RESEARCH RAP
Special Report

State Tax Revenue in the Third District*

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Recently several state governments have announced that their tax collections have fallen short of expectations. In the Third District states—Pennsylvania, New Jersey, and Delaware—state tax collections in recent months have been below amounts anticipated in state budgets. The governors of these states have announced reductions from budgeted spending. This report looks at the recent trend in state tax collections in the three states and reviews how state tax collections fared in past periods of economic weakness. The purpose is to understand how the current softening in national and regional economic conditions might affect state tax collections in the immediate future.[1]

State Tax Revenue Is Very Sensitive to State Income

The amount of tax a state collects is very sensitive to the personal income of the state's residents.[2] Total state tax collections vary with total personal income in the state, and the variation in the amount of tax collected tends to vary more than income. (See Chart 1.) This relationship is as evident in the three states of the Third District as it is in all the states. (See Charts 2-4.) The variance between income and tax collections is most pronounced around turning points in economic activity. While both tax collections and income accelerate and decelerate roughly in tandem, growth in tax collections slows more than income—or collected amounts actually fall—during recessions, and tax collections rise more than income in the early stages of expansions. Growth in state taxes fell below growth in income in the third quarter of 2000, before the onset of the 2001 recession, and the growth rate of tax collections remained below that of income until the fourth quarter of 2002, a year after the end of the 2001 recession. In the expansion following that recession, tax

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[1] Only state tax revenue is covered in this report. State governments also obtain revenue from other governmental units, mainly the federal government, from operating state-owned utilities, and from other sources. Revenue from these sources can vary, although this variation is not usually related as closely to the business cycle as tax revenue.

collection growth did not consistently exceed income growth until the third quarter of 2003. The growth rate of total state tax collections fell below the growth rate of income in the third quarter of 2006 and has remained below it since.

State tax collections vary more than state residents' incomes for several reasons. Two important factors determining how tax collections respond to changes in income are the tax rate structure and the tax base (the economic activity to which the tax is applied). The two largest sources of state tax revenue are income taxes on individuals and sales and gross receipts taxes on the purchase of goods and services. (See Table 1.) The way in which these two activities—earning and spending—are taxed influences the variation observed in state tax collections.

In many states, individual income taxes are progressive, with higher tax rates for higher incomes. In the Third District, New Jersey's individual income tax rates range from 1.4 to 8.97 percent; Delaware's rates range from 2.2 to 5.95 percent. Pennsylvania has a flat rate of 3.07 percent. For states with progressive individual income tax rates, variations in income over time cause individual incomes to be taxed at different rates at different times. This magnifies the effect of variations in income on the amount of income tax collected, increasing it by more than the rise in income and decreasing it by more than the decline in income. This effect contributes to the pattern of variation in total state tax collections over the course of the business cycle described earlier.

For sales and gross receipts taxes, variations in spending will cause variations in the amount of tax collected. Although sales taxes are not progressive, there are different rates for different classes of goods. In many states, food and clothing are exempt from sales taxes or taxed at lower rates than other goods. In several states, nonprescription drugs are also exempt from sales tax. In most states, prescription drugs are exempt. (Among Third District states, Pennsylvania and New Jersey have sales tax exemptions for most of the usually exempt goods. Delaware does not have a general sales tax.) The existence of different tax rates for different types of goods can cause sales tax collections to fluctuate more than income because of the way spending tends to vary as income varies. For example, as consumers' incomes rise, they tend to spend relatively more on goods that are taxed (and on goods subject to higher tax rates) than on goods, such as food, that are not taxed (or subject to lower tax rates). This tendency results in sales tax collections that can rise or fall more than income or spending. Furthermore, large variations in spending can occur even when incomes are practically unchanged, resulting in greater variation in sales tax collections than in income. For example, during times of economic uncertainty, consumers might delay spending on goods for which they do not have an immediate need, especially big-ticket durable goods (e.g., automobiles, appliances, furniture, etc.)—as appears to be happening now—and then step up spending on these items as confidence is restored.

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[2] State personal income data used in this report are from the U.S. Bureau of Economic Analysis. State tax data are from the U.S. Census Bureau survey of state government tax collections, unless otherwise noted.

The Recent Trend and the Outlook for State Tax Collections

State tax collections were growing through the second quarter of this year, as the most recent census survey data indicate. However, the growth rate of collections has been slowing for the past two years. Recent data obtained directly from the states, although not complete, indicate that growth in state tax collections came to a halt in the third quarter.[3] For the total tax collections for all states for which data are available, collections in the third quarter of 2008 were up only 0.1 percent from the same quarter in 2007. A large decline in corporate income tax collections as well as a drop in sales tax collections negated nearly all of the gain in personal income tax collections. For total tax collections in the Third District states, Pennsylvania and New Jersey had decreases of 2.1 percent and 1.2 percent, respectively. There were declines in corporate income tax collections in Pennsylvania and personal income and sales tax collections in New Jersey. Delaware had an increase of 4.8 percent in total tax collections, on the strength of a large increase in corporate income tax collections.

Looking ahead, two factors suggest no growth or further declines in state tax collections in 2009. The first factor is the developing weakness in income. The rise in unemployment during 2008, with much of it occurring in the later part of the year, raises the likelihood that incomes will be lower during the fourth quarter of this year and into next year. This will probably result in lower personal income tax collections in the fourth quarter of this year. The weakness in personal income tax collections will probably persist through the first half of 2009, a result of continued weakness in income if economic conditions do not improve speedily, and a result of lower tax collections in April 2009 based on 2008 income tax filings. Besides lower tax collections from earnings, the decline in financial asset values in 2008 will limit or reduce taxes collected on capital gains. The economic conditions that are reducing personal income tax collections are also reducing corporate income tax collections, which fell in total for all the states on a year-to-year basis in the second and third quarters.

The second factor limiting or reducing state tax collections is the current and prospective decline in consumption spending. Nominal retail sales fell 4 percent at an annual rate during the third quarter, the first quarterly decline since the 5.2 percent decrease in the first quarter of 2002. Sales of big-ticket durable goods were particularly weak; for example, sales of automobiles and light trucks fell 19 percent from the second quarter to the third quarter. As noted earlier, state sales tax collections for all the states as a whole have been falling, and if consumer spending declines further, sales tax collections will also fall. In the Third District, this factor is not relevant in Delaware, which does not have a general sales tax, but it is a factor in Pennsylvania and New Jersey, where the latest monthly data indicate that sales tax collections have slipped.

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[3] Donald J. Boyd and Lucy Dadayan, "State Tax Revenue Now Flat, for the First Time Since 2002 Recession: After Weak Third Quarter, Further Declines Likely Lie Ahead," Nelson A. Rockefeller Institute of Government *State Revenue Flash Report*, November 6, 2008. www.rockinst.org/government_finance/.

The current weakening in economic activity has been particularly serious in the financial services industry, including the real estate sector. For states where the finance-insurance-real estate (FIRE) industry accounts for a large share of economic activity, tax revenues from this source are at risk. There are three readily available measures of the importance of the FIRE industry in a state: state gross domestic product, employment, and earnings. By each of these measures, the FIRE industry is somewhat more important in New Jersey and significantly more important in Delaware than it is nationally. (See Table 2.) Of course, all types of FIRE businesses are not affected equally, and the exact types that make up the FIRE industry in each state will have an important influence on how the industry performs in each state. Nevertheless, a broad scaling back in financial activity—which is evidently under way—has negative implications for the overall economies and potential tax revenues of states with significant FIRE industries.

Coping with Variations in State Tax Revenues

States are vulnerable to variations in tax collections, especially declines in tax revenue that can necessitate reductions in expenditures from budgeted amounts, such as the recent spending cuts noted at the beginning of this report. Most of the states have limited flexibility in coping with negative variations in tax revenue because they are legally bound to balance expenditure and revenue in their annual budgets. States attempt to compensate for variations in tax collections with budget stabilization funds, also known as rainy day funds. The legal discretion that states have with respect to adding to or withdrawing from rainy day funds varies from state to state. In some states there are limits on the amount of revenue that can be placed in the funds, and legislative action is required to use the funds. In many cases, the amount of the funds (whether limited by law or not) has not been adequate to cover the shortfall in tax collections when economic conditions have deteriorated. For example, in the 2001 recession, state deficits in total were five times greater than state rainy day funds in total.[4]

As currently structured, the size and use of rainy day funds might be sufficient to deal with unforeseen short-term declines in state revenue. However, to be sufficient to compensate for the variation in tax collections that is typical over the course of a business cycle, rainy day funds need to be larger in relation to average annual tax collections. If the objective of a budget stabilization fund is to be able to maintain steady spending over the course of a revenue cycle, then such a fund must have certain key features. First, it must be large enough to cover the cyclical decline in revenue. Second, each state's buildup of a rainy day fund should be continuous during the expansion phase of its own cycle of revenue growth and decline, which is not always synchronous with the national business cycle.[5] Third, the fund should be a regular part of the budget and not based on fortuitous surpluses (as is the case in many states). Fourth, both additions to the fund

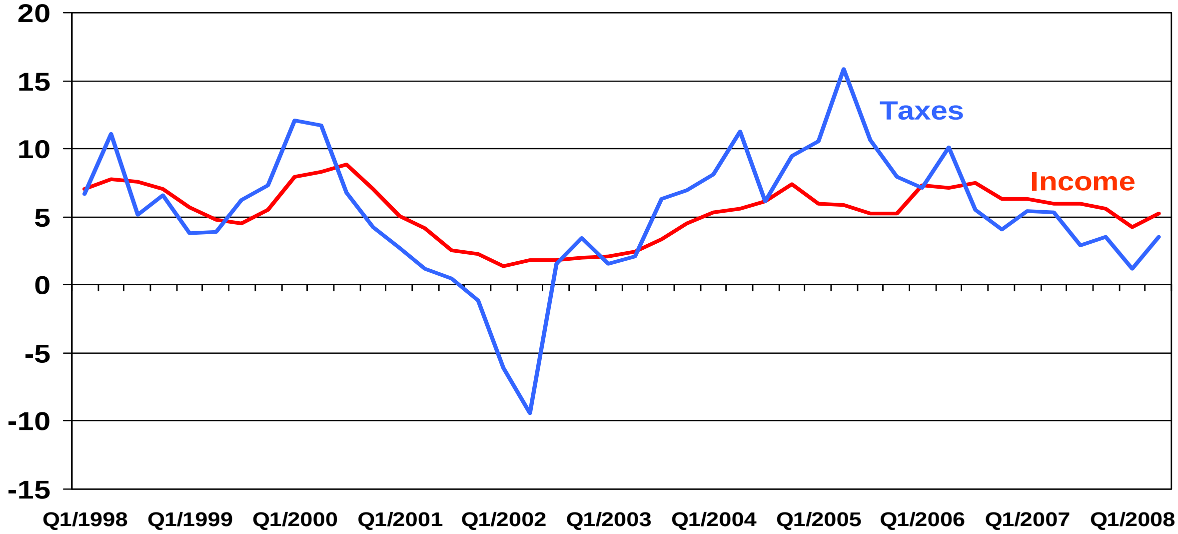
[4] Elaine Maag and Alison McCarthy, "State Rainy Day Funds," *Tax Notes*, October 2, 2006, p. 79.
[5] For estimates of required rainy day funds and annual savings rates for the states, see Gary A. Wagner and Erick M. Elder, "Revenue Cycles and the Distribution of Shortfalls in U.S. States: Implication of an 'Optimal' Rainy Day Fund,"

and disbursements from it should be automatic according to procedures established beforehand, not decided ad hoc when state tax collections are either rising above or declining below amounts anticipated in the budget.

National Tax Journal, 60 (December 2007), pp. 727-42.

Chart 1
Personal Income and State Tax Collections
All States

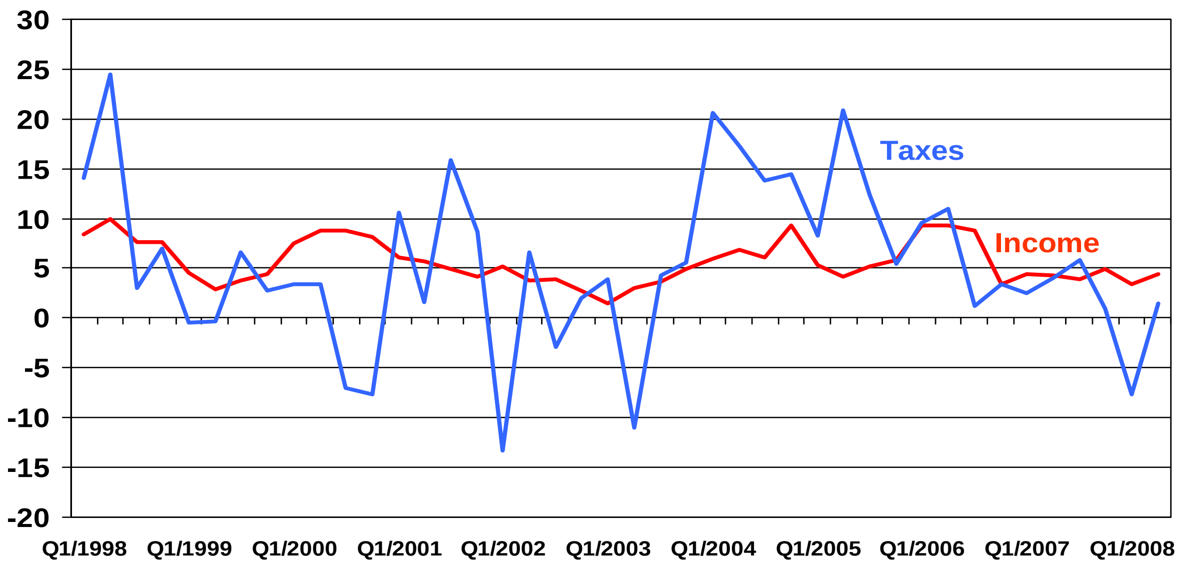
Percent Change, Year-Year



Source: U. S. Census Bureau and Bureau of Economic Analysis

Chart 2
Personal Income and State Tax Collections
Delaware

Percent Change, Year-Year

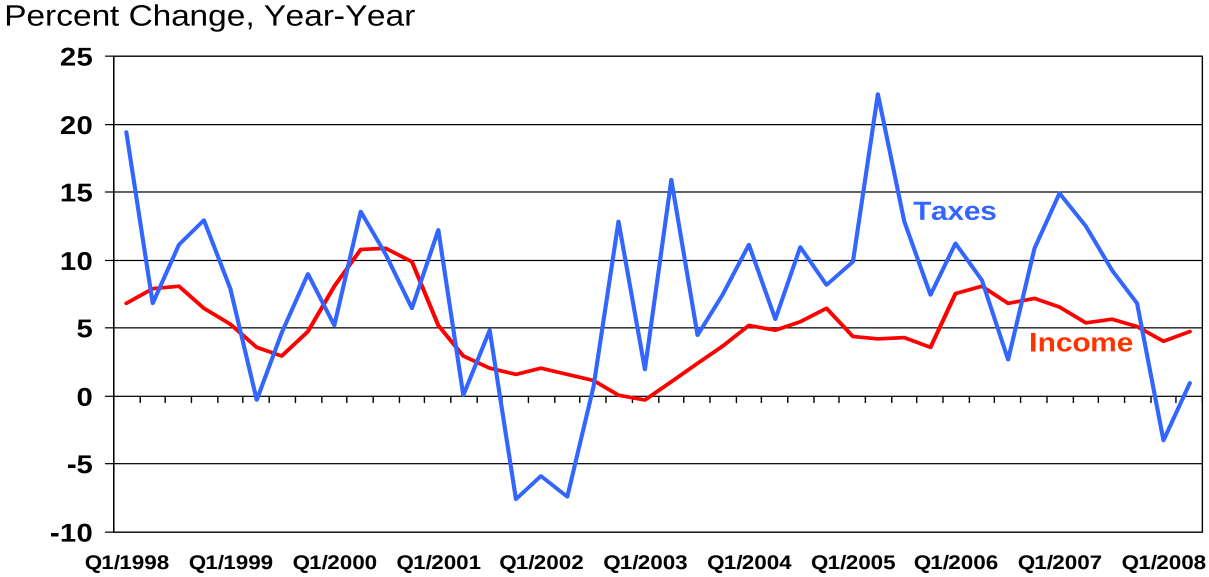


Source: U. S. Census Bureau and Bureau of Economic Analysis

Chart 3

Personal Income and State Tax Collections

New Jersey

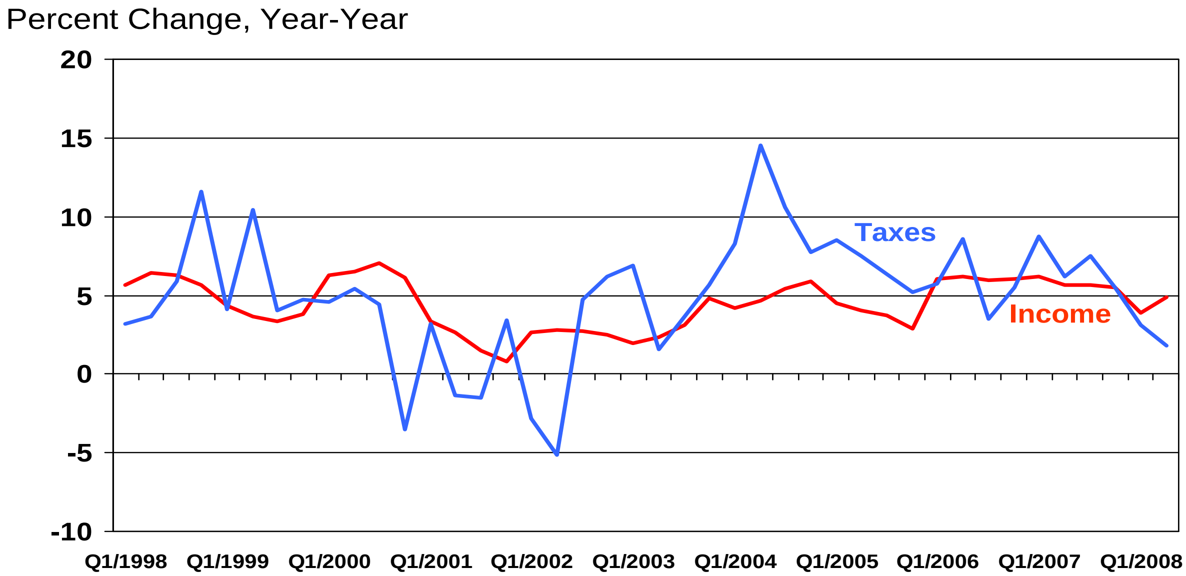


Source: U. S. Census Bureau and Bureau of Economic Analysis

Chart 4

Personal Income and State Tax Collections

Pennsylvania



Source: U. S. Census Bureau and Bureau of Economic Analysis

Table 1

Major Taxes in Third District States

Tax Category*	PA	NJ	DE	All States Total
	Percent of Total Taxes			
Individual Income Taxes	32.4	40.9	32.7	36.3
Sales and Gross Receipts Taxes	27.6	29.0	0.0	31.1
Corporation Net Income Taxes	6.8	9.8	10.0	6.5
Motor Fuel Sales Taxes	6.5	1.8	3.8	4.9
Corporation Franchise Taxes & Fees	2.5	1.1	24.9	1.3
Occupation and Business Licenses	2.2	1.8	7.9	1.7

*Includes only those taxes that account for 5 percent or more of total taxes in at least one of the three states.

Source: U.S. Census Bureau, Quarterly State Tax Collections, 2007Q3 - 2008Q4

Table 2

Finance-Insurance-Real Estate Industry Measures

2007

	PA	NJ	DE	US
	Percent of Total			
Gross Domestic Product	18.6	24.9	44.7	20.8
Employment	5.7	6.7	10.4	6.0
Earnings of State Residents Employed in the Industry as a Share of Total State Personal Income	6.6	8.2	13.0	7.6

Source: U.S. Bureau of Labor Statistics and Bureau of Economic Analysis