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Massachusetts Budget and Policy Center

FACTS AT A GLANCE December 14, 2010

Allowing for More Meaningful Comparisons: Taxes and Spending as a Share of Personal Income

OVERVIEW

In order to identify shifting budget priorities and examine levels of taxation, budget analysis often involves tracking spending over time and contrasting budget decisions made across states. Doing this sort of analysis can be challenging, however, because a range of variables—population size, economic strength, and cost of living—complicate simple comparisons of total spending amounts or total tax receipts.

In an attempt to balance out these variables and facilitate more useful comparisons, *MassBudget* often analyzes total spending and taxation levels as a percent of personal income earned in a given state. This *Facts At A Glance* describes the strengths of using state personal income as a measure and details some of its limitations.

WHY ANALYZE SPENDING AND REVENUE AS A SHARE OF THE ECONOMY?

Massachusetts's state budget represents a set of decisions about how we, as a Commonwealth, choose to allocate a portion of our income to pay for those things that we do together through government. In order to make sense of these choices, it is useful to consider what our total resources are—essentially, the size of our economy—and compare that to how much we choose to spend on the things we do together through state government—education, transportation, health care, public safety, child protective services, etc.

Rather than analyze spending and revenue as a share of the economy, sometimes people simply look at total dollar amounts or they adjust them on a per-capita basis. Each of these approaches, however, does not take into account the differing abilities of states to raise revenues and fund programs. Two states with large differences in average income levels could raise the same amount of revenue per resident, but the less wealthy state would have to tax its citizens at a higher rate to reach this revenue level. In fact, in 2006 the US Census Bureau stopped producing any per-capita statistics as part of its state government tax collections data due to concerns with how per-capita statistics sometimes get used.

WHY USE PERSONAL INCOME AS A MEASURE?

Looking at revenue or spending as a percent of personal income earned in a given state is a common form of measurement since it examines budget decisions in the context of a state's ability to pay. Similarly, personal income is a useful measure for tracking changes over time because it allows us to examine whether government spending is rising or falling as a share of our overall economy. When spending grows faster than personal income, for example, that can create fiscal challenges.[1] Finally, using personal income also helps

[1] It is important, however, when making comparisons over time using personal income adjustments to compare similar points in the business cycle. During periods of economic recovery, government spending is often a smaller percentage of

correct for the fact that many states with above-average incomes have higher associated costs of living and therefore must spend more per resident to provide the same level of services.

While looking at government spending as a percent of income earned may seem complicated, this measure actually mirrors the basic structure of the income tax, which is a tax paid as a share of one's income. In determining whether an income tax is higher in one state versus another we often look primarily at the rate, which is a measure of taxes paid as a percent of income earned. [2] A state with a 7 percent income tax rate is generally considered to have a higher income tax than a state with 6 percent rate because people are paying a larger share of their income in income taxes. This is the case even though the amount that the average person pays—the per capita tax—might be lower in the state with the higher rate, if the higher rate state has significantly lower average incomes.

Even though sales and property taxes are not levied directly based upon a person's ability to pay, as is the case with the income tax, we can still analyze revenue generated from these taxes as a percent of personal income. Analyzing all three taxes in this way not only allows for useful comparisons over time and across states, but it allows us to contrast how these taxes are distributed across income groups.

WHAT COUNTS TOWARD "STATE PERSONAL INCOME"?

State personal income is a measure developed by the US Bureau of Economic Analysis. It typically captures the total amount of wages, salaries, and benefits earned across a state in a given year, as well as a set of other, smaller income categories.[3] Essentially, it is a measure of all income earned in a state from all different sources. State personal income does not typically include income derived from capital gains or income earned in Massachusetts by out-of-state residents, which, when included, provide an even better measure of the financial resources available in the state.

IMPORTANT CONSIDERATIONS FOR THE USE OF STATE PERSONAL INCOME

MassBudget often makes two adjustments to personal income data provided by the Bureau of Economic Analysis (BEA)—adjustments recommended in the New England Public Policy Center's paper "Assessing Alternative Measures of State Income" [4]—in order to more fully capture all state income. First, we add in realized capital gains income since investment income adds to the state economy on top of wage income. Second, we make a residential adjustment to include earnings of residents of other states who work in Massachusetts. Since we only have data for Massachusetts, however, we are not able to make these adjustments when conducting 50-state comparisons.

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personal income than it is in recessions because during recessions there is often a decline in real income and the demand for safety net services increases.

[2] For a complete picture one would also need to consider exemptions, allowing for a more accurate picture of precisely what percent of income is paid in income taxes. *MassBudget* data generally reflect that more complete measure.

[3] These additional categories include supplements to wages and salaries, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and personal current transfer receipts (which includes payments from the government to individuals for which no current services are performed, such as unemployment insurance payments), less contributions for government social insurance.

[4] For more information on these technical details see "Assessing Alternative Measures of State Income," July 30, 2008, published by the New England Public Policy Center of the Federal Reserve Bank of Boston, available at: http://www.bos.frb.org/economic/neppc/memos/2008/weinerpopov073008.pdf

Another limitation of the BEA personal income measure is that it does not include corporate profits. Corporate profits represent an additional source of taxable income that is used widely to help support state government. Due to the multi-state nature of large corporations, it is difficult to allocate accurately the proportional amount of corporate profits earned in a given state.

CONSIDERING PERSONAL INCOME ALONGSIDE OTHER MEASURES

In order to help make meaningful comparisons of different types of state spending, it is often useful to analyze personal income alongside other measures. For example, looking at education spending as a percent of personal income is an instructive measure of how much of a state's economy is dedicated to running its schools, but taken alone it does not correct for states with fewer school-age children resulting from an older mix of state residents. For this reason, it is useful to look at per-pupil spending alongside a measure of spending as a percent of personal income.