STATE HIGHER EDUCATION FINANCE
CASE STUDY:
STATE BUDGET DRIVERS: SLOW REVENUE GROWTH AND INCREASED EXPENDITURE COMPETITION

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The State Higher Education Executive Officers Association (SHEEO) is the national association of the chief executives of statewide governing, policy, and coordinating boards of postsecondary education. Founded in 1954, SHEEO serves its members as an advocate for state policy leadership, a liaison between states and the federal government, and a vehicle for learning from and collaborating with peers. SHEEO also serves as a manager of multistate teams to initiate new programs and as a source of information and analysis on educational and public policy issues. Together with its members, SHEEO advances public policies and academic practices that enable Americans to attain education beyond high school and achieve success in the 21st century economy. An electronic version of the State Higher Education Finance (SHEF) Report FY 2018 and numerous supplementary tables containing extensive state-level data are available at www.sheeo.org. These may be freely used with appropriate attribution and citation. In addition, core data and derived variables used in the SHEF study for fiscal years 1980 through 2018 are available on the SHEEO website, along with interactive data visualizations via Tableau.
TABLE OF CONTENTS

INTRODUCTION ...................................................................................................................................... 4

REVENUE DRIVERS ................................................................................................................................. 4

EXPENDITURE DRIVERS ........................................................................................................................... 8
INTRODUCTION

The Great Recession took a tremendous toll on state economies, and the ensuing recovery over the last decade has been slow and uneven across states. Employment and major sources of tax revenue have been slow to recover and taken much longer to reach pre-recession levels when compared to previous economic recoveries. This slow revenue growth combined with increased demand for public services, such as Medicaid expansion, have placed added stress on state budgets that in many instances were facing structural deficits before 2007. State tax structures have been slow to evolve with the modern economy, and the tax bases in many states have narrowed in recent decades. Moreover, an aging population accelerates this tax base erosion and may have hurt the solvency of state pension plans. When considered together, these trends of slow revenue growth and increased competition for limited tax revenue have significant consequences for state spending on higher education.

Higher education is commonly known as the balance wheel of state budgets. During periods of economic contraction, states reduce higher education spending at greater rates than other budget categories to meet their balanced budget requirements. Since institutions of higher education have an alternate revenue source in the form of tuition, they have the ability to offset reductions in state funding. As tax revenue recovers, states generally return funding to higher education at higher rates. However, as this SHEF report highlights, higher education spending has struggled to recover to levels seen before the Great Recession. This case study explores some of the revenue and expenditure drivers that have led to this slow recovery.

REVENUE DRIVERS

The economic recovery since the Great Recession was slow to take hold and has lagged behind previous recoveries on several indicators. Total nonfarm employment took 76 months to rebound from the effects of the Great recession, and state tax revenue growth has also been particularly sluggish. While each state has a unique tax structure, most states rely on sales and income (corporate and personal) taxes for the majority of their General Fund revenue. Among these major revenue sources, only sales and personal income tax revenue have returned to 2007 levels. Corporate income tax revenue remains approximately 30 percent below 2007 levels. The following section reviews changes in sales and personal income tax revenue since the Great Recession.

4. Ibid.
SALES TAX REVENUE

Figure 1 shows the cumulative percent change in sales tax revenue since the start of the four most recent recessions. Sales tax revenue recovered the quickest following the recession of the early 1980s and had nearly identical increases following the 1990 and 2001 recessions. Sales tax revenue following the Great Recession significantly lagged the previous recoveries and did not recover until 2013, six years after the start of the recession. In 2017, sales tax revenue was 8 percent higher than in 2007, but the annual increase has essentially matched the rate of annual inflation since 2015. The slower rates of recovery with each ensuing recession are likely due in part to the erosion of sales tax bases in many states.

**FIGURE 1**

**CUMULATIVE PERCENT CHANGE IN STATE SALES TAX REVENUE SINCE THE START OF EACH RECESSION (CONSTANT ADJUSTED 2017 DOLLARS)**

- 0% to 10% increase
- 10% to 20% increase
- 20% to 30% increase
- 30% to 40% increase
- 40% to 50% increase

**NOTE:** Adjusted to constant 2017 dollars using the Consumer Price Index.

**SOURCES:** State tax revenue data from the U.S. Census Bureau’s State Government Tax Collections, 2017.
As noted above, state sales tax structures have been slow to evolve with the modern United States economy. Most states tax some services, but as the broader economy has gone through a shift from a reliance on purchasing tangible goods to a greater reliance on purchasing services, state tax structures have not kept pace. This trend toward purchasing services is expected to continue and even accelerate in the coming years with a larger portion of the population entering retirement. Because incomes typically decline in retirement, retirees tend to purchase more services, especially healthcare, and fewer goods. Which services and at what rates they should be taxed is a controversial topic. Two states (Arizona and Missouri) have passed constitutional amendments that prohibit the taxation of services.\(^7\)

States have also been slow to tax internet commerce, leading to an estimated revenue reduction of $8 to $13 billion in 2017.\(^8\) However, the Supreme Court’s ruling in South Dakota v. Wayfair is expected to broaden state sales tax bases. The decision allows states to assess sales taxes on online vendors even if they do not have a physical presence in the state. Currently, 28 of the 45 states that collect sales tax revenue require tax collection from certain online transactions.\(^9\) Sales tax revenue from online purchases is expected to expand slowly because smaller vendors and vendors that process few transactions in a state are exempt from many of the new state laws.\(^10\)

**INCOME TAX REVENUE**

State revenue from personal income taxes has had a stronger recovery since the Great Recession but has also been more volatile than sales tax revenue. Figure 2 shows the cumulative percent change in personal income tax revenue since the start of the four most recent recessions. The two recoveries during the 21st century lagged the recoveries of the 20th century. Like sales taxes, state revenue from personal income taxes did not reach 2007 levels until 2013. Ten years after the start of the Great Recession, personal income tax revenue is only 12 percent higher, which is 42 percentage points lower than the increase in personal income tax revenue following the recession of the early 1990s. Personal income tax revenue increases have stagnated in the last few years and essentially increased the rate of inflation.

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State personal income tax revenue is influenced by many factors. Tax withholding throughout the year is the primary method of collecting personal income tax revenue and is influenced by changes in employment.\(^\text{11}\) The slow rebound in employment and stagnant wage growth through much of the economic recovery likely produced a drag on income tax collections. Additionally, more members of the baby boom generation are entering retirement, and most states exclude some or all retirement income from tax collections.\(^\text{12}\) Stock market performance also affects income tax revenue. While the equity market has generally produced positive returns in recent years, there have also been periods of volatility which adversely affect capital gains tax collections.\(^\text{13}\)

Changes in state and federal tax codes affect revenue collections and individual behavior, especially in the short term.\(^\text{14}\) The impact of federal tax reform was felt in state coffers before and after the Tax Cuts and Jobs Act (TCJA) became law in December 2017. Most state income tax collections conform to the federal tax code. Consequently, when taxpayers change their behavior in response to federal income taxes, there is a ripple effect at the state level. For instance, after the


\(^{14}\) Ibid.
TCJA was passed, many taxpayers accelerated state and local tax payments in the 2017 tax year before a $10,000 cap on federal deductions went into effect in 2018 for these taxes.\textsuperscript{15} It will likely take several years for state budgets to experience the full effect of the TCJA. In the meantime, states will continue making changes to their tax codes in response to federal tax reform, as 27 states did in 2018.\textsuperscript{16}

**EXPENDITURE DRIVERS**

Due to slow revenue growth, state General Fund budgets have little slack and there is growing competition among budget categories for the limited public dollars. Unlike other budget categories such as K-12 education—for which spending levels are constitutionally or legally mandated in many states—and Medicaid—which receives federal matching funds—higher education funding is considered one of the most discretionary items in state budgets and is particularly susceptible to being crowded out by other budget categories.

In fact, spending for higher education, as a portion of General Fund expenditures, declined from 13 percent in FY 1992 to 9 percent in FY 2018.\textsuperscript{17} This downward momentum for higher education spending is likely to continue in the coming years as expenditures for K-12 education, Medicaid, and state pension plans are expected to increase.

**K-12 EDUCATION**

Much like higher education, spending for K-12 education was severely affected by the Great Recession. In FY 2004, states allocated 37 percent of General Fund expenditures to K-12 education. By FY 2018, the K-12 education share fell to 34 percent.\textsuperscript{18} Pressure to increase spending on K-12 education has increased the last couple of years with teacher strikes in several states where salaries have stagnated, and because infrastructure improvements are needed.

**MEDICAID**

State expenditures for Medicaid have been one of the fastest growing budget categories in recent years. Between FY 1992 and FY 2018, Medicaid expenditures doubled from 11 percent of General Fund expenditures to 22 percent.\textsuperscript{19} Demand for Medicaid is expected to increase in the coming years with 36 states expanding coverage under the Affordable Care Act.\textsuperscript{20} While early studies have found no adverse effect of this expansion on state budgets,\textsuperscript{21} the percentage of costs paid by states for new Medicaid enrollees will increase from 0 percent to 10 percent in 2020. With states funding a larger share of Medicaid expansion in the coming years, Medicaid expenditures are expected to continue consuming a more significant portion of state budgets.\textsuperscript{22}

\begin{flushright}
15. Ibid.
17. National Conference of State Legislatures survey of legislative fiscal offices
18. Ibid.
19. Ibid.
\end{flushright}
PENSIONS

State-operated pension funds in the United States were underfunded by an estimated $1.4 trillion in 2016. Nationally, state pension plans have approximately 66 percent of the assets needed to cover future liabilities in 2016. In four states (Wisconsin, South Dakota, New York, and Tennessee), pension plans were at least 90 percent funded, while plans in three states (Illinois, Kentucky, and New Jersey) were less than 40 percent funded. To close these funding gaps, states will need to produce better investment returns, or provide larger contributions. Since investment returns, already rarely meet expectations, rating agencies expect states to increase contributions in the coming years, which adds long-term pressure to already tight budgets.

23. Ibid.