

Recession, Recovery, and State and Local Finances

Donald Boyd

© 2011 Lincoln Institute of Land Policy

**Lincoln Institute of Land Policy
Working Paper**

The findings and conclusions of this Working Paper reflect the views of the author(s) and have not been subject to a detailed review by the staff of the Lincoln Institute of Land Policy.

Contact the Lincoln Institute with questions or requests for permission to reprint this paper. help@lincolninst.edu

Lincoln Institute Product Code: WP11DB1

Abstract

The Great Recession hit state and local finances much harder than any recession of the past 50 years. While it is well-known that the recession was deeper and longer than other recessions, what is less well understood is that the factors driving state tax revenue were hit far harder than underlying economic variables might suggest, and far harder than in past recessions. As of June 2011, state tax revenue has begun growing again but the state and local finances are far from recovery: state tax revenue remains well below pre-recession levels, states are struggling with the loss of federal stimulus money, Medicaid spending pressures are rising, pension contributions and retiree health care payments are rising, and local governments in many states face severe fiscal pressure from weakening property tax revenue. The state revenue crisis is over but the fiscal crisis continues.

About the Author

Donald Boyd is the executive director of the national Task Force on the State Budget Crisis, co-chaired by former Federal Reserve Board chairman Paul Volcker and former New York lieutenant governor Richard Ravitch. Boyd is currently on leave from his responsibilities as senior fellow at the Rockefeller Institute of Government, where he conducts research on state and local government fiscal issues.

Contact: donboyd5@gmail.com

Table of Contents

“Automatic” impacts of recessions on state and local finances	1
The economy and tax revenue	1
The economy and spending pressures	2
Impacts vary from recession to recession, and from state to state	2
Why state tax collections fell sharply and quickly	3
Why did the income tax fall so much?	5
Local tax revenue and the housing bust	11
How the fiscal crisis and policy responses have been unfolding	14
Looking forward	20
References and Bibliography	23
Endnotes	24

Recession, Recovery, and State and Local Finances

“Automatic” impacts of recessions on state and local finances

State and local government finances, and particularly tax revenue, are tied inextricably to the economy.

The economy and tax revenue

Sometimes the links between the economy and government finances are direct and easy to understand: in good times, when employment rises income tax withholding on wages rises, and in bad times, if consumers cut back spending sales tax revenue generally declines. In both cases tax revenue responds swiftly to economic changes, although the revenue response can be sharper than the economic change.

Other links are not as direct or fast. When financial markets rise rapidly, high-income taxpayers can have huge increases in the values of corporate stock and other assets. Whether and when these gains will turn into income tax revenue is complex. Tax generally is due only if taxpayers “realize” gains – if they sell assets – and that is a choice affected by transaction costs, current and expected future tax rates, availability of losses to offset gains, and a host of personal considerations. If tax is due, the timing of tax payments can easily lag the economic change by many months, reflecting rules governing tax payment dates and “safe harbor” payment amounts.

The relationship between the economy and the property tax is particularly complex. The base of the tax is not market value, but taxable assessed value: an assessor must choose or be required to adjust assessments to reflect market value changes, and those changes may or may not be subject to tax immediately. Some jurisdictions update assessments only every few years. For example, South Carolina counties reassess every five years. Other jurisdictions encourage assessors to reflect market value changes as soon as possible, and make it easy for taxpayers to request this.

Even if market values are reflected rapidly in assessments, they may not be fully taxable immediately. California, Florida, South Carolina, and several other states have “acquisition-value” assessing that caps growth in assessments for some individual parcels until they are sold. New York City and some other jurisdictions allow market value changes to be phased in. When market values are rising rapidly, taxable assessments for these properties lag behind market value growth. If market values subsequently fall, market values may still be above artificially suppressed taxable assessed values, so that no reduction in assessment is required. As a result, taxable assessed values tend to change more slowly and less sharply than market values, in ways that vary greatly from state to state, and even across jurisdictions within states.

Another important difference between the property tax and income and sales taxes is that tax rates usually are set annually. Within limits, local government officials have the ability to offset assessed-value declines by raising rates. This, too, varies greatly across the nation, reflecting political willingness to raise rates and differing tax-limitation rules. It is harder to identify the “pure” impact of the economy on the property tax than it is for the income or sales tax.

One result is that it is nearly impossible to generalize about how a recession will affect property taxes. When a recession hits and income declines, we can be pretty sure that most states' income

taxes will suffer: to be sure, more in some places than others depending on the structure of their economy and how it was hit by the recession, and more in some places than others depending on the structure of the income tax, but still we can be pretty sure that it will be hurt in most places. Not true for the property tax: how the property tax responds to declines in market values is so tied to the institutional features of the tax in a particular state or jurisdiction that it is nearly impossible to say how it will be affected without understanding those features.

The economy and spending pressures

On the spending side of budgets, the linkage to the economy is quite complex and usually slower and smaller than the impact on revenue. Recessions drive up the demand for many of the services that governments provide, often with a lag. As unemployment rises, many people out of work eventually lose health care benefits and become eligible for Medicaid, driving up state Medicaid expenditures after a year or more. Other safety-net programs, too, are driven upward, although they generally are much smaller shares of state budgets.

Unemployment increases that put pressure on safety net programs funded directly out of state (and local) budgets also drive state unemployment insurance trust fund expenditures up. State budgets are insulated from the direct impact of rising UI benefit payments because the trust funds generally have experience-rated taxes that are increased, with a lag, to cover their deficits. However, these tax increases affect the economy and they tap the same tax bases that states may target to cover general fund shortfalls, making it more difficult to raise taxes to close budget gaps. Unemployment insurance funds also create tertiary effects: states can borrow from the federal unemployment insurance trust fund to cover shortfalls, triggering interest payments from the general fund on that borrowing, again with a lag.

During a recession, demand for higher education, particularly community colleges, rises – when jobs are hard to find, it is a good time to stay in school and strengthen skills. Meanwhile, it is hard to find governmental programs for which demand declines in a recession. If inflation slows, that can lead to lower growth in costs, but because the costs of many goods and services are governed by contracts, some of which extend to multiple years, this benefit can take time to appear in budgets. Stock market declines that often accompany recessions drive pension fund assets down and required pension contributions upward, but most pension systems use smoothing methods that cause these required contributions to rise over a period of several years, with a lag.

Impacts vary from recession to recession, and from state to state

How these effects play out over time varies greatly from recession to recession and from state to state, depending on the structure of a state's economy, on its tax and spending structure, and on how a particular recession affects different parts of the economy that are tied closely to government finances. For example, even though the Great Recession hit nearly all states quite severely, North Dakota's economy and tax revenue grew throughout the recession due largely to its heavy concentration in natural resources. As another example, in the 2001 recession consumer spending and thus sales taxes were little affected, but investment income fell sharply in the wake of the dot-com bust leading to dramatic income tax declines. By contrast, the Great Recession caused large and early declines in consumer spending, and large declines in investment income. As a result, Tennessee, with no income tax but heavy reliance on the sales tax, was little affected

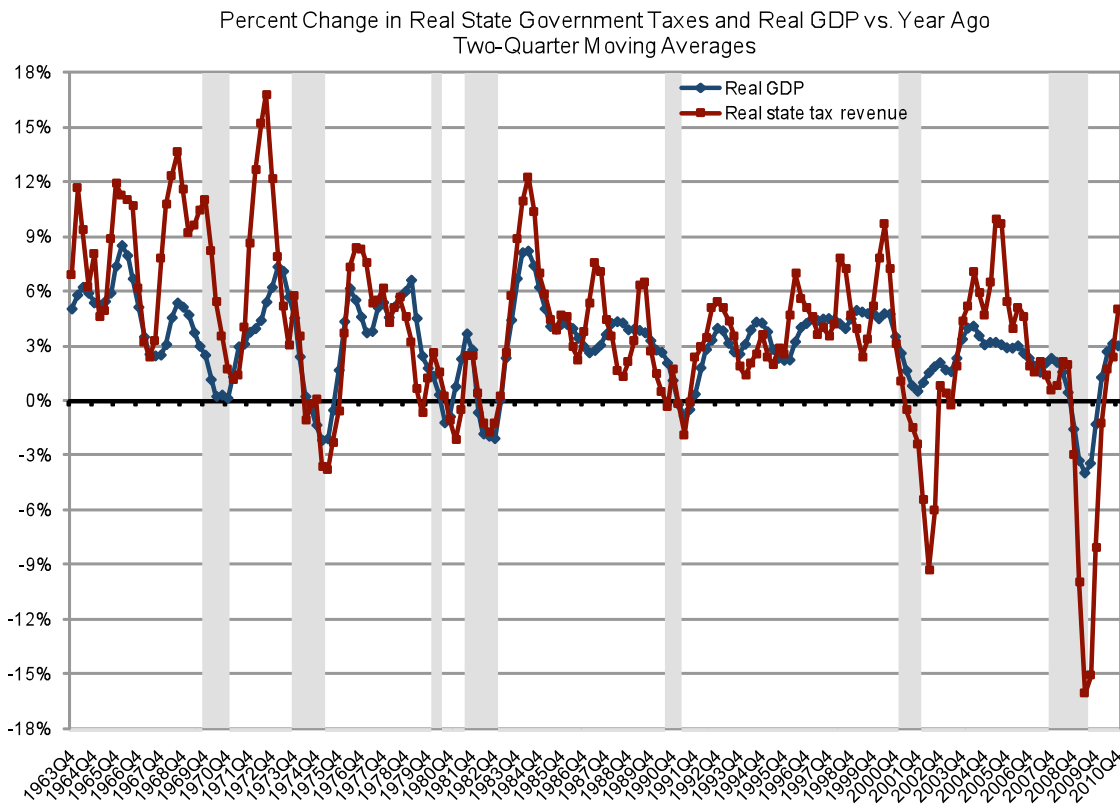
by the 2001 recession but was hit sooner and somewhat harder than the average state by the Great Recession.

Why state tax collections fell sharply and quickly

The Great Recession started in December 2007. After a slight delay, state tax collections began to plummet, falling for five consecutive quarters beginning in the fourth quarter of 2008 and continuing throughout 2009. Tax revenue fell by a dizzying 16.8 percent in the second quarter of 2009. Tax revenue declined further and more sharply in this recession than in any other post-war recession.

Because this was the deepest and longest recession since the Great Depression, it's not surprising that tax revenue fell sharply. But the depth of the recession was only part of the problem. In Figure 1 the red line shows the year over year change in tax revenue and the blue line shows year over year change in gross domestic product (a broad measure of the economy), both adjusted for inflation. The shaded vertical areas demarcate each recession. It's obvious from the graph that tax revenue fell more sharply than in prior recessions, but the graph also shows that tax revenue fell far more sharply than did the economy and that the relationship to the economy was far worse than in past recessions.

Figure 1: State tax revenue fell more sharply than in past recessions, and more sharply than the economy would suggest



Sources: U. S. Census Bureau (Quarterly tax collections); Bureau of Economic Analysis (real GDP).
Notes: (1) Percentage changes averaged over 2 quarters; (2) No legislative adjustments; (3) Recession periods are shaded.

What caused this? The drivers of state tax revenue have been hit much harder than the broader economy would suggest. Although real gross domestic product declined by 4.1 percent during the recession, the income typically taxed by state governments declined by 8.5 percent – more than twice as much, and more than twice the decline of the severe recession of 1973. Similarly, consumption of items typically subject to state sales taxes declined 9.1 percent in this recession - - more than twice as steep as in the 1973 recession. Capital gains, which had been increasing in importance to state income taxes, fell by more than 60 percent. Table 1 shows the peak to trough decline for these and several other important influences on tax revenue.

Table 1: Key tax revenue drivers fared worse than the broader economy, and worse than in past recessions

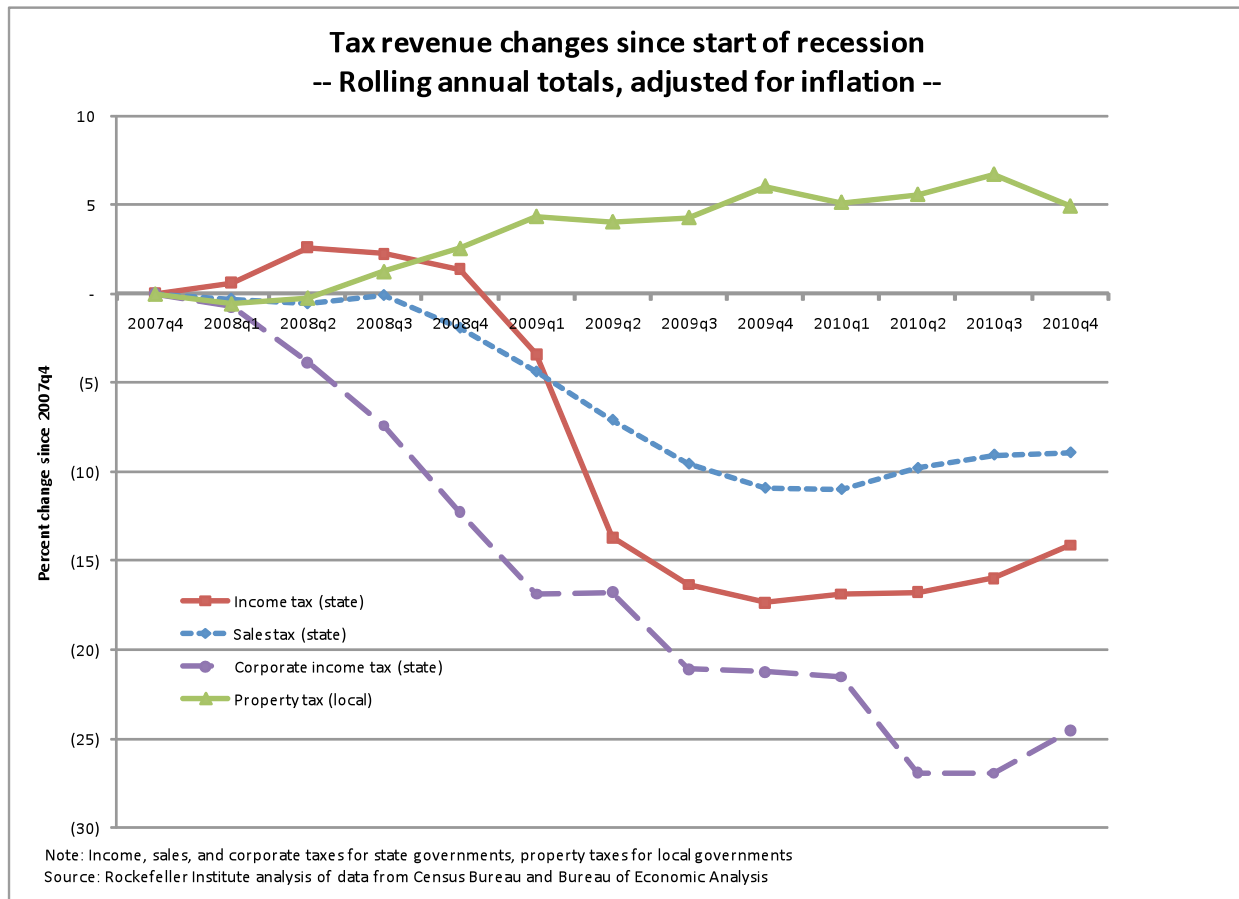
Variables with important influences on state and local government tax revenue									
<i>Selected recessions</i>									
% change cycle peak to own trough (quarters)							Real capital gains (annual)		
Recession starting	Duration (months)	Real GDP	Personal income (real)	Commonly taxable components of personal income (real)	Commonly taxable consumption items (real)	Real single family home prices (adjusted for general inflation)			
							Tax years	% change	\$ change as % of real GDP
1969q4	11	-0.2%	0.0%	0.0%	-1.3%	na	1968 to 1970	-47.0%	-0.4%
1973q4	16	-3.2%	-2.6%	-3.7%	-4.5%	na	1972 to 1975	-31.6%	-1.0%
1980q1	6	-2.2%	-1.2%	-1.4%	-4.5%	-8.7%	1979 to 1981	-7.7%	-0.2%
1981q3	16	-2.9%	-0.2%	-0.2%	0.8%	-4.8%	1981 to 1984	+51.7%	+1.5%
1990q3	8	-1.4%	-1.0%	-1.9%	-1.8%	-2.2%	1988 to 1991	-38.5%	-1.3%
2001q1	8	0.0%	-0.2%	-2.8%	-0.9%	real home prices rose	2000 to 2002	-59.9%	-4.3%
2007q4	18	-4.1%	-2.3%	-8.5%	-9.1%	-13.5%	2007 to 2009 (est.)	-63.0%	-4.5%

Notes: Taxable consumption defined as durables, nondurables other than food, plus food services, accommodations services, and recreation services; taxable personal income defined as sum of wages, nonfarm proprietors' income, interest income, and dividends. Consumption and income deflated by personal consumption expenditures price index. Capital gains deflated by GDP price index.

Sources: GDP, consumption, personal income, and price indexes from Bureau of Economic Analysis; capital gains from various IRS Statistics of Income documents; housing prices based on all-transactions index from Federal Housing Finance Agency

The net result of these and other forces was huge declines in state income, sales, and corporate taxes. Figure 2 shows that annual income taxes fell by more than 15 percent in inflation-adjusted terms, sales taxes fell by more than 10 percent, and corporate income taxes fell by more than 25 percent. Property taxes, which are crucial to local governments but generally unimportant to states, remained quite stable through much of the period, although they are beginning to weaken and in some parts of the country have fallen significantly.

Figure 2: State income, sales, and corporate taxes fell, while local property taxes were stable



Why did the income tax fall so much?

As Figure 2 shows, rolling annual income tax revenue, adjusted for inflation, fell by nearly 20 percent from peak to trough even though, as noted earlier, on a peak-to-trough basis real GDP fell by “only” 4.1 percent, personal income fell by 2.3 percent, and the taxable components of personal income fell by 8.5 percent.^{1, 2}

Because capital gains have played such an important role in state tax revenue trends, they deserve special attention.

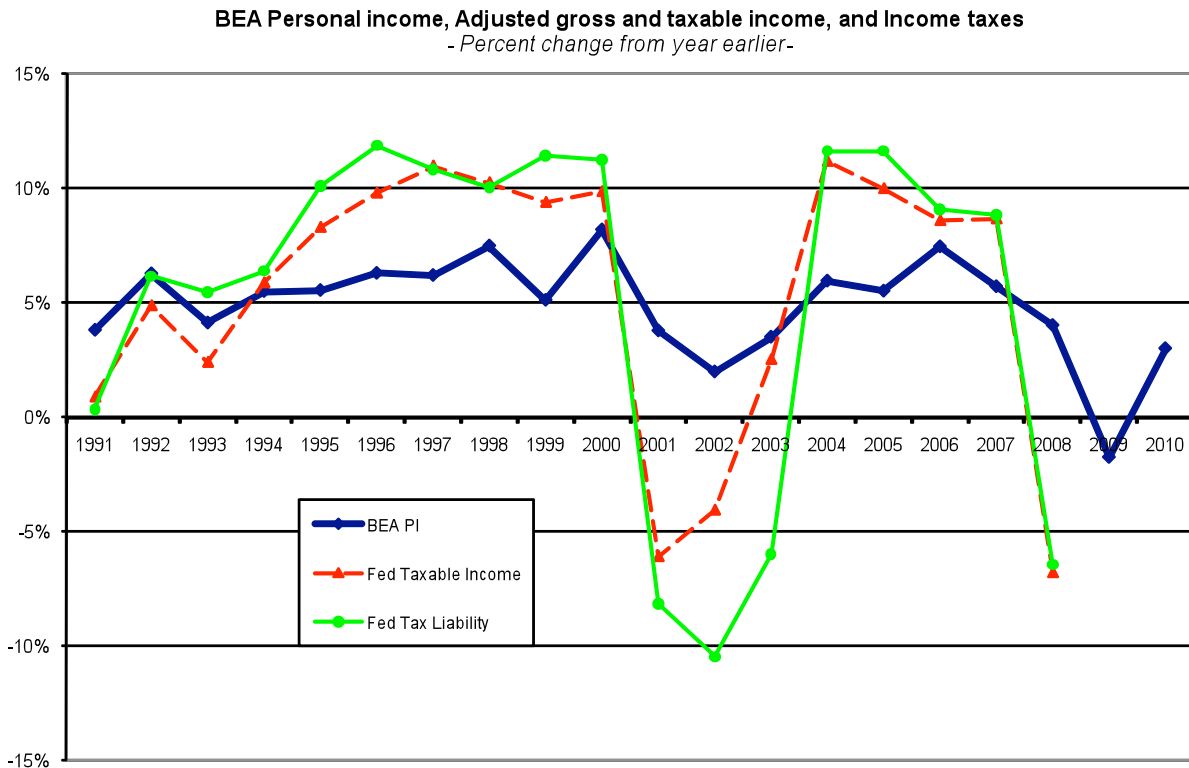
The decline in the income tax was driven by a decline in taxable income that was far greater than the decline in personal income (the concept included in the national income and products

¹ The time periods covered by these percentages do not match precisely since we use four-quarter totals for the income tax and quarterly values for the economic variables, but they are close enough that the conclusion is correct and if anything this is likely to understate the disparity between the economic change and the tax revenue change.

² The corporate income tax decline was worse than the personal income tax decline, but because it is a far smaller revenue source in most states, the fiscal consequence is less severe.

accounts). Figure 3 shows for calendar years since 1991, year over year percent change in personal income as reported by the Bureau of Economic Analysis (BEA), federal taxable income as reported by the Internal Revenue Service, and federal tax liability also as reported by the IRS.³ (We do not have data on state taxable income and state tax liability but these data are likely to track fairly closely with comparable state data.⁴) It is obvious that taxable income, and income tax liability, both are much more volatile than BEA personal income. For example, in 2001 when personal income growth slowed to 3.8 percent from 8.2 percent in the prior year, taxable income actually declined by 6.1 percent, contributing to an 8.1 percent decline in tax liability.

Figure 3: Taxable income and income tax liability fell far more sharply than personal income



Sources: NIPA Table 2.1 (personal income); IRS Statistics of Income histab3.xls (AGI)
Notes: (1) NOT adjusted for 2008-10 tax increases or other law changes; (2) Data are for calendar years, except state PIT which is for fiscal year in which associated tax returns are filed

The disparity between taxable income growth and personal income growth was driven by nonwage income subject to tax rather than by wages.⁵ Figure 4 shows year over year growth rates in interest and dividends as reported on tax returns, and income receipts from assets as reported in economic accounts. Figure 5 shows year over year growth in all other tax-return

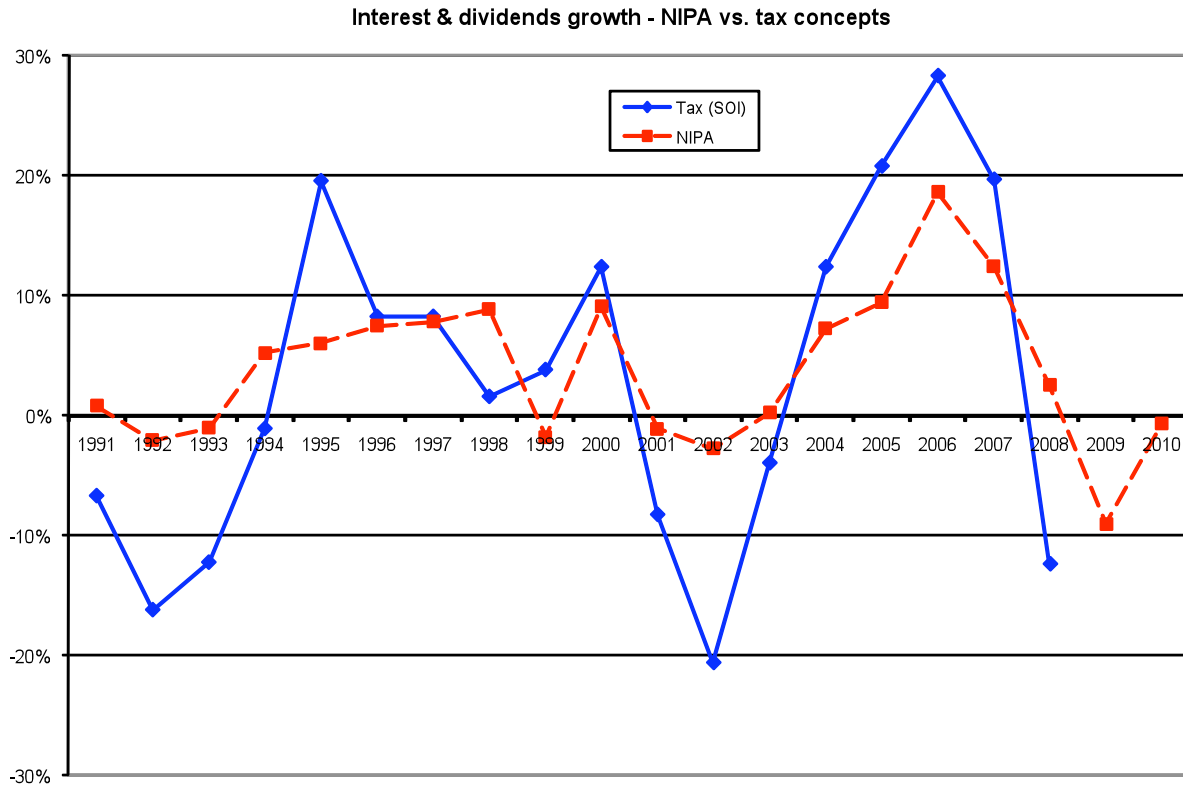
³ None of the data in this graph has been adjusted for changes in federal tax law, but I believe those changes were not large enough to have skewed growth rates substantially over the time period shown.

⁴ The federal personal income tax appears to track fairly closely to state income tax collections for the relevant time periods. The federal income tax is likely to be somewhat more volatile than state income taxes in aggregate because it has a more progressive rate structure than does the typical state.

⁵ A graph of growth in wages as reported by BEA and as reported on tax returns shows virtually identical growth rates, and the correlation between the two growth rates over the 1991 to 2008 time period is 0.98.

income (other than wages and interest and dividends) compared with growth in all other personal income (other than wages and income receipts from assets). It is clear from both graphs that taxable income that corresponds roughly with income concepts in the national income accounts is far more volatile.⁶

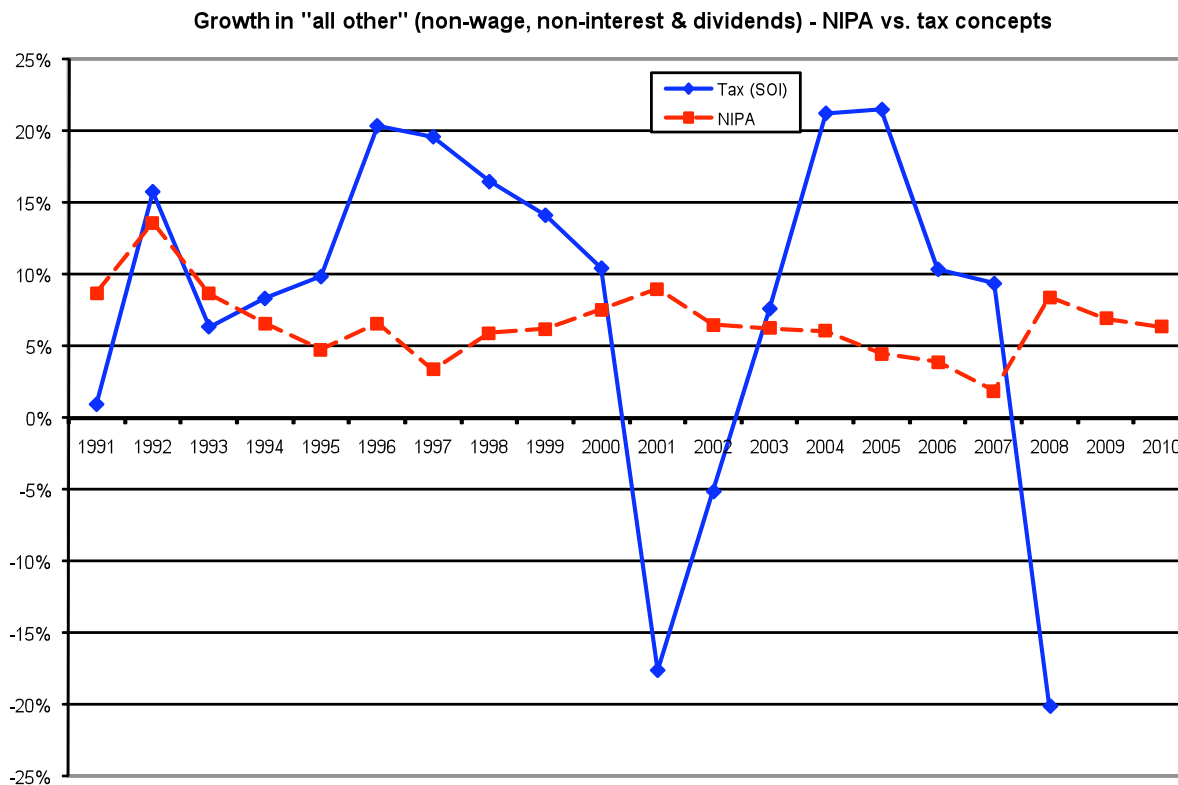
Figure 4: Interest and dividends on tax returns were far more volatile than receipts from assets reported in economic accounts



Sources: BEA (Personal interest and dividend income, NIPA Table 2.1), and SOI (Taxable interest and ordinary dividends)

⁶ The correspondence is only rough. Adjusted gross income on tax returns tends to be about 25 to 35 percent smaller than personal income in the national economic accounts, and personal income includes some concepts such as the imputed rental value of homes that simply have no counterpart on tax returns. Still, the comparison is instructive.

Figure 5: Non-wage income from sources other than interest and dividends, as reported on tax returns, fell far more sharply than income in economic accounts



Sources: BEA (NIPA Table 2.1), and SOI

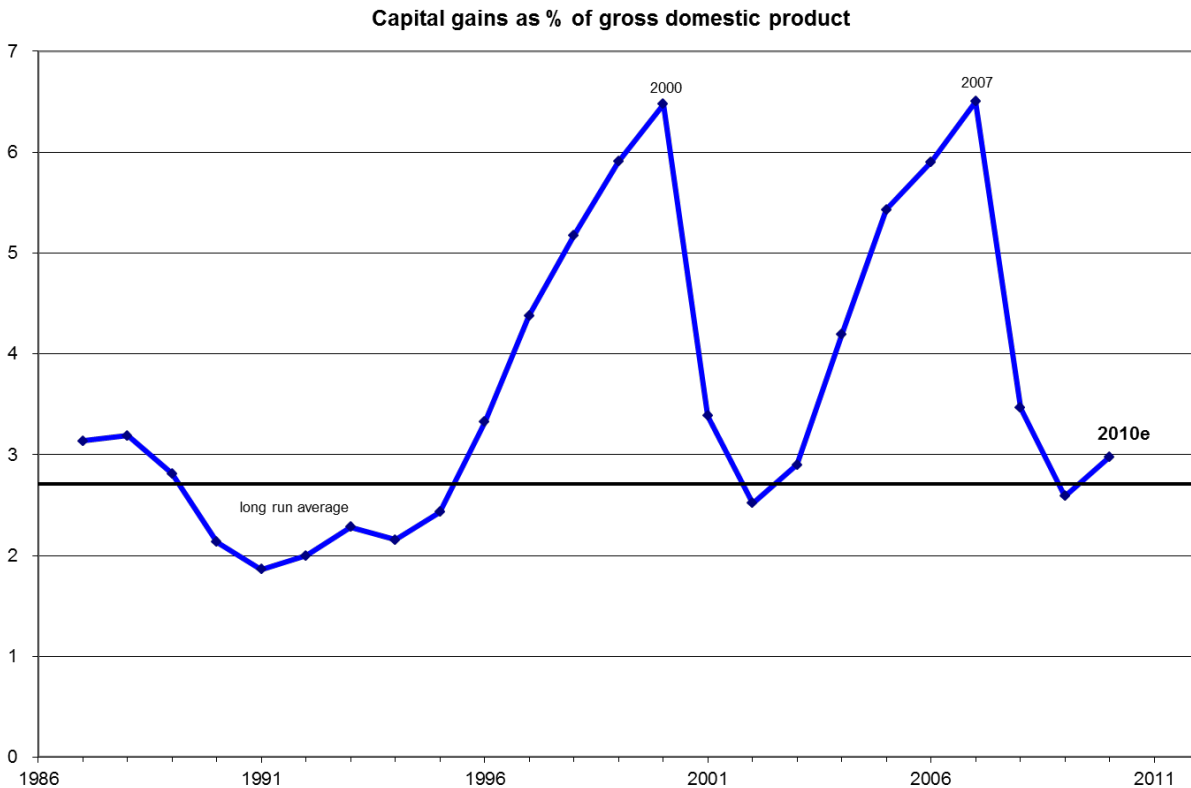
Nonwage income — particularly stock market gains — is volatile for several reasons. First, the underlying forces determining the potential magnitude of taxable income are quite volatile: the stock market can go up and down significantly, creating opportunity for taxpayers to take capital gains and losses. Interest income also can be volatile — for someone with a variable-rate asset, a fall in the interest rate from 4 percent to 3 percent represents a decline of 25 percent in interest income. (Most portfolio income does not respond as suddenly or fully to interest rate changes, but it certainly does happen.) The broader economy, too, can have a big influence on potential capital gains and losses and on other forms of nonwage income.

Second, in the case of capital gains, the decision to realize gains — whether to sell assets with accrued gains — is a discretionary one that reflects not just asset values, but also current and expected future tax rates, transaction costs, expected earnings on alternative investments, and a host of personal planning considerations. Gains realized for tax purposes therefore are more volatile than accrued gains. (Realized gains are not an element of personal income in the national income accounts, which is one reason that personal income is less volatile than taxable income.)

Finally, the timing of associated tax payments is volatile and variable. Taxpayers generally must make estimated payments related to expected taxable income — typically on April 15, June 15, September 15, and January 15 — but safe harbors, estimating uncertainties, behavioral stickiness, and considerations related to deductibility of state taxes against federal taxes all influence the timing and variability of estimated payments.

Figure 6 shows the dramatic changes in capital gains as a share of gross domestic product over the last two-and-a-half decades. Capital gains more than tripled as a share of GDP between 1991 and 2000, then plummeted for two years in the wake of the dot-com bust, and then more-than doubled between 2002 and 2007 before falling by more than 60 percent. The rising importance of capital gains and increased volatility of gains is one important reason for increasing volatility in state tax structures and increases in state revenue forecasting errors.⁷

Figure 6: Seesawing changes in non-wage taxable income were driven by capital gains volatility



Sources: (1) Capital gains: Internal Revenue Service (www.irs.gov/taxstats); (2) Gross domestic product from U.S. Bureau of Economic Analysis

The impact of these changes varies widely across the states, with some being far more susceptible to capital gains volatility than others. Table 2 ranks states by a measure of capital gains dependence. (See Boyd and Dadayan, 2010.)

⁷ See Mattoon and McGranahan, and Pew Center on the States and Rockefeller Institute of Government for discussion of these issues.

Table 2: State dependence on capital gains

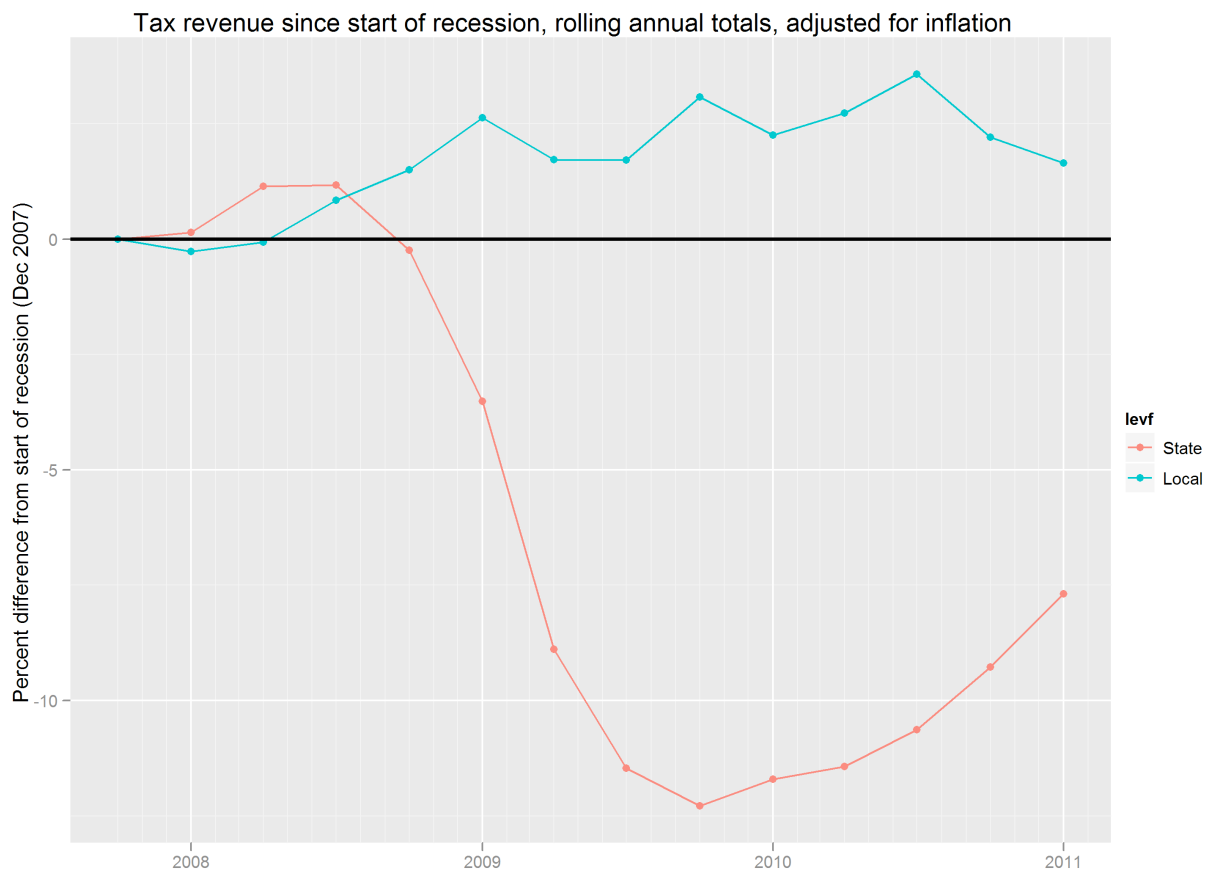
Income-Tax States Ranked by a Measure of Capital Gains Dependence				
State	Capital gains as share of AGI (2007)	Top Capital Gains Tax Rate on Corporate Equities	PIT as share of taxes (2009)	Rank (1=highest), considering capital gains
<i>US average or median</i>	9.6%	5.7%	34.4%	
California	10.7%	10.3%	43.9%	1
New York	13.5%	6.9%	56.7%	2
Idaho	10.3%	7.8%	37.1%	3
Oregon	8.9%	9.0%	73.2%	4
New Jersey	7.9%	9.0%	39.2%	5
Maine	7.9%	8.5%	39.3%	6
Connecticut	13.3%	5.0%	49.3%	7
Massachusetts	11.7%	5.3%	54.4%	8
Vermont	10.8%	5.7%	21.3%	9
Nebraska	8.8%	6.8%	40.0%	10
Hawaii	8.1%	7.3%	28.4%	11
Minnesota	7.4%	7.9%	40.5%	12
North Carolina	7.3%	7.8%	46.6%	13
Iowa	6.0%	9.0%	38.7%	14
Colorado	11.4%	4.6%	50.7%	15
Montana	10.4%	4.9%	34.4%	16
Oklahoma	8.7%	5.5%	31.2%	17
Utah	9.5%	5.0%	42.8%	18
Delaware	8.0%	6.0%	32.5%	19
Georgia	7.8%	6.0%	48.5%	20
Kansas	7.1%	6.5%	40.8%	21
Virginia	7.9%	5.8%	55.1%	22
Maryland	8.0%	5.5%	42.8%	23
Arizona	9.6%	4.5%	17.4%	24
Missouri	6.9%	6.0%	46.1%	25
Kentucky	6.1%	6.0%	34.0%	26
Ohio	5.7%	6.2%	34.7%	27
Alabama	7.0%	5.0%	32.1%	28
Louisiana	5.5%	6.0%	29.4%	29
South Carolina	7.9%	3.9%	32.9%	30
Arkansas	6.3%	4.9%	30.0%	31
West Virginia	4.6%	6.5%	32.5%	32
Illinois	9.9%	3.0%	31.4%	33
Mississippi	5.1%	5.0%	22.8%	34
Michigan	5.8%	4.4%	25.6%	35
North Dakota	6.4%	3.9%	15.3%	36
Pennsylvania	7.6%	3.1%	31.8%	37
New Mexico	7.9%	2.7%	19.2%	38
Indiana	6.0%	3.4%	29.0%	39
Wisconsin	7.0%	2.7%	42.9%	40
Rhode Island	8.4%	1.7%	37.2%	41

Sources: (1) Capital gains as share of AGI: calculated by Rockefeller Institute from IRS Statistics of Income File 07in54cm.xls, (2) top capital gains tax rate: State Individual Capital Gains Tax Rates, American Council for Capital Formation, October 2008; rate for United States is median of rates shown, (3) PIT as share of taxes calculated by Rockefeller Institute from Census Bureau state tax data; (4) Rank calculated by Rockefeller Institute by first indexing each state's capital gains share and top rate to the nation, multiplying the two resulting indexes, and ranking them.

Local tax revenue and the housing bust

So far, local government revenue has been more stable than state tax revenue and the impact of the recession on local governments has been far less severe than the impact on state governments. As Figure 7 shows, as of the fourth quarter of 2010 rolling annual inflation-adjusted local tax revenue was about two percent higher than its level at the start of the recession while state tax revenue was 10 percent below the recession start. The main reason for this relative stability is that local governments rely on the property tax for about three quarters of their tax revenue and as Figure 2 showed, for the nation as a whole the property tax has been quite stable.

Figure 7: Local government tax revenue has been far more stable than state tax revenue.



Source: Bureau of the Census

As others have noted and as discussed above, in the typical jurisdiction the property tax tends to lag changes in the economy and changes in housing prices, by as much as three years on average,

and declines tend to be less severe than declines in housing prices.⁸ While this lag is evident in data for the nation as a whole, there is great variation around the country for several reasons.

First, the housing bust has varied significantly in severity from state to state. Nationally, housing prices of single-family homes peaked in the first quarter of 2007, and then fell 11.2 percent through the second quarter of 2010.⁹ However the range in housing-price changes was enormous, with statewide average prices in Nevada declining by 44.2 percent, while prices in North Dakota actually rose 6.9 percent. The five hardest-hit states all had declines of more than 20 percent, while five states had increases of two percent or more.

Second, the speed with which housing-value changes are reflected in assessments will vary from state to state and even jurisdiction to jurisdiction, depending on property tax laws and practices. In some states assessors change property values rapidly in response to price declines, while in others, such as South Carolina, assessments are revised only once every five years. Even when assessments are updated quickly, laws and practice can cause *taxable* assessments to lag. For example, in New York City phase-in rules for commercial property and caps on homeowner assessment increases have stabilized property tax revenue.¹⁰ Other jurisdictions in New York do not have these rules and may see more-rapid changes in assessments.

Finally, property tax revenue depends not just on assessments but also on locally set tax rates. Some governments will be more willing to raise property tax rates than others in response to declining assessments, and some governments will be constrained by laws limiting tax rates. As a result, local responses to assessment declines will vary greatly.

Census Bureau data from a quarterly survey of 5,500 local tax collecting units of government can provide some information on property tax collections below the national level, even though the Bureau only publishes national totals. Although the sample is designed to produce estimates of property tax collections for the nation as a whole, not for individual states, the data from individual units in the sample can provide valuable insight into variation around the nation.

Figure 8 shows the year over year percent change in property taxes for the median government in the sample and for governments at the 75th and 25th percentile. It is based on rolling annual totals for the property tax to smooth out aberrations in the timing of tax payments.¹¹ The graph clearly shows a slowing trend in property tax collections, down from 6 to 7 percent in 2004 to about 2.5 percent in recent quarters. Furthermore, it shows wide variation across governments: fully 25

⁸ For a good discussion of these issues, see Byron F. Lutz, “The Connection Between House Price Appreciation and Property Tax Revenues” (Washington, D.C.: Federal Reserve Board, September 12, 2008) and Byron Lutz, Raven Molloy, and Hui Shan, “The Housing Crisis and State and Local Government Tax Revenue: Five Channels” (Washington, D.C.: Federal Reserve Board, August 2010).

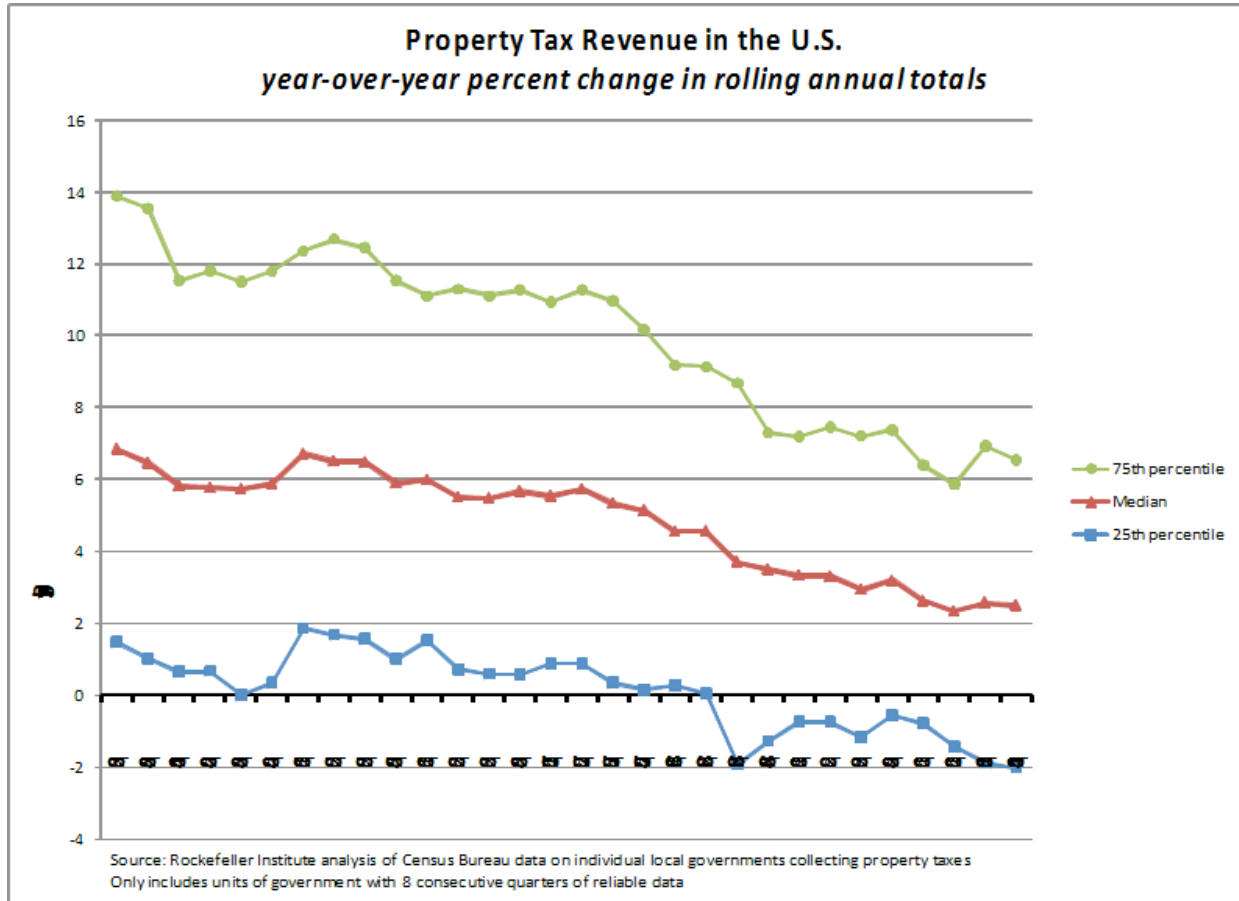
⁹ Based on the Federal Housing Finance Agency’s “All Transactions” housing price index. The FHFA price indexes are less volatile than the widely reported Case-Schiller price indexes for major cities, but have the advantage of offering estimates of price changes for the nation as a whole and for individual states, neither of which is possible with the Case-Schiller indexes. This particular analysis relies on non-seasonally adjusted price indexes, but seasonality in the indexes does not appear to be very meaningful.

¹⁰ See “Stabilizing Revenue Collection During the Downturn: How Assessment Phase Ins and Caps Affect the City’s Property Tax”, *Fiscal Brief*, New York City Independent Budget Office, February 2011.

¹¹ In constructing this graph, I removed tax-collecting units that had missing or imputed data for one or more quarters needed in the calculations, to ensure that the result was as accurate a representation of actual collections as possible.

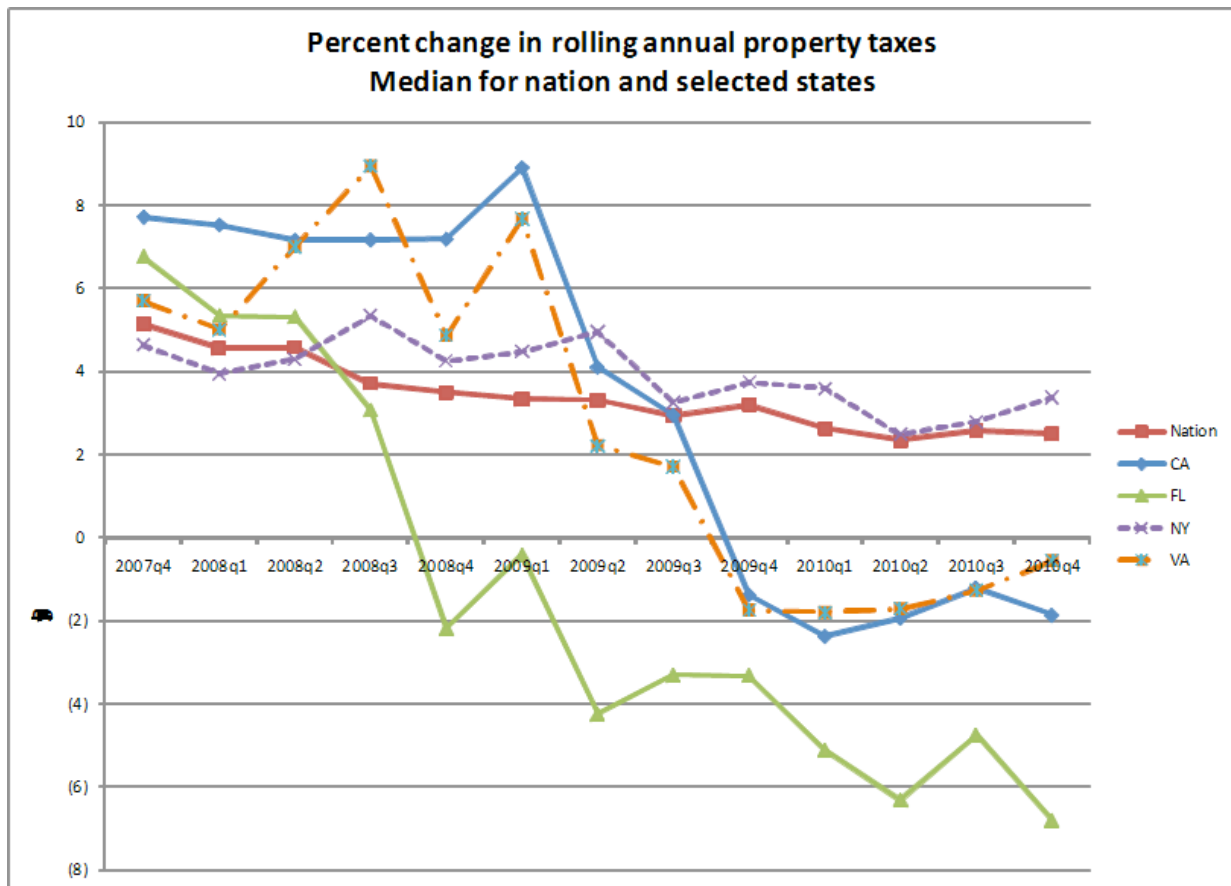
percent of the tax-collecting units had a 2 percent decline or worse in the most recent quarter, while 25 percent had an increase of 6 percent or more.

Figure 8: Property tax collections have been relatively stable but are weakening



Even though the data cannot be used to develop state-level estimates of property tax collections, it is possible to gain insights into individual states and regions of the country. Figure 9 shows the same kind of calculations for the median property tax collecting unit in California, Florida, New York, and Virginia for those quarters in which at least 10 collecting units had sufficient available data. (These states are shown because they are large, have many property tax collecting units, and demonstrate wide variation in property tax trends.) These state-specific numbers cannot be said to represent average or total performance in any given state – rather they represent what the “typical” government with sufficient data experienced in the state. The figure suggests that California, Florida, and Virginia local governments have come upon much harder times, as measured by property tax revenue, than have local governments in New York or the nation as a whole.

Figure 9: Property taxes have weakened substantially in Florida, California and Virginia



The point of this analysis is that although the property tax has been stable for the nation as a whole, there are significant parts of the country in which it appears to be weakening considerably, contributing to stress in local government finances. Given the lags that appear to be built into property tax assessment and collection systems, further weakening appears likely in many parts of the country.

How the fiscal crisis and policy responses have been unfolding

State and local governments tend to respond to economic crises with delays that soften policy choices they must make and stretch these choices out over many years, for several reasons.

First, government finances are not hit quite as rapidly as private sector finances. When the economy weakens, private sector employers lay off workers, and consumers become worried and slow their spending. These effects can take time to work their way into tax revenue, and some effects are cushioned and delayed: for example, unemployment insurance can help support consumption so that sales tax declines are not as large as they otherwise might be, and housing price declines generally are not reflected in property tax revenue until assessors reassess properties. Medicaid enrollment and spending may not rise until health insurance benefits for

laid-off workers are exhausted. Pension contributions, which can be driven upward by declines in pension funds' corporate stock, respond with a lag because of "smoothing" rules that actuaries employ. And policy choices by the federal government, such as the American Recovery and Reinvestment Act (ARRA) stimulus program can further mute and delay the impacts on state and local governments, as was certainly the case this time.

Second, when tax revenue plunges in the middle of a fiscal year, there are practical limits to what governors can do in response. If governors tried to close a midyear gap simply by cutting spending, they would encounter difficult arithmetic. A 5 percent shortfall in revenue discovered halfway through the year could, all else equal, require spending cuts of 10% for the remainder of the year. But much of spending would be off limits: debt service and pension contributions count not be cut, for example. And in some states the governor is not allowed to cut aid to localities, one of the largest areas of the budget, without legislative approval. Cuts to remaining spending might have to be 15 or 20 percent, depending on how much spending is off limits in the middle of the year. And even these cuts would take time to implement: layoffs require notice, for example. For these reasons and more, when governors confront midyear gaps, in addition to spending cuts they usually draw down reserves or take other actions that push some of the problem into the next year, when they can address it as part of the regular budget process.

Third, even during the annual (or, in some states, biennial) budget process, states are likely to push some of the problem into future years. During recessions the demand for most government services is stable or even rises: the number of children in school generally does not fall in recessions, nor does the number of elderly in nursing homes, two major spending areas for state and local governments. And the number of students in community colleges and the number of adults qualifying for Medicaid usually rise as a result of recessions, driving those costs up. Confronted with stable and rising costs while revenue is plummeting, and wishing to avoid tax increases when citizens are least able to afford them, states often patch budget gaps partly with nonrecurring resources – actions that, out of context, often seem foolish. But when nonrecurring resources fall away in future years, states have new gaps to close, even while the economy may be improving.

For all these reasons, state and local government policy responses to recessions tend to drag out over several years. Finally, delays in state decision-making mean that some cuts in aid to local governments will be lagged, leading to further delays in local government policy choices.

Policy responses are quite difficult to measure, but in several respects states followed this prototypical pattern in response to the Great Recession. Figure 10 shows indicators of stress and response for the current fiscal crisis, beginning with fiscal year 2008.¹ (In most states, FY 2008 began in July 2007 and ended in June 2008. The recession began officially in December 2007.)

The first three columns show information that was largely known or assumed at the start of the fiscal year: projected growth in major taxes, federal fiscal relief based on the ARRA program and successor legislation (not known at the start of 2009, but mostly known at the start of later years), and enacted revenue changes.² The tax revenue projections often are developed several months before budget adoption so the data for fiscal year 2008 reflect what states generally thought in late 2006 through early 2007, while the economy was slowing but before the start of the recession. At this point states were expecting relatively slow growth of 2.9 percent.

The next two columns show unanticipated revenue shortfalls or overage, and intra-year policy response. Fiscal year 2008, for the nation as a whole, was on target and midyear budget cuts were minor (the cuts of \$5.2 billion were 0.8 percent of general fund spending.)³

The final two columns show how the year turned out. The first shows general fund spending growth, a rough indicator of how free spending states were (or were not), because most of this spending is financed with revenue that states raise from their own economies. The final column shows use of fund balances – the one significant gap-closing action that states can take at the end of the fiscal year with virtually no advance notice. Both columns show that 2008, for the nation as a whole, was not usual: spending chugged along at 4.9 percent, and states made modest use of fund balances.

Figure 10: Macro view of state responses to the Great Recession

Unfolding of the fiscal crisis and early responses								
Fiscal year	Expectations and choices made mostly at start of year			Unanticipated		Result		
	Projected growth in major taxes at start of year	Federal fiscal relief (\$ billions)	Enacted revenue changes (\$ billions)	Overage (shortfall) in major taxes (\$ billions)	Midyear cuts (\$ billions)	General fund spending growth (nominal %)	Use of fund balances (\$ billions)	
2008	2.9%	-	4.5	0.8	5.2	4.9%	6.8	
2009	2.9%	31.0	1.5	(37.2)	31.6	-3.8%	22.9	
2010	-1.4%	68.0	23.9	(20.9)	21.9	-6.3%	4.7	
2011	5.0%	59.0	6.2	2.4	7.8	5.2%	(0.4)	
2012	3.9%	6.0	13.8	n/a	n/a	2.6%	n/a	

Source: NASBO and NGA, Fiscal Survey of the States, various editions; Center on Budget and Policy Priorities
Notes: Data for 2012 are based on governors' recommended budgets; federal fiscal relief in 2009 not known at start of year

The next year, fiscal 2009, was quite different. States were projecting revenue growth of 2.9 percent based on estimates likely developed in December 2007 through May 2008, while the financial crisis was developing and housing prices were falling, but the financial collapse had not yet occurred and the depth of the crisis was not understood. States did not yet know they would receive federal fiscal relief. They knew the economy was weakening, and adopted austere but not draconian spending plans, with cuts in many services and programs. They did not want, nor think they needed, significant tax increases to balance their budgets. As the year progressed, the world changed dramatically. Halfway through the fiscal year the financial crisis hit with full force. Lehman Brothers filed for Chapter 11 in September 2008, and in December the National Bureau of Economic Research announced that the economy had been in recession since a year earlier. The stock market was plummeting.

Tax revenue fell sharply late in the year, and plunged in the April-June 2009 quarter when tax returns on 2008 income were filed. Tax revenue fell short by \$37 billion, most of that occurring in the final quarter of the fiscal year. Federal fiscal relief arrived just in the nick of time and states drew down approximately \$31 billion at the end of fiscal year 2009. This shifted some

spending to federal funds that otherwise would have been financed with state funds, artificially depressing reported spending from general funds. Reported general fund expenditures actually declined by 3.8 percent in nominal terms – the first nominal decline since 1983. States also adopted \$32 billion of midyear cuts, and used \$23 billion in fund balances to close the year in cash balance.

In early months of calendar year 2009 states were making their budgets for fiscal year 2010. They lowered their revenue expectations considerably, anticipating a nominal decline in revenue. They used \$68 billion in federal fiscal relief, but still raised taxes by \$24 billion.⁴ They began to cut spending programs more significantly. Through fiscal year 2010 at least 21 states had made cuts affecting health care, at least 23 had made cuts affecting services for the elderly and disabled, at least 24 made cuts to K-12 education, and 32 cut aid for higher education. At least 41 states made cuts to their workforces, through furloughs, layoffs, and other mechanisms.⁵

Despite their lowered revenue expectations for fiscal 2010, revenue from major taxes still fell short by \$21 billion, and states made comparable midyear cuts. When the final numbers were in, general fund spending declined by 6.3 percent, although as noted above this was artificially depressed because some normally state-financed spending was financed with federal funds.

By fiscal year 2011, states had stopped falling off a cliff. They expected tax revenue growth of 5 percent and would receive \$59 billion of federal fiscal relief. They did not raise taxes significantly but made considerable additional cuts in spending, although general fund spending would grow in part to make up for waning federal fiscal relief. The year progressed relatively uneventfully.

Finally, in fiscal year 2012 – the current state fiscal year – federal stimulus relief would decline by \$53 billion from 2011, creating a “funding cliff” and leading to further programmatic cuts, although their effect is masked somewhat.

While it is difficult to measure the impact of spending cuts on state and local programs, it is easier to see the impact on state and local government employment. In most recessions, state and local government employment has not declined at all, but that is not the case this time, as Figure 11 shows. As discussed earlier, the state and local government sector tends to respond with a lag. Although private sector employment fell sharply from the beginning of the recession, state and local government employment continued to rise modestly for about a year and a half. Shortly before private sector employment reached its nadir, state and local government employment began to decline, and states and localities have been cutting employment with fervor. Local government employment is now about three percent below its peak, and state government employment is a bit more than two percent below its peak.

Figure 11: State and local governments took more than a year before cutting employment, but now are cutting back substantially

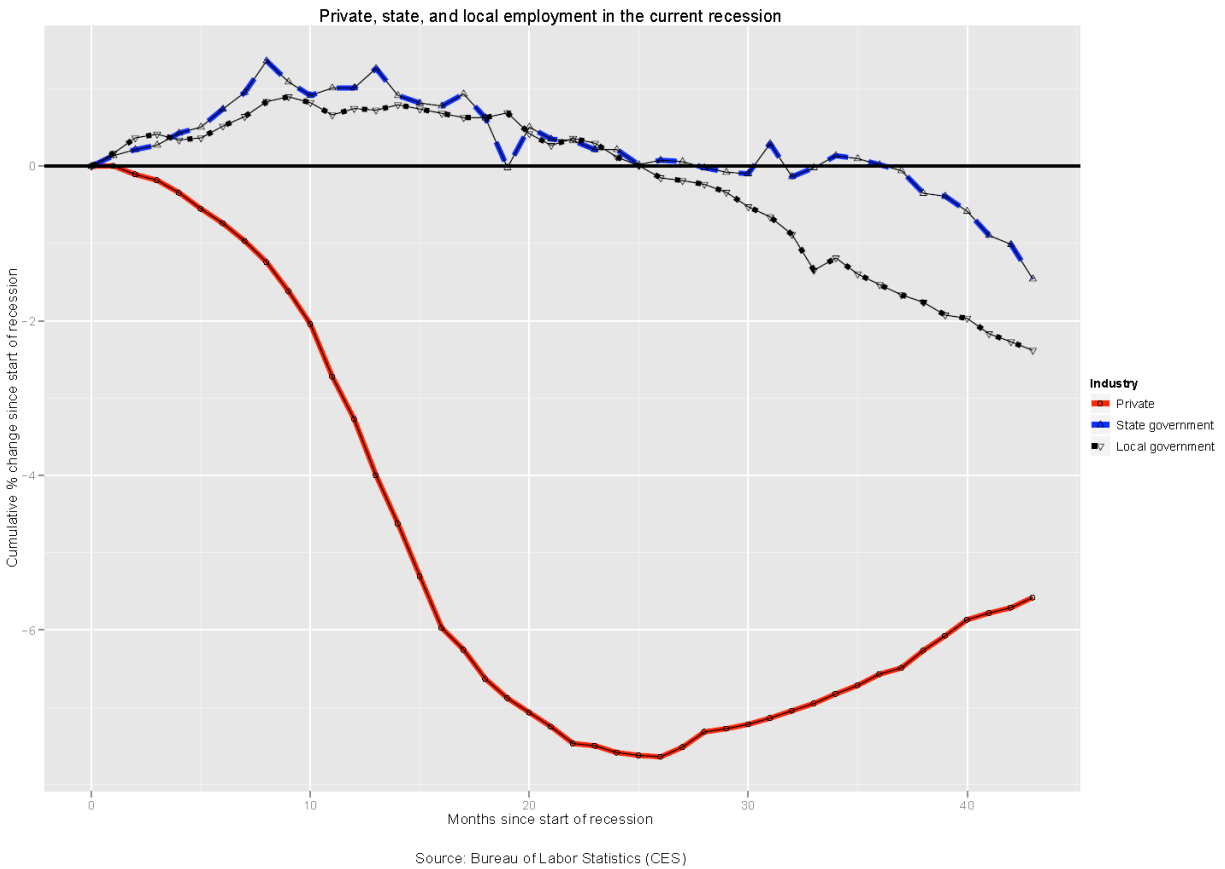
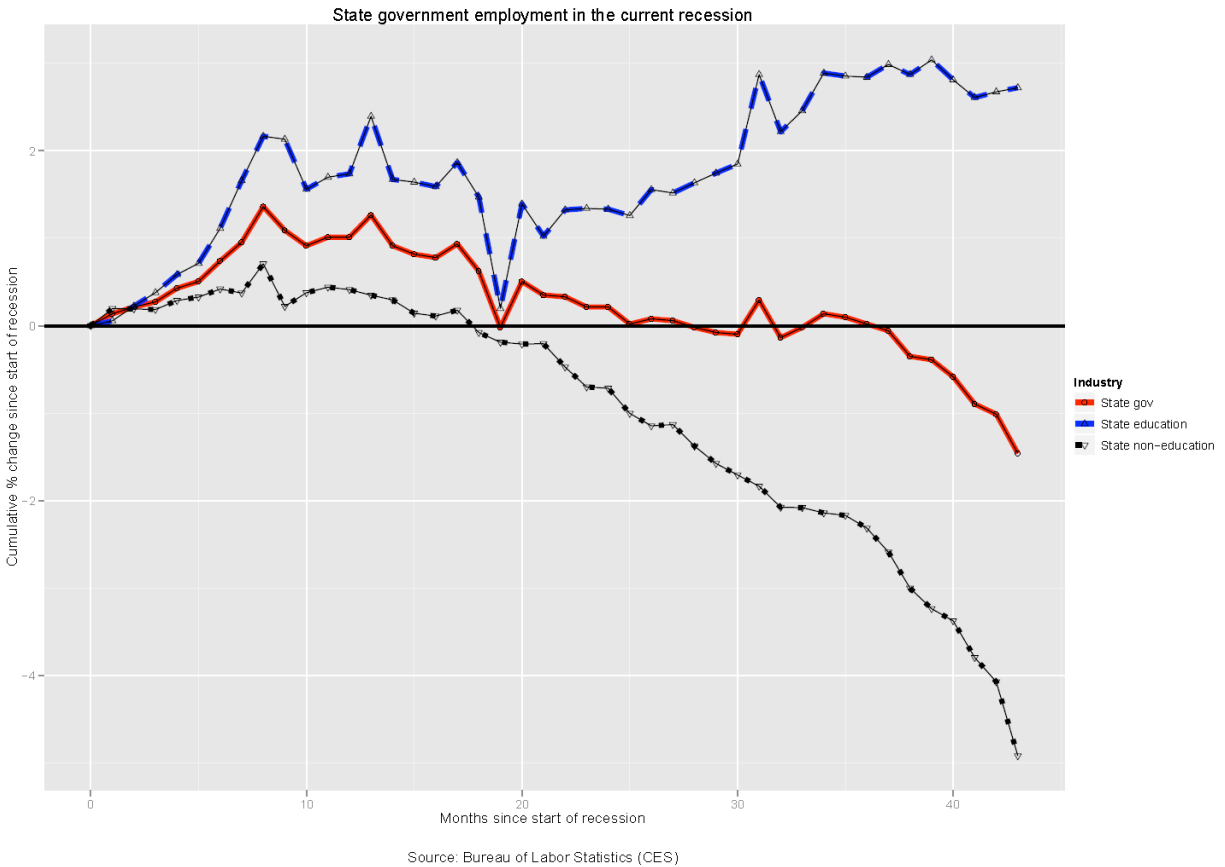


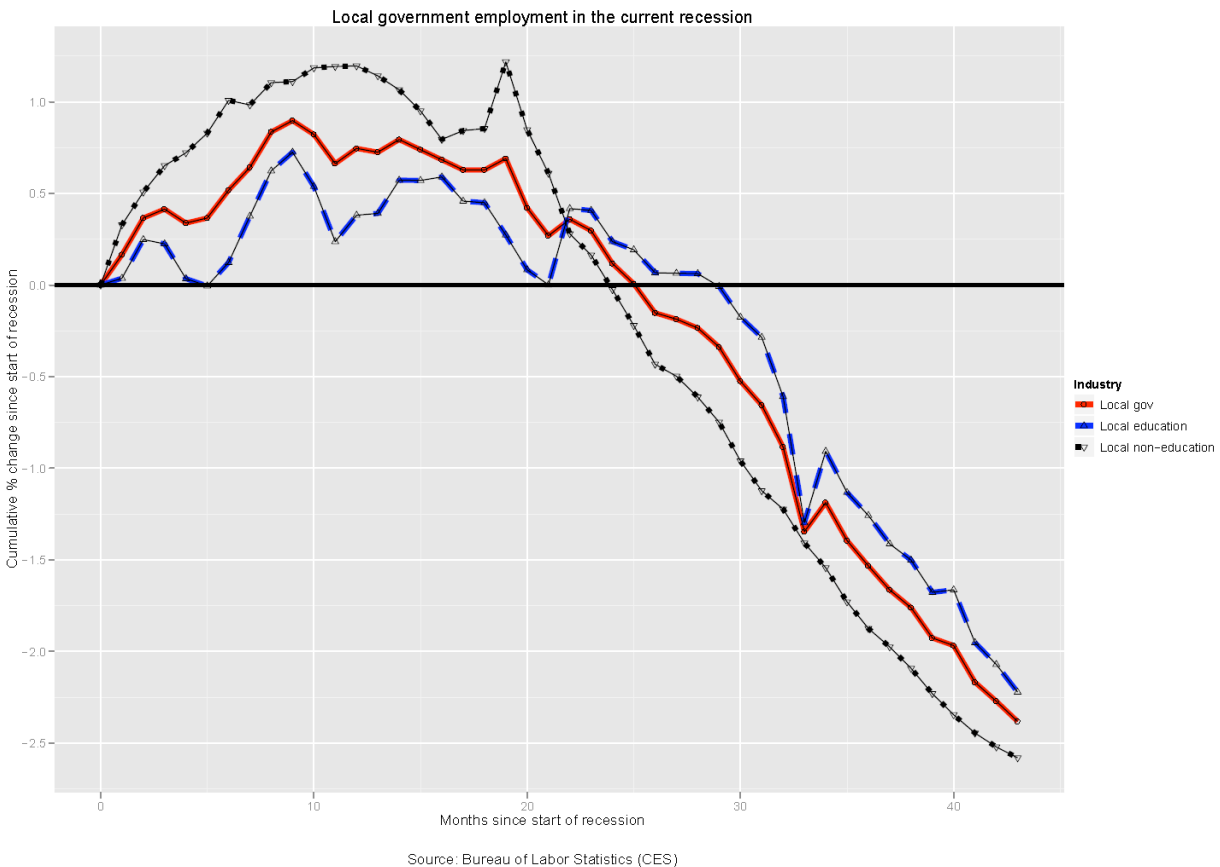
Figure 12 shows state government education and non-education employment. Education employment in most states is related primarily to higher education – community colleges, 4-year colleges, and universities – although some is related to the administrative bureaucracy for elementary and secondary education, and in some states it includes some of the K-12 workforce. State government education employment has continued to rise significantly throughout the recession and recovery, reflecting in part the increased demand for higher education that usually comes with recessions. Meanwhile, state governments have been cutting non-education employment at an accelerating pace, so that it is now down about five percent from its peak – not much different from the current, slightly recovered, condition for private sector employment. This is unprecedented in post-war recessions.

Figure 12: States are cutting non-education employment sharply



Finally, Figure 13 shows the same information for local governments, which are being hit increasingly hard by slowing property taxes and cuts in state aid. They have been cutting both education and non-education employment. The former is now down about 2.5 percent from its peak, while the latter is down about 3.5 percent of its peak. There are no signs that these cuts are slowing, and little reason to believe they will abate in the near term.

Figure 13: Local governments are cutting both education and non-education employment



Looking forward

The recession ended in June 2009 and the economy has been recovering slowly.

After tumbling year-over-year for five consecutive quarters, state tax collections grew in each quarter of 2010. The character of that growth has improved over time. In the first two quarters of 2010, tax increases more than offset declines caused by the weak underlying economy. But in the last two quarters of 2010 growth was driven primarily by the improving economy. By the fourth quarter tax revenue grew by 7.8 percent, but even without tax increases it would have grown by 7.0 percent.

Tax revenue in the January-March 2011 quarter grew 9.3 percent versus the year earlier, 21 states had double-digit growth. Preliminary data for the first two months of the second quarter show tax revenue up 12.5 percent.

Does that mean states are out of the woods? No.

State tax collections fell off a cliff in 2008 and 2009. While states are climbing up from the bottom of the cliff, they are nowhere near the top again. Inflation-adjusted state tax revenue for the nation as a whole in calendar year 2010 was 9.7 percent below the peak attained in 2007.

And the seemingly heady growth in the first two quarters of 2011 cannot be sustained. Much of it appears to have been driven by stock market gains in 2010, boosting income tax returns in the second quarters. Those gains almost certainly will not be repeated in 2011. In addition, turmoil in European debt markets plus the recent Standard & Poor's downgrade of United States long-term debt have contributed to fears of a double-dip recession and almost certainly mean economic growth will be slower than most states assumed in their current budgets. Meanwhile, there are some signs that local government tax revenue is beginning to weaken, as discussed above. States are closer to the bottom of the cliff than the top, and are at risk of falling back down. At the end of 2010 tax revenue was below its 2007 level in 47 states, and was 15 percent or more below that level in 11 states. (See Table 4.) It is hard to finance rising spending demands with revenue below its 3-year-earlier level, and most states face continued hard choices.

Table 3: Inflation-adjusted state tax revenue is recovering but remains nearly 8 percent below its level at the start of the recession. Some signs of possible weakening in local revenue

Percent change in state government tax revenue since start of recession, adjusted for inflation			
<i>Year ending March 2011 vs. year ending December 2007</i>			
	Sum of states	(7.7)	
Louisiana	(25.3)	Kansas	(8.1)
South Carolina	(24.1)	California	(7.9)
Georgia	(20.5)	Maryland	(6.8)
Idaho	(18.1)	Indiana	(6.5)
Utah	(17.6)	New Hampshire	(6.1)
Florida	(16.8)	Mississippi	(5.5)
New Jersey	(15.7)	Connecticut	(4.6)
Arizona	(15.0)	Massachusetts	(4.3)
Hawaii	(14.0)	Texas	(3.8)
Oklahoma	(13.9)	Arkansas	(3.6)
Alaska	(13.4)	Kentucky	(2.8)
New Mexico	(13.2)	Pennsylvania	(2.6)
Nebraska	(12.3)	South Dakota	(2.1)
Virginia	(12.3)	Minnesota	(1.4)
Montana	(11.9)	Illinois	(1.0)
Colorado	(11.7)	Wisconsin	(0.7)
Missouri	(11.5)	Wyoming	(0.4)
Alabama	(11.1)	New York	(0.3)
Washington	(10.3)	Maine	0.1
Nevada	(10.3)	Vermont	0.4
Rhode Island	(9.5)	West Virginia	0.8
Michigan	(9.4)	Iowa	1.7
Tennessee	(9.0)	Oregon	8.9
North Carolina	(8.8)	Delaware	13.0
Ohio	(8.6)	North Dakota	62.9

Source: U.S. Bureau of the Census and Rockefeller Institute of Government

The current improvement in state tax revenue is welcome but there is a long way to go. States still face fiscal trouble for four main reasons. First, revenue remains well below its peak. Second, the recession has had lagged fiscal effects, driving the demand for many government services up, especially Medicaid, other safety net programs, and higher education. And the recession has created other pressures and problems for states by depleting unemployment insurance trust funds, which may lead to higher unemployment insurances taxes so that federal loans can be repaid. Third, states' cyclical adjustments are not complete: they must contend with losses in federal stimulus aid of more than \$50 billion in 2011-12, and losses in temporary revenue measures put in place in response to the recession. Fourth, even after this cycle is fully behind us, states will have to contend with large increases in pension contributions and payments for retiree health care – a pressure likely to build for years.

While the state revenue crisis has been abating, for many states and localities, the fiscal crisis is continuing.

References and Bibliography

- Boyd, Donald and Lucy Dadayan, “Revenue Declines Less Severe, But States’ Fiscal Crisis Is Far From Over”, *State Revenue Report*, Rockefeller Institute of Government, April 2010.
- Boyd, Donald and Lucy Dadayan, “States Report Strong Growth in Tax Revenues in the First Quarter of 2011”, *Data Alert*, Rockefeller Institute of Government, May 2011.
- Council of Economic Advisers, *The Impact of Health Insurance Reform on State and Local Governments*, Executive Office of the President, September 15, 2009.
- Holahan, John and Bowen Garrett, *Rising Unemployment, Medicaid and the Uninsured*, The Urban Institute, For Henry J. Kaiser Family Foundation, January 2009.
- Lutz, Byron F., “The Connection Between House Price Appreciation and Property Tax Revenues”, Federal Reserve Board, Washington, D.C., September 12, 2008.
- Lutz, Byron, Raven Molloy, and Hui Shan, “The Housing Crisis and State and Local Government Tax Revenue: Five Channels”, Federal Reserve Board, Washington, D.C., August 2010.
- Mattoon, Richard, and Leslie McGranahan. “Revenue Bubbles and Structural Deficits: What’s a State to Do?” Federal Reserve Bank of Chicago, *Working Paper* 2008-15.
- Pew Center on the States and Rockefeller Institute of Government, *States’ Revenue Estimating: Cracks in the Crystal Ball*, March 2011.
- Sheils, John and Randy Haught, *Long-Term Cost of the America’s Healthy Future Act of 2009; As Passed by the Senate Finance Committee*, The Lewin Group, Prepared for The Peter G. Peterson Foundation, October 30, 2009.
- Sisko, Andrea, Christopher Truffer, Sean Keehan, John A. Poisal, M. Kent Clemens, and Andrew J. Madison, “National Health Spending Projections: The Estimated Impact Of Reform Through 2019”, *Health Affairs*, October 2010.
- U.S. Government Accountability Office, *State and Local Governments: Growing Fiscal Challenges Will Emerge during the Next 10 Years*, GAO-08-317, January 2008.
- U.S. Government Accountability Office, *State and Local Governments: Rising Health Care Costs Drive Long-term and Immediate Pressures*, Office, Statement for the Record For the Committee on Finance, U.S. Senate, GAO-09-210T, November 19, 2008.

Endnotes

¹ The numbers in the table and in the following paragraphs are drawn primarily from various editions of the NASBO/NGA *Fiscal Survey of the States* and from selected reports by the Center on Budget and Policy Priorities. All of these data are measured with considerable noise, but nonetheless they provide a useful overall picture of state finances.

² The federal fiscal relief numbers are based on McNichol, Elizabeth, Phil Oliff and Nicholas Johnson, *States Continue to Feel Recession's Impact*, Center on Budget and Policy Priorities, June 17, 2011.

³ Some individual states faced considerable fiscal stress in 2008, particularly those states most affected by the collapse of the housing bubble, such as Arizona, Nevada, and Florida.

⁴ These increases were concentrated in a few states, particularly California, New Jersey, and New York. Most states did not raise taxes significantly.

⁵ Center on Budget and Policy Priorities, <http://www.cbpp.org/cms/index.cfm?fa=view&id=2853>