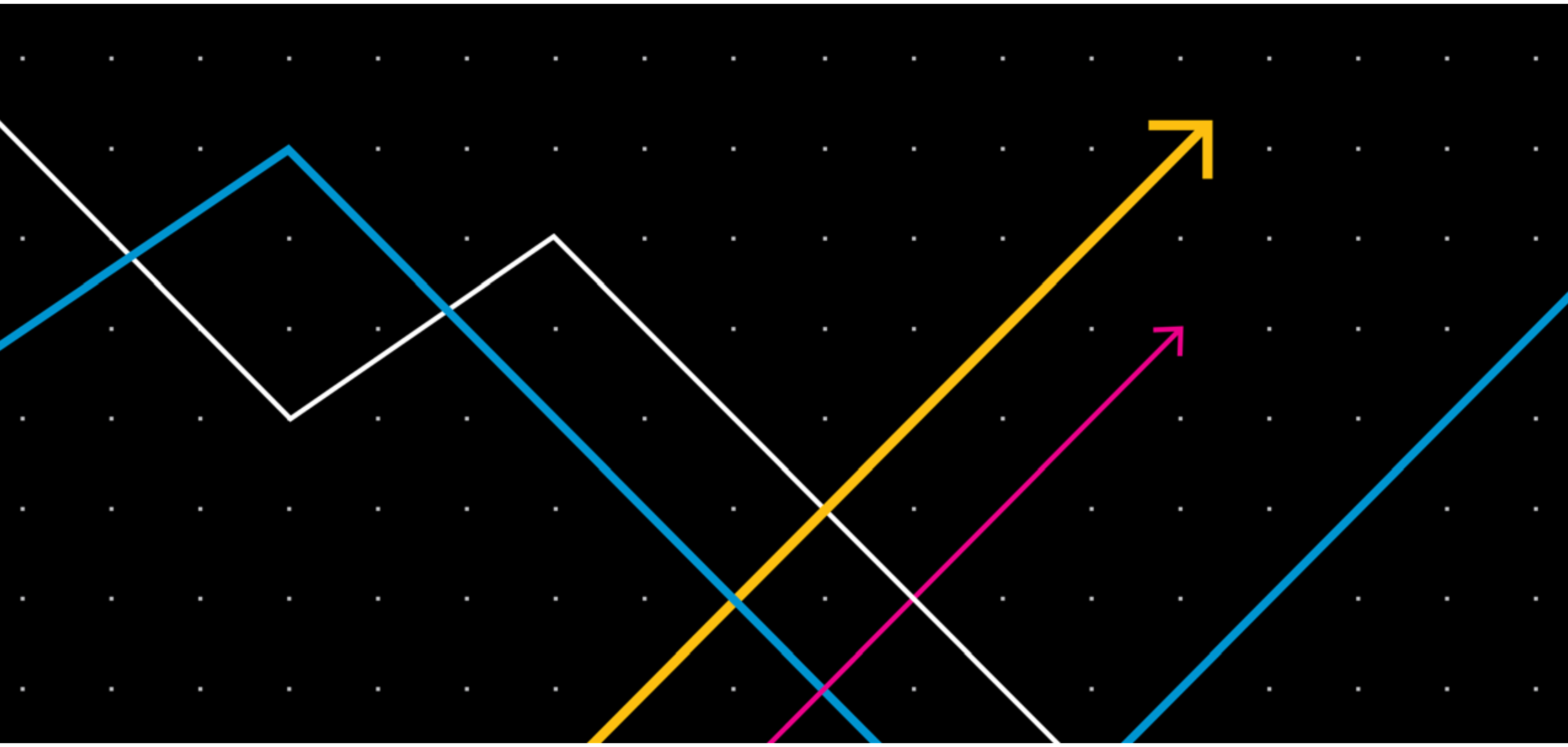
STATE AND LOCAL FINANCE INITIATIVE



RESEARCH REPORT

State Revenues Grew in Third Quarter, but Income Taxes Face Uncertain Prospects

State Tax and Economic Review, 2018 Quarter 3

Lucy Dadayan

March 2019

URBAN INSTITUTE · ELEVATE · THE · DEBATE

TPC

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

ABOUT THE TAX POLICY CENTER

The Urban-Brookings Tax Policy Center aims to provide independent analyses of current and longer-term tax issues and to communicate its analyses to the public and to policymakers in a timely and accessible manner. The Center combines top national experts in tax, expenditure, budget policy, and microsimulation modeling to concentrate on four overarching areas of tax policy that are critical to future debate.

Contents

Acknowledgments

The views expressed are those of the author and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

Executive Summary

- **State and local government tax revenues** from major sources—personal income, corporate income, sales, and property taxes—were up 5.5 percent in the third quarter of 2018 compared with the prior year.

- Year-over-year growth in **state government tax revenues** from major sources was strong at 8.8 percent in the third quarter of 2018. However, growth was mixed across different revenue sources.

  » **State personal income taxes** still showed strong growth, but the growth was weaker than in the previous three quarters.

  » **State sales taxes** had uninterrupted growth since the first quarter of 2010, but the growth lagged the rates in previous economic expansions.

  » **State corporate income taxes** showed double-digit growth for the second consecutive quarter.

- Year-over-year growth in **local government tax** revenues from major sources was 1.4 percent in the third quarter of 2018, substantially lower than the 4.9 percent average quarterly growth rate observed in the previous four quarters.

  » **Local property taxes** increased 1.9 percent in the third quarter of 2018, which was stronger than the 1.6 percent growth in the first and second quarters of 2018 but substantially weaker than the 9.2 percent growth in the final quarter of 2017. Local property taxes were artificially boosted in the final quarter of 2017 because some taxpayers responded to the Tax Cuts and Jobs Act (TCJA) by making property tax prepayments before the law took effect in 2018.

- Preliminary **state government tax data for the fourth quarter of 2018** indicate declines in personal income tax collections, which was largely anticipated. Personal income tax collections were artificially boosted in the fourth quarter of 2017 mostly because of income-shifting behavior. The decline in income tax collections in the fourth quarter of 2018 is partially attributable to the disappearing impact of incentives created under the TCJA to accelerate payments of state and local income taxes into tax year 2017 because of limits in the itemized deduction for state and local taxes (SALT) and the decrease in the number of taxpayers who would benefit from itemizing deductions. In addition, wild swings in the stock market throughout the fourth quarter of 2018 likely also contributed to personal income tax declines.

Corporate income tax collections showed double-digit year-over-year growth for the second consecutive quarter. Year -over-year growth in sales tax collections in the fourth quarter of 2018 was stronger than the growth in the first three quarters of 2018, likely attributable to changing state rules and the expansion of the e-commerce sales tax base associated with greater taxpayer compliance following the US Supreme Court's decision in *South Dakota v. Wayfair, Inc.* in June 2018.

- Economic factors driving revenue growth were all positive in the third quarter of 2018. However, the growth in economic factors must be viewed with caution.
  - Real **gross domestic product** was 3.0 percent higher for the nation in the third quarter of 2018 than in the same quarter in 2017. Overall, state economies have grown at a slower pace in the first three quarters of 2018 than have state tax revenues. The discrepancy in growth rates has become more common in most recent years, heightening revenue volatility, and likely reflects timing decisions in personal income tax revenue payments.
  - The **unemployment rate** was 3.8 percent in the third quarter of 2018. Unemployment rates have seen steady declines since 2010, largely driven by improved job prospects across the board and declines in labor force participation partly caused by retiring baby boomers.
  - **Employment** grew 1.9 percent in the third quarter of 2018 compared with one year ago. However, there were large disparities among the states, with 32 states reporting growth below the national average.
  - **Personal consumption expenditures** have been rebounding after being hit hard by steep declines in oil and gas prices in 2014–15. However, current growth rates in both durable goods and services are weaker than growth rates observed before the fall of oil prices, which had a negative impact on sales tax revenues.
  - **Housing prices** increased more than 6.5 percent in the first three quarters of 2018. Housing prices have been rising from low levels in 2007, but growth was not even across the 50 states. In 10 states, housing prices are still lower than their prerecession peak levels.

Trends in State and Local Tax Revenues

State and local government tax revenues have fluctuated wildly over the past year largely because of the Tax Cuts and Jobs Act (TCJA) passed in late December 2017. The act is very complex, includes over 100 new provisions, and is the largest revision in the tax code in 30 years.

Overall, year-over-year growth in state and local government tax revenues was strong in the third quarter of 2018 but weaker than the growth observed in the final quarter of 2017 and the first half of 2018. Most of the weakness was attributable to local property taxes; these were artificially boosted in the fourth quarter of 2017 because of taxpayer responses to the TCJA. Following the enactment of the TCJA, some high-income taxpayers rushed to prepay their property taxes to take advantage of the uncapped state and local tax (SALT) deduction in 2017. They also may have increased estimated payments or changed the time at which they realized capital gains or losses. Under the TCJA, the SALT deduction was capped at $10,000 per year effective January 1, 2018.

Table 1 shows state and local government tax revenues from major sources for the third quarter of 2017 and the third quarter of 2018, as well as the nominal percentage change between both quarters and the average quarterly year-over-year growth in state fiscal year 2018.[1] Growth varied substantially by source and level of government. Major findings include the following:

- **State and local government revenues** from major sources increased 5.5 percent in the third quarter of 2018 compared with a year earlier, noticeably weaker than the 6.6 percent average quarterly growth in state fiscal year 2018.
- **State government revenue** from major sources increased 8.8 percent in the third quarter of 2018 from a year ago, slightly higher than the average quarterly year-over-year growth rate of 8.0 percent in state fiscal year 2018. Year-over-year growth in state personal income tax revenues slowed to 8 percent in the third quarter of 2018 after double-digit percentage growth for three consecutive quarters. Growth in sales tax collections was 6.5 percent in the third quarter of 2018 compared with the third quarter of 2017, stronger than the average quarterly year-over-year growth rate of 4.4 percent in state fiscal year 2018. Growth in state corporate income tax revenues skyrocketed to 29.4 percent in the third quarter of 2018 (again compared with the third quarter of 2017), reflecting the volatility of this revenue source.

- **Local government revenue** from major sources increased 1.4 percent from a year ago in the third quarter of 2018, substantially weaker than the 4.9 percent average quarterly year-over-year growth in state fiscal year 2018. Local property taxes, the single largest source of local government tax revenues, increased 1.9 percent from a year ago in the third quarter of 2018, substantially weaker than the 4.2 percent average quarterly year-over-year growth in state fiscal year 2018. This likely reflects timing decisions and not underlying changes in local property tax revenues; state fiscal year 2018 included the fourth quarter of calendar year 2017 which had larger property tax payments. Local sales and corporate income taxes declined, but these constitute a very small share of local revenues.

TABLE 1

State and Local Government Tax Revenue Growth

Millions of dollars

Tax source	2017 Q3	2018 Q3	Nominal percentage change	Average quarterly Y-O-Y growth rate, SFY 2018
Total state and local major taxes	**$307,475**	**$324,396**	**5.5**	**6.6**
State major taxes	***$169,725***	***$184,686***	***8.8***	***8.0***
Personal income tax	81,958	88,489	8.0	11.1
Corporate income tax	9,368	12,124	29.4	7.1
Sales tax	74,546	79,385	6.5	4.4
Property tax	3,854	4,689	21.7	6.0
Local major taxes	***$137,750***	***$139,710***	***1.4***	***4.9***
Personal income tax	7,942	8,406	5.8	6.7
Corporate income tax	1,884	1,730	(8.2)	7.4
Sales tax	22,120	21,773	(1.6)	7.4
Property tax	105,804	107,801	1.9	4.2

Source: US Census Bureau (tax revenue), with adjustments by the author.

Notes: Q = quarter; SFY = state fiscal year; Y-O-Y = year-over-year.

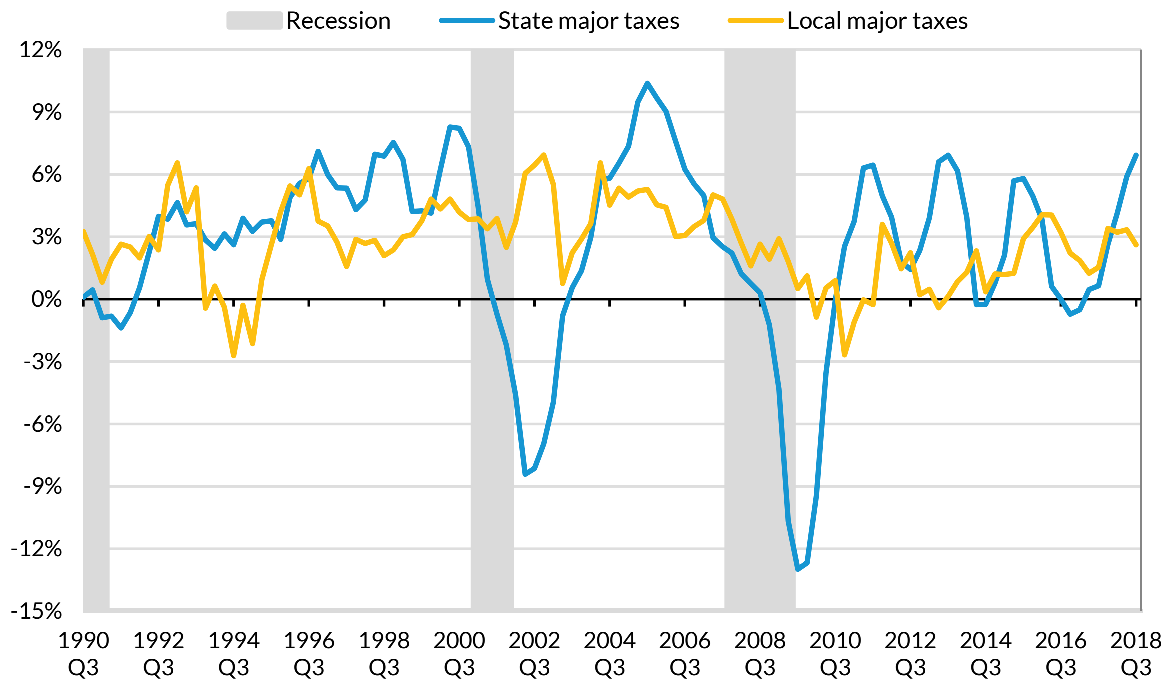
Figure 1 shows longer-term trends in state and local tax collections, specifically, the year-over-year percentage change in the four-quarter moving average of inflation-adjusted state and local tax collections from major sources: personal income tax, corporate income tax, sales tax, and property tax. As shown in Figure 1, state tax revenues from major sources fluctuated greatly over the past few years, mostly driven by the impact of the federal fiscal cliff (in 2013), volatility in the stock market, and, most recently, by the impact of taxpayer behavior in response to the passage of the TCJA. State taxes from major sources, adjusted for inflation, grew 6.9 percent in the past four quarters relative to the year earlier, which is the strongest growth since the third quarter of 2013. The four-quarter moving average of inflation-adjusted local taxes from major sources grew 2.6 percent in the third quarter of 2018.

Most local governments rely heavily on property taxes, which are relatively stable and respond slowly to declines in property value. By contrast, the personal income, sales, and corporate taxes that states heavily rely on respond rapidly to economic declines. Over the past two decades, property taxes have consistently made up at least two-thirds of total local tax collections. As noted, the recent fluctuations in property tax receipts reflect the timing of payment shifts in response to TCJA.

FIGURE 1

Strong Growth in State Major Tax Revenues

Year-over-year change in inflation-adjusted state and local taxes from major sources



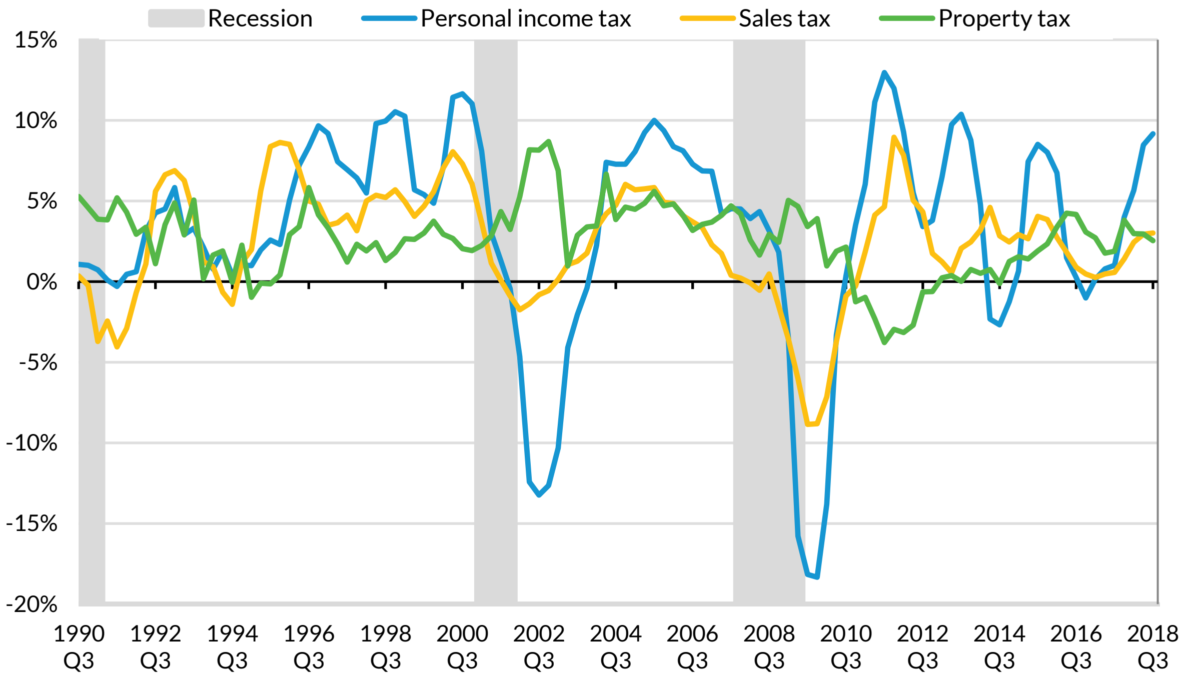
Source: Author's calculations using data from the US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP).
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation. Data are for four major tax categories only: personal income, corporate income, general sales, and property.

Figure 2 breaks out inflation-adjusted state and local personal income, sales, and property tax revenue over the same period. The graph shows the large fluctuations in state and local personal income tax collections in recent years. The year-over-year growth in state-local personal income tax revenues was 8.5 percent in the second quarter of 2018 and 9.2 percent in the third quarter of 2018, substantially stronger than in previous quarters. State and local sales tax revenues grew 2.9 and 3.0 percent, respectively, in the second and third quarters of 2018, which is relatively strong compared with the sluggish growth observed since mid-2016. State-local property taxes, nearly all of which are collected by local governments, grew 2.5 percent from a year earlier in the third quarter of 2018, weaker than the growth observed in the final quarter of 2017 and first half of 2018.

FIGURE 2

Substantial Growth in State-Local Personal Income Tax Revenues

Year-over-year change in inflation-adjusted major state-local taxes



Source: Author's calculations using data from the US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP).
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation.

State Tax Revenue in 2018, Quarter 3

Total state tax revenue grew 8.2 percent in the third quarter of 2018 relative to a year ago, in nominal terms, according to US Census Bureau data adjusted by the author.[2] Inflation-adjusted growth was 5.8 percent. Growth was reported in all major sources of state tax revenues. Personal income tax revenues grew 8.0 percent in the third quarter of 2018 relative to a year ago, which is substantially weaker than the double-digit growth observed in the final quarter of 2017 and the first half of 2018. Corporate income tax collections grew by double-digits for the second consecutive quarter, while sales tax and motor fuel tax collections grew 6.5 and 5.8 percent relative to a year ago. Table A1 shows (1) nominal and inflation-adjusted growth in state government tax revenue collections from major sources and (2) average quarterly year-over-year growth rates for the past eight years, between the first quarter of 2010 and the third quarter of 2018. Despite the strong growth in overall state tax revenue collections in the most recent four quarters, the inflation-adjusted average annual growth rate since 2010 was only 3.1 percent.

Total state tax revenues showed solid year-over-year growth across all regions for the third quarter of 2018 (Table A2). Growth in the median state was 0.2 percentage points weaker than the growth rate for the national average. The Southwest region had the strongest growth at 15.5 percent; the Mideast region had the weakest growth at 5.5 percent.[3]

All states reported growth in total state tax revenue collections for the third quarter of 2018 relative to a year ago, with 15 states reporting double-digit growth. Growth in state tax revenues was particularly strong in Alaska, New Mexico, North Dakota, and West Virginia, all of which are oil- and mineral-dependent states and rely heavily on severance taxes. The steep oil price declines throughout 2015 and early 2016 led to substantial declines in severance tax collections in these states and depressed states' overall economic activity, leading to prior weakness in overall state tax collections (Dadayan and Boyd 2016). Therefore, the strong growth in overall state tax collections in these states mainly reflects revenue bouncing back from depressed levels for previous years.

Personal Income Taxes

State personal income tax revenues grew 8.0 percent in nominal terms and 5.5 percent in inflation-adjusted terms for the third quarter of 2018 compared with the same period in 2017. Growth for the third quarter of 2018 was weaker than the growth in the previous three quarters but stronger than the recent trend or average quarterly year-over-year growth rate in state personal income tax collections of 6.5 percent in nominal terms and 4.8 percent in real terms since 2010. As cautioned in the previous *State Tax and Economic Review* quarterly reports, the strong growth in personal income tax collections in the final quarter of 2017 and first half of 2018 was mostly attributable to the temporary impact of the federal policy changes that created strong incentives for some high-income taxpayers to shift income and deductions between tax years (Dadayan 2018). Moreover, personal income tax collections in the first and second quarters of 2018 were boosted by extension payments related to tax year 2017. Some of these extension payments were likely attributable to one-time payments related to the federal Emergency Economic Stabilization Act of 2008, which gave hedge fund managers until December 31, 2017, to repatriate foreign earnings.

Personal income tax collections saw double-digit year-over-year growth in the Far West and Southwest regions, at 11.2 percent each. The Mideast region saw the weakest growth at 4.1 percent, followed by the Southeast region at 6.3 percent.

Overall, personal income tax collections grew in 40 states in the third quarter of 2018, with 12 states reporting double-digit year-over-year growth. Personal income tax revenues were particularly strong in Louisiana and New Mexico, likely because of the rebounding oil and gas industry in those states. Growth was also strong in Kansas and Illinois, mostly because of increases in their income tax rates. In Illinois, the income tax rate was increased from 3.75 percent to 4.95 percent effective July 1, 2017 (Illinois Department of Revenue 2017). In Kansas, the legislature increased income tax rates for tax years 2017 and 2018 and created a higher income tax bracket retroactively for tax year 2017, which was maintained for subsequent years (Kansas Department of Revenue 2017).

To get a clearer picture of the underlying trends in personal income tax collections, we examine trends in the four major components: withholding, quarterly estimated payments, final payments, and refunds. The US Census Bureau does not collect data on individual components of personal income tax collections. The data presented here were collected by the author directly from the states. These data are more current than the Census Bureau data and thus provide a preliminary view of income tax collections for the fourth quarter of 2018. Table 2 shows growth for each major component in the past eight quarters, illustrating the boost in personal income tax collections in the final quarter of 2017 and the first quarter of 2018 and the declines in the final quarter of 2018. These changes were mostly observed in estimated payments and final returns, which were artificially shifted between tax years as a result of the cap on SALT deductions under the TCJA.

TABLE 2

Growth in State Government Personal Income Tax Components

Year-over-year nominal percentage change

Personal income tax components	**Tax Year 2017 (%)**				**Tax Year 2018 (%)**			
	2017Q1	**2017Q2**	**2017Q3**	**2017Q4**	**2018Q1**	**2018Q2**	**2018Q3**	**2018Q4**
Withholding	6.1	6.3	5.2	7.2	8.9	7.5	6.2	6.9
Estimated payments	1.0	(1.8)	1.8	52.7	31.0	12.8	18.2	(71.2)
Final returns	(0.7)	(5.2)	1.4	15.1	15.2	8.4	12.7	(2.4)
Refunds	(2.8)	9.2	4.9	(7.1)	6.1	0.9	14.3	16.2
PIT total	**7.9**	**0.4**	**4.5**	**15.9**	**14.8**	**10.4**	**7.8**	**(10.6)**

Source: Individual state data, analysis by the author.

Notes: The percentage changes for total personal income tax differ from data reported by the US Census Bureau. FY = fiscal year; PIT = personal income tax; Q = quarter.

Withholding

Withholding is usually a good indicator of the current strength of personal income tax revenue because it comes largely from current wages and is less volatile than estimated payments or final settlements. Table A3 shows year-over-year growth in withholding for the past eight quarters for all states with a broad-based personal income tax. The growth in withholding was substantially stronger in the final quarter of 2017 as well as in the first and second quarters of 2018. In the first quarter of 2018, year-over-year withholding increased 8.9 percent, which was the strongest growth since the first quarter of 2011, when withholding grew 8.1 percent. The strength in withholding, however, should be viewed cautiously, because it was partially driven by one-time bonuses paid by employers in response to the TCJA. Growth in year-over-year withholding softened in the third and fourth quarters of 2018, to 6.5 and 6.9 percent, respectively.

The average quarterly year-over-year growth rate in withholding was 7.4 percent in tax year 2018, compared with the average growth rate of 6.2 percent in tax year 2017. However, the median growth rate in withholding was 6.1 percent in tax year 2018, compared with the 4.9 percent median growth rate in tax year 2017.

All regions showed year-over-year growth in withholding in the third and fourth quarters of 2018. The Great Lakes region had the strongest growth in the third quarter of 2018 at 8.4 percent; the Far West region had the strongest growth in the fourth quarter of 2018 at 12.2 percent. The strong growth in withholding in the Great Lakes region is mostly attributable to Illinois, where withholding grew 13.8 percent for the third quarter of 2018 compared with the previous year, driven primarily by the increase in its income tax rate.

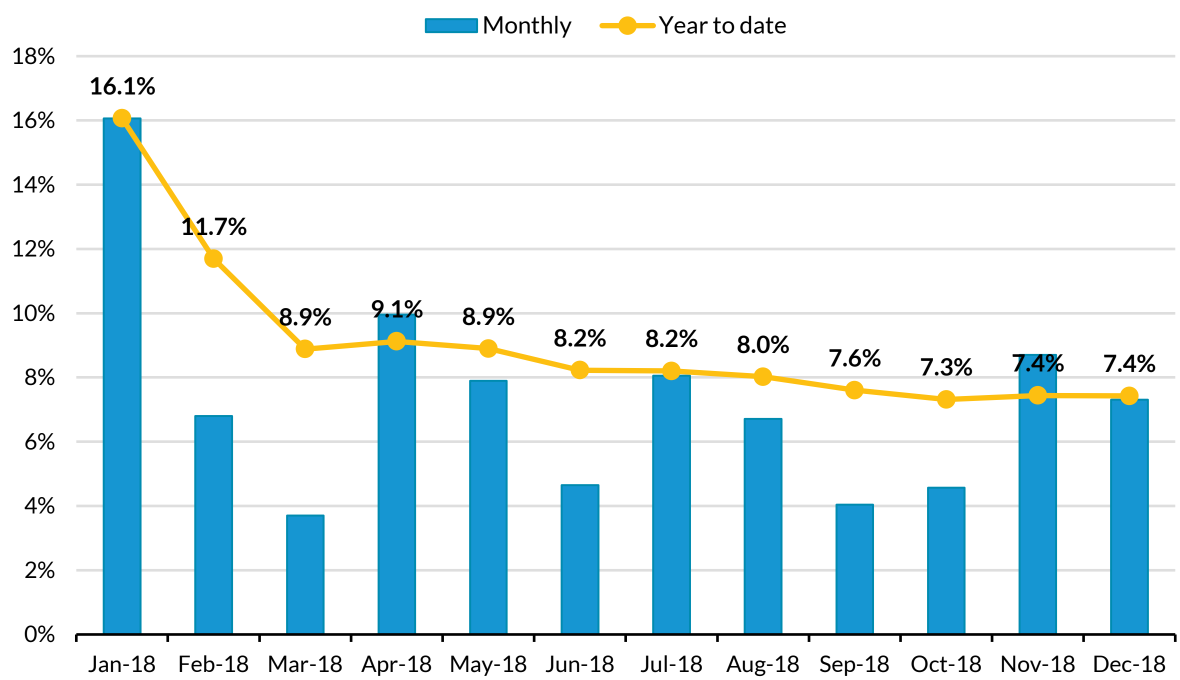
Year-over-year growth in withholding was widespread across the states in both third and fourth quarters of 2018. Thirty-seven of 41 states with broad-based income taxes reported growth in withholding in the third quarter of 2018, with 8 states reporting double-digit growth. In 17 states, growth in withholding was below the national average of 6.2 percent in the third quarter of 2018. Idaho and Kentucky reported declines in withholding in the fourth quarter of 2018. The declines in both states are mostly attributable to reductions in their state income tax rates. Fourth-quarter year-over-year growth in withholding was particularly strong in California in terms of dollar value, which increased by $1.9 billion in the final quarter of 2018. Without California, year-over-year growth in withholding for the rest of the nation was only 5.5 percent in the fourth quarter of 2018.

Figure 3 shows monthly and year-to-date growth rates in withholding for tax year 2018. Withholding was particularly strong in January of 2018, likely because of one-time bonus payments in response to the TCJA. Growth in withholding, however, weakened substantially in the subsequent months. According to preliminary data, withholding in tax year 2017 was $308 billion and represented 83.1 percent of overall personal income tax collections. Withholding grew 7.4 percent, reaching $331 billion in tax year 2018. Withholding as a share of total personal income tax collections increased to 84.7 percent of overall personal income tax collections in tax year 2018.

FIGURE 3

Withholding Was Substantially Stronger in January of 2018

Percentage change in withholding tax collections compared with the previous year, tax year 2018 monthly and year to date



Source: Author's calculations using data from individual state government agencies.

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, such as capital gains realized in the stock market, or from self-employment or business income. Estimated payments normally represent a small share of overall income tax revenues but can have a large impact on the direction of overall collections. Estimated payments accounted for roughly 17.3 percent of total personal income tax revenues in the third quarter of 2018 but only 6.5 percent in the fourth quarter, which is the lowest share in at least a decade.

The first payment for each tax year is due in April in most states; the second, third, and fourth payments are generally due in June, September, and January (although many high-income taxpayers make the last state income tax payment in December so that it is deductible on the federal tax return for that tax year rather than the next). In some states, the first estimated payment includes payments with extension requests for income tax returns on the previous tax year and is thus related partly to income in that previous tax year. Subsequent payments generally are related to income for the current tax year, although often that relationship is quite loose.

The first payment is usually difficult to interpret because it includes this mix of payments related to the current tax year and the previous tax year. The second and third payments are easier to interpret because they are almost always related to the current year. Weakness in these payments can reflect weakness in nonwage income, such as that generated by the stock market. However, it can also be "noisy" in the sense that it reflects taxpayers' responses to tax-payment rules as well as to expected nonwage income.

In the 38 states for which we have complete data, the median first payment (mostly attributable to the 2018 tax year) increased 12.6 percent compared with prior year levels; this is in contrast to a 1.7 percent decline in the median first payment for tax year 2017. The median second and third payments for tax year 2018 grew 9.3 and 9.6 percent year over year, respectively; this was substantially stronger than growth rates of 1.8 and 0.3 percent in the median second and third payments for tax year 2017 (Table A4). Preliminary data from 36 states for the fourth payment (paid in the months of December 2018 and January 2019 and attributable to tax year 2018) show steep declines across all states: the median decline is 41.1 percent, which contrasts with the 39.1 percent growth in the median fourth payment for tax year 2017.

The median estimated payment for December 2017 was unusually strong, mostly in response to the TCJA, which led some high-income taxpayers to accelerate state income tax payments into December 2017 to take advantage of the uncapped SALT deduction for tax year 2017. As evidence, estimated payments grew from $10 billion in December 2016 to $16.9 billion in December 2017, an increase of 68.8 percent. Estimated payments saw a steep decline in December 2018, with an 82.4 percent drop from December 2017 levels; they were also substantially lower than December 2016 estimated payments. This December setback was partially anticipated because of the one-time spike in estimated tax payments for December 2017. Although state revenue forecasters projected declines in estimated income tax payments for December 2018, the actual declines were far greater than expected, particularly in states with a larger share of high-income taxpayers. The largest declines in terms of dollar amounts were in California and New York, where estimated payments declined by $6.6 billion or 85.8 percent and by $2.7 billion or 88.3 percent, respectively, in December 2018 compared with December 2017. Steep declines in California and New York are not surprising because the two states have the largest share of taxpayers with income over $1 million. Taxpayers in California and New York constitute about 12 and 6 percent of all US taxpayers, whereas California and New York are the home states for about 17 and 12 percent, respectively, of all millionaire taxpayers. Estimated payments in California and New York made up approximately 49 percent of the total estimated payments for the nation in December 2018 and 64 percent of estimated payments in December 2017.

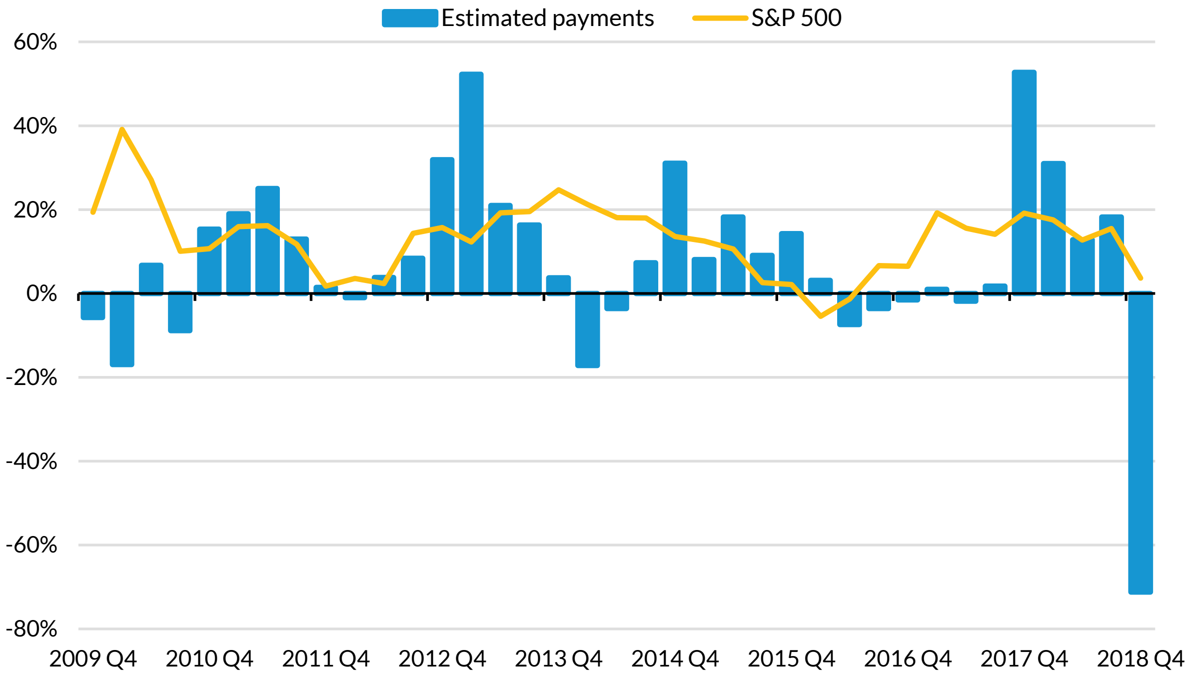
Figure 4 shows year-over-year percentage change by quarter in estimated payments and in the S&P 500 Index for the past 10 years. The longer-term trends indicate large volatility in estimated payments, which is partially caused by the volatility in the stock market but is also affected by various federal policy changes. For example, growth in estimated payments in the final quarter of 2012 and the first and second quarters of 2013 was much larger than the growth rates in the S&P 500 Index because estimated payments were tied to the impact of the “fiscal cliff” budget deal as Congress raised top federal income tax rates for tax year 2013. Therefore, some high-income taxpayers accelerated income into tax year 2012 to avoid higher tax rates for later years. This led to large declines in the year-to-year comparison for estimated payments the following year. The substantial growth in estimated payments in the final quarter of 2017, as well as in the first quarter of 2018, is tied to the passage of the TCJA. And the steep declines in estimated payments in the final quarter of 2018 are mostly attributable to the mirror-image impact of the TCJA that led to a one-time spike in income tax collections last year and reversal of that effect this year. However, the further decline in estimated payments was likely also driven by the weak stock market performance in the final quarter of 2018. The stock market saw large fluctuations, with the S&P 500 Index declining an average of 3.6 percent in December 2018 compared with December 2017 after being above 2017 levels for the bulk of 2018. In response to declines in realized capital gains, taxpayers may have reduced their December estimated payments.

Estimated payments as a share of overall personal income taxes have grown over time. In state fiscal year 2018, estimated payments made up 22.3 percent of total personal income tax collections, up from 17.9 percent in fiscal year 2010 and 20.0 percent in fiscal year 2014. The growth in estimated payments, as well as the volatility of estimated payments, adds heightened uncertainty for state revenue forecasts.

FIGURE 4

Large Volatility in Estimated Payments

Year-over-year percentage change in estimated payments and S&P 500 Index



Source: Author's calculations using data from individual state government agencies and Yahoo Finance (S&P500).

Final Payments

Final tax payments normally represent a small share of total personal income tax revenues in the first, third, and fourth quarters of the tax year and a much larger share in the second quarter of the tax year because of the April 15 income tax return deadline. Final payments accounted for 22.5 percent of all personal income tax revenues in the second quarter of 2018 but only 3.0 and 5.8 percent in the third and fourth quarters of 2018.

Total final payments showed strong growth in the final quarter of 2017 and the first three quarters of 2018, compared to the year-earlier levels. The strong growth was likely attributable to the passage of the TCJA as discussed above.

Table A5 shows year-over-year growth in final payments for the most recent eight quarters. Final payments declined 2.4 percent for the fourth quarter of 2018 compared with the prior-year levels. The largest decline is attributable to Utah, where collections declined by $330.6 million, or 71.6 percent.[4]

Final payments in the median state increased 7.9 and 13.2 percent, respectively, for the third and fourth quarters of 2018, compared with levels a year earlier.

Growth rates in final payments varied widely across the states. In the 35 states for which we have complete data, final payments increased in 26 states in the fourth quarter of 2018, with 18 states reporting double-digit growth relative to a year earlier.

Refunds

Personal income tax refunds usually represent a small share of total personal income tax revenues in the third and fourth quarters of the tax year and a much larger share in the first and second quarters of the tax year.

Refunds grew 14.3 and 16.2 percent, respectively, in the third and fourth quarters of 2018 compared with the same quarters in 2017. In total, states paid out about $0.6 billion and $1.2 billion more in refunds in the third and fourth quarters of 2018, respectively, than in the same quarters in 2017. Overall, 26 states paid out more refunds in the third quarter of 2018 and 33 states paid out more refunds in the fourth quarter of 2018 than in the same quarters in 2017. New York had the largest share of refund payouts ($0.5 billion more) in the fourth quarter of 2018.

Earlier in 2018, many states projected higher-than-expected refunds in April 2018 because of the substantial growth in estimated payments in December 2017 and January 2018. However, the increase in refunds was lower than expected in many states.

Actual versus Forecasted Income Tax Revenues

We collected data for those states that provide actual and forecasted data of monthly personal income tax revenue. Such information was available and easily retrievable for 23 states, and the data are presented in Table 3 for December 2018.

In 18 of 23 states, actual personal income tax collections in December 2018 were lower than in December 2017, with a median decline of 11.1 percent. The decline in personal income tax collections is driven by the steep decline in nonwage income, which largely reflects December 2017 record levels. As discussed, fluctuations in the stock market might have also led to income tax declines in December 2018. In 11 states, personal income tax collections in December 2018 were lower than in December

2016, with an average decline of 9.7 percent but a median growth of 1.0 percent. The largest declines were in California and New York.

TABLE 3

Actual versus Forecasted State Personal Income Tax Revenues for December

Dollar amounts in millions

	Dec. 2016 actual	Dec. 2017 actual	Dec. 2018 actual	Percent change, 2016 vs 2017	Percent change, 2017 vs 2018	Percent change, 2016 vs 2018	Dec. 2018 forecast	Dec. 2018 actual	Percentage variance, Dec. 2018 actual from forecast	Forecast date
Median				***19.5***	***(11.1)***	***1.0***			***(8.3)***	
Average	***$22,567.9***	***$29,026.1***	***$20,373.1***	***28.6***	***(29.8)***	***(9.7)***	***$22,746.1***	***$20,373.1***	***(10.4)***	
Arizona	411.7	574.0	441.9	39.4	(23.0)	7.3	481.7	441.9	(8.3)	Oct-18
Arkansas	231.9	259.3	263.3	11.8	1.5	13.6	272.7	263.3	(3.4)	Nov-18
California	8,577.3	11,495.5	6,764.5	34.0	(41.2)	(21.1)	7,324.0	6,764.5	(7.6)	Jan-19
Colorado	620.9	700.0	610.7	12.7	(12.8)	(1.6)	716.7	610.7	(14.8)	Dec-18
Idaho	166.2	210.0	126.6	26.3	(39.7)	(23.8)	184.9	126.6	(31.5)	Dec-18
Illinois	1,314.0	1,569.7	1,576.4	19.5	0.4	20.0	1,819.6	1,576.4	(13.4)	Feb-18
Indiana	612.1	462.0	488.5	(24.5)	5.7	(20.2)	508.1	488.5	(3.9)	Dec-18
Kansas	218.2	335.4	291.5	53.7	(13.1)	33.6	300.0	291.5	(2.8)	Nov-18
Maine	149.2	156.4	141.9	4.8	(9.2)	(4.9)	146.0	141.9	(2.8)	Mar-18
Massachusetts	1,479.0	1,966.0	1,449.0	32.9	(26.3)	(2.0)	2,009.0	1,449.0	(27.9)	Jan-18
Mississippi	155.9	173.1	171.4	11.0	(1.0)	9.9	168.5	171.4	1.7	Nov-17
Montana	89.7	119.5	111.2	33.2	(6.9)	24.0	123.1	111.2	(9.7)	Apr-18
Nebraska	176.0	215.0	199.6	22.2	(7.2)	13.4	219.7	199.6	(9.2)	Nov-18
New York	4,752.2	6,772.0	4,105.1	42.5	(39.4)	(13.6)	4,520.0	4,105.1	(9.2)	Aug-18
North Dakota	9.0	14.0	6.2	55.7	(55.7)	(31.0)	6.6	6.2	(5.4)	May-17
Ohio	780.8	788.6	761.5	1.0	(3.4)	(2.5)	808.3	761.5	(5.8)	Jan-17
Oklahoma	178.1	216.9	218.0	21.8	0.5	22.4	224.3	218.0	(2.8)	Feb-18
Pennsylvania	962.4	1,094.0	972.4	13.7	(11.1)	1.0	1,104.8	972.4	(12.0)	Jun-18
Rhode Island	128.1	156.9	130.8	22.5	(16.6)	2.1	151.0	130.8	(13.4)	Nov-18
South Carolina	487.0	509.3	515.5	4.6	1.2	5.9	533.5	515.5	(3.4)	Apr-18
Vermont	74.9	81.8	67.6	9.2	(17.4)	(9.8)	79.3	67.6	(14.7)	Jan-18
West Virginia	146.6	172.1	169.9	17.4	(1.3)	15.9	162.5	169.9	4.5	Jun-18
Wisconsin	846.8	984.7	789.6	16.3	(19.8)	(6.8)	881.9	789.6	(10.5)	Jan-19

Source: Individual state data, analysis by the author.

In 21 states, actual personal income tax collections in December 2018 were below the forecasts, with an average overestimation of 10.4 percent and a median overestimation of 8.3 percent. Some states prepared revenue forecasts for December 2018 shortly after the passage of the TCJA; others updated revenue forecasts late in 2018 or in the past three months. Yet most states overestimated personal income tax revenues. Although revenue forecasters in most states factored in taxpayers' behavioral responses to the federal tax policy changes, most states still overestimated the growth in income tax revenues, some by sizable percentages. State officials are hoping for rebounding income tax revenues: they expect that December declines are a timing issue and are anticipating higher estimated and final payments later in state fiscal year 2019. But December 2018 declines pose a real issue for

New York because the state's fiscal year runs from April 1 to March 31. Steep declines in income tax collections in December 2018 led to a substantial budget shortfall for New York. Estimated payments are projected to be $2.3 billion below forecast.[5] Declines of that magnitude so late in the fiscal year put the state budget in a vulnerable position, particularly given the state's restrictions on spring borrowing.[6] Within the state, New York City is facing looming fiscal pressures because of the city's reliance on high-income taxpayers and recent sharp declines in income tax collections, which are projected to be $1 billion less in fiscal year 2019 than in fiscal year 2018.[7] The city's fiscal outlook may also have gotten gloomier as Amazon announced it was pulling out of a plan to build a second corporate headquarters there.

Corporate Income Taxes

State corporate income tax revenue is highly volatile because corporate profits and the timing of tax payments can vary and shift across quarters. Further, most states collect a small share of state revenues from corporate taxes and can therefore experience large fluctuations in percentage terms with little overall budgetary impact. Average quarterly year-over-year growth rates in state corporate income tax collections were 2.8 percent in nominal terms and 1.1 percent in real terms since 2010 (Table A1).

Corporate income tax revenue saw steep declines during the Great Recession and are still below the peak levels observed before the Great Recession. However, corporate income tax receipts grew by double digits in the second and third quarters of 2018 compared with the prior year. Corporate income tax revenues increased 29.4 percent in nominal terms and 26.5 percent in inflation-adjusted terms in the third quarter of 2018 compared with a year earlier. However, large disparities exist among states and regions. Corporate income tax collections increased by at least double-digit percentages in all regions, and in the Southwest collections increased 104.3 percent. The strong growth in the Southwest region is mostly attributable to New Mexico, where the growth was caused by a surge in oil production following lower production in the previous years. The Southeast region had the weakest year-over-year growth at 16.3 percent. Annual corporate income tax collections declined in six states.

The strong corporate income revenue performance is partially driven by the one-time taxation of repatriated foreign corporate earnings as well corporations shifting income into tax year 2018 in response to the TCJA lowering the federal corporate income tax rate effective January 1, 2018.

State corporate income tax revenues are expected to fluctuate further in the coming months because of the passage of the TCJA, which reduced the federal corporate income tax rate from 35 percent to 21 percent and substantially modified the corporate income tax base. The TCJA may lead to increased corporate income tax collections in the states where tax codes conform to federal tax law but not rates. Even in states that do not conform, state corporate tax revenues may increase if the federal rate changes lead to changes in corporate behavior and income reporting. However, the composition of state economies and other factors will also affect revenues. The TCJA also eliminated the corporate alternative minimum tax. With all these changes, states are anticipating that some pass-through businesses will find it beneficial to restructure as C corporations and take advantage of lower corporate income tax rates. However, some businesses may not restructure if they are worried about whether future legislatures might raise tax rates. State revenue forecasters may not fully understand how businesses are responding to the TCJA for a long time. The TCJA included the most significant structural change in the federal tax code to the corporate income tax since 1986, and the Internal Revenue Service has still offered no definitive guidance for many of the TCJA's key provisions. Therefore, many corporate taxpayers are still waiting to react, and it is unclear how taxpayer behavior will evolve.

General Sales Taxes

General state sales tax collections grew 6.5 percent in nominal terms and 4.1 percent in real terms in the third quarter of 2018 compared with the same period in 2017. Sales tax collections have grown continuously since the first quarter of 2010 in nominal terms, but growth generally was sluggish until mid-2018.

Sales tax collections increased in all regions in the third quarter of 2018 compared with the third quarter of 2017. The Southwest region reported the strongest growth at 12.3 percent, while the Plains region had the weakest growth at 4.4 percent. Forty-two states reported increases in sales tax collections in the third quarter of 2018, with five states reporting double-digit growth.

The recovery in sales tax collections had been slow in the post–Great Recession period. Since 2010, the average quarterly year-over-year growth rate in state sales tax collections was 4.0 percent in nominal terms and only 2.3 percent in real terms. The weak annual growth rates in sales tax collections are at least partially attributable to tax dollars lost by online retail sellers not collecting sales tax on some or all sales. And the recent gains are mostly attributable to the expansion of the sales tax base in several states and their efforts to capture tax revenues from a larger share of online sales.

The uncertainty and changing definitions surrounding the nexus for online sales taxes have been an ongoing debate in the states. Internet sales grew substantially in the past decade and eroded the sales tax base. Absent federal legislation, most states adopted specific measures such as enactment of nexus or "Amazon" laws to address the issue.

On June 21, 2018, the US Supreme Court ruled in favor of South Dakota in the *South Dakota v. Wayfair* case,[8] which ultimately gives states the authority to require out-of-state sellers with at least a specified amount of sales within the state to collect sales taxes and transfer the revenues to state governments. Since the Supreme Court's *Wayfair* ruling, 38 of 45 states with sales tax base have enacted laws or regulations to require sales tax collections by remote sellers. The remaining seven states will likely follow suit.

But online sales taxation by states raises concerns for local jurisdictions around the country that operate independently and have independent taxing authority. And most states have yet to decide how to impose sales tax collections on marketplace facilitators (such as Amazon Marketplace—entities that are not actual sellers but that make it easier for buyers and sellers to enter into transactions). To date, only about a dozen states have enacted laws or regulations requiring marketplace facilitators to collect sales taxes on behalf of their sellers. According to a recent study by the US Government Accountability Office, state and local governments could gain $8 to $13 billion a year if the states are given the authority to impose sales tax collection from all remote sellers (US GAO 2017). These estimates are likely higher than the actual revenue increases in the current year because many large internet sellers had already started collecting sales tax revenue even before the Wayfair decision. And current and forecasted revenues are lower as some sales are being excluded because they are made by small sellers (albeit sometimes through a larger marketplace program).

Motor Fuel Taxes

States collected $12.4 billion in motor fuel sales tax in the third quarter of 2018, which represents 5.8 percent growth compared with the same period in 2017.

Motor fuel sales tax collections have fluctuated after the Great Recession. Average quarterly year-over-year growth in state motor fuel tax collections was 3.8 percent in nominal terms and only 2.1 percent in real terms since 2010. Economic growth, changing fuel prices, general increases in fuel efficiency, and changing driving habits all affect gasoline consumption and motor fuel taxes. Changes in state motor fuel rates also affect tax collections.

Growth rates varied widely across the states and the regions. Motor fuel sales tax collections grew in all regions but the Mideast, where collections declined 0.9 percent in the third quarter of 2018 compared with the same quarter in 2017. The largest growth was in the Far West region at 15.5 percent followed by the Southeast region at 7.0 percent. The double-digit growth in the Far West region was driven by a tax rate increase in California. Twelve states reported declines in motor fuel sales tax collections in the third quarter of 2018; nine states reported double-digit growth. Alabama had the strongest growth because of a timing issue: the state shifted revenue from one quarter to another.

Other Taxes

Census Bureau quarterly data on state tax collections provide detailed information for some of the smaller taxes, including state property taxes, tobacco products excise taxes, alcoholic beverage excise taxes, motor vehicle and operators' license taxes, and some other taxes. In Table A6, we show year-over-year growth rates for four-quarter average inflation-adjusted revenue for the nation as a whole. In the third quarter of 2018, states collected $51.5 billion from the smaller tax sources, which constituted 21.1 percent of total state tax collections.

Overall, revenues from smaller taxes have been growing at a slower pace after the Great Recession. The average quarterly year-over-year growth rate in state tax revenues from smaller sources was 1.8 percent in real terms since 2010.

Inflation-adjusted year-over-year growth in revenues from smaller tax sources was 4.7 percent in the third quarter of 2018. State property taxes, which represent a small portion of overall state tax revenues, grew 8.0 percent. Tax revenues from motor vehicle and operators' licenses increased 5.8 percent, while tax revenue from tobacco product sales increased 1.4 percent in the third quarter of 2018. Tax revenues from alcoholic beverage sales declined 0.5 percent. Finally, revenues from all other smaller tax sources increased 4.7 percent for the third quarter of 2018 compared with a year earlier.

Preliminary Revenue Results for Fourth Quarter 2018

Preliminary data collected for the October-December quarter of 2018 shows declines in overall state tax collections, mostly driven by large declines in personal income tax collections. In 46 states for which we have preliminary data, overall state tax collections declined 1.9 percent in the fourth quarter of 2018 compared with the same quarter in 2017. However, state tax revenues in the median state showed growth of 3.1 percent in the fourth quarter of 2018. Table A7 shows state-by-state changes in major tax revenues for the fourth quarter of 2018 compared with the same quarter of 2017. Total state tax revenues declined in 14 states. These declines, except for North Dakota and Washington, were primarily driven by the steep declines in personal income tax collections. (Washington does not have a personal income tax.) Tax revenue declines in North Dakota were mostly attributable to the general fund cap for oil and gas taxes. The largest declines were in California and New York, where overall state revenue collections declined 14.5 and 14.7 percent, respectively, in the fourth quarter of 2018 compared with the same quarter in 2017, largely because of declines in estimated tax payments.

After three consecutive quarters of double-digit growth, personal income tax collections showed softer growth in the third quarter of 2018 and declines of 9.4 percent in the final quarter of 2018 (compared with a year earlier). Twenty-three of 41 states with broad-based income taxes reported declines in personal income tax collections in the fourth quarter of 2018, with six states reporting double-digit declines. The largest declines in terms of dollar value were in California ($3.71 billion), New York ($2.99 billion), New Jersey ($0.55 billion), Connecticut ($0.43 billion), and Massachusetts ($0.39 billion). All five states rely substantially on higher-income taxpayers. Therefore, the recent declines in these states are partially attributable to the TCJA, which, as discussed, led to windfall income tax revenues in the fourth quarter of 2017. But it is unclear how much of these declines are caused by timing shifts that were reflected in 2017 payments or lower payments that may be corrected later in the fiscal year or caused by weaker 2018 taxable income partially caused by fluctuations in the stock market. Personal income tax revenues in the fourth quarter of 2018 were also weaker than in the fourth quarter of 2016 in the above mentioned five states, except for Massachusetts. Estimated and final payments in April will provide more insight on the income tax revenue situation. Preliminary data for January 2019 paint a mixed picture: personal income tax revenues grew by $0.8 billion in California in January 2019 compared with January 2018 but declined by $2.6 billion in New York and by $0.8 billion in Connecticut.

Sales tax collections showed softer growth of 4.1 percent in the fourth quarter of 2018 (compared with a year earlier), while corporate income tax revenues grew 11.9 percent, marking the third consecutive quarter of double-digit growth. Thirty-eight states reported growth in sales tax collections, with six states reporting double-digit growth compared with a year earlier. Finally, 32 states reported growth in corporate income tax collections, with 28 states reporting double-digit growth, again compared with a year earlier.

Factors Driving State Tax Revenues

State revenues vary across place and time because of three underlying forces: state-level changes in the economy (which often differ from national trends), different ways that national economic changes and trends affect each state's tax system, and legislated changes in tax rates or rules. The next two sections discuss changes in both economic conditions and recently legislated tax changes.

Economic Indicators

Most state tax revenue sources are heavily influenced by the economy. In general, state taxes rise when the state economy grows, income taxes grow when income goes up, sales tax generates more revenue when consumers increase their purchases of taxable items, property taxes increase when housing prices go up, and so on. Next, we examine the interplay between various economic indicators and associated state tax revenues.

State Gross Domestic Product

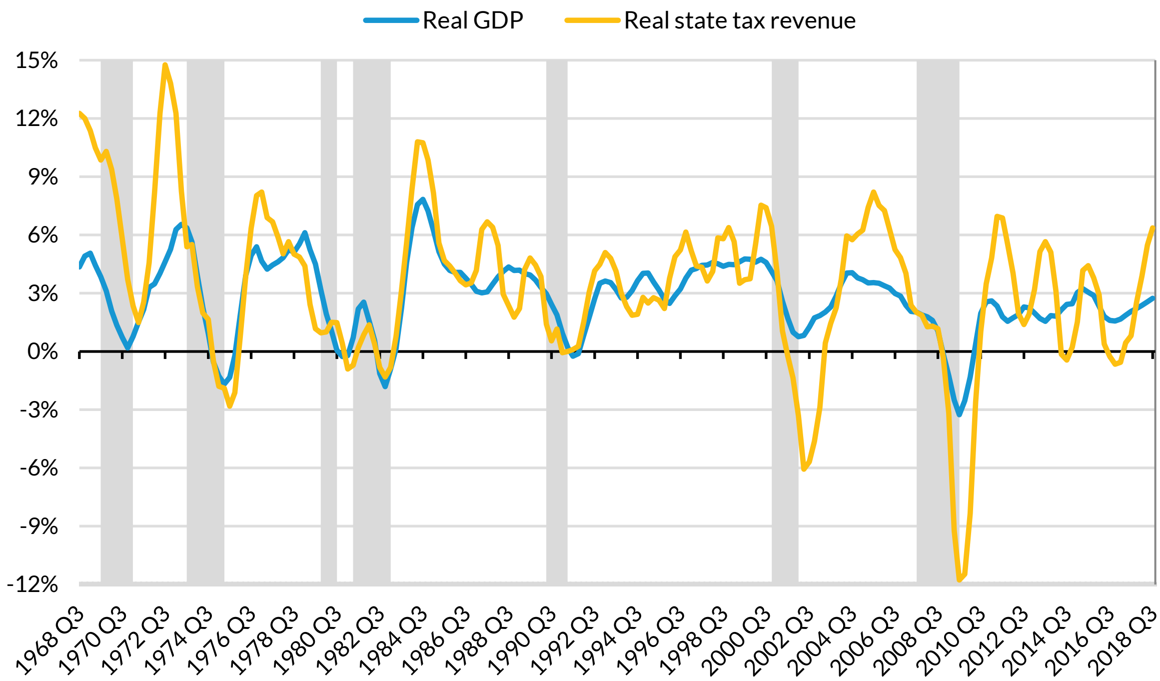
When the economy booms, tax revenues tend to rise rapidly, and when it declines, tax revenue tends to decline, though these changes have different patterns and timing. Figure 5 shows year-over-year growth for four-quarter moving averages in real (inflation-adjusted) state tax revenue and gross domestic product (GDP). We present moving averages to smooth short-term fluctuations and illustrate the interplay between the economy and state revenues. As shown in Figure 5, real GDP growth showed uninterrupted growth since the second quarter of 2010. By contrast, real state tax revenue showed declines in 2014, 2016, and 2017, but growth in the second and third quarters of 2018 was more than twice as strong as the growth in real GDP. As will be discussed, these changes are partly related to changes in tax rates.

Volatility in state tax revenue is not fully explained by changes in real GDP, a broad measure of the economy. State tax revenues became far more volatile than the general economy in the past two decades, mostly because of changes in state tax rates and policies as well as states' growing reliance on income taxes. Declines in real state revenues were far steeper than the declines in real GDP during the Great Recession. State tax revenues have risen significantly in the last quarter of 2017 and the first three quarters of 2018 as the overall economy has grown (though it has not grown as quickly as revenues).

FIGURE 5

State Tax Revenue is More Volatile than the Economy

Year-over-year change in inflation-adjusted state taxes and real GDP



Source: Author's calculations using data from the US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP).
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation.

States vary substantially in terms of the correlation between growth rates in real state tax revenues and state GDP. Figure 6 shows growth for each state for four-quarter moving averages in inflation-adjusted state tax revenue and in real state GDP in the third quarter of 2018 compared with the same quarter in 2017. By this measure, real state tax revenues increased in 48 states and real state GDP increased in 46 states in the third quarter of 2018. The percentage change in real state tax revenues ranged from negative 0.8 percent in Ohio to 55.9 percent in Alaska and 25.8 percent in North Dakota; the percentage change in real state GDP ranged from negative 1.0 percent in Delaware to 4.8 percent in Washington (Alaska and North Dakota are both outlier states and are excluded from Figure 6 to better display the overall relationship). In the third quarter of 2018, growth in real state tax revenues was lower than the national average of 6.4 percent in 31 states and growth in real state GDP was lower than the national average of 2.3 percent in 40 states.

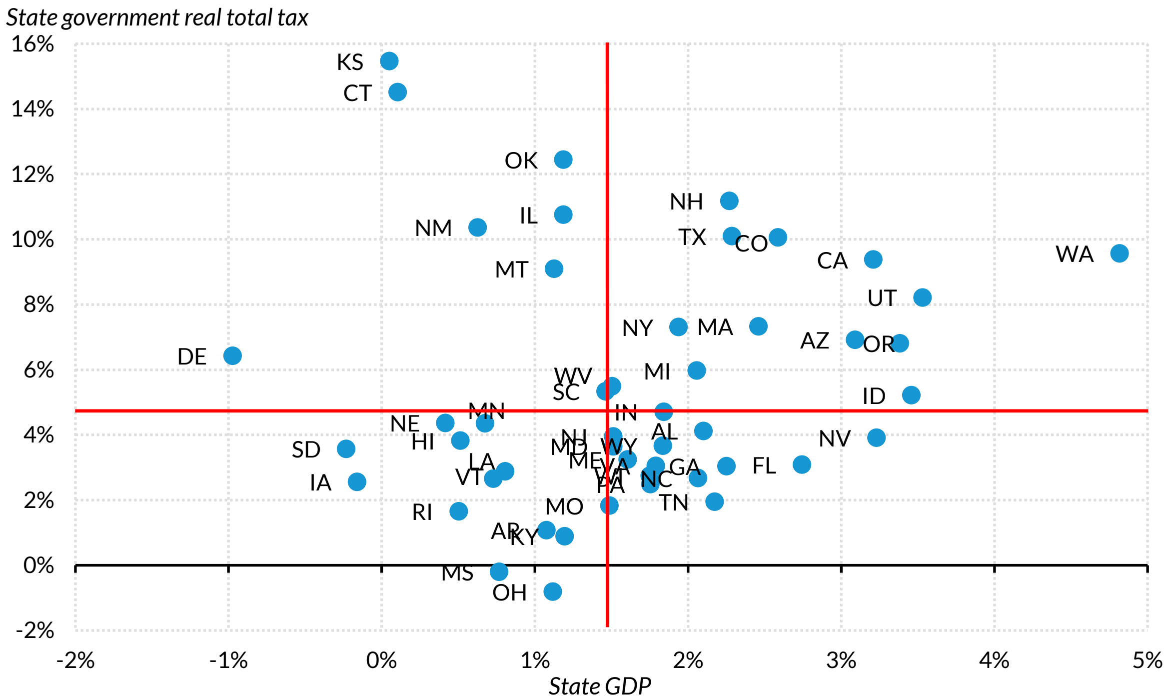
In general, states with the strongest growth in real state tax revenues were either oil-dependent or income tax–dependent states. Strong growth in oil-dependent states represented state revenue bouncing back from depressed levels the previous year. Oil prices (and revenues from oil) were lower in

2017. Strong growth in income tax–dependent states was largely attributable to income tax shifting in response to federal policy changes. The strong tax revenue growth trend observed in income tax-dependent states is likely to reverse in the fourth quarter of 2018.

FIGURE 6

Growth Disparity: State Tax Revenues versus State GDP

Year-over-year change in state taxes and real GDP, 2018Q3 versus 2017Q3



Source: Author's calculations using data from the US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP).
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation. Red lines are for US averages. Alaska and North Dakota are excluded from the figure.

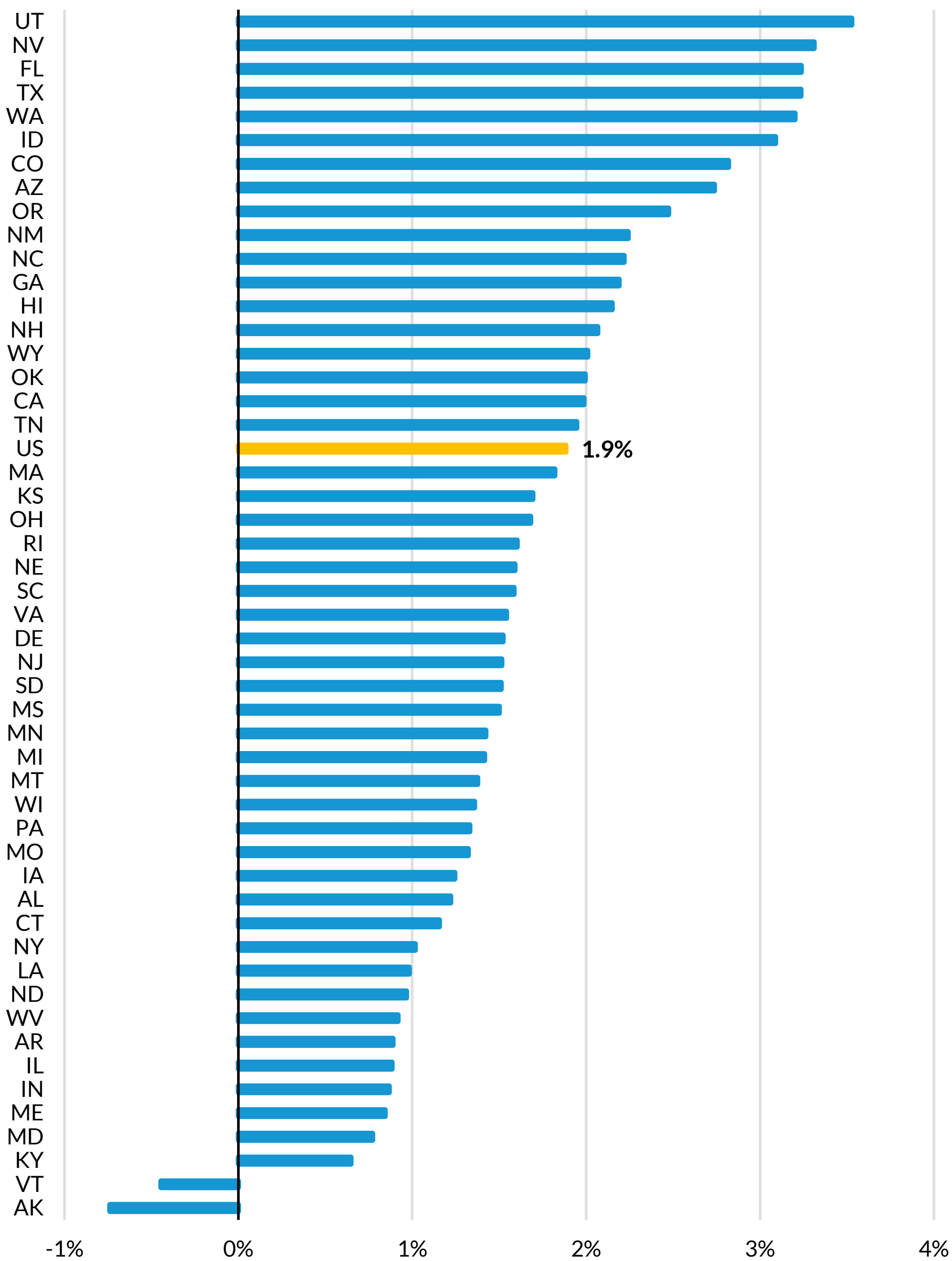
State Unemployment and Employment

The national unemployment rate has seen steady declines since 2010 and was at 3.8 percent in the third quarter of 2018. Unemployment rates ranged from 2.1 percent in Hawaii to 6.7 percent in Alaska in the third quarter of 2018. Although low unemployment rates are generally good for the economy, the decline in the unemployment rate since 2011 was driven by improved job prospects and by a decline in labor force participation caused by factors such as demographic shifts and retiring baby boomers. In addition, the unemployment rate excludes involuntary part-time workers (those who would prefer fulltime work) as well as people who have stopped looking for a job but wanted and were available for work.[9]

FIGURE 7

Growth in Employment for the Third Quarter of 2018

Year-over-year change in seasonally-adjusted employment, 2018Q3 versus 2017Q3



Source: Author's calculations using data from the Bureau of Labor Statistics.

Nationwide employment grew 1.9 percent in the third quarter of 2018 compared with the same quarter in 2017 (Figure 7). Employment growth was weaker than the national average in 32 states. On a year-over-year basis, employment grew in 48 states. Alaska and Vermont reported declines of 0.7 and 0.4 percent, respectively.

Personal Consumption Expenditures

“Personal consumption expenditures” is a measure of national consumer spending. The measure shows the value of the goods and services purchased by American consumers and is correlated with the base for sales taxes. Figure 8 displays the year-over-year percentage change in the four-quarter moving average of nominal personal consumption expenditures for durable goods, nondurable goods, and services, as well as for state sales tax collections. We also show trends in the consumption of energy goods and services.

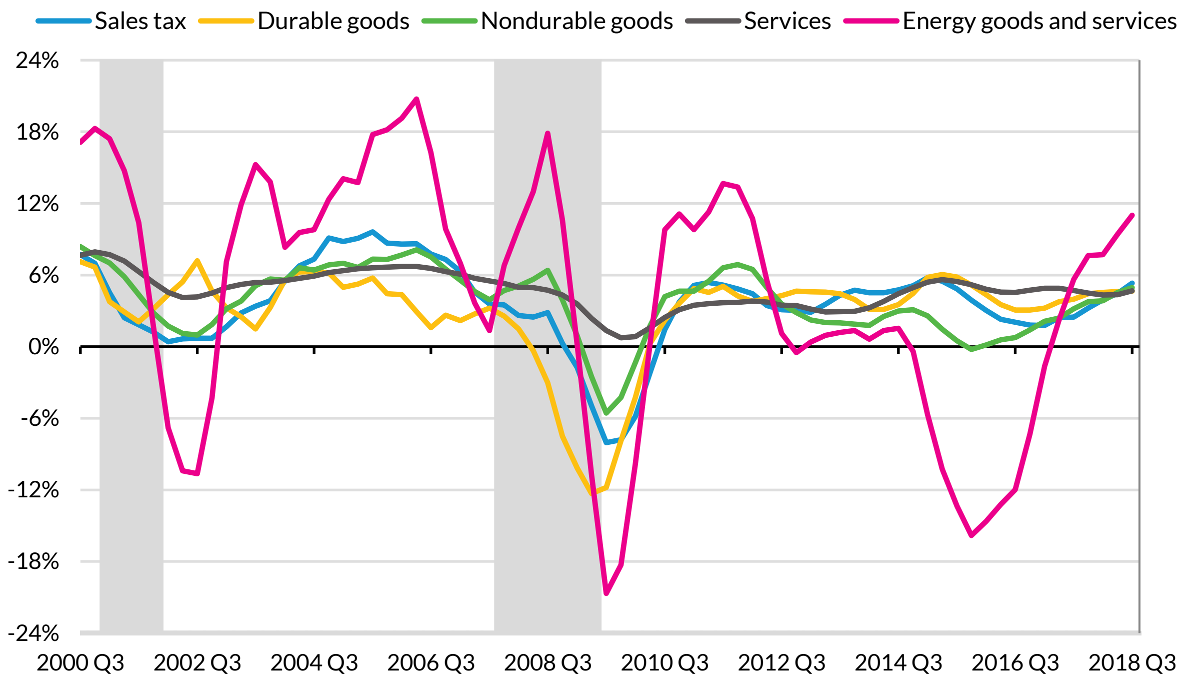
Growth in the consumption of durable goods, an important element of state sales tax bases, has been relatively volatile in the most recent quarters, trending downward throughout 2015 and 2016 and upward since the first quarter of 2017. Nondurable consumption spending declined in the fourth quarter of 2015 but has grown since then, showing strong growth in the second and third quarters of 2018. Nondurable goods are largely impacted by the trends in gasoline and other energy goods consumption. As shown in Figure 8, total spending on energy goods and services declined dramatically in the last quarter of 2014 and through the first quarter of 2017 in response to steep declines in oil and gas prices. This decline in total spending for this sector led to declines in general sales tax revenues, which are based on prices as well as quantity consumed.

Energy goods and services have been recovering from previously depressed levels and showed double-digit growth in the third quarter of 2018. Spending on durable goods, nondurable goods, and services was also strong in the third quarter of 2018. Still, the current growth rates in both durable goods and services are weaker than growth rates observed since the last peak in 2015. Consequently, current growth rates in state sales tax revenues are also substantially weaker than growth rates observed throughout 2014 and 2015.

FIGURE 8

Substantial Recovery in Energy Goods; Sluggish Growth in Services

Year-over-year percentage change in sales tax and personal consumption spending



Sources: Author's calculations using data from the US Census Bureau (sales taxes) and Bureau of Economic Analysis (NIPA table 2.3.5).

Notes: Year-over-year change is the percentage change of four-quarter moving averages.

Housing Market

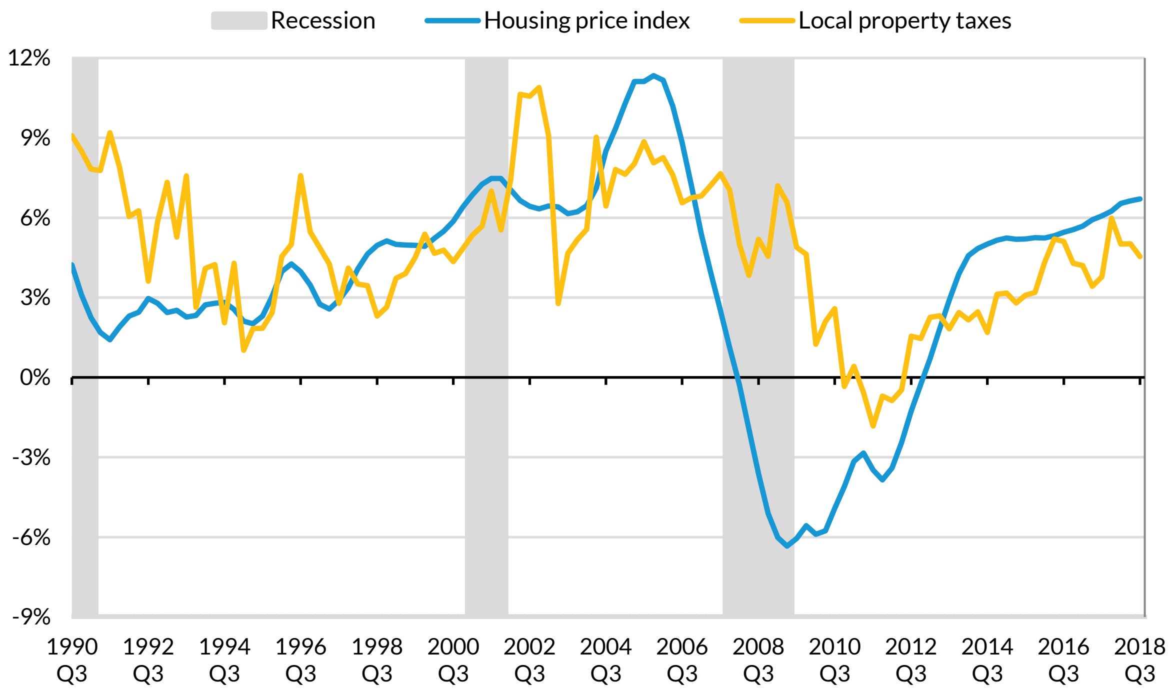
Trends in housing prices are important determinants for expected trends in local property taxes. Assessment lags and assessment caps can affect how quickly house price changes translate into property tax revenues. But declines in housing prices usually lead to declines in property taxes, while growth in housing prices usually leads to growth in property taxes.

Figure 9 shows year-over-year percentage changes in the four-quarter moving average of the housing price index and local property taxes. Housing prices saw deep declines during the Great Recession, which led to a significant slowdown in local property tax growth and to an actual decline in fiscal year 2011 and 2012.[10] The housing price index began declining in mid-2005, with steep negative movements from the last quarter of 2005 through the second quarter of 2009, though actual patterns varied across states and regions. The trend in the housing price index and local property taxes has been generally upward over the past seven years. Despite the overall upward trends, both the housing price index and local property taxes are still below peak levels observed before the Great Recession. National average housing prices appreciated 6.7 percent in the third quarter of 2018 from one year ago, while local property taxes grew 4.5 percent during the same period.

FIGURE 9

Continued Growth in Housing Prices; Downward Trends in Local Property Taxes

Year-over-year percentage change in housing prices versus local property taxes



Sources: Author's calculations using data from the US Census Bureau (local property taxes) and Federal Housing Finance Agency (house price indexes).
Notes: Year-over-year change is the percentage change of four-quarter moving averages.

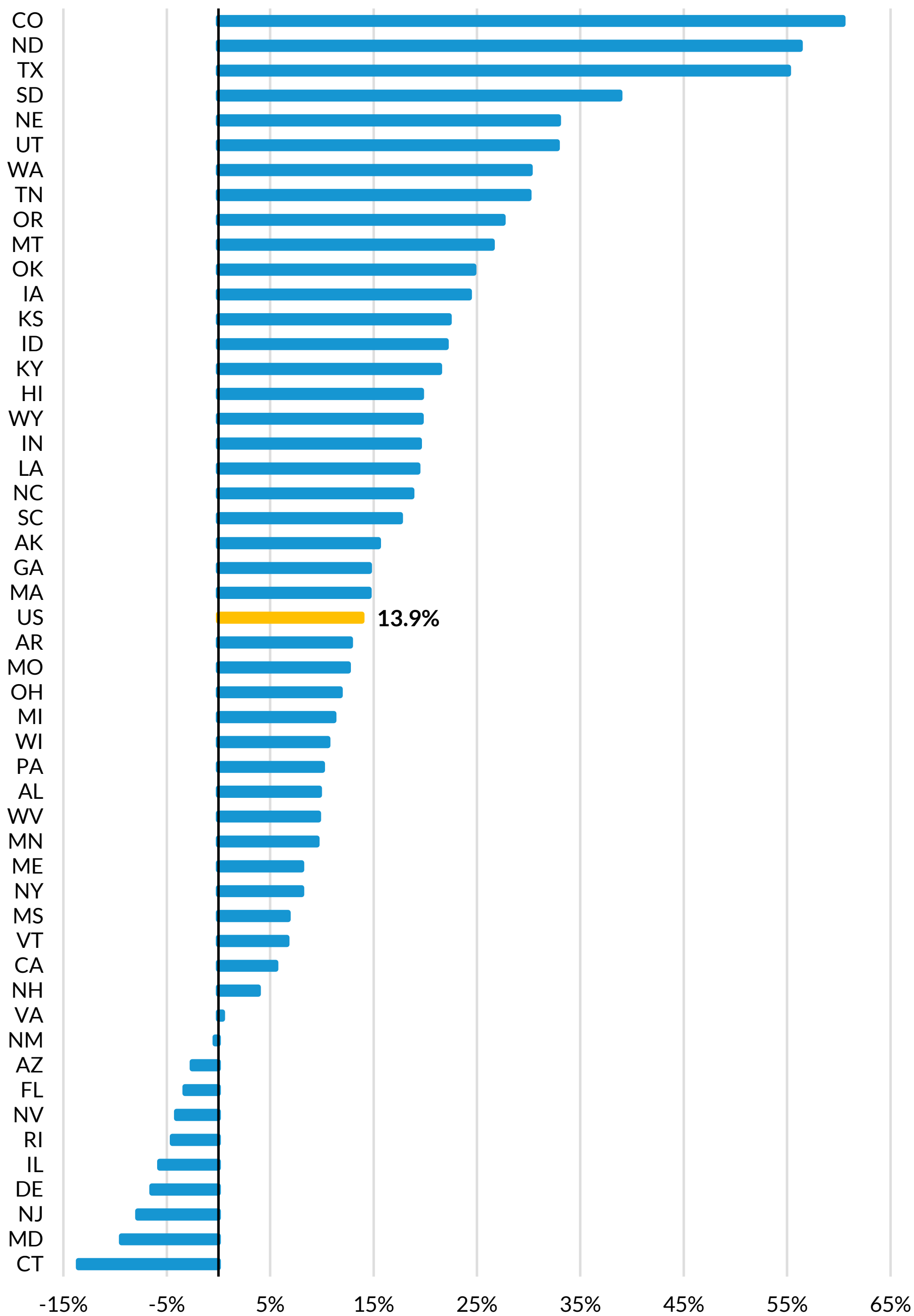
Statewide housing price indexes increased in all states in the third quarter of 2018 (compared with a year earlier), ranging from a 1.0 percent increase in North Dakota to 15.0 percent in Nevada. Growth in 29 states was below the national average of 6.6 percent.

Despite continuous and strong nationwide growth in the housing market, prices are still below their prerecession peaks in several states. Figure 10 shows the state-by-state nominal percentage change in housing price indexes at the end of the third quarter of 2018 compared with the first quarter of 2007, when housing prices were at their peak.

FIGURE 10

Growth in Housing Price Indexes Since the Prerecession Peak

Percent change in housing prices from pre-recession peak level, 2018Q3 versus 2007Q1



Source: Author's calculations using data from the Federal Housing Finance Agency (house price indexes).

National average housing prices grew 13.9 percent in nominal terms between the first quarter of 2007 and the third quarter of 2018. However, there are substantial variations among the states. Housing prices grew in 40 states but declined in 10 in the third quarter of 2018 compared with the prerecession peak levels observed in the first quarter of 2007. The three hardest-hit states—Connecticut, Maryland, and New Jersey—all had declines of 7.5 percent or more in statewide average housing prices. Connecticut had the greatest decline at 13.6 percent. On the other hand, statewide housing price indexes increased by double digits in 30 states over this period. In 15 states, growth in statewide average housing prices was over 20 percent, with Colorado and North Dakota having the highest growth rates at 60.4 and 56.3 percent, respectively.

Many states have raised concerns about tight housing supply and rising demand. In 2007, before the fall in housing prices, the 30-year fixed-rate mortgage averaged around 6.4 percent. Mortgage rates have declined substantially since then, and 30-year fixed-rate mortgages currently are averaging around 4.5 percent.[11] The low mortgage rate, widely available financing options, and stronger labor market forces have raised the demand for housing, which in turn will continue pushing housing prices higher. The growth in house prices will eventually pose a risk to affordability unless housing quantities increase.

Tax Law Changes Affecting the Third Quarter of 2018

Anticipated and actual federal policy changes had a substantial impact on state tax revenues in the most recent quarters. However, other important elements affecting state tax revenue trends are changes in state tax laws. Many states had enacted tax changes for fiscal year 2019, partly responding to federal tax policy changes and partly reflecting policy preferences. We present analysis here based on the data and information retrieved from the National Association of State Budget Officer's Fall 2018 Fiscal Survey of the States. During the July-September 2018 quarter, enacted tax increases and decreases produced an estimated gain of $803 million compared with the same period in 2017.[12] State-enacted tax changes substantially increased corporate income taxes by $690 million in the third quarter of 2018, compared with a year earlier. Tax changes decreased personal income taxes by $135 million, increased sales taxes by $112 million, and increased some other taxes by approximately $136 million. Below, we discuss some of the major enacted tax changes for fiscal year 2019.

Nine states enacted personal income tax increases, while 16 states enacted decreases. Legislated tax changes are estimated to decrease aggregate personal income tax revenues by $1 billion in fiscal year 2019. The largest estimated increase is in Georgia, where conformity to federal tax reform is estimated to lead to a $251 million increase in personal income tax collections in fiscal year 2019. Lawmakers in New Jersey enacted several income tax changes, which are estimated to increase personal income tax collections by $157 million in fiscal year 2019. First, officials in New Jersey increased the maximum marginal income tax rate from 8.97 percent to 10.75 percent for taxpayers with income over $5 million, which is estimated to increase income tax revenues by $280 million in fiscal year 2019. [13] Other changes included increasing the state earned income tax credit and increasing the maximum gross income deduction allowed for homestead property taxes paid from $10,000 to $15,000. These changes are estimated to decrease personal income tax revenues by $123 million. Connecticut enacted income tax law changes that significantly changed the taxation of income earned by partnerships and S corporations. The most notable change was the creation of a new pass-through entity tax at 6.99 percent and provision of a corresponding tax credit for 93.01 percent of the tax (Connecticut Department of Revenue Services 2018). These changes are estimated to decrease personal income tax revenues by $600 million but increase corporate income tax revenues by the same amount in fiscal year 2019. Officials in Missouri reduced the top personal income tax rate with an estimated impact of $238 million reduction in personal income tax revenues in fiscal year 2019.[14] Lawmakers in Iowa enacted income tax rate reductions for all income tax brackets that are estimated to decrease state personal income tax revenues by $186 million in fiscal year 2019 (Iowa Legislative Services Agency 2018).

Ten states enacted corporate income tax increases; nine states enacted decreases. The largest corporate income tax change is in New York, where state officials amended the definition of exempt controlled foreign corporation income to reflect federal tax changes and to prevent a $2 billion loss of revenue as a result of the federal provisions under the TCJA (New York Department of Taxation and Finance 2018). Other key corporate income tax legislative changes were in Connecticut and in New Jersey. As discussed, the introduction of a new pass-through entity tax in Connecticut is estimated to increase corporate income tax revenues by $600 million in fiscal year 2019. Lawmakers in New Jersey imposed a temporary 2.5 percent tax on business taxpayers with allocated net income over $1 million (New Jersey Department of the Treasury 2018). This measure is estimated to increase corporate income tax revenues by $425 million in fiscal year 2019.

Thirteen states enacted tax changes for some other nonmajor taxes, with an estimated overall increase of $25 million in fiscal year 2019. The estimated impact of each state's changes is not significant, except for Oklahoma's and Washington's. Lawmakers in Oklahoma increased the gasoline excise tax by 3 cents, the diesel tax by 6 cents, and the incentive rate on oil and gas production from 2 percent to 5 percent.[15] These legislative changes are estimated to bring in an additional $272 million in revenues in fiscal year 2019. Officials in Washington reduced the second state property tax levy rate, which is estimated to reduce state property tax revenues by $206 million in fiscal year 2019.[16]

Eight states enacted sales tax increases, and nine states enacted decreases. Legislated tax changes are estimated to increase sales tax revenues by $676 million in fiscal year 2019. The most significant legislative changes were in Kentucky and Louisiana. Lawmakers in Kentucky expanded the sales and use tax base, which is estimated to increase sales tax revenues by $208 million in fiscal year 2019 (Kentucky Department of Revenue 2018). Louisiana's Governor extended the expiring 1 percent sales tax enacted in 2016, but at a lower (0.45 percent) rate, which is estimated to increase sales tax revenues by $463 million in fiscal 2019.[17]

The National Association of State Budget Officer's Fall 2018 Fiscal Survey of the States does not fully capture sales tax changes in the wake of the Supreme Court's *Wayfair* decision related to state laws requiring remote sellers to collect and remit sales and use tax. Most states enacted these types of laws after the completion of the survey by the National Association of State Budget Officers. To date, 38 of 45 states with sales tax base have enacted economic nexus laws to collect sales and use taxes from remote sellers (Table A8). Massachusetts, Ohio, Pennsylvania, and Rhode Island had adopted internet sales tax laws before the June 21, 2018, *Wayfair* ruling and have updated the laws or provided additional guidance for remote sellers since. Arizona, Arkansas, Kansas, Florida, Missouri, New Mexico, and Virginia still have not enacted laws but are likely to follow suit in the coming months.

As of February 2019, 33 states are already enforcing sales tax collections by remote sellers. In California the effective date is set for April 1, 2019; in Texas the effective date is set for October 1, 2019; and three states (Louisiana, New York, and Tennessee) still have to determine the effective date. States have set different sales and volume thresholds for the internet sales taxation. In 24 states the threshold is set to sales of more than $100,000 or over 200 transactions. In Pennsylvania and South Carolina, the threshold is set to sales of more than $100,000 regardless of the number of transactions. Threshold levels are much lower in Idaho and Oklahoma at $10,000 regardless of the number of transactions. In nine states, however, the threshold level is much higher, at $250,000 or above (see Table A8).

Overall, states enacted various legislative changes, some of which are in response to federal tax policy changes. The estimated impact of net enacted tax changes is a net increase of $2.8 billion in revenues in fiscal year 2019. Legislated tax actions in fiscal year 2018 were more substantial, with an estimated net impact of $8.8 billion. One potential explanation is that states enacted substantial legislative changes for fiscal year 2018 because of budget shortfalls that they faced in fiscal year 2017.

Conclusion

State and local government tax revenues have fluctuated substantially in the recent past, mostly driven by taxpayers anticipating and then reacting to federal tax changes. The TCJA had complex and hard-to-predict effects on state and local government budgets. The SALT deduction cap impacted the timing and flow of state tax receipts across fiscal years, creating substantial challenges for predictable tax revenue receipt. It led to windfall income tax revenues in the final quarter of 2017 and first half of 2018, helping states end fiscal year 2018 on a positive note. However, it led to less revenue in the last quarter of 2018 and potentially a much less optimistic revenue picture for fiscal year 2019.

States face large fiscal uncertainties, particularly because of the uncertainties related to the longer-term impact of federal tax policy changes and other actions on state economies and budgets. State revenue forecasters across the nation are not certain how the subsequent rounds of taxpayer responses will play out in the coming months and years, and the Internal Revenue Service is still finalizing regulations about how these changes should be interpreted. Moreover, the five-week partial shutdown of the federal government from the end of December into January is also likely to affect state fiscal 2019 revenues.

Income tax revenue collections were boosted in state fiscal year 2018 in part because of income reported for tax year 2017, stemming from both anticipation of and passage of the TCJA and the final realization date for some types of income under the Emergency Economic Stabilization Act of 2008. Growth rates early in fiscal year 2018 were higher, partly reflecting lower-than-anticipated revenues in 2017. Preliminary data indicate reversal of the trends in the fourth quarter of calendar year 2018.

Second, the TCJA's repatriation provisions have complicated implications for state corporate tax revenues. US corporate offshore earnings were estimated to be around $3.0 trillion in 2017, and for a long time, US income taxes on these earnings was deferred. The new provisions under the TCJA deemed these earnings to be repatriated and subject to US tax at preferential tax rates, and these overseas profits will be taxed at 8.0 percent for illiquid holdings or at 15.5 percent for cash and cash equivalents. This provision will raise federal revenues while reducing constraints on multinational firms using these previously untaxed foreign earnings. Repatriated income may also be subject to state income taxation, which could boost state corporate income tax revenues, but clarifying regulations are needed.

Third, the US Supreme Court's decision in *South Dakota v. Wayfair* has encouraged state governments to explore expanding their authority over online sales taxation and to require that remote sellers collect sales tax, which will subsequently increase state sales tax revenues.[18]

Fourth, after the US Supreme Court lifted the ban on sports betting on May 14, 2018, several states took rapid measures to legalize sports betting; other states are weighing similar measures. Sports betting could bring additional revenue to states in the short run.

Last but not least, international trade uncertainty has a negative impact on both state trade and overall state economic stability. This is especially true for those states with industries that could be most affected by tariffs imposed by the US and its trading partners, including agriculture and certain manufacturing industries.

Currently we are in the second longest economic expansion on record, trailing the 1990s expansion by only three months as of February 2019. However, both economic and revenue growth in the current expansion has been weaker than in previous expansions. Despite the strong growth in the overall economy, state fiscal 2019 year-to-date revenues are below the forecasts in most states. Poor state revenue performance is driven by the heightened revenue volatility as a result of the TCJA as well as recent fluctuations in the stock market. The stock market fragility and volatility throughout the most recent four months stems from several factors including the weakening global economy, the federal government shutdown, volatility in oil prices, and declining world trade. Although the near-term economic outlook is positive, state revenue forecasters would be prudent to maintain a cautious revenue outlook for the remainder of state fiscal year 2019 and fiscal year 2020.

Appendix A. Additional Tables

TABLE A1

Quarterly State Government Tax Revenue by Major Tax

	Nominal Y-O-Y Percentage Change						Real Y-O-Y Percentage Change				
2010Q1–2018Q3	PIT	CIT	Sales	MFT	Total tax	Inflation rate	PIT	CIT	Sales	MFT	Total tax
average growth	*6.5*	*2.8*	*4.0*	*3.8*	*4.8*	*1.7*	*4.8*	*1.1*	*2.3*	*2.1*	*3.1*
2018 Q3	8.0	29.4	6.5	5.8	8.2	2.3	5.5	26.5	4.1	3.4	5.8
2018 Q2	10.3	17.3	5.2	6.8	8.7	2.4	7.7	14.5	2.7	4.2	6.1
2018 Q1	14.9	(5.2)	5.0	11.0	8.8	2.0	12.7	(7.0)	3.0	8.8	6.7
2017 Q4	14.8	10.1	4.6	9.6	9.1	2.0	12.6	8.0	2.6	7.5	7.0
2017 Q3	4.3	6.2	3.0	2.2	3.8	1.9	2.4	4.2	1.0	0.3	1.9
2017 Q2	0.0	11.7	3.2	4.2	2.4	1.7	(1.7)	9.8	1.4	2.4	0.6
2017 Q1	8.9	(28.2)	2.1	0.9	3.2	2.1	6.6	(29.6)	(0.0)	(1.1)	1.1
2016 Q4	0.3	(2.6)	1.6	1.2	1.2	1.5	(1.2)	(4.1)	0.1	(0.3)	(0.3)
2016 Q3	2.4	(8.9)	2.7	1.2	1.3	1.0	1.4	(9.8)	1.7	0.2	0.3
2016 Q2	(2.8)	(9.7)	0.9	0.3	(1.8)	0.9	(3.7)	(10.6)	(0.1)	(0.7)	(2.7)
2016 Q1	1.7	(5.9)	2.1	2.9	1.5	0.9	0.8	(6.7)	1.2	2.0	0.7
2015 Q4	5.1	(9.9)	2.7	3.5	2.3	0.9	4.2	(10.7)	1.8	2.6	1.4
2015 Q3	6.5	0.2	3.7	4.8	4.1	0.9	5.5	(0.8)	2.8	3.8	3.2
2015 Q2	13.9	6.0	3.6	3.1	7.1	1.1	12.7	4.8	2.4	2.0	5.8
2015 Q1	7.0	3.3	5.8	4.3	5.5	1.2	5.7	2.1	4.6	3.1	4.3
2014 Q4	8.4	9.8	6.5	2.4	5.7	1.6	6.7	8.0	4.9	0.8	4.0
2014 Q3	4.4	7.4	6.4	0.6	4.2	2.1	2.3	5.3	4.2	(1.4)	2.1
2014 Q2	(6.6)	(0.3)	4.6	4.0	(0.9)	2.1	(8.5)	(2.4)	2.5	1.9	(3.0)
2014 Q1	(1.3)	7.9	3.0	2.8	0.5	1.8	(3.0)	6.0	1.2	1.0	(1.2)
2013 Q4	1.1	3.7	5.1	3.5	3.0	1.8	(0.7)	1.8	3.2	1.7	1.2
2013 Q3	4.9	1.8	5.5	2.9	5.3	1.7	3.1	0.2	3.7	1.2	3.5
2013 Q2	19.2	8.5	4.6	2.1	10.0	1.7	17.1	6.6	2.8	0.3	8.1
2013 Q1	18.2	9.6	3.9	(1.6)	8.9	1.9	16.0	7.6	2.0	(3.4)	6.9
2012 Q4	10.4	2.5	3.3	1.3	5.6	2.1	8.1	0.4	1.2	(0.7)	3.4
2012 Q3	4.7	8.7	2.3	2.1	3.1	1.8	2.9	6.7	0.5	0.3	1.3
2012 Q2	4.7	1.6	2.2	1.7	3.2	1.7	2.9	(0.2)	0.4	(0.1)	1.4
2012 Q1	4.1	4.3	4.6	1.3	3.8	2.1	2.0	2.1	2.5	(0.8)	1.7
2011 Q4	3.7	(6.3)	3.5	0.7	3.2	2.0	1.7	(8.1)	1.5	(1.2)	1.2
2011 Q3	9.7	2.6	3.7	(0.2)	6.1	2.4	7.2	0.2	1.3	(2.5)	3.7
2011 Q2	15.3	19.4	5.7	7.4	11.1	2.2	12.9	16.9	3.5	5.2	8.8
2011 Q1	12.1	4.4	6.3	13.3	10.0	1.9	10.1	2.5	4.4	11.3	8.0
2010 Q4	10.5	19.7	4.8	11.8	8.4	1.6	8.8	17.8	3.2	10.1	6.7
2010 Q3	4.8	(1.0)	4.5	10.7	5.4	1.4	3.4	(2.3)	3.1	9.1	3.9
2010 Q2	2.1	(19.4)	4.8	4.1	2.6	1.1	1.0	(20.3)	3.7	2.9	1.5
2010 Q1	2.4	0.8	0.6	(0.1)	2.9	0.6	1.9	0.3	(0.0)	(0.7)	2.3
2009 Q4	(5.0)	(2.0)	(4.3)	(1.5)	(3.1)	0.4	(5.3)	(2.4)	(4.7)	(1.9)	(3.5)
2009 Q3	(11.4)	(20.9)	(9.8)	2.3	(10.5)	0.3	(11.6)	(21.1)	(10.1)	2.0	(10.7)
2009 Q2	(27.4)	0.9	(8.8)	(1.5)	(16.3)	1.0	(28.1)	(0.1)	(9.7)	(2.5)	(17.1)
2009 Q1	(16.7)	(20.1)	(8.0)	(3.6)	(10.9)	1.5	(17.9)	(21.3)	(9.3)	(5.0)	(12.2)
2008 Q4	(0.6)	(20.1)	(5.5)	(5.0)	(3.4)	1.9	(2.4)	(21.5)	(7.3)	(6.8)	(5.2)
2008 Q3	1.3	(12.1)	3.2	(5.0)	2.5	2.1	(0.7)	(13.9)	1.1	(6.9)	0.4
2008 Q2	6.2	(7.1)	3.0	(3.1)	4.5	1.7	4.4	(8.7)	1.3	(4.7)	2.7
2008 Q1	3.0	(4.2)	0.3	1.1	1.8	2.0	1.0	(6.0)	(1.6)	(0.8)	(0.2)

Source: Bureau of Economic Analysis (GDP) and US Census Bureau (tax revenue), with adjustments by the author.

Notes: CIT = corporate income tax; PIT = personal income tax; MFT = motor fuel tax; Y-O-Y = year-over-year.

TABLE A2

Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2018 Q3 versus 2017 Q3

	PIT	CIT	Sales	MFT	Total
US (median)	***7.2***	***31.4***	***6.1***	***4.1***	***8.0***
US (average)	***8.0***	***29.4***	***6.5***	***5.8***	***8.2***
New England	**7.4**	**30.7**	**5.3**	**2.1**	**8.6**
Connecticut	11.4	40.3	3.1	3.5	8.5
Maine	7.9	27.4	6.6	6.3	7.5
Massachusetts	6.6	26.9	5.6	1.0	9.7
New Hampshire	2.5	22.5	N/A	0.4	9.9
Rhode Island	3.2	93.1	6.4	4.1	2.4
Vermont	7.4	69.0	3.0	(5.3)	6.2
Mideast	**4.1**	**30.8**	**5.7**	**(0.9)**	**5.5**
Delaware	4.5	189.3	N/A	8.5	14.0
Maryland	6.1	17.9	4.1	(3.8)	7.3
New Jersey	6.3	91.5	1.7	(4.0)	9.9
New York	2.4	4.1	4.8	3.1	2.5
Pennsylvania	7.2	31.4	9.7	(2.2)	7.4
Great Lakes	**9.7**	**32.2**	**4.8**	**2.1**	**6.9**
Illinois	18.0	26.0	5.6	(2.2)	9.8
Indiana	7.5	40.1	4.8	6.3	7.7
Michigan	5.4	38.7	5.4	(9.4)	5.3
Ohio	6.7	NM	2.2	12.4	3.8
Wisconsin	6.8	33.1	8.9	1.7	8.0
Plains	**8.0**	**35.1**	**4.4**	**0.9**	**9.8**
Iowa	6.4	47.0	3.7	4.8	7.3
Kansas	19.4	20.7	1.3	(2.0)	13.8
Minnesota	7.7	34.5	7.3	(2.1)	8.8
Missouri	3.5	22.3	5.5	4.1	4.4
Nebraska	10.6	15.5	6.1	3.7	7.6
North Dakota	11.6	230.8	(6.2)	0.9	37.2
South Dakota	N/A	3.9	6.6	(0.0)	4.9
Southeast	**6.3**	**16.3**	**5.8**	**7.0**	**6.3**
Alabama	9.1	5.8	8.1	77.2	9.9
Arkansas	5.3	10.6	5.1	0.7	4.7
Florida	N/A	50.8	6.6	2.4	5.7
Georgia	7.9	10.7	7.1	3.2	6.5
Kentucky	(0.7)	(1.2)	8.2	1.2	1.8
Louisiana	22.3	38.7	(5.5)	(0.1)	7.4
Mississippi	5.0	(17.0)	5.5	4.0	3.4
North Carolina	6.1	30.1	4.2	4.3	5.0
South Carolina	4.8	67.0	4.7	14.8	11.2
Tennessee	(56.4)	(5.5)	6.8	9.2	9.7
Virginia	2.7	(10.0)	7.0	10.2	3.3
West Virginia	16.0	27.9	15.1	23.0	17.3
Southwest	**11.2**	**104.3**	**12.3**	**4.9**	**15.5**
Arizona	9.7	81.6	7.1	4.1	15.3
New Mexico	21.2	1,107.8	14.9	4.1	21.6
Oklahoma	9.1	56.2	10.7	10.2	13.8
Texas	N/A	N/A	13.4	4.4	15.2
Rocky Mountain	**8.1**	**75.3**	**7.0**	**6.9**	**9.4**
Colorado	11.9	107.1	6.1	4.7	10.8
Idaho	(14.5)	44.4	7.2	11.3	2.4

Montana	7.2	(0.9)	N/A	7.2	10.7
Utah	11.6	93.9	6.7	6.6	11.1
Wyoming	N/A	N/A	11.8	7.3	8.0
Far West	**11.2**	**25.6**	**5.9**	**15.5**	**9.5**
Alaska	N/A	84.1	N/A	11.7	114.3
California	11.4	20.9	6.0	23.3	8.2
Hawaii	7.4	(33.0)	(2.3)	(1.1)	1.7
Nevada	N/A	N/A	3.5	0.4	1.3
Oregon	10.4	69.5	N/A	4.1	11.8
Washington	N/A	N/A	8.2	(0.7)	15.3

Source: US Census Bureau (tax revenue), with adjustments by the author.

Notes: CIT = corporate income tax; PIT = personal income tax; MFT = motor fuel tax; N/A = not applicable; NM = not meaningful.

TABLE A3

State Personal Income Tax Withholding

Year-over-year nominal percentage change

	Tax Year 2017				Tax Year 2018			
	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
US (median)	***4.7***	***5.0***	***4.5***	***5.4***	***5.5***	***5.8***	***6.7***	***6.5***
US (average)	***6.1***	***6.3***	***5.2***	***7.2***	***8.9***	***7.5***	***6.2***	***6.9***
New England	**2.1**	**5.0**	**4.5**	**5.7**	**5.8**	**6.6**	**3.9**	**6.6**
Connecticut	1.5	1.7	2.2	3.4	6.2	4.5	8.8	9.4
Maine	3.5	3.9	3.3	5.8	5.2	8.7	4.9	8.5
Massachusetts	2.8	6.9	5.8	7.1	5.2	7.6	2.1	5.1
Rhode Island	3.6	3.0	4.2	4.4	3.9	6.0	(0.3)	5.4
Vermont	(12.0)	6.5	3.5	3.4	21.4	4.2	5.3	9.4
Mideast	**5.8**	**7.0**	**3.7**	**6.2**	**8.1**	**4.8**	**4.1**	**3.3**
Delaware	9.2	6.2	4.7	4.8	5.9	2.3	6.3	4.8
Maryland	4.7	10.0	(2.9)	4.4	4.6	5.5	3.0	4.9
New Jersey	10.0	13.0	7.3	5.2	7.0	5.0	3.0	3.9
New York	5.2	4.9	4.6	7.8	10.3	4.6	5.1	2.2
Pennsylvania	4.4	3.7	4.4	4.4	4.3	4.5	3.0	4.4
Great Lakes	**5.1**	**6.0**	**8.8**	**12.1**	**14.5**	**13.1**	**8.4**	**4.4**
Illinois	8.6	7.8	26.3	29.3	36.6	37.3	13.8	6.1
Indiana	5.4	5.2	5.6	7.0	11.1	9.6	7.0	2.9
Michigan	3.9	4.7	(3.0)	3.8	2.1	1.1	4.6	2.9
Ohio	3.6	3.3	3.1	5.0	4.9	5.1	5.5	5.9
Wisconsin	1.9	7.8	4.6	6.0	4.6	3.5	6.5	2.4
Plains	**4.8**	**5.3**	**5.3**	**5.8**	**6.4**	**6.8**	**4.8**	**7.7**
Iowa	1.1	4.4	5.4	3.4	4.8	11.0	6.6	10.8
Kansas	3.8	3.8	13.4	20.0	19.2	23.6	14.4	7.9
Minnesota	7.1	6.9	3.7	4.8	6.0	4.4	6.7	6.5
Missouri	4.7	4.7	5.5	3.6	3.2	1.3	(5.4)	ND
Nebraska	5.9	3.6	1.7	5.5	5.5	5.9	9.6	6.8
North Dakota	(9.9)	(1.2)	5.9	0.7	0.8	13.3	12.4	12.2
Southeast	**5.0**	**4.2**	**2.1**	**3.0**	**5.1**	**6.1**	**6.3**	**7.4**
Alabama	3.1	4.3	5.3	4.1	5.5	8.6	11.3	7.6
Arkansas	4.6	8.5	5.9	4.7	3.8	4.1	5.7	5.4
Georgia	7.3	5.5	2.9	5.6	4.7	2.8	7.4	4.7
Kentucky	2.3	3.5	3.9	3.3	2.5	3.5	(2.5)	(0.8)
Louisiana	8.8	2.9	(4.2)	11.7	(0.9)	15.5	21.7	21.5
Mississippi	1.6	2.6	3.1	3.4	2.2	3.8	7.0	1.7
North Carolina	2.3	0.2	(1.8)	(3.1)	7.3	5.8	7.5	10.4
South Carolina	5.1	7.6	1.7	5.3	5.8	2.5	5.7	6.5
Virginia	6.7	5.0	4.0	2.0	6.5	9.0	1.1	7.7
West Virginia	1.9	5.1	4.5	5.4	4.5	9.1	15.9	9.9
Southwest	**6.0**	**4.0**	**4.6**	**6.9**	**8.0**	**8.3**	**7.9**	**7.2**
Arizona	7.9	4.8	5.4	5.7	7.3	5.0	8.8	6.4
New Mexico	6.6	(7.0)	0.9	10.7	9.9	28.9	4.8	ND
Oklahoma	3.1	7.5	5.2	6.9	8.2	5.3	8.0	8.3
Rocky Mountain	**7.7**	**8.2**	**6.7**	**8.8**	**6.2**	**10.0**	**6.7**	**5.6**
Colorado	7.4	8.4	6.8	7.7	8.5	6.7	9.6	10.0
Idaho	9.3	8.0	8.6	15.1	8.8	7.7	(16.2)	(20.4)
Montana	6.8	5.5	3.9	10.0	5.0	5.9	6.8	10.6
Utah	7.7	8.6	6.6	7.7	0.8	18.4	12.4	9.2
Far West	**9.4**	**8.6**	**6.9**	**8.9**	**11.4**	**7.4**	**7.7**	**12.2**
California	9.6	8.9	7.4	9.0	12.2	6.8	7.4	12.3
Hawaii	12.0	1.2	(0.9)	9.8	(10.9)	38.7	10.3	ND
Oregon	7.3	8.2	5.4	7.7	9.5	4.6	9.1	11.0

Source: Individual state data, analysis by the author.

Notes: Nine states—Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming—have no broad-based personal income tax and are not shown in this table. ND = no data.

TABLE A4

State Personal Income Tax Estimated Payments/Declarations

Year-over-year nominal percentage change

State	Payments for Tax Year 2017: April 2017, 1st payment	June 2017, 2nd payment	September 2017, 3rd payment	December 2017-January 2018, 4th payment	Payments for Tax Year 2018: April 2018, 1st payment	June 2018, 2nd payment	September 2018, 3rd payment	December 2018-January 2019, 4th payment
Median	***(1.7)***	***1.8***	***0.3***	***39.1***	***12.6***	***9.3***	***9.6***	***(41.1)***
Average	***(4.3)***	***1.6***	***1.4***	***46.7***	***9.3***	***17.2***	***18.2***	***(39.6)***
Alabama	(23.3)	0.8	(4.3)	46.2	42.5	7.2	23.9	(42.5)
Arizona	11.1	4.2	4.8	62.6	8.3	11.8	14.9	(58.3)
Arkansas	(1.6)	(2.8)	(3.4)	25.0	3.9	3.3	1.9	(36.8)
California	(0.8)	2.9	8.7	31.2	13.2	20.9	33.5	(22.6)
Colorado	12.2	6.5	10.1	45.0	(7.1)	13.3	11.3	(47.5)
Connecticut	(7.2)	(6.1)	(5.6)	159.6	14.0	36.8	8.7	(71.5)
Delaware	(3.3)	10.1	2.6	46.1	12.2	(4.2)	(1.8)	(32.3)
Georgia	2.1	8.2	3.8	69.0	13.5	6.9	6.1	(58.1)
Hawaii	37.3	49.4	45.3	12.2	71.8	(19.5)	6.5	ND
Illinois	19.3	8.1	16.5	82.2	46.6	41.7	29.3	(42.8)
Indiana	(18.5)	1.8	(3.1)	37.4	41.3	5.6	7.8	(33.6)
Iowa	76.9	3.2	10.0	62.0	(0.0)	(6.2)	(4.6)	(48.1)
Kansas	(2.3)	10.8	50.5	335.9	186.7	162.0	80.6	(54.0)
Kentucky	(0.6)	(4.2)	(4.0)	30.2	8.0	10.3	4.6	(43.9)
Louisiana	18.8	8.1	9.5	61.4	34.5	7.0	5.7	(39.8)
Maine	0.0	18.4	2.8	15.6	6.8	(11.7)	2.3	(18.0)
Maryland	11.2	1.6	(8.5)	32.9	36.5	5.5	11.2	(32.7)
Massachusetts	(30.5)	(7.7)	(13.7)	68.3	17.0	14.9	16.5	(49.8)
Michigan	1.6	11.8	8.1	54.0	23.2	9.9	12.3	(43.3)
Minnesota	(1.8)	(4.5)	(2.2)	45.0	(0.3)	9.4	5.8	(52.2)
Mississippi	56.2	(0.1)	(7.4)	18.1	(42.2)	(7.0)	2.6	(28.0)
Missouri	2.1	(2.5)	(13.4)	42.4	(5.5)	2.5	13.8	ND
Montana	4.7	3.5	0.4	48.3	7.8	16.2	2.1	(36.1)
Nebraska	(5.4)	(5.5)	(3.7)	35.9	6.1	7.9	6.2	(35.6)
New Jersey	(9.7)	(3.2)	(1.2)	17.2	7.5	20.2	23.3	(32.5)
New York	(12.9)	(1.4)	(1.7)	68.7	4.5	15.9	15.2	(54.5)
North Carolina	(8.7)	1.8	2.8	31.1	30.7	1.0	2.7	(44.4)
North Dakota	(10.2)	(17.2)	(9.6)	49.8	12.5	11.3	7.4	(43.5)
Ohio	(1.6)	(12.0)	0.3	58.4	39.5	36.7	18.7	(43.3)
Oklahoma	(14.9)	3.9	0.8	36.1	14.5	9.2	9.9	(29.4)
Oregon	29.8	9.7	3.6	40.8	6.6	7.9	13.2	(46.9)
Pennsylvania	(4.9)	1.3	0.2	33.4	16.4	9.7	14.8	(33.2)
Rhode Island	(11.0)	8.6	(3.8)	31.8	14.5	(1.6)	12.8	(37.8)
South Carolina	7.3	3.9	(5.1)	31.3	(65.3)	1.8	5.3	(35.4)
Vermont	(6.4)	(3.1)	(8.6)	23.6	12.7	14.8	14.9	(25.5)
Virginia	(26.5)	1.2	1.2	36.9	28.3	16.3	8.8	(37.0)
West Virginia	(16.0)	4.2	3.6	27.4	9.7	4.3	10.0	(22.7)
Wisconsin	(2.9)	(1.3)	(0.9)	17.8	4.8	12.5	9.2	(42.8)

Source: Individual state data, analysis by the author.

Notes: Nine states—Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming—have no broad-based personal income tax and are not shown in this table. ND = no data.

TABLE A5

State Personal Income Tax Final Payments

Year-over-year nominal percentage change

	Tax Year 2017				Tax Year 2018			
State	**2017 Q1**	**2017 Q2**	**2017 Q3**	**2017 Q4**	**2018 Q1**	**2018 Q2**	**2018 Q3**	**2018 Q4**
Median	***(1.8)***	***(3.7)***	***(3.9)***	***6.8***	***11.2***	***5.5***	***7.9***	***13.2***
Average	***(0.7)***	***(5.2)***	***1.4***	***15.1***	***15.2***	***8.4***	***12.7***	***(2.4)***
Alabama	0.6	0.0	(4.9)	6.4	13.3	2.9	20.7	3.1
Arizona	1.3	(3.2)	2.8	(4.2)	8.3	5.0	12.7	27.8
Arkansas	(14.8)	(14.8)	(13.2)	(7.1)	11.3	(1.8)	3.9	8.3
California	(1.8)	(10.1)	(1.9)	(0.6)	11.2	11.0	15.7	13.9
Colorado	(13.3)	4.7	9.3	12.7	46.2	9.9	12.0	7.1
Connecticut	11.7	(12.1)	(1.3)	54.5	15.2	9.7	2.6	(37.8)
Delaware	(3.2)	(3.5)	7.5	5.1	7.7	8.1	(11.6)	16.8
Georgia	(6.7)	0.1	25.1	(3.3)	11.8	(0.2)	32.2	15.8
Hawaii	13.8	(11.0)	(7.4)	6.5	14.6	21.1	25.0	ND
Idaho	14.2	0.8	8.4	10.1	52.1	(4.2)	7.7	(45.5)
Illinois	(5.8)	(1.8)	(13.3)	13.1	29.8	53.0	53.7	25.5
Indiana	(4.9)	(1.4)	40.1	(13.6)	0.2	3.4	(1.4)	18.0
Iowa	25.3	(4.3)	(15.9)	(7.5)	2.1	(8.6)	16.3	30.3
Kansas	91.3	(8.2)	30.0	(13.2)	(17.3)	99.1	18.7	63.7
Kentucky	2.8	(0.7)	(9.7)	(3.6)	4.6	4.6	1.2	14.3
Louisiana	30.7	3.5	(12.7)	26.5	(1.3)	3.1	1.5	6.8
Maine	4.3	0.4	(5.1)	2.7	(5.9)	0.9	4.1	5.9
Maryland	(11.5)	2.7	1.2	8.3	12.3	1.6	7.5	6.2
Massachusetts	(13.0)	(4.8)	0.6	31.4	33.1	8.2	11.5	15.5
Michigan	(7.3)	(3.3)	(7.8)	(4.1)	16.3	9.9	21.2	19.1
Minnesota	(2.7)	(9.5)	1.8	7.7	17.3	4.1	7.1	(1.9)
Missouri	3.4	(9.7)	(3.9)	4.9	1.8	4.3	7.2	ND
Montana	(19.0)	(9.1)	(9.0)	11.8	(2.2)	10.9	0.8	2.8
Nebraska	(3.5)	(16.6)	(13.8)	16.9	(2.3)	5.5	17.9	(4.9)
New Jersey	2.8	2.0	48.8	97.7	32.0	2.7	(21.7)	(42.8)
New Mexico	(4.1)	4.9	9.5	41.6	4.1	14.4	54.0	ND
New York	(9.1)	(7.6)	(10.8)	(2.0)	25.2	4.2	20.5	19.6
North Carolina	12.7	(11.1)	(4.7)	29.6	8.3	0.9	1.7	(10.2)
North Dakota	(17.1)	(7.1)	0.0	(14.9)	4.7	15.6	(9.1)	5.3
Ohio	8.5	0.6	(27.4)	(6.7)	0.0	20.5	51.5	45.6
Oklahoma	4.8	(2.5)	(9.0)	(3.5)	5.7	11.1	13.5	16.6
Pennsylvania	0.2	(0.2)	(0.0)	17.8	14.6	(1.0)	50.2	19.3
Rhode Island	37.5	(7.3)	(7.8)	(5.5)	50.1	14.7	6.4	20.4
South Carolina	(19.6)	(4.4)	31.1	30.4	15.7	18.4	7.9	14.1
Utah	(4.9)	6.1	16.1	72.3	9.6	(7.1)	5.6	(71.6)
Vermont	(13.5)	(3.7)	13.0	10.6	15.3	31.5	(2.3)	13.2
Virginia	(36.1)	(6.9)	(19.8)	NM	110.2	6.6	77.6	NM
West Virginia	14.9	(12.0)	(9.2)	16.5	(6.4)	0.5	20.7	(1.0)
Wisconsin	3.2	(8.7)	(4.5)	7.1	(16.1)	6.9	2.0	(11.1)

Source: Individual state data, analysis by the author.

Notes: Nine states—Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming—have no broad-based personal income tax and are not shown in this table. NM = not meaningful; ND = no data.

TABLE A6

Quarterly State Government Tax Revenue for Nonmajor Tax Revenue Sources

Year-over-year inflation-adjusted percentage change; four-quarter moving averages

2018 Q3 collections ($ millions)	Property tax	Tobacco product sales tax	Alcoholic beverage sales tax	Motor vehicle & operators' license taxes	Other taxes	Total nonmajor taxes
	$4,689	$4,894	$1,652	$7,740	$32,524	$51,499
2010Q1–2018Q3 average growth	***1.8***	***0.4***	***1.2***	***1.9***	***2.2***	***1.8***
2008 Q3	8.0	1.4	(0.5)	5.8	4.7	4.7
2008 Q2	3.6	5.3	0.9	5.1	3.7	3.9
2008 Q1	1.0	4.7	1.1	1.4	2.9	2.6
2017 Q4	(0.6)	6.1	2.4	(0.1)	2.1	1.9
2017 Q3	(1.3)	3.5	2.9	3.7	0.8	1.3
2017 Q2	0.4	1.7	2.2	1.4	(0.0)	0.4
2017 Q1	2.9	1.1	1.0	2.3	(1.7)	(0.4)
2016 Q4	2.3	1.3	0.4	2.6	(1.6)	(0.4)
2016 Q3	4.8	1.1	0.7	1.0	(2.5)	(1.0)
2016 Q2	4.1	0.6	1.6	2.5	(1.8)	(0.5)
2016 Q1	4.9	1.7	2.6	2.2	(1.4)	(0.0)
2015 Q4	8.6	0.0	1.5	2.7	(1.2)	0.3
2015 Q3	6.1	(0.9)	1.2	1.5	(0.5)	0.3
2015 Q2	5.1	(2.2)	1.5	1.1	(0.8)	(0.2)
2015 Q1	4.2	(4.0)	(0.3)	1.1	(0.4)	(0.2)
2014 Q4	0.7	(4.7)	1.4	(0.7)	(1.9)	(1.7)
2014 Q3	3.1	(3.7)	1.3	0.6	(1.6)	(1.1)
2014 Q2	5.2	0.5	(0.1)	1.1	(0.4)	0.3
2014 Q1	5.1	1.8	1.3	0.9	0.4	1.0
2013 Q4	4.8	3.7	(0.7)	0.3	3.2	2.8
2013 Q3	3.2	3.6	(2.4)	(0.5)	3.6	2.8
2013 Q2	(0.3)	(1.0)	(1.9)	(0.9)	2.7	1.5
2013 Q1	(3.2)	(1.6)	(0.1)	0.2	2.5	1.3
2012 Q4	(4.8)	(2.6)	2.2	2.0	1.2	0.6
2012 Q3	(9.2)	(3.4)	3.4	3.1	2.1	0.9
2012 Q2	(10.6)	(2.3)	3.0	3.1	4.1	2.1
2012 Q1	(10.8)	(2.5)	0.6	2.1	7.6	4.0
2011 Q4	(11.0)	(1.9)	(0.5)	1.8	11.8	6.5
2011 Q3	(7.5)	(0.9)	0.5	0.4	12.8	7.3
2011 Q2	(3.8)	0.8	1.6	1.6	12.2	7.6
2011 Q1	2.5	2.8	3.2	3.4	10.1	7.4
2010 Q4	8.2	3.2	3.3	4.1	7.9	6.7
2010 Q3	13.4	2.3	3.1	5.7	5.0	5.5
2010 Q2	13.4	0.6	2.1	3.8	(0.9)	1.2
2010 Q1	9.9	(1.2)	0.7	1.5	(8.5)	(4.7)
2009 Q4	6.1	(1.5)	0.6	0.2	(12.6)	(7.9)
2009 Q3	(0.5)	0.4	0.1	(1.1)	(12.6)	(8.4)
2009 Q2	(2.0)	1.4	(0.0)	(0.9)	(6.3)	(4.2)
2009 Q1	(3.6)	2.7	0.5	(0.3)	3.0	1.9
2008 Q4	(2.8)	3.2	0.5	(1.1)	6.3	4.0
2008 Q3	1.8	3.5	(0.1)	(0.5)	8.1	5.6
2008 Q2	3.4	5.9	0.5	(0.4)	5.6	4.4
2008 Q1	4.0	6.2	0.6	(1.0)	2.4	2.3

Source: US Census Bureau (tax revenue), with adjustments by the author.

TABLE A7

Preliminary Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2018 Q4 versus 2017 Q4

	PIT	CIT	Sales	Total
US (median)	***(0.9)***	***26.9***	***5.9***	***3.1***
US (average)	***(9.4)***	***11.9***	***4.1***	***(1.9)***
New England	**(12.0)**	**27.4**	**8.6**	**(0.9)**
Connecticut	(20.1)	9.5	14.3	(1.7)
Maine	(0.9)	166.0	5.5	5.0
Massachusetts	(9.7)	10.3	6.1	(3.5)
New Hampshire	NM	44.6	N/A	9.1
Rhode Island	(6.0)	104.3	5.8	7.7
Vermont	(0.9)	336.3	6.2	7.2
Mideast	**(17.1)**	**17.5**	**3.6**	**(6.4)**
Delaware	(0.5)	19.5	N/A	9.4
Maryland	3.2	11.7	3.8	2.6
New Jersey	(15.1)	34.8	0.9	(3.3)
New York	(25.2)	2.1	2.5	(14.7)
Pennsylvania	(2.3)	34.3	7.3	3.7
Great Lakes	**0.6**	**41.9**	**6.7**	**4.5**
Illinois	4.7	12.2	11.3	7.3
Indiana	0.1	96.0	5.8	5.3
Michigan	(4.2)	NM	5.0	5.1
Ohio	4.0	NM	7.2	4.9
Wisconsin	(5.2)	2.7	2.4	(1.4)
Plains	**(3.5)**	**17.3**	**3.7**	**(0.5)**
Iowa	6.4	26.0	(0.2)	4.9
Kansas	(0.5)	56.9	0.2	1.7
Minnesota	(7.8)	10.9	5.8	(2.5)
Missouri	(4.6)	(5.5)	5.9	(1.0)
Nebraska	(2.4)	38.2	(4.8)	(0.9)
North Dakota	5.6	48.5	27.1	(6.9)
South Dakota	N/A	N/A	3.6	3.8
Southeast	**1.3**	**16.1**	**4.8**	**4.2**
Alabama	4.0	28.6	5.1	3.2
Arkansas	2.3	29.4	3.4	3.9
Florida	N/A	34.1	6.2	8.6
Georgia	0.5	29.7	6.8	3.2
Kentucky	(4.0)	(6.4)	9.0	3.1
Louisiana	18.4	454.2	(14.5)	10.2
Mississippi	(0.6)	50.8	4.1	3.9
North Carolina	2.7	(83.5)	6.1	3.7
South Carolina	2.2	(89.2)	2.9	1.8
Tennessee	NM	(10.1)	6.0	2.2
Virginia	(1.6)	22.1	3.0	0.5
West Virginia	2.4	58.9	10.4	9.4
Southwest	**(3.7)**	**90.7**	**6.7**	**7.5**
Arizona	(7.7)	90.7	7.1	2.2
New Mexico	ND	ND	ND	ND
Oklahoma	5.2	NM	9.8	19.1
Texas	N/A	N/A	6.4	7.2
Rocky Mountain	**(10.5)**	**5.9**	**6.8**	**(4.0)**
Colorado	0.5	(7.1)	6.4	1.8
Idaho	(28.7)	14.6	7.7	(7.7)
Montana	2.4	(12.1)	N/A	1.6
Utah	(24.4)	39.0	4.6	(11.8)

Wyoming	N/A	N/A	12.8	ND
Far West	**(15.7)**	**(10.5)**	**(2.4)**	**(11.9)**
Alaska	N/A	9.8	N/A	22.4
California	(17.0)	(13.0)	(6.1)	(14.5)
Hawaii	ND	ND	ND	ND
Nevada	N/A	N/A	ND	ND
Oregon	(2.1)	27.9	N/A	(0.1)
Washington	N/A	N/A	11.0	(1.3)

Source: Individual state data, analysis by the author.

Notes: CIT = corporate income tax; PIT = personal income tax; N/A = not applicable; ND = no data; NM = not meaningful.

TABLE A8

States with Economic Nexus Laws

Threshold volume and effective dates

State	Threshold volume	Effective date
Alabama	>$250,000	10/1/2018
California	>$100,000 or over 200 transactions	4/1/2019
Colorado	>$100,000 or over 200 transactions	12/1/2018
Connecticut	>$250,000 or over 200 transactions	12/1/2018
Georgia	>$250,000 or over 200 transactions	1/1/2019
Hawaii	>$100,000 or over 200 transactions	7/1/2018
Idaho	>$10,000	7/1/2018
Illinois	>$100,000 or over 200 transactions	10/1/2018
Indiana	>$100,000 or over 200 transactions	10/1/2018
Iowa	>$100,000 or over 200 transactions	1/1/2019
Kentucky	>$100,000 or over 200 transactions	10/1/2018
Louisiana	>$100,000 or over 200 transactions	TBD
Maine	>$100,000 or over 200 transactions	7/1/2018
Maryland	>$100,000 or over 200 transactions	10/1/2018
Massachusetts	>$500,000 or over 100 transactions	10/1/2017
Michigan	>$100,000 or over 200 transactions	9/30/2018
Minnesota	>$100,000 or over 100 transactions	10/1/2018
Mississippi	>$250,000	9/1/2018
Nebraska	>$100,000 or over 200 transactions	1/1/2019
Nevada	>$100,000 or over 200 transactions	10/1/2018
New Jersey	>$100,000 or over 200 transactions	11/1/2018
New York	>$300,000 or over 100 transactions	6/1/2019
North Carolina	>$100,000 or over 200 transactions	11/1/2018
North Dakota	>$100,000 or over 200 transactions	10/1/2018
Ohio	>$500,000	1/1/2018
Oklahoma	>$10,000	7/1/2018
Pennsylvania	>$100,000	7/1/2019
Rhode Island	>$100,000 or over 200 transactions	8/17/2017
South Carolina	>$100,000	11/1/2018
South Dakota	>$100,000 or over 200 transactions	11/1/2018
Tennessee	>$500,000	TBD
Texas	>$500,000	10/1/2019
Utah	>$100,000 or over 200 transactions	1/1/2019
Vermont	>$100,000 or over 200 transactions	7/1/2018
Washington	>$100,000 or over 200 transactions	10/1/2018
West Virginia	>$100,000 or over 200 transactions	1/1/2019
Wisconsin	>$100,000 or over 200 transactions	10/1/2018
Wyoming	>$100,000 or over 200 transactions	2/1/2019

Source: Individual state information, compiled by the author.

Notes: Alaska, Delaware, Montana, New Hampshire, and Oregon do not have sales tax and are excluded from the table. Arizona, Arkansas, Kansas, Florida, Missouri, New Mexico, and Virginia did not yet enact economic nexus laws and are also excluded from the table. States are hyperlinked to respective economic nexus laws or guidelines.

Notes

[1] State fiscal year 2018 ended in June 2018 in all states except Alabama, Michigan, New York, and Texas.

[2] The author made several adjustments for the July-September 2018 quarter and to several previous quarters of tax revenue data reported by the US Census Bureau based on the information and data received directly from the states and from the Census Bureau.

[3] In this report the author uses Bureau of Economic Analysis regions as the basis of analysis.

[4] See Utah State Legislature, "A Sharp Drop in Gross Paids Headlines the Revenue Picture through 6 Months of 2019," January 28, 2019, https://budget.utah.gov/2019/01/28/a-sharp-drop-in-gross-paids-headlines-the-revenue-picture-through-6-months-of-2019.

[5] See New York State Governor's Office, "Governor Cuomo and Comptroller DiNapoli Deliver Update on State Revenues and the Impact of SALT," press release, February 4, 2019, https://www.governor.ny.gov/news/governor-cuomo-and-comptroller-dinapoli-deliver-update-state-revenues-and-impact-salt.

[6] See New York State Assembly, "Fiscal Reform and the New York State Assembly," June 1995, https://www.assembly.state.ny.us/Reports/Admin/199506/.

[7] See New York City Office of the Mayor, "Mayor de Blasio Delivers Testimony At The Joint Fiscal Committees Of The New York State Legislature Budget Hearing," press release, February 11, 2019, https://www1.nyc.gov/office-of-the-mayor/news/087-19/transcript-mayor-de-blasio-delivers-testimony-the-joint-fiscal-committees-the-new-york-state.

[8] See *South Dakota v. Wayfair*, Brief of *Amici Curiae* Law Professors and Economists in Support of Petitioner, No. 17-494, March 5, 2018, https://www.supremecourt.gov/DocketPDF/17/17-494/37603/20180305141434827_Brief%20of%20Amici%20Curiae%20Law%20Professors%20and%20Economists%20iso%20Petitioner.PDF.

[9] For more information, see Bureau of Labor Statistics, "How the Government Measures Unemployment," last modified October 8, 2015, https://www.bls.gov/cps/cps_htgm.htm#unemployed.

[10] For more discussion of the relationship between property tax and housing prices, see Dadayan (2012).

[11] See Federal Reserve Bank of St. Louis, "30-Year Fixed Rate Mortgage Average in the United States," https://fred.stlouisfed.org/series/MORTGAGE30US.

[12] Urban Institute analysis of data from NASBO (2018), table A-1.

[13] See *Gross Income Tax* (New Jersey Department of the Treasury), last updated February 28, 2019, https://www.state.nj.us/treasury/taxation/git2018TaxRates.shtml.

[14] See Missouri Office of the Governor, "Governor Mike Parson Signs Income Tax Cut for Missourians," press release, July 12, 2018, https://governor.mo.gov/press-releases/archive/governor-mike-parson-signs-income-tax-cut-missourians.

[15] See Oklahoma Tax Commission, "Gross Production and Petroleum Excise Tax," accessed March 5, 2019,

https://www.ok.gov/tax/documents/Summary%20of%202017%20Second%20Special%20Session%20GP%20Tax%20Legislation.pdf.

[16] See Washington State Department of Revenue, "State School Levy Property Tax Tip Sheet," FS0026, May 2018, https://dor.wa.gov/sites/default/files/legacy/Docs/Pubs/Prop_Tax/SchoolLevy.pdf.

[17] See Louisiana Department of Revenues, "New State Sales Tax Rate Goes into Effect July 1," press release, June 24, 2018, https://revenue.louisiana.gov/NewsAndPublications/NewsReleaseDetails/11467.

[18] For more information, see Auxier and Rueben (2018) and Howard Gleckman, "Don't Look Now, but States Already Are Requiring Online Sellers to Collect Sales Taxes," *Tax Vox* (blog), Urban-Brookings Tax Policy Center, September 4, 2018, https://www.taxpolicycenter.org/taxvox/dont-look-now-states-already-are-requiring-online-sellers-collect-sales-taxes.

References

Auxier, Richard, and Kim Rueben. 2018. "The Evolution of Online Sales Taxes and What's Next for States." *Tax Policy Center Brief* . Washington, DC: Urban-Brookings Tax Policy Center. https://www.taxpolicycenter.org/publications/evolution-online-sales-taxes-and-whats-next-states.

Connecticut Department of Revenue Services. 2018. *Guidance on 2018 Estimated Payments for the Newly Enacted Pass-Through Entity Tax*. Hartford, CT. https://portal.ct.gov/-/media/DRS/Publications/pubssn/2018/SN20184pdf.pdf.

Dadayan, Lucy. 2018. "State Tax Revenues Soar in the First Quarter of 2018." *State Tax and Economic Review, 2018 Q1*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99267/state_tax_revenues_soar_in_the_first_quarter_of_2018_1.pdf.

Dadayan, Lucy. 2012. "The Impact of the Great Recession on Local Property Taxes." *Rockefeller Institute Brief*. Albany, NY: Nelson A. Rockefeller Institute of Government. https://rockinst.org/wp-content/uploads/2018/02/2012-07-16-Recession_Local_-Property_Tax.pdf.

Dadayan, Lucy, and Donald J. Boyd. 2016. "Double, Double, Oil and Trouble." *By the Numbers Brief*. Albany, NY: Nelson A. Rockefeller Institute of Government. http://rockinst.org/wp-content/uploads/2018/02/2016-02-By_Numbers_Brief_No5.pdf.

Illinois Department of Revenue. 2017. "Summary of Illinois Income Tax and Sales Tax Changes from P.A. 100-0022." *Informational Bulletin FY 2018-01*. Springfield, IL: Illinois Department of Revenue. http://www.revenue.state.il.us/Publications/Bulletins/2018/FY-2018-01.pdf.

Iowa Legislative Services Agency. 2018. "Income and Sales Tax Modification." *Fiscal Note*. Des Moines, IA. https://www.legis.iowa.gov/docs/publications/FN/963408.pdf.

Kansas Department of Revenue. 2017. "Income Tax Rates and Withholding Rates Changed for Individuals, Estates, and Trusts." *Notice 17-02*. Topeka, KS: Kansas Department of Revenue. https://www.ksrevenue.org/taxnotices/notice17-02.pdf.

Kentucky Department of Revenue. 2018. *Kentucky Sales Tax Facts*. Frankfort, KY. https://revenue.ky.gov/News/Publications/Sales%20Tax%20Newsletters/Sales%20Tax%20Facts%202018%20-%20May.pdf.

NASBO. 2018. *The Fiscal Survey of States: Fall 2018*. Washington, DC: National Association of State Budget Officers. http://www.nasbo.org/reports-data/fiscal-survey-of-states.

New Jersey Department of the Treasury. 2018. *General Instructions For Corporation Business Tax Return and Related Forms*. Trenton, NJ. https://www.state.nj.us/treasury/taxation/pdf/current/cbt/cbt100ins.pdf.

New York Department of Taxation and Finance. 2018. *Tax Treatment of IRC § 965 Repatriation Amounts for Tax Year 2017 for New York C Corporations, Insurance Corporations, and Exempt Organizations*. Albany, NY. https://www.tax.ny.gov/pdf/notices/n18-7.pdf.

US GAO. 2017. "Sales Taxes: States Could Gain Revenue from Expanded Authority, but Businesses Are Likely to Experience Compliance Costs." *GAO-18-114*. Washington, DC: US Government Accountability Office. https://www.gao.gov/assets/690/688437.pdf.

About the Author

Lucy Dadayan is a senior research associate with the Urban-Brookings Tax Policy Center at the Urban Institute.

Before joining Urban, Dadayan was a senior research scientist with the Rockefeller Institute of Government, where she wrote extensively on state and local government fiscal issues, including state government tax revenue trends, personal income taxes, tax revenue forecasts, property taxes, gambling tax revenue, government employment, spending on social services, education spending, and state spending on children's programs. She has authored or coauthored four chapters for the *Book of the States* (2015, 2016, and 2017 editions). Dadayan's work is frequently cited in major news media, including the *Wall Street Journal*, the *New York Times*, the *Bond Buyer*, Bloomberg, the *Washington Post*, *Forbes*, the *Boston Globe*, the *Financial Times*, and the *Los Angeles Times*. Dadayan is often invited to present at conferences and provide testimonies for state government agencies.

Dadayan has been a reviewer for the peer-reviewed journals *Public Budgeting and Finance*, *State and Local Government Review*, and the *Journal of Public Administration and Policy Research*. In addition, she is a reviewer for the Hawaii International Conference on System Sciences, one of the longest-standing continuously running scientific conferences.

Dadayan holds an MA in public policy and affairs and a PhD in informatics, both from the State University of New York at Albany.

Statement of Independence

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.

URBAN INSTITUTE · ELEVATE · THE · DEBATE

2100 M Street NW
Washington, DC 20037

www.urban.org