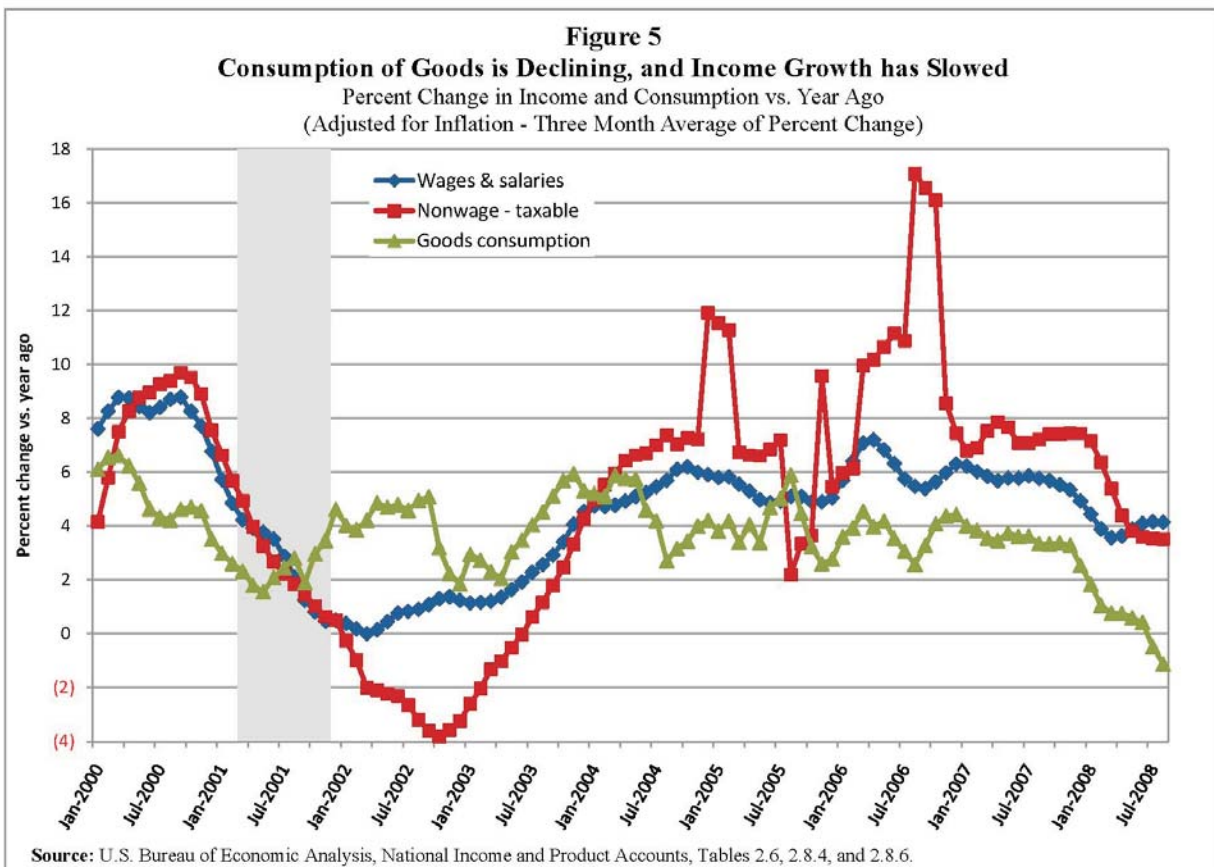
- ✓ While income growth has slowed, the big story so far is that consumption of goods — especially durables — has been declining. This is a classic response of consumers to

economic uncertainty and fears of lower income — eliminating, postponing, and scaling back purchases of items that are not necessary or not needed immediately, such as new cars, washing machines, and so on.

- ✓ Consumption continued to weaken in July and August (after the period covered by this report), suggesting that sales tax collections are likely to have deteriorated further in the July-September quarter.
- ✓ Nonwage income historically has been more volatile than either wages or consumption. This income fell extremely sharply in the 2002-2003 period and the recent slowdown in this income — so far — pales in comparison to that period.

Unfortunately, state-by-state data on income and consumption are not available on a timely basis, and so we cannot easily see variation across the country in these trends.

Traditionally, the Rockefeller Institute has relied on employment data from the Bureau of Labor Statistics to examine state-by-state economic



conditions. These data are relatively timely and are of high quality. Table 6 shows year-over-year employment growth for the last four quarters. For the nation as a whole, this growth slowed to a meager 0.3 percent in the April-June quarter, continuing the slowing seen in earlier quarters.

The regional patterns are quite varied: The Great Lakes region has suffered a malaise for at least a year, the Mid-Atlantic, Plains, and New England regions (excepting Rhode Island) have been slowing but have largely avoided outright declines versus a year earlier, and other regions have slowed sharply over the last year. The fastest growth continues to occur in the Southwest and Rocky Mountain states, but employment has slowed there as well.⁵

Thanks to work by economists at the Philadelphia Federal Reserve Bank, we now have the ability to supplement employment data with broader and highly timely measures known as “coincident economic indexes” intended to provide information about current economic activity in individual states.⁶ They are modeled on a similar measure for

the nation as a whole, but due to limited availability of state-level data they are focused on labor market conditions, incorporating information from nonfarm payroll employment, average hours worked in manufacturing, the unemployment rate, and real wage and salary disbursements.

These indexes can be used to measure the scope of economic decline. Figure 7 shows, by month over the last three decades, the number of states that had declining economic activity relative to three months earlier. As recently as January, only 15 states suffered declines, but since then economic weakening has spread rapidly throughout the country. By May, fully 39 states had declines in economic activity (as measured by the coincident index) compared with three months earlier and the index has hovered near then since, with 36 states declining in August relative to three months earlier. The horizontal line drawn to the left of the August 2008 point on the graph shows that declines now appear to be more widespread than in the 1990-91 recession, but slightly less so than in the 2001 and 1980-82 recessions.⁷

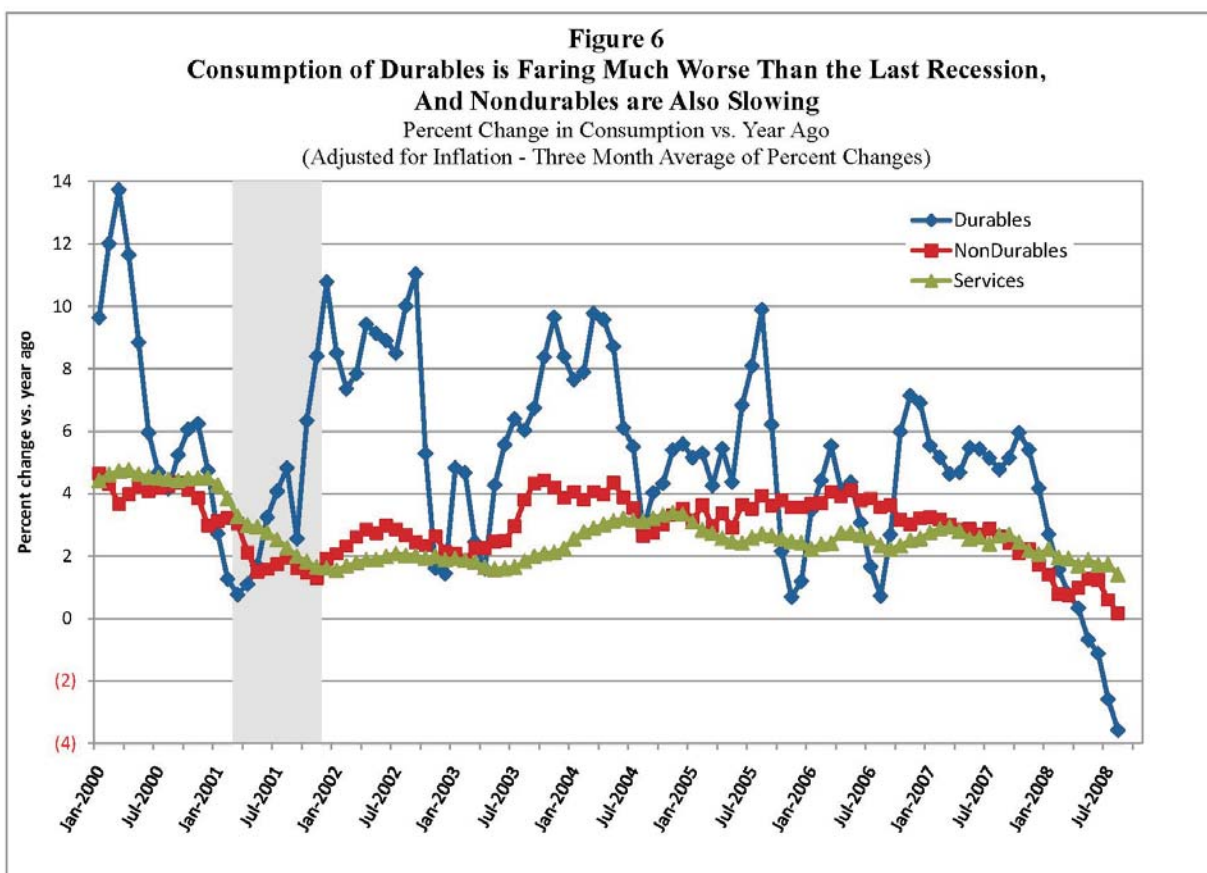


Table 6				
Nonfarm Employment, by State				
Last Four Quarters, Year-Over-Year Percent Change				
	2007		2008	
	July-Sep.	Oct.-Dec.	Jan.-Mar.	Apr.-June
United States	1.1	0.8	0.6	0.3
New England	0.8	0.6	0.5	0.4
Connecticut	1.1	0.9	0.7	0.4
Maine	0.6	0.5	0.2	0.1
Massachusetts	0.9	0.7	0.6	0.5
New Hampshire	1.3	1.4	1.3	1.7
Rhode Island	(0.3)	(1.1)	(1.7)	(2.2)
Vermont	(0.0)	(0.2)	0.1	0.1
Mid-Atlantic	0.9	0.7	0.6	0.3
Delaware	0.4	0.2	0.2	(0.1)
Maryland	0.9	0.9	1.0	1.1
New Jersey	0.1	0.0	0.1	(0.1)
New York	1.5	1.1	0.9	0.5
Pennsylvania	0.8	0.4	0.4	0.1
Great Lakes	0.1	(0.1)	(0.2)	(0.4)
Illinois	0.7	0.6	0.5	0.2
Indiana	0.8	0.5	0.3	(0.0)
Michigan	(1.2)	(1.5)	(1.4)	(1.5)
Ohio	(0.2)	(0.2)	(0.1)	(0.3)
Wisconsin	0.4	0.3	(0.4)	(0.5)
Plains	1.2	0.8	0.7	0.3
Iowa	0.9	0.6	0.7	0.5
Kansas	2.3	1.4	1.1	0.4
Minnesota	0.6	0.5	0.5	0.2
Missouri	0.9	0.5	0.3	(0.2)
Nebraska	2.0	1.8	1.5	1.2
North Dakota	1.6	1.5	1.8	1.3
South Dakota	2.1	1.6	1.7	1.0
Southeast	1.1	0.9	0.6	0.2
Alabama	1.2	1.4	0.7	0.4
Arkansas	0.3	0.5	0.4	0.3
Florida	(0.1)	(0.2)	(0.4)	(1.0)
Georgia	1.4	0.9	1.0	0.4
Kentucky	1.2	1.3	1.1	0.5
Louisiana	3.6	2.8	1.9	1.7
Mississippi	0.8	0.6	0.6	0.5
North Carolina	2.3	1.8	1.6	0.9
South Carolina	3.2	1.6	1.0	0.7
Tennessee	0.5	0.4	0.2	(0.3)
Virginia	0.9	0.7	0.4	0.5
West Virginia	0.1	(0.1)	0.3	0.4
Southwest	2.3	2.0	1.8	1.7
Arizona	0.9	0.1	(0.1)	(0.7)
New Mexico	1.2	1.0	0.9	1.1
Oklahoma	1.7	1.6	1.5	1.2
Texas	2.9	2.6	2.4	2.4
Rocky Mountain	2.8	2.4	1.9	1.4
Colorado	2.5	2.1	2.0	1.5
Idaho	2.4	2.1	0.5	(0.1)
Montana	2.3	2.2	1.8	1.6
Utah	3.7	3.0	2.4	1.5
Wyoming	3.7	3.4	3.1	2.9
Far West	0.9	0.6	0.3	0.1
Alaska	0.6	0.8	0.5	1.0
California	0.6	0.2	(0.0)	(0.1)
Hawaii	0.5	0.4	0.8	0.4
Nevada	0.3	0.3	(0.1)	(0.5)
Oregon	1.5	1.1	0.8	0.3
Washington	2.6	2.4	2.0	1.3

Source: Bureau of Labor Statistics, analysis by Rockefeller Institute.

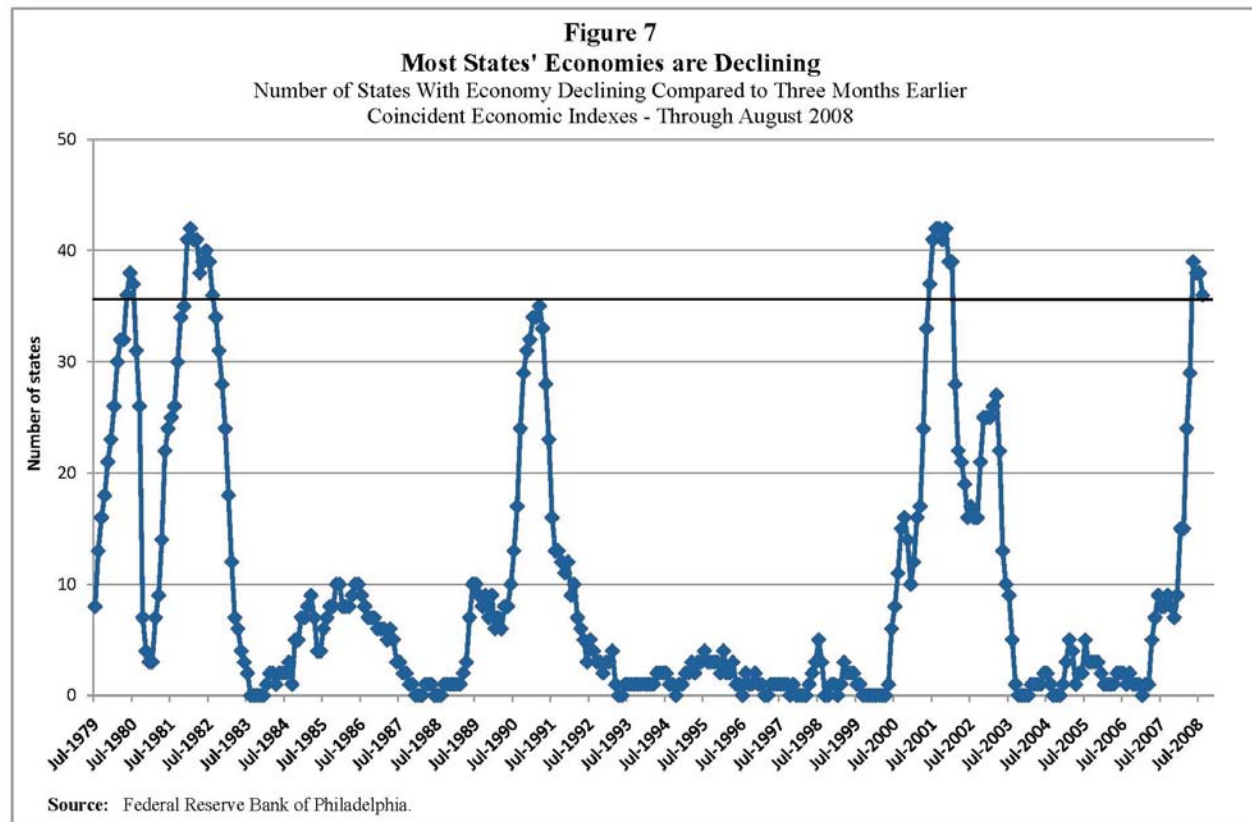
Which states have declined? The picture has changed only a little between May (the middle of the quarter reported on here) and August (the most recently available month) so we show a map for August only (Figure 8). Most states that are growing are rich in oil and minerals or are farm states that have benefited from increases in food prices, and many are near the center of the country. The significant exceptions — New Hampshire, New York, and Vermont — were relatively unscathed, as of August, by the real estate collapse although New York in particular faces new troubles discussed below. Many of the states with the largest declines have suffered heavily from large declines in the price of housing, including Arizona, Florida, Michigan, Nevada, and Rhode Island. Table 7 shows the states sorted by the change in the coincident economic index versus a year ago.

These figures show the breadth of economic decline but provide little information on the depth of decline. Figure 9 shows the median percentage change compared to three months earlier — in a sense, how the typical state has been faring.⁸ Here we can see that the current decline in the typical state is about as bad as it was during the 2001 recession but not yet as bad as in the 1990-91 or 1980-82 recessions. (Although the economy may be almost as weak now as in the last recession, for reasons discussed elsewhere in this report, tax revenue has not yet suffered as much as it did in the last recession.)⁹

The continued weakening in July and August suggests that state tax collections in the just-completed July-September quarter will have been weak, and that tax collections will weaken further. We expect to issue a “flash report” on the July-September quarter as soon as we have enough data to report.

Tax Law Changes Affecting This Quarter

Another important element affecting trends in tax revenue growth is changes in states’ tax laws. When states boost or depress their revenue growth with tax increases or cuts, it can be difficult to draw any conclusions about their current fiscal condition from nominal collections data. That is why this report attempts to note where such changes have



significantly affected each state's revenue growth. We also occasionally note when tax-processing changes have had a major impact on revenue growth, even though these are not due to enacted legislation, as it helps the reader to understand that the apparent growth or decline is not necessarily indicative of underlying trends.

During the April-June 2008 quarter, enacted tax changes and processing variations increased state revenue by an estimated net of nearly \$1.5 billion compared to the same period in 2007. Personal income tax reductions totaled approximately \$173 million. Among all states reporting, legislated changes are estimated to have increased sales tax revenue in the quarter by a net \$518 million. Corporate income tax increased by \$368 million. Taxes collected from other sources, including motor fuel, cigarette/tobacco, and alcohol increased by \$785 million.¹⁰ The net impact is that total tax revenue grew about 0.7 percent more than it would have in absence of these changes — unadjusted growth would have been 2.9 percent rather than the 3.6 percent reported growth.

Looking Ahead

Three More Shoes to Drop

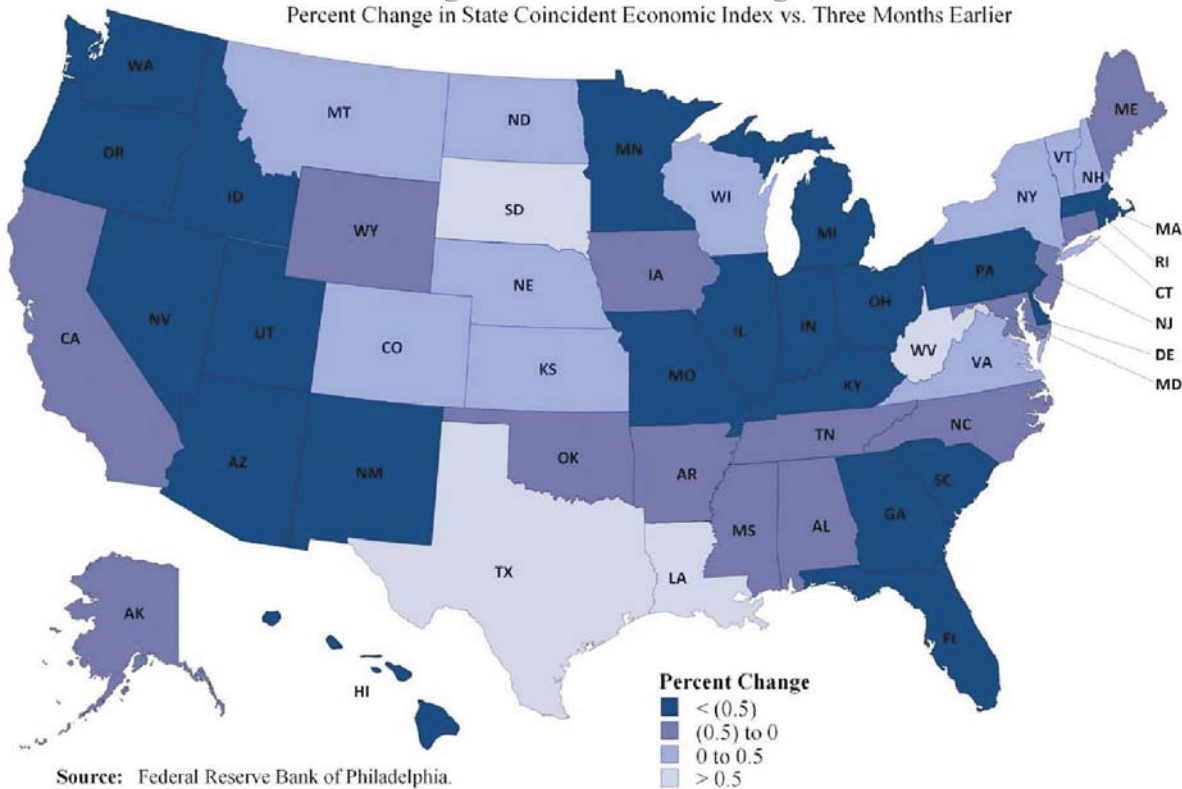
The collapse of the financial services sector and the decline in the stock market of roughly 20 percent year-to-date mean that at least three bad things will happen to state finances.

First, the collapse of the financial services industry means that states that rely especially heavily on this industry will be hit extremely hard, both through the taxes they levy on the financial services sector and through the spillover effects on other parts of their economies.

Second, the decline in the stock market and in other financial markets means that investment income of taxpayers is likely to fall significantly, although it is always difficult to predict precisely how much and when.

Third, the loss of so much asset value and a decline in confidence will lead to much greater slowing and, in fact, decline in the real economy than forecasters previously expected. The consensus of

Figure 8
In August: 36 States had Declining Economies
 Percent Change in State Coincident Economic Index vs. Three Months Earlier



Source: Federal Reserve Bank of Philadelphia.

economic forecasters now appears headed toward recession, with some anticipating that it will be significant and prolonged.

Reliance on the Financial Services Industry

Table 8 shows the contribution of the finance and insurance industries to each state's gross domestic product. This table offers hints as to which states will be most affected.

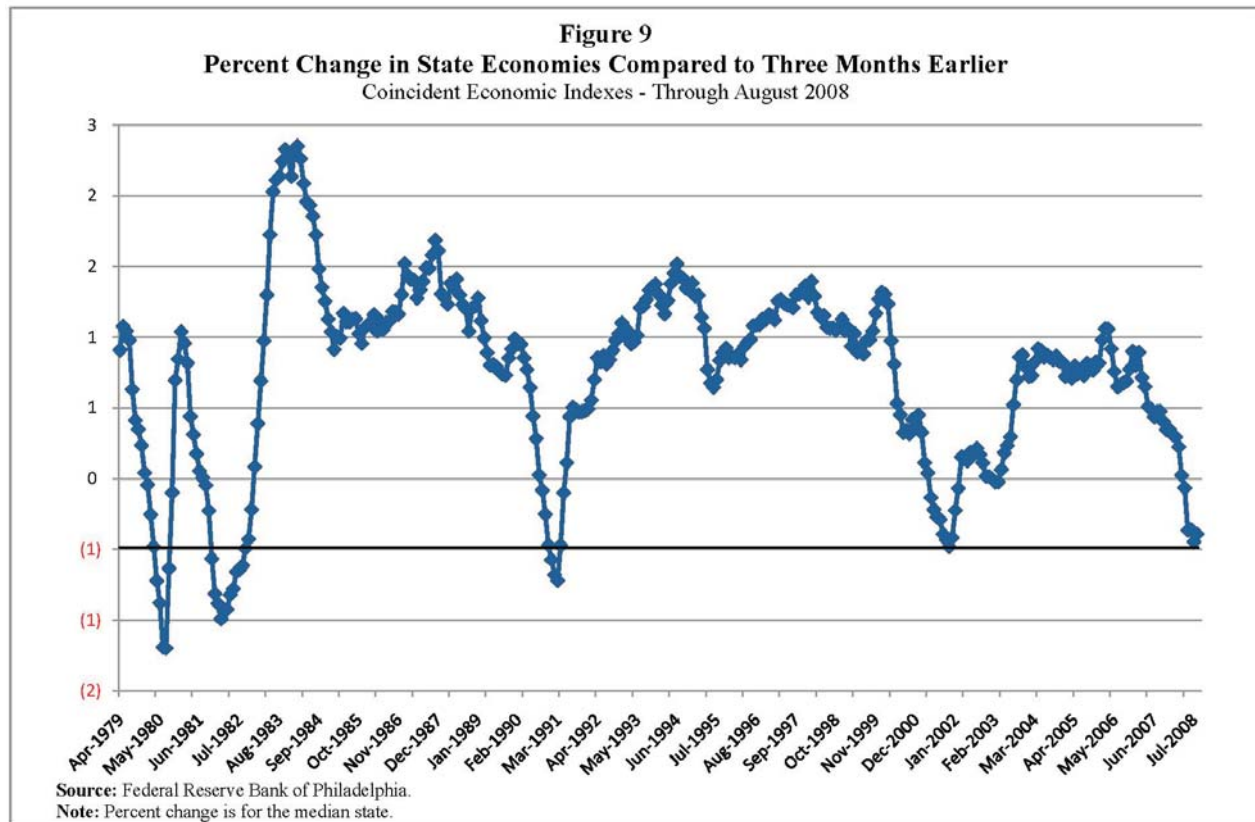
Delaware, which is at the top of the list, has courted the financial services industry for decades and finance and insurance accounts for nearly one-third of the Delaware economy. The industry already had been weakening in Delaware and the outlook is grim. Delaware in fact has already announced a shortfall in its bank tax revenue.¹¹

In New York, it is often said that the financial services industry accounts for approximately 20 percent of New York State's tax revenue. An analysis by *The New York Times* in July indicated that the largest financial companies based in New York City intended to pay about \$18 billion less in

compensation in 2008 than in 2007, and much of this would be paid to workers who live in New York City and New York State.¹² New York's budget office estimated that Wall Street bonuses grew by an average of 28 percent per year between 2004 and 2007. In its July forecast, New York projected that bonuses in 2008 would decline by about 21 percent. The news has since gotten worse and Governor David Paterson recently raised the projected budget gap for New York in 2009-10 to over \$7 billion.

The Last Recession, and Declines in Top-Bracket Income

We can gain insight into the likely size and timing of some of the important effects by examining what happened during the last recession. That recession, as analyzed elsewhere, was relatively mild in its effects on the real economy but the stock market dropped significantly for three years and state tax collections were hit harder than at any time during the previous 50 years.



Adjusted Gross Income and Capital Gains

Table 9 below shows the growth in main components of adjusted gross income on federal tax returns, the starting point for most state income taxes. The line below the adjusted gross income table shows the year-over-year percent change in the average value of the S&P 500 stock market index for the calendar year. We use the average value, rather than the change from the end of one year to the end of another because income taxes are levied on income earned over the course of a year, not on what happens at year-end. By this calendar-year-average measure, the first stock market decline occurred in 2001, although of course the market began declining in 2000. Scanning across the table, it is obvious that capital gains and the stock market bear at least some relationship, as we would expect.

From 1997 through 2000 states benefited from rapid growth in wages and salaries, net capital gains, and other components of adjusted gross income, leading to a boom in state tax collections.

Over this period adjusted gross income grew an average of 8.8 percent per year.

The stock market began declining in the spring of 2000 and by the spring of 2001 the national economy had entered a mild recession. But income subject to state income taxes fell quite significantly. Wage growth slowed from 7.8 percent in 2000 to 2.4 percent in 2001 and actually declined slightly in 2002. Capital gains declined by a whopping 48 percent in 2001 and declined again by 27 percent in 2002. Finally, the other components of adjusted gross income slowed and then fell.

In 2003, income subject to tax began to recover, driven by a boost in capital gains, and starting in 2004 it was off to the races again.

The lessons from this table are that even a mild recession can lead to significant declines in income subject to state taxes, and that that weakness can be quite prolonged — in this case lasting for a full three taxable years.

The stock market affects state tax revenue in many ways, but the most important is through its impact on capital gains, which in turn affects

Tax Structure and Revenue Growth

Even if economic growth affected all regions and states to exactly the same degree and at exactly the same time, the impact on state revenue would vary because the tax systems used by the states react differently to similar economic situations. States that rely heavily on the personal income tax will tend to see stronger growth in good times, since they benefit from growth in income earned by the highest income individuals. This is most evident in states with more progressive income tax structures, since higher incomes are taxed at the highest rates. The sales tax is also very responsive to economic conditions, but is historically less elastic than the personal income tax, dropping more slowly in bad times and increasing more slowly in good times. States that rely heavily on corporate income or severance taxes often see wild swings in revenue that are not necessarily related to general economic conditions. (Severance taxes are levied on the removal of natural resources, such as oil and natural gas.)

Because high-end incomes are based more heavily upon volatile sources such as stock options and capital gains, growth in personal income tax revenue is far more subject to dramatic fluctuations than it would be if it were based entirely on wages and salaries. Over the last few years, we have seen growth in the stock market and relatively strong growth in corporate profits and other business-related income. In the last recession, we saw the downside of this volatility. Declines in the stock market and other investments pushed personal and corporate income tax collections down much faster than the economy and created large holes in almost every state's budget. As was the case before the 2001 recession, capital gains now constitute a large share of adjusted gross income, and thus contribute a large share of state tax revenues.* Such an environment creates relatively high levels of risk for states that depend heavily on personal income tax revenues. Corporate profits and corporate income tax revenue both showed weak numbers in the last two quarters of 2007 and in 2008.

Sales tax revenue generally fluctuates less rapidly than corporate income taxes and can be more or less volatile than the personal income tax depending on the nature of the business cycle. It does not capture spending on services well, which tends to be less volatile than spending on goods taxed under the sales tax. Over the past decade or so, some state tax analysts have expressed concern that as states have removed more stable elements of consumption such as groceries and clothing from their bases, their sales taxes were more subject to plunge as consumers became nervous about spending on optional and big-ticket items. The sales tax generally maintained slow growth in the latest economic downturn, but grew rapidly and remained steady as general economic conditions improved. Sales tax revenue has been weak in each of the last six quarters.

* Donald J. Boyd, *What Will Happen to State Government Finances in a Recession?*, The Nelson A. Rockefeller Institute of Government, January 30, 2008.

State	Coincident index August 2008 (Jan 2007=100)	Percent change vs. 1 year ago (August 2007)	Percent change vs. 3 months ago (May 2008)
West Virginia	102.5	2.6	2.2
Louisiana	103.1	1.4	0.7
Texas	106.1	3.4	0.6
South Dakota	104.8	2.7	0.6
North Dakota	102.6	1.4	0.5
New York	103.6	1.9	0.4
Colorado	104.2	1.9	0.4
New Hampshire	103.7	1.8	0.3
Virginia	102.1	1.0	0.3
Kansas	101.5	(0.0)	0.2
Nebraska	102.7	0.9	0.2
Montana	102.1	(0.3)	0.1
United States average	102.2	0.8	0.0
Vermont	100.5	(0.1)	0.0
Wisconsin	100.9	0.3	0.0
Tennessee	101.3	0.3	(0.0)
Arkansas	101.7	1.3	(0.1)
Alabama	100.8	(0.2)	(0.1)
Wyoming	105.1	3.1	(0.1)
Connecticut	102.0	0.3	(0.2)
Mississippi	101.2	0.4	(0.2)
California	101.4	0.4	(0.3)
Oklahoma	103.1	1.2	(0.3)
New Jersey	101.0	0.1	(0.3)
Iowa	101.7	0.5	(0.3)
Alaska	99.1	(0.7)	(0.4)
Maryland	101.2	0.2	(0.4)
Maine	99.4	(1.0)	(0.4)
North Carolina	102.4	0.5	(0.5)
Utah	103.0	0.6	(0.5)
Florida	98.3	(1.6)	(0.5)
New Mexico	102.1	0.6	(0.5)
Indiana	100.2	(1.0)	(0.6)
South Carolina	100.9	(1.0)	(0.6)
Rhode Island	95.9	(3.2)	(0.6)
Delaware	98.5	(1.7)	(0.6)
Massachusetts	103.9	1.5	(0.7)
Hawaii	99.1	(0.8)	(0.8)
Missouri	98.4	(1.9)	(0.8)
Ohio	97.9	(2.3)	(0.9)
Georgia	100.4	(0.7)	(0.9)
Kentucky	100.2	(1.4)	(1.0)
Illinois	100.1	(0.7)	(1.0)
Michigan	95.2	(4.0)	(1.0)
Washington	99.6	(2.9)	(1.1)
Arizona	98.0	(2.3)	(1.1)
Idaho	99.2	(2.2)	(1.2)
Minnesota	98.9	(1.9)	(1.3)
Oregon	99.4	(2.0)	(1.3)
Pennsylvania	97.7	(3.1)	(1.6)
Nevada	95.8	(4.2)	(2.1)

Source: Federal Reserve Bank of Philadelphia.

adjusted gross income. Payments associated with this income often are made when tax returns are filed in the spring after the tax year closes. Figure 10 shows the percent change in (1) the S&P 500 index for the calendar year, (2) net capital gains on a taxable (calendar) year basis, and (3) state income taxes paid in the spring following the calendar year. While the three series do not move in lockstep — many factors aside from the stock market affect capital gains, and many factors aside from capital gains affect spring income tax payments — it is clear that the relationship exists. The rightmost point on the graph shows an estimate of the stock market value for calendar year 2008 as a whole, which places it about 14 percent down from the 2007 calendar year average. This certainly suggests that capital gains will decline in 2008 and that spring income tax payments in April-June of 2009 will also decline.

Of course, it may be worse. Models that forecast capital gains realizations often include not only stock market values, but also measures or proxies of the potential for buildup in capital gains in preceding years, real estate values, and the overall strength in the economy. As discussed in an earlier paper, capital gains are again at a historic high relative to the economy, so there is a long way to fall.¹³ In particular, the decline in real estate values could drive capital gains down further, although relatively little data are available to assess the possible size of this impact.

What Will Happen to Wages and Executive Compensation?

It was not just capital gains that were hit in the last recession. Many

Table 8	
State Reliance on Finance and Insurance Industries	
Share of Gross Domestic Product in the Finance and Insurance Industry in 2007	
Delaware	32.5
South Dakota	19.6
New York	17.9
Connecticut	16.5
North Carolina	12.7
Rhode Island	12.1
Iowa	10.7
Massachusetts	10.6
Illinois	9.5
Utah	9.4
Minnesota	9.4
Nebraska	8.4
Arizona	8.4
New Jersey	8.3
Ohio	8.1
United States total	8.1
New Hampshire	8.1
Pennsylvania	7.5
Nevada	7.3
Florida	7.1
Wisconsin	6.9
California	6.6
Maine	6.6
Georgia	6.5
Virginia	6.5
Michigan	6.1
Missouri	5.9
Colorado	5.9
Vermont	5.9
Tennessee	5.8
Maryland	5.7
North Dakota	5.7
Texas	5.7
Kansas	5.6
Washington	5.4
Alabama	5.4
Indiana	5.4
Oregon	5.2
South Carolina	5.0
Montana	4.9
Idaho	4.7
Kentucky	4.7
Oklahoma	4.2
Mississippi	4.2
Hawaii	4.0
Arkansas	4.0
West Virginia	4.0
New Mexico	3.2
Louisiana	3.1
Alaska	2.8
Wyoming	2.4
Source: Bureau of Economic Analysis, GDP by state.	

other sources of income subject to state tax also suffer. One particularly notable change, with a parallel here, is that wages of high-income taxpayers fell significantly. With so many high-tech firms going bust and with stock options offered to executives underwater, and with bonuses paid to financial services workers disappearing, wages received by the highest income taxpayers declined markedly. We do not have panel data that allow us to show the changes in wages paid to individual workers, but the aggregate data suggest this effect was strong. Table 10 below shows the year-to-year growth in total wage income, in wage income reported on tax returns with adjusted gross income below \$200,000, and in wages reported on returns with \$200,000 or more, or \$500,000 or more of adjusted gross income (the former group includes the latter).

The same forces that led to these declines in wages of high-income taxpayers appear to be at work again. Bonuses are being scaled back sharply at financial services firms, if they are being paid at all. Many highly paid executives at these firms no longer have jobs and the firms may not even exist, and their payments will be down sharply. Executives receiving payment in the form of stock options may find those options underwater as the value of their firms' stock has declined or even gone to zero. Several reports have documented that "variable compensation" in the financial services industry had been on the rise in recent years, forming an increasing share of total compensation. Variable compensation is good for executives and employees during the up-cycle but bad during the down-cycle. These wages invariably were taxed at the highest state marginal tax rates so the loss in revenue will be large.

Spillover Effects on the Rest of the Economy

The massive decline in income in the financial services industry will be a drag on the economies of those states that rely heavily on this industry. In addition, the related credit crunch is likely to lead to further economic slowing throughout the nation. States are busy revising their forecasts in an effort to take these effects into account, but they undoubtedly will be worse than what is assumed in most states' current official economic forecasts.

Table 9
The Previous Recession: After Rapid Growth, Wages Slowed to a Standstill, Capital Gains Plummeted, and Adjusted Gross Income Declined Significantly

Growth in Components of Federal Adjusted Gross Income (AGI), Taxable Years

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Salaries & wages	7.0%	7.4%	6.5%	7.8%	2.4%	-0.1%	2.0%	5.8%	4.7%	6.1%
Net capital gains & distributions	41.4%	25.3%	21.7%	16.2%	-48.2%	-26.9%	23.3%	60.9%	41.0%	16.7%
All other AGI, net	10.2%	9.0%	8.3%	8.3%	0.0%	-3.4%	2.2%	10.3%	14.8%	11.4%
Adjusted gross income	9.6%	9.0%	8.1%	8.7%	-3.1%	-2.2%	2.9%	9.4%	9.3%	8.2%
Percent change in calendar-year-average S&P500 index	29.8%	24.2%	22.3%	6.7%	-16.5%	-16.6%	-2.1%	17.2%	6.5%	9.2%

Sources: (1) AGI components: IRS Statistics of Income Division (www.irs.gov/taxstats/indtaxstats), various data files; (2) S&P500: average of monthly adjusted closes over the calendar year.

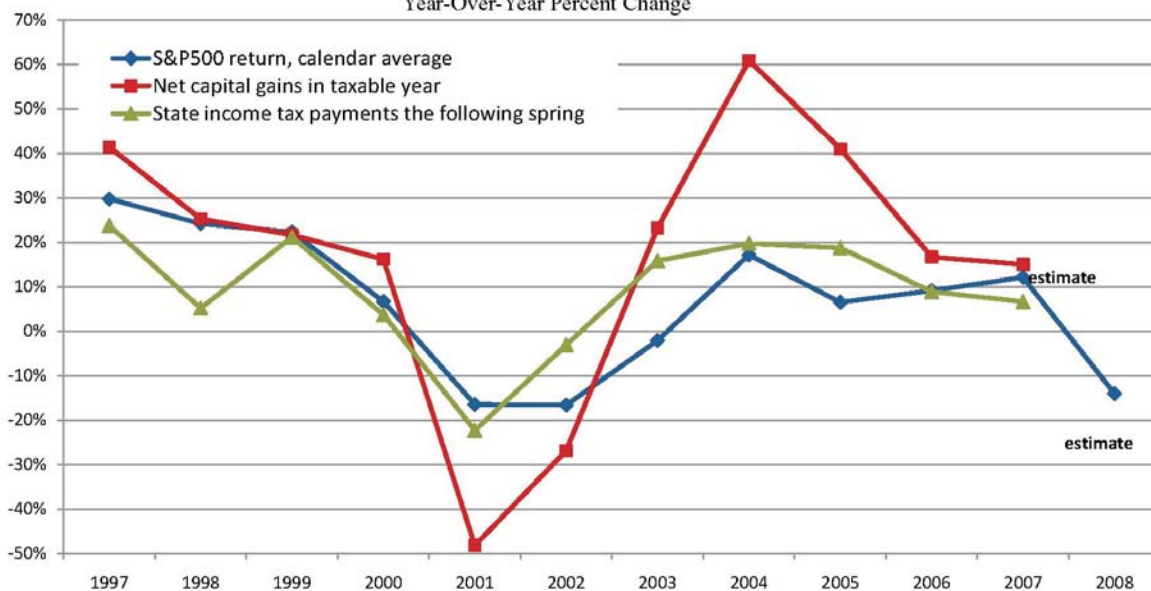
What to Look For

There’s no simple formula to determine which states will be most affected and when by the turmoil in the financial services industry and in financial markets.

Many states at the top of Table 8 (showing the relative importance of financial services) will be hurt. Other states that are less reliant on financial

services also may suffer large losses in tax revenue, particularly if they rely on progressive income taxes that generate significant revenue from high-income taxpayers — California and Colorado are likely candidates here. In past market declines their tax revenue has fallen significantly and can be expected to do so again. And New York will be hit in both ways. We expect to examine these issues in more detail in future Revenue Reports.

Figure 10
The Previous Stock Market Decline: Capital Gains Fell Sharply for Two Years & Spring Income Tax Payments Fell. What Will Happen in Tax-Year 2008 and Spring 2009?
 S&P500 Returns, Capital Gains Reported on Federal Tax Returns, and State Income Tax Payments
 Year-Over-Year Percent Change



Sources: (1) S&P500: average of monthly adjusted closes over the calendar year. Symbol ^GSPC from finance.yahoo.com. Estimate for 2008 assumes September 30 value for rest of year; (2) Capital gains: IRS Statistics of Income Division (www.irs.gov/taxstats/indtaxstats), various data files. Estimate for 2007 assumes 15% growth; (3) State income tax revenue from U.S. Census Bureau.

There will be many opportunities to gain insight into the extent and timing of state tax revenue weakness in the months and quarters ahead.

We expect that the July-September quarter that just closed will show even greater weakness in sales tax collections, based on the July and August decline in goods consumption discussed earlier and based on early reports from selected states. In many states an estimated payment of income tax was due on September 15 and this could reflect anticipated declines in investment income. We planned to issue a flash report for this quarter as soon as we have sufficient data to do so.

The October-December quarter will include sales tax revenue related to early holiday shopping and early payments of estimated state income taxes due on January 15, and it should begin to show the effects of further economic weakening on wage withholding and other taxes.¹⁴ It also is a big quarter for payment of local property taxes.

The January-March quarter will include substantial revenue related to holiday shopping, considerable revenue related to the January 15 estimated payment of personal income tax, and much of the withholding related to bonuses in the financial services industry and other industries. Of course, to the extent the economy continues to weaken, many different tax sources will be affected.

Finally, the April-June quarter, which is the final quarter of the fiscal year in most states, will include payments related to tax returns on 2008 income. As discussed earlier, that income and those payments could be down sharply from last year.

Conclusions

State tax revenue received an artificial boost in the April-June quarter from 2007 income tax returns, unrelated to the current state of the economy. This boost has gone away even as economic conditions continue to deteriorate. Already states are declaring tax revenue shortfalls for the fiscal year that began July 1, and some have announced midyear budget cuts.

For example, in Georgia Governor Sonny Perdue is withholding 6 percent of funding to most departments, and larger cuts are anticipated in January.¹⁵ In Ohio, Governor Ted Strickland ordered \$540 million in budget cuts and adjustments due to revenue shortfalls.¹⁶ And in New York, Governor Paterson ordered state agencies to reduce operational expenses by more than 10 percent from the Executive Budget, and ordered agencies to prepare budget requests for 2009-10 that keep spending flat.¹⁷

The situation will only worsen as the year progresses. The final quarter of the fiscal year — the April-June 2009 quarter — is likely to be very, very bad, reflecting declines in investment income and compensation to high-income individuals.

In the early phase of economic slowing, states that were directly and severely affected by housing price declines and states that rely heavily on sales taxes hurt by slowing consumption formed the leading edge of trouble: Arizona, Florida, Michigan, and Rhode Island, along with ever-troubled California, had the largest tax shortfalls and faced the largest budget gaps. But now, other states are poised to take leadership: those that rely heavily on the financial services industry, and states that rely on steeply progressive income taxes that extract

Table 10

The Previous Recession: Wages on High-Income Returns Fell Sharply, Probably Due to Large Declines in Executive Compensation, Bonuses, and Stock Options

Wage Income on Federal Tax Returns Before and During the Last Recession
Year-Over-Year Percent Change

Total wages on tax returns:	2000	2001	2002
All returns with wage income	7.8	2.4	(0.1)
Returns with AGI below \$200k	5.5	4.5	1.4
Returns with AGI of \$200k or more	20.5	(7.7)	(8.7)
Returns with AGI of \$500k or more	26.1	(17.1)	(13.7)

Source: IRS Statistics of Income Division (www.irs.gov/taxstats/indtaxstats), various data files.

much of their revenue from individuals with high wages and high investment income. New York, New Jersey, Connecticut, and again California, are likely to face extreme difficulty in the wake of the financial services industry meltdown.

On several occasions we have analyzed the impact of recessions on state government finances and revenue in particular. We've noted the extraordinary declines in revenue in the last recession, despite its mild economic impact, and remarked that it was unlikely that the next recession could have as severe an impact on state revenue. We don't believe this anymore. The real economy now appears likely to perform much worse than it did in the last recession. Consumption of goods that states tax already has declined more sharply than in the last

recession, and much steeper declines seem likely in the quarters ahead. Investment income now appears headed for a significant drop in the 2008 tax year — perhaps as large or larger than in the last recession. Compensation of highly paid executives and participants in the financial services industry appears headed for an extraordinary decline. Taxes paid by financial services firms have plummeted. Many of the economic risks appear to be on the downside. It is not at all clear whether and to what extent a credit crunch could hamper and reduce business activity.

The last fiscal crisis for states, which occurred in the midst of a mild recession, was dubbed a perfect storm. This one could be more perfect.

Appendix I: Selected Standout States

The use of Census Bureau tax data makes it possible to make comparisons across states that were extremely difficult before. The following sets of graphs compare tax collections in eight states with the overall United States average — four states that were in early and severe difficulty, and four states that have not yet suffered significant tax weakness.

The first four states — Arizona, Florida, Michigan, and Nevada — had significant declines in housing prices, and in the case of Michigan, this was layered on top of long-term economic weakness. The next four states have not yet felt as much fiscal trouble, at least as measured by recent tax collections. Three are in the Northeast — Connecticut, Massachusetts, and New York, and their fortunes are soon to change. The fourth, Montana, is a different story.

In these three northeastern states real per capita tax revenue has risen faster over the last two years than the average state in the nation. But all of this is due to change. All three benefit mightily from the financial services industry. Recent devastation in that industry already is leading to lower tax collections from businesses, will soon lead to lower taxes on bonuses and executive compensation, and will spill over into the rest of the economy to the detriment other tax collections as well.

Each graph shows inflation-adjusted taxes per capita averaged over four quarters, indexed to the second quarter of 2006 — the end of the 2006 fiscal year in most states. Plus each state, and the United States as a whole, has a value of 100 in the second quarter of 2006.

The red line in each panel represents the United States average, and is the same in each and every panel. The blue line gives the values for the state in question. For example in the upper left panel the blue line represents state tax collections in Arizona compared with the United States. Each horizontal line on a graph represents five percentage points. In the first panel we see that Arizona's blue line fell below 90 in the second quarter of 2008. This means that real taxes per capita for the four quarters ending in the second quarter of 2008 were more than 10 percentage points below their value for the four quarters ending in the second quarter of 2006. This is a very significant decline in state tax revenue.

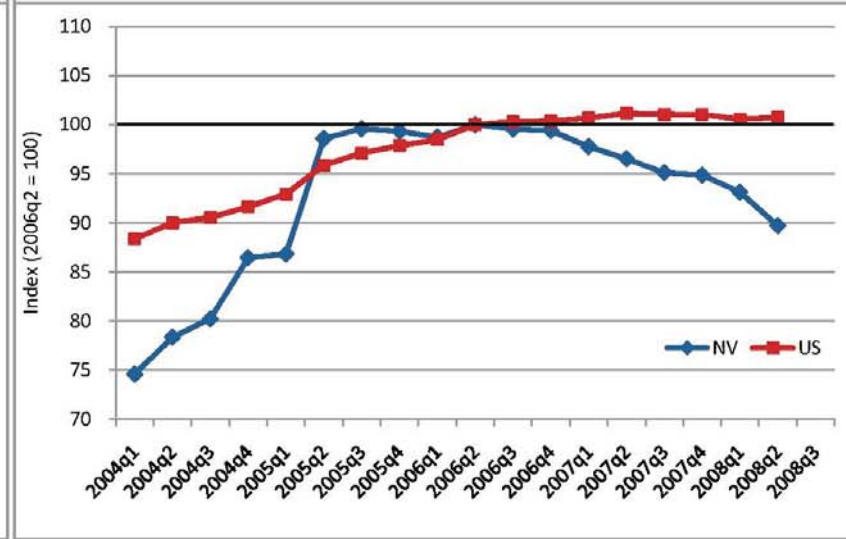
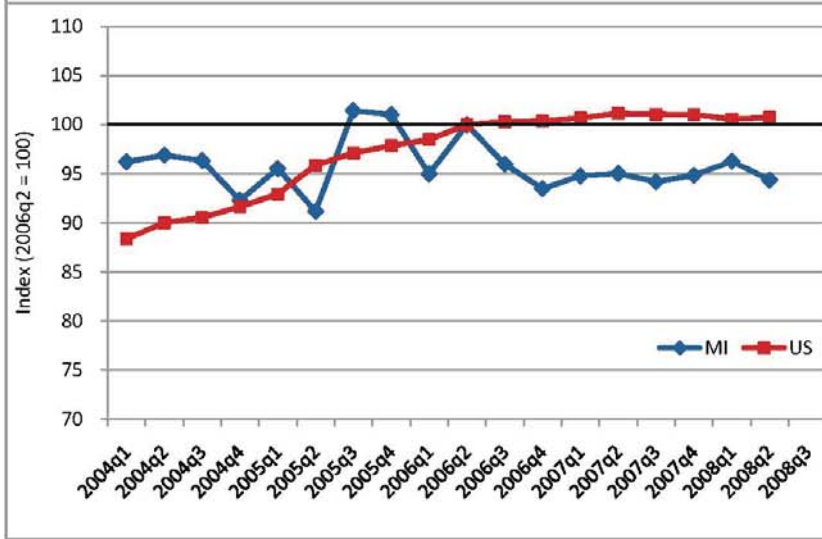
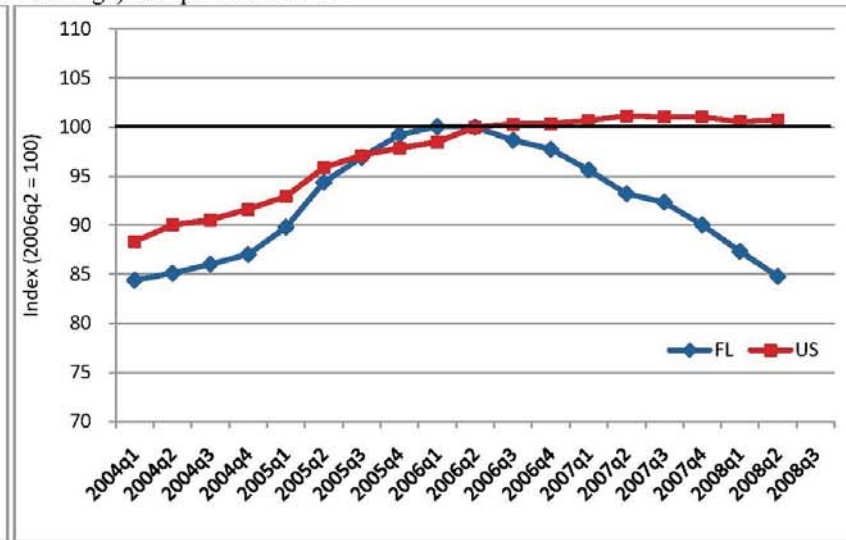
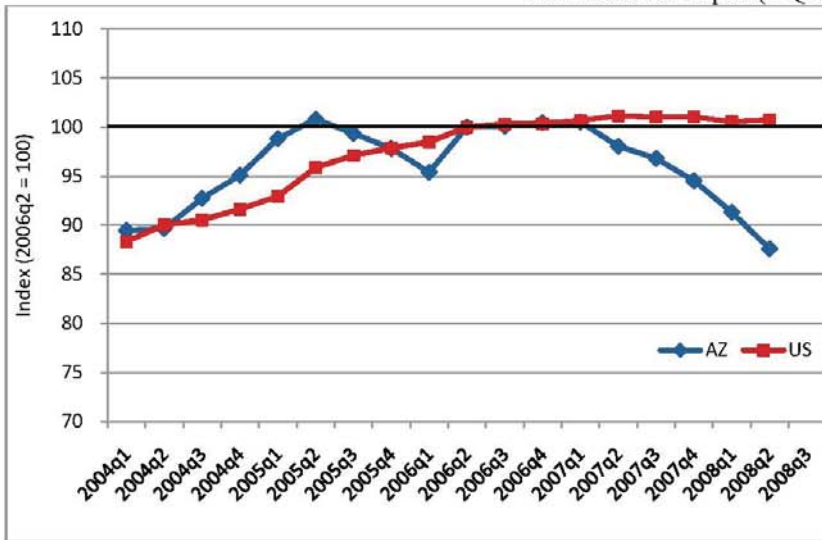
By contrast, the value for the United States at that time was just over 100, meaning that for the U.S. as a whole state tax collections after adjusting for inflation and population growth were slightly higher than two years earlier.

The scales of all the graphs are the same, meaning that we can compare visually across graphs. The fourth state, Montana, is a different story. Montana's economy has been doing quite well, in part due to the run-up in oil prices, and its tax revenue has also. As shown by the graph in the lower left panel.

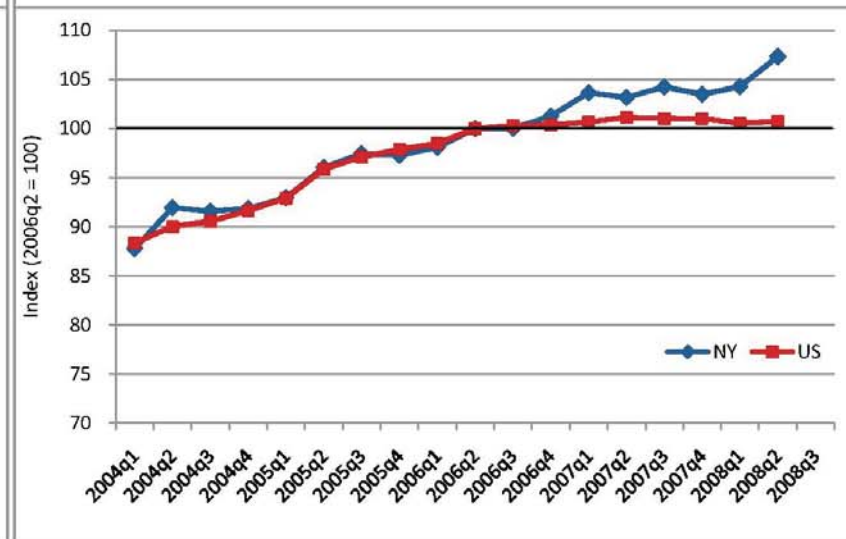
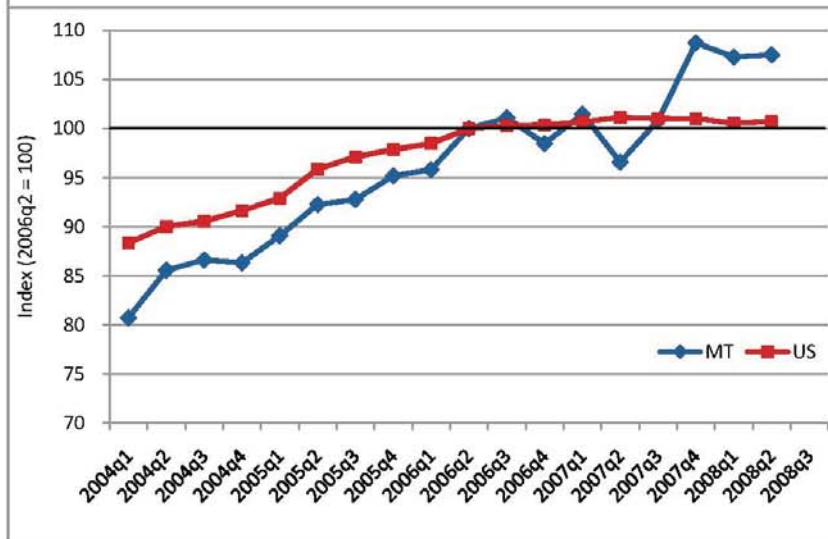
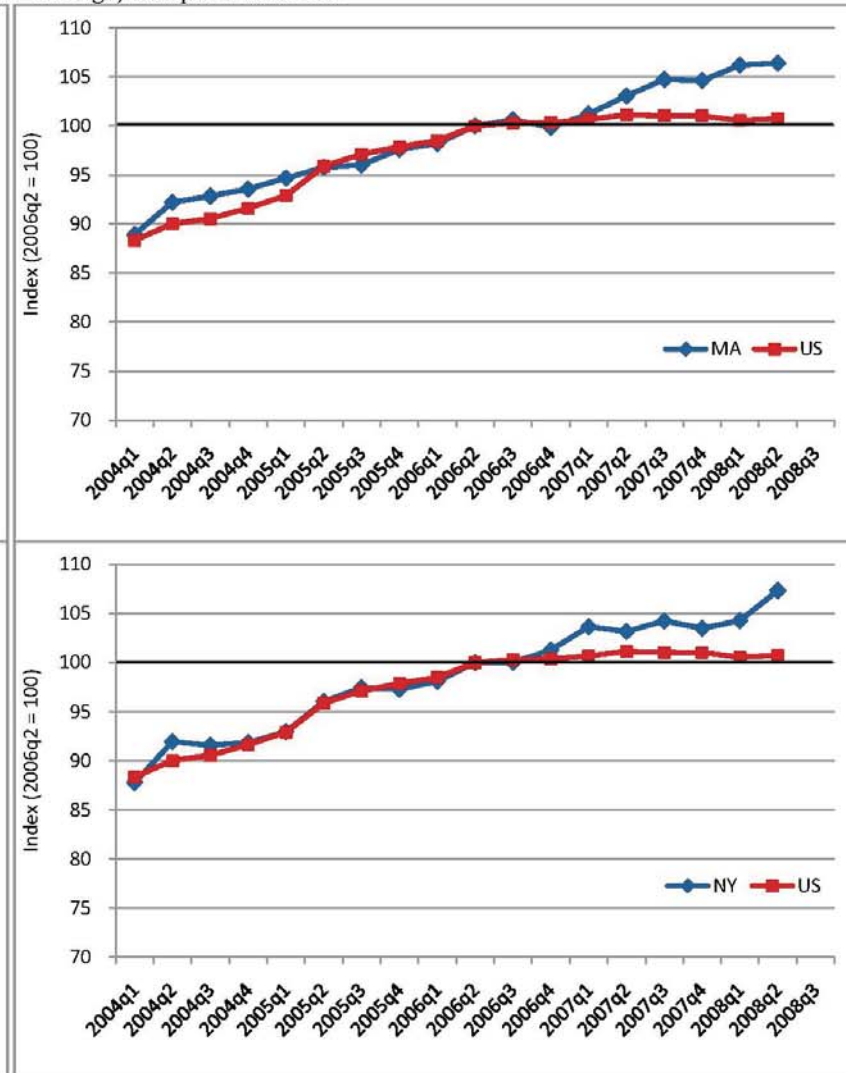
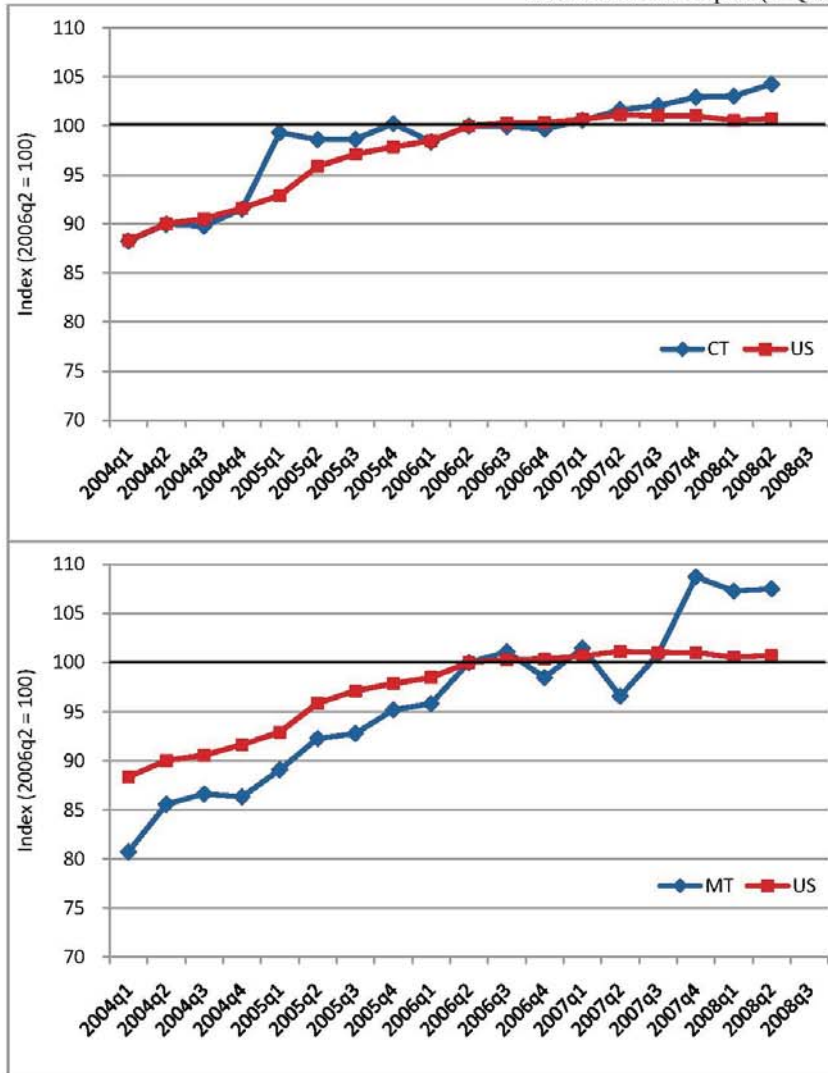
There are other standout states as well but they are not so easy to present graphically

The bottom two panels show Michigan and Nevada. Nevada looks very much like Arizona and Florida — it benefited from the same sort of real estate run-up, and suffered a very similar sharp decline in state tax revenue. Michigan by contrast has suffered a long term economic and malaise.

Selected States With Early and Severe Difficulty
Real Taxes Per Capita (4-Quarter Average) Compared With U.S



Selected States Not Yet Showing Great Revenue Weakness
 Real Taxes Per Capita (4-Quarter Average) Compared With U.S



Appendix II: Why We Have Moved to Census Quarterly Tax Data

The Rockefeller Institute has for many years collected its own state tax revenue data from the 50 states, in part because quarterly data collected by the Census Bureau (and available at www.census.gov/govs/www/qtax.html) were not sufficiently timely. This has been changing in recent years, and the Census Bureau data now are far more timely than before. This is the first quarterly report for which the Census data form the backbone of our analysis.

The improved timeliness of the Census quarterly tax data creates an opportunity for the Institute to enhance our longstanding reports on state tax revenues in ways that will lead to improved reporting and analysis of state and local finance. In particular, the Census Bureau data, while not quite as timely as data collected by the Rockefeller Institute, allow us to (1) report on local collections for the nation as a whole, which would not be practical if we collect our own data; (2) examine a longer time series of data for individual states, allowing for better analysis of past recessions; and (3) report on smaller individual taxes such as motor fuel and tobacco taxes, which again are not practical with data we collect ourselves. While we are still collecting data directly from states and their websites, we do not expect to devote as much effort to that research as in the past. This will allow us to put greater effort into analysis and into preparing short “flash” reports when news from the states warrants this.

Relative Strengths of the Two Main Sources of Quarterly Tax Data

The Census Bureau data are collected via a survey of the 50 states plus selected local governments, providing data on state government taxes for each of the 50 states plus the District of Columbia, and estimates of national totals for local government taxes (not by state). The data also hold the promise of providing quarterly estimates for individual local governments in the Census Bureau’s sample, potentially allowing us to track and report on how a sample of local governments are affected by economic trends such as the recent housing bust. In addition, the Census data form a longer

time series than the Rockefeller Institute’s data, allowing for additional analysis of how state and local government tax revenue has responded to past recessions.

The Census data are based on a more comprehensive universe of taxes than the convenience sample used by the Institute (which was designed to facilitate fast and easy reporting by states), and captured approximately 15 percent more revenue than the Institute’s survey in the latest quarter. They also provide detail on some of the smaller taxes not lined out in the Institute’s survey, such as motor fuel taxes and tobacco taxes. Although these taxes are relatively small, they can be of special interest to some audiences at some times — for example, motor fuel taxes, which often are dedicated for highway purposes, have fallen on a year-over-year basis in six of the last seven quarters due in part to higher gas prices and resulting softness in fuel sales. Tobacco taxes, which are used in some states to secure tobacco settlement bonds, also can be of great interest, particularly in the wake of large tax increases in some states that were intended, in part, to depress tobacco consumption. We expect to prepare separate analyses of individual smaller taxes from time to time.

The main drawbacks of the Census data are that (1) they are not quite as timely as the Institute’s tax data, and (2) initial data reported by the Census Bureau sometimes include estimates for entire states or for individual taxes in selected states, and these estimates must be used with care (in subsequent releases the Census Bureau revises its data, generally replacing estimates with reported values from states). In the most recent quarter, the Census Bureau estimated data for Massachusetts, New Jersey, New Mexico, and Washington. In addition, for the states of Maine, Maryland, Ohio, and Wisconsin the Census Bureau data for certain taxes were affected by anomalies and may be revised considerably. Thus, in these states we estimated revenue for these taxes by applying growth rates obtained directly from state reports to the Census year-ago data. These data are likely to be revised in subsequent quarters.

We plan to address these issues in two ways. First, given the widespread availability of data on the Internet, we expect to issue occasional “flash”

reports between our regular quarterly reports if interesting trends emerge. These reports generally would be available several weeks sooner than the full quarterly report. Second, we will make adjustments to Census data or to our descriptions of the

data when necessary, to take account of any significant estimates incorporated in the data.

In the most recent quarter, the Census data show the same broad patterns as the Institute's data, as the table below shows.

Table 11		
Census and Rockefeller Institute Data Tell Similar Stories		
Growth in State Tax Collections, by Tax Type April-June 2008 vs. Year Ago		
	U.S. Census Bureau	Rockefeller Institute
Personal income tax	6.6	7.3
Corporate income tax	(8.3)	(6.9)
General sales tax	(1.4)	(1.8)
All taxes	3.6	4.8

Appendix III: Why We Now Use the GDP Price Index to Adjust for Inflation

We have mentioned in several recent reports the extraordinary divergence between two measures of inflation: the gross domestic product price index, and the price index for state and local government purchases.¹⁸

In fact, as noted in this report, year-over-year inflation as measured by the GDP price index was 2.0 percent in the April June quarter, and was 6.6 percent as measured by the state and local government index. This difference of 4.6 percentage points is the largest difference in 60 years. Figure 11 plots this difference over the last quarter century.

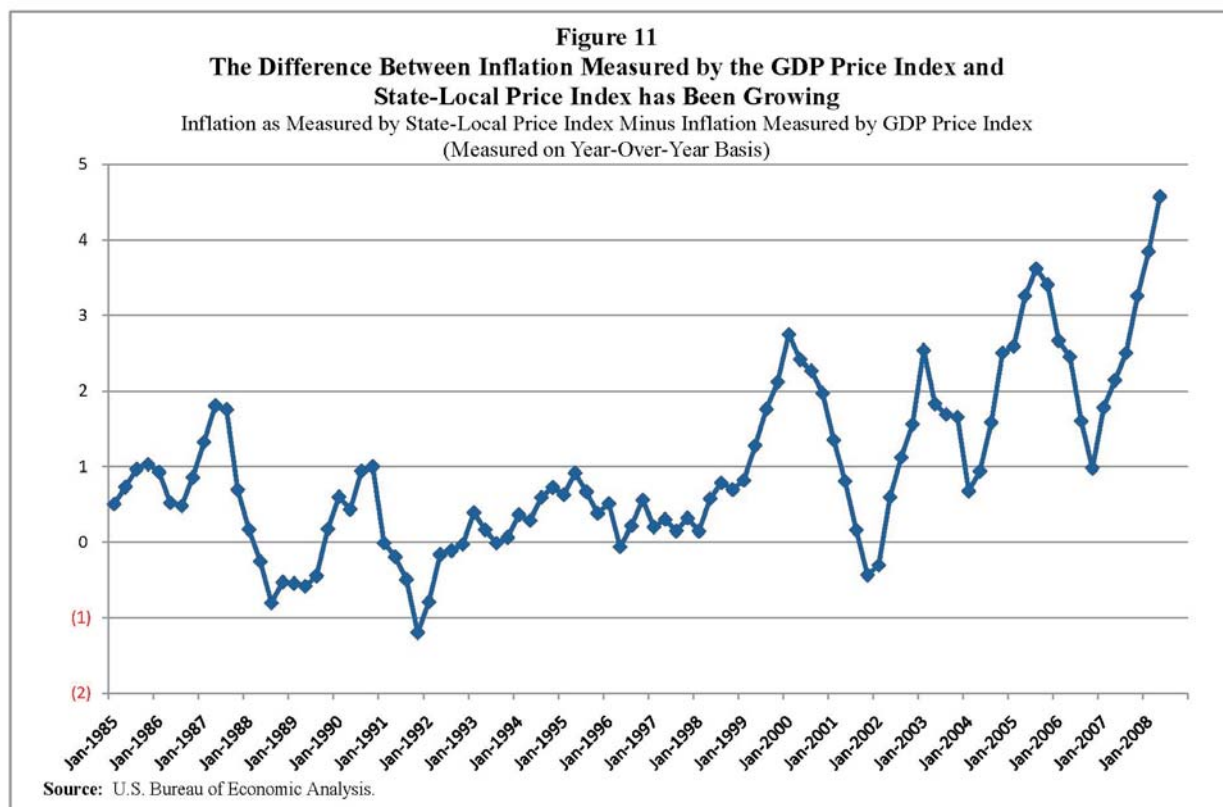
Although we have not studied the two indexes carefully, we believe the two main reasons for this growing divergence are that prices of health care and petroleum products have been rising more quickly than economy-wide prices, and state and local governments are heavy purchasers of both.

For several years we have been adjusting tax revenue for inflation using the state and local government price index. The growing divergence in

the two measures of inflation in recent years has led us to re-examine this choice.

Which price index one should use to adjust for inflation depends on the purpose. If we want to know how far nominal tax dollars will go — how much governments can purchase with them — then it makes sense to adjust for inflation using a measure of the prices of goods that governments purchase (e.g., the state and local government price index). If instead we want to know how much tax revenue states are raising relative to the overall economy — and use their tax revenue as a leading indicator to help gauge the overall strength of the economy — then we want to adjust with a price index related to overall prices in the economy (e.g., the GDP price index).

It is possible to make good arguments in favor of either approach. Some people want to know whether state and local governments are being squeezed by rising prices, so that governments' tax dollars do not stretch as far as the dollar of other participants in the economy. Adjusting with the state local government price index implicitly takes this into account. When state and local government prices rise rapidly, the adjustment reduces real tax



revenue — reduces our assessment of how much governments can buy with their tax dollars.

Other people want to think about tax revenue data as a leading indicator of economic conditions. In this case, adjusting with a rapidly rising state and local government price index will overstate the weakness in the economy. We believe this is one of the main reasons people read our revenue report.

Until recently the choice of which index to use was an academic matter, in the pejorative sense of the word. The difference between the two measures of inflation, when examined over short time spans such as in comparison to a year ago, usually was not large enough to change any fundamental

conclusions about what was going on. But with the recent large and growing divergence this choice has real-world implications.

Because we believe it is important not to let large price increases for state and local governments suggest large declines in real tax revenue, we have decided that it's best begin adjusting for inflation using an economy wide index — the GDP price index. So beginning with this report, that is what we are doing. However, we will continue to report separately to state and local government price index and to discuss its implications. And as time and resources permit, we expect to analyze the purchases of state and local governments in greater detail.

Appendix IV: Detailed State Data

	2007				2008			
	Personal Income	Corporate Income	Sales	Total	Personal Income	Corporate Income	Sales	Total
United States	91,442	17,854	63,197	228,078	97,458	16,369	62,340	236,346
New England	7,445	1,130	2,395	14,116	8,021	1,017	2,413	14,582
Connecticut	2,451	244	817	4,233	2,695	204	860	4,482
Maine	290	51	269	862	315	46	274	954
Massachusetts	4,061	528	1,017	6,383	4,329	488	998	6,577
New Hampshire	63	204	NA	514	68	207	NA	538
Rhode Island	356	77	213	864	384	46	205	847
Vermont	224	26	79	1,261	230	26	76	1,183
Mid-Atlantic	20,411	3,743	8,787	41,475	23,307	3,305	8,945	44,235
Delaware	294	133	NA	1,017	303	174	NA	1,032
Maryland	2,251	265	1,197	4,949	2,285	287	1,369	5,284
New Jersey	4,605	1,411	2,557	10,644	4,908	1,304	2,510	10,747
New York	9,882	1,075	2,804	15,899	12,312	772	2,846	18,049
Pennsylvania	3,380	859	2,229	8,967	3,499	768	2,220	9,125
Great Lakes	12,470	2,731	8,712	31,341	13,155	2,347	8,817	31,247
Illinois	3,101	1,159	1,921	8,488	3,427	1,225	1,975	8,757
Indiana	1,613	474	1,388	4,370	1,708	458	1,549	4,538
Michigan	1,898	562	2,005	5,985	2,139	228	1,884	5,587
Ohio	3,539	326	1,993	7,494	3,613	227	1,997	7,491
Wisconsin	2,319	211	1,404	5,004	2,268	209	1,411	4,874
Plains	6,710	949	3,802	14,916	7,085	950	3,780	15,559
Iowa	818	140	456	1,867	865	159	482	2,019
Kansas	1,049	257	558	2,255	1,091	203	541	2,237
Minnesota	2,473	208	1,292	5,454	2,677	256	1,293	5,748
Missouri	1,691	198	823	3,292	1,742	186	799	3,318
Nebraska	552	63	378	1,207	586	65	388	1,224
North Dakota	126	54	126	527	124	60	136	731
South Dakota	NA	30	168	313	NA	21	140	282
Southeast	15,799	3,839	16,202	48,304	16,075	3,382	15,434	47,062
Alabama	973	182	582	2,434	991	171	578	2,461
Arkansas	734	139	730	2,187	783	99	698	2,205
Florida	NA	784	5,522	10,197	NA	701	5,143	9,354
Georgia	2,725	408	1,576	5,358	2,617	300	1,445	5,008
Kentucky	910	349	716	2,654	1,161	125	720	2,718
Louisiana	1,110	313	783	3,117	1,085	377	785	3,188
Mississippi	556	106	904	1,974	588	102	903	2,010
North Carolina	3,631	477	1,336	6,923	3,665	474	1,270	6,886
South Carolina	1,231	113	1,142	2,998	1,182	132	1,036	2,855
Tennessee	213	475	1,736	3,486	253	439	1,709	3,494
Virginia	3,230	313	891	5,642	3,212	330	886	5,558
West Virginia	486	181	284	1,334	537	132	262	1,325
Southwest	2,303	640	7,537	18,813	2,146	547	7,640	21,220
Arizona	1,088	358	1,393	3,493	884	302	1,310	3,150
New Mexico	340	129	445	1,505	363	120	437	1,623
Oklahoma	874	152	514	2,279	900	125	516	2,431
Texas	NA	NA	5,185	11,536	NA	NA	5,378	14,016
Rocky Mountain	3,664	546	1,567	7,808	3,664	562	1,505	7,867
Colorado	1,765	226	563	2,995	1,822	210	556	3,052
Idaho	569	84	339	1,182	576	90	319	1,173
Montana	319	72	NA	854	311	77	NA	887
Utah	1,011	164	505	1,976	955	186	457	1,909
Wyoming	NA	NA	160	800	NA	NA	173	846
Far West	22,641	4,276	14,195	51,305	24,004	4,259	13,806	54,573
Alaska	NA	354	NA	1,877	NA	418	NA	4,429
California	20,292	3,695	9,474	38,220	21,429	3,626	9,221	38,990
Hawaii	489	49	662	1,429	459	47	642	1,367
Nevada	NA	NA	1,344	2,642	NA	NA	1,279	2,525
Oregon	1,861	178	NA	2,561	2,116	168	NA	2,779
Washington	NA	NA	2,715	4,577	NA	NA	2,664	4,483

Source: U.S. Census Bureau.

Table 13				
Quarterly Tax Revenue by Major Tax, by State				
April-June, 2007 to 2008, Percent Change				
	PIT	CIT	Sales	Total
United States	6.6	(8.3)	(1.4)	3.6
New England	7.7	(10.0)	0.7	3.3
Connecticut	10.0	(16.4)	5.2	5.9
Maine	8.9	(9.7)	2.0	10.8
Massachusetts	6.6	(7.5)	(1.9)	3.0
New Hampshire	7.9	1.2	NA	4.8
Rhode Island	7.8	(39.5)	(4.0)	(1.9)
Vermont	2.8	(0.0)	(3.6)	(6.2)
Mid-Atlantic	14.2	(11.7)	1.8	6.7
Delaware	2.9	30.1	NA	1.5
Maryland	1.5	8.2	14.3	6.8
New Jersey	6.6	(7.5)	(1.9)	1.0
New York	24.6	(28.1)	1.5	13.5
Pennsylvania	3.5	(10.6)	(0.4)	1.8
Great Lakes	5.5	(14.1)	1.2	(0.3)
Illinois	10.5	5.7	2.8	3.2
Indiana	5.9	(3.4)	11.6	3.8
Michigan	12.7	(59.4)	(6.1)	(6.6)
Ohio	2.1	(30.3)	0.2	(0.0)
Wisconsin	(2.2)	(0.8)	0.5	(2.6)
Plains	5.6	0.1	(0.6)	4.3
Iowa	5.8	13.1	5.7	8.1
Kansas	4.0	(20.8)	(3.0)	(0.8)
Minnesota	8.2	23.1	0.0	5.4
Missouri	3.0	(6.0)	(2.9)	0.8
Nebraska	6.1	3.9	2.7	1.5
North Dakota	(1.2)	11.0	8.2	38.7
South Dakota	NA	(28.0)	(16.6)	(10.1)
Southeast	1.7	(11.9)	(4.7)	(2.6)
Alabama	1.8	(5.9)	(0.7)	1.1
Arkansas	6.6	(28.8)	(4.3)	0.8
Florida	NA	(10.6)	(6.9)	(8.3)
Georgia	(3.9)	(26.4)	(8.3)	(6.5)
Kentucky	27.6	(64.2)	0.5	2.4
Louisiana	(2.2)	20.5	0.2	2.3
Mississippi	5.8	(3.7)	(0.1)	1.8
North Carolina	0.9	(0.8)	(4.9)	(0.5)
South Carolina	(4.0)	16.3	(9.3)	(4.8)
Tennessee	19.0	(7.5)	(1.5)	0.2
Virginia	(0.5)	5.5	(0.6)	(1.5)
West Virginia	10.5	(27.1)	(7.7)	(0.7)
Southwest	(6.8)	(14.5)	1.4	12.8
Arizona	(18.7)	(15.6)	(6.0)	(9.8)
New Mexico	6.6	(7.5)	(1.9)	7.9
Oklahoma	2.9	(17.9)	0.4	6.7
Texas	NA	NA	3.7	21.5
Rocky Mountain	0.0	2.9	(4.0)	0.8
Colorado	3.2	(7.2)	(1.1)	1.9
Idaho	1.2	6.4	(6.1)	(0.7)
Montana	(2.5)	7.4	NA	3.8
Utah	(5.5)	13.0	(9.6)	(3.4)
Wyoming	NA	NA	8.5	5.7
Far West	6.0	(0.4)	(2.7)	6.4
Alaska	NA	18.2	NA	136.0
California	5.6	(1.9)	(2.7)	2.0
Hawaii	(6.0)	(2.8)	(3.0)	(4.4)
Nevada	NA	NA	(4.8)	(4.5)
Oregon	13.7	(5.7)	NA	8.5
Washington	NA	NA	(1.9)	(2.0)

Source: U.S. Census Bureau.

Endnotes

- 1 Table 1 does not include adjustment for legislative changes. We are investigating how best to make these adjustments to the Census data.
- 2 The Census Bureau does not currently collect data on withholding taxes and estimated payments. The data presented here were collected by the Rockefeller Institute.
- 3 See, for example, calculatedrisk.blogspot.com.
- 4 Most newspaper accounts of economic data show growth from one quarter or month to the next, rather than year over year. That is because most economic time series have been adjusted to remove seasonality so that comparisons from one period to the next are meaningful. Government tax data, by contrast, rarely are adjusted to remove seasonal variations and as a result analysts usually examine these time series on a year-over-year basis, thereby comparing data for this year to the same season or period last year and implicitly removing some of the seasonal effects. To make our analysis of economic data comparable to our analysis of tax data, for most purposes in this report we examine economic data on a year-over-year basis.
- 5 These employment data tell a similar story to that of the coincident indexes of economic activity discussed later, but it can take careful interpretation to see this. The employment data are compared to the same period a year ago rather than to preceding months. If employment begins to decline relative to earlier months — one indicator of a possible recession — it can still be higher than its value a year ago. What we are likely to see in the employment data in this case is a slowing rate of year-over-year growth when the economy begins to decline relative to recent months. The coincident indexes presented later can be compared more easily to recent months and thus can provide a more-intuitive picture of a declining economy. But both sets of data are useful.
- 6 Unlike leading indexes, these measures are not designed to predict where the economy is headed; rather, they are intended to tell us where we are now. For a technical discussion of these indexes and their national counterpart, see Theodore M. Crone and Alan Clayton-Matthews. “Consistent Economic Indexes for the 50 States,” *Review of Economics and Statistics*, 87 (2005), pp. 593-603; Theodore M. Crone, “What a New Set of Indexes Tells Us About State and National Business Cycles,” *Business Review*, Federal Reserve Bank of Philadelphia (First Quarter 2006); and James H. Stock and Mark W. Watson. “New Indexes of Coincident and Leading Economic Indicators,” *NBER Macroeconomics Annual* (1989), pp. 351-94. The data and several papers are available at www.philadelphiafed.org/econ/indexes/coincident.
- 7 The data underlying these indexes are subject to revision, and so tentative conclusions drawn now could change at a later date. In fact, the latest revised data, used here, now show slightly more widespread declines in early 2008 than did data available for our last quarterly report.
- 8 The median state change generally will not be the same as the national change because it gives every state equal importance — in this measure, California is no more important than Wyoming.
- 9 See Donald J. Boyd, *What Will Happen to State Government Finances in a Recession?*, Nelson A. Rockefeller Institute of Government, January 30, 2008.
- 10 Rockefeller Institute analysis of data from the National Conference of State Legislatures.
- 11 Eric Ruth, “Delaware: State’s financial sector roiled by banking crisis”, *The News Journal*, September 16, 2008, www.delmarvanow.com/apps/pbcs.dll/article?AID=/20080916/NEWS01/80916002
- 12 McGeehan, Patrick, “City and State Brace for Drop in Wall Street Pay,” *The New York Times*, July 26, 2008, www.nytimes.com/2008/07/26/nyregion/26pay.html
- 13 Donald J. Boyd, *What Will Happen to State Government Finances in a Recession?*, Nelson A. Rockefeller Institute of Government, January 30, 2008.
- 14 Because state income taxes are deductible against the federal income tax, many high income taxpayers make their January 15 payment of estimated state income taxes before the close of the calendar year, to gain the benefit of the federal deduction.
- 15 Fain, Travis, “Agencies taking steps to deal with state budget cuts”, *Forbes*, August 15, 2008, <http://www.forbes.com/feeds/ap/2008/08/15/ap5328972.html>
- 16 Associated Press, www.chroniclet.com/2008/09/10/ohio-governor-sees-new-540-million-budget-shortfall_122/
- 17 See press releases from Governor Paterson of September 5 and September 25, 2008.
- 18 Lucy Dadayan and Robert B. Ward, *State Tax Revenue Weakens Still Further, While Costs Rise Sharply*, State Revenue Report 71, March 2008.

About The Nelson A. Rockefeller Institute of Government's Fiscal Studies Program

The Nelson A. Rockefeller Institute of Government, the public policy research arm of the State University of New York, was established in 1982 to bring the resources of the 64-campus SUNY system to bear on public policy issues. The Institute is active nationally in research and special projects on the role of state governments in American federalism and the management and finances of both state and local governments in major areas of domestic public affairs.

The Institute's Fiscal Studies Program, originally called the Center for the Study of the States, was established in May 1990 in response to the growing importance of state governments in the American federal system. Despite the ever-growing role of the states, there is a dearth of high-quality, practical, independent research about state and local programs and finances.

The mission of the Fiscal Studies Program is to help fill this important gap. The Program conducts research on trends affecting all 50 states and serves as a national resource for public officials, the media, public affairs experts, researchers, and others.

This report was researched and written by Donald Boyd, senior fellow, and Lucy Dadayan, senior policy analyst. Robert B. Ward, deputy director of the Institute, directs the Fiscal Studies Program. Michael Cooper, the Rockefeller Institute's Director of Publications, did the layout and design of this report, with assistance from Michele Charbonneau.

You can contact Donald Boyd at boydd@rockinst.org. Lucy Dadayan may be contacted at (518) 443-5828 (phone), (518) 443-5274 (fax), or dadayanl@rockinst.org (e-mail).