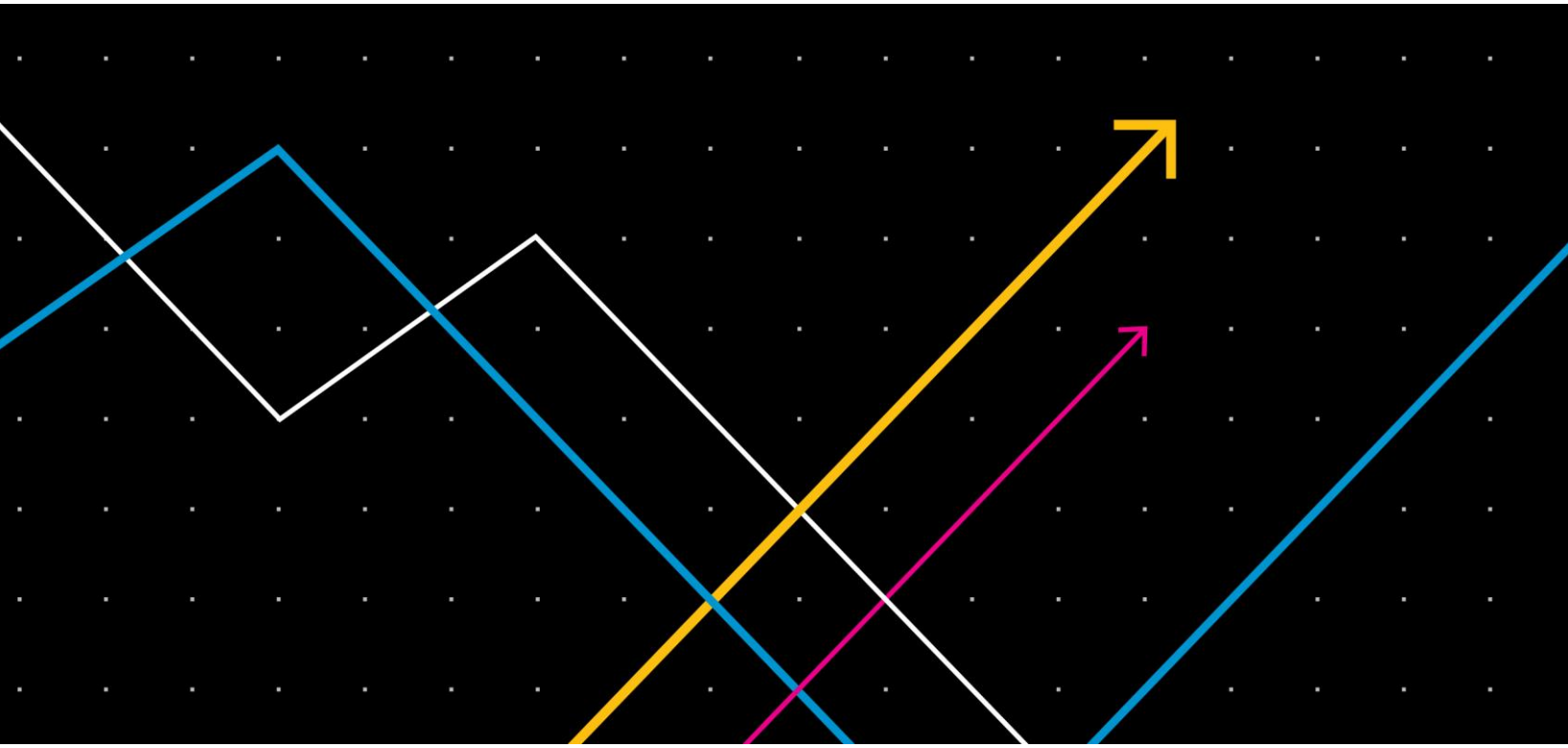

RESEARCH REPORT

State Tax Revenues Were Strong Through 2019 but Will Likely Plummet in 2020 Because of the COVID-19 Pandemic

State Tax and Economic Review, 2019 Quarter 4

Lucy Dadayan

May 26, 2020

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Contents

Acknowledgments iv

Get Real-Time Data v

Executive Summary vi

Trends in State and Local Tax Revenues 1

- Trends in State Tax Revenue in 2019 Quarter 4 6
- Personal Income Taxes 7
  - Withholding 8
  - Estimated Payments 10
  - Final Payments 14
  - Refunds 15
  - Actual versus Forecasted Income Tax Revenues 16
- Corporate Income Taxes 18
- General Sales Taxes 20
- Motor Fuel Taxes 22
- Other Taxes 23
- Overview of Tax Revenues in Fiscal Year-To-Date 2020 23
- Preliminary Review of State Tax Revenue in 2020 Quarter 1 25

Factors Driving State Tax Revenues 27

- Economic Indicators 27
  - State Gross Domestic Product 27
  - State Unemployment and Employment 29
  - Personal Consumption Expenditures 31
  - Housing Market 33
- Tax Law Changes Affecting the Fourth Quarter of 2019 36

Conclusion 40

Appendix: Additional Tables 42

Notes 54

References 56

About the Author 57

Statement of Independence 58

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Get Real-Time Data

The State Tax and Economic Review is the preeminent source of data and analysis on state tax collections. The Urban Institute's State and Local Finance Initiative regularly collects data and information from all 50 states, uses this information to adjust national and state data from the US Census Bureau, then provides the most timely, accurate, and in-depth look at how states are faring.

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Monthly State Government Personal Income Tax Data

Data from 41 states with broad-based income taxes from 2010 to present for the following components of personal income taxes: withholding, estimated payments, final payments, refunds, and total net personal income taxes.

Quarterly State Government Tax Revenue Data

Data from all states from 2010 to present on tax revenue from the individual income tax, corporate income tax, general sales tax, and motor fuel tax.

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Monthly State Government Marijuana Tax Revenue Data

Data from all states that tax sales of recreational marijuana from inception of the tax to present.

Executive Summary

- **State and local government tax revenues** from major sources—personal income, corporate income, sales, and property taxes—were 6.0 percent higher in the fourth quarter of 2019 than in the prior year; this growth was stronger than the 5.2 percent average annual growth rates for the prior four quarters.
- **State government tax revenues** from major sources showed solid year-over-year growth at 6.6 percent in the fourth quarter of 2019. The growth varied among major revenue sources:
  - » **State personal income tax revenues have** fluctuated substantially following the passage of the Tax Cuts and Jobs Act of 2017 (TCJA), which created incentives for some taxpayers to shift income between tax years and to delay estimated income tax quarterly payments into the extension and final payments period. However, growth in state personal income tax revenues was back to normal levels in the second half of 2019.
  - » **State sales tax revenues** have experienced uninterrupted growth since the first quarter of 2010, but this growth has lagged the rates observed in previous economic expansions. State sales tax revenues have seen some boost in the most recent months, mostly in response to the US Supreme Court's decision in *South Dakota v. Wayfair, Inc.* in June 2018 and subsequent changes in state tax rules.
  - » **State corporate income tax revenues** once again showed strong year-over-year growth in the fourth quarter of 2019, marking the seventh consecutive quarter of double-digit growth. However, state officials had cautioned that the double-digit growth was partially caused by the changes made in the TCJA and would level off in the coming quarters. Further, under the Coronavirus Aid, Relief, and Economic Security (CARES) Act passed in March 2020, net operating losses (NOLs) incurred in calendar years 2018, 2019, and 2020, can be carried back to each of the five tax years preceding the tax year of such loss. Therefore, corporate income tax revenues could be lowered for prior fiscal years in those states that have rolling conformity with the Internal Revenue Service tax code and have NOL carryback provisions.
- Year-over-year growth in **local government tax revenues** from major sources was 5.6 percent in the fourth quarter of 2019, which was slightly stronger than the 5.3 average annual growth observed in the prior four quarters.
  - » **Local property tax revenues** increased 5.8 percent year over year in the fourth quarter of 2019 compared with a year earlier, which is stronger than the 5.1 percent average growth

in the prior four quarters. Local property tax revenues, just like state personal and corporate income tax revenues, fluctuated wildly in the recent quarters, partially in response to the TCJA's changes, as taxpayers adjusted the timing of payments.

- **Preliminary data for the first quarter of 2020** showed growth in overall state tax revenue collections. However, growth was mostly attributable to January and February, and state tax revenues started declining in March because of the COVID-19 pandemic.
  - » Year-over-year growth rates for **state personal income tax** revenues varied widely across the states in the first quarter of 2020, with 11 states reporting declines, 21 states reporting single-digit growth, and another 9 states reporting double-digit growth.
  - » After showing double-digit year-over-year growth for seven consecutive quarters, **state corporate income tax** collections weakened in the first quarter of 2020. However, there was wide variation across the states, and the revenue growth experienced in the median state was stronger.
  - » Year-over-year growth in **state sales tax** collections in the first quarter of 2020 was strong in most states and above 5.0 percent in 23 states. The recent strength in sales tax collections is largely because of the *Wayfair* ruling and states' responses to it. However, we anticipate sharp declines in sales tax revenues in the second quarter of 2020 because of the COVID-19 pandemic and the ensuing economic drop-off.
- **Economic factors** driving revenue growth were all positive in the fourth quarter of 2019. However, states' economic performance has changed dramatically since then as the pandemic threw the economy into turmoil, and a recession is either imminent or has begun at this point. Therefore, the growth in economic factors at the end of 2019 must be viewed with extreme caution. Moreover, growth in some economic factors in some states had been weakening in the second half of 2019, well before the COVID-19 pandemic.
  - » Real **gross domestic product** (GDP) was 2.3 percent higher for the nation in the fourth quarter of 2019 than in the same quarter in 2018. However, year-over-year growth in real GDP was only 0.3 percent in the first quarter of 2020, which is the weakest growth rate since the fourth quarter of 2009. Real GDP will contract sharply in the second quarter of 2020 because of the massive economic disruptions caused by the COVID-19 pandemic.
  - » The seasonally adjusted **unemployment rate** was 3.5 percent in the fourth quarter of 2019 and 3.8 percent in the first quarter of 2020. Unemployment rates had seen steady declines since 2010, largely because of improved job prospects. However, over 30 million people

filed unemployment insurance claims since the COVID-19 pandemic spread to the US, which will spike the unemployment rate in the coming months.

- Year-over-year growth in **employment** was 1.1 percent in the fourth quarter of 2019 and 1.0 percent in the first quarter of 2020. Overall employment growth had slowed even before the onset of the COVID-19 pandemic and is poised to decline precipitously in the second quarter of 2020. Ten states had already reported declines in the first quarter of 2020.
- **Personal consumption expenditures** had been rebounding after being hit hard by steep declines in oil and gas prices in 2014–15. However, consumer spending on both durable and nondurable goods was substantially weaker in 2019 than the growth rates observed throughout 2018. Much of the weakness in spending on nondurable goods was attributable to the declines in spending on energy goods and services. Given that oil prices declined precipitously in April and that the COVID-19 pandemic has paralyzed large portions of the economy since mid-March, we expect spending on goods and services to decline sharply in the second quarter of 2020.
- **House prices** increased 5.1 percent in nominal terms in the fourth quarter of 2019. Overall, growth in house prices was weaker throughout 2019 than growth in the prior two years. Although average house prices have been rising since the declines that immediately preceded the Great Recession, at the end of 2019 they were still below their prerecession peaks in six states.

Trends in State and Local Tax Revenues

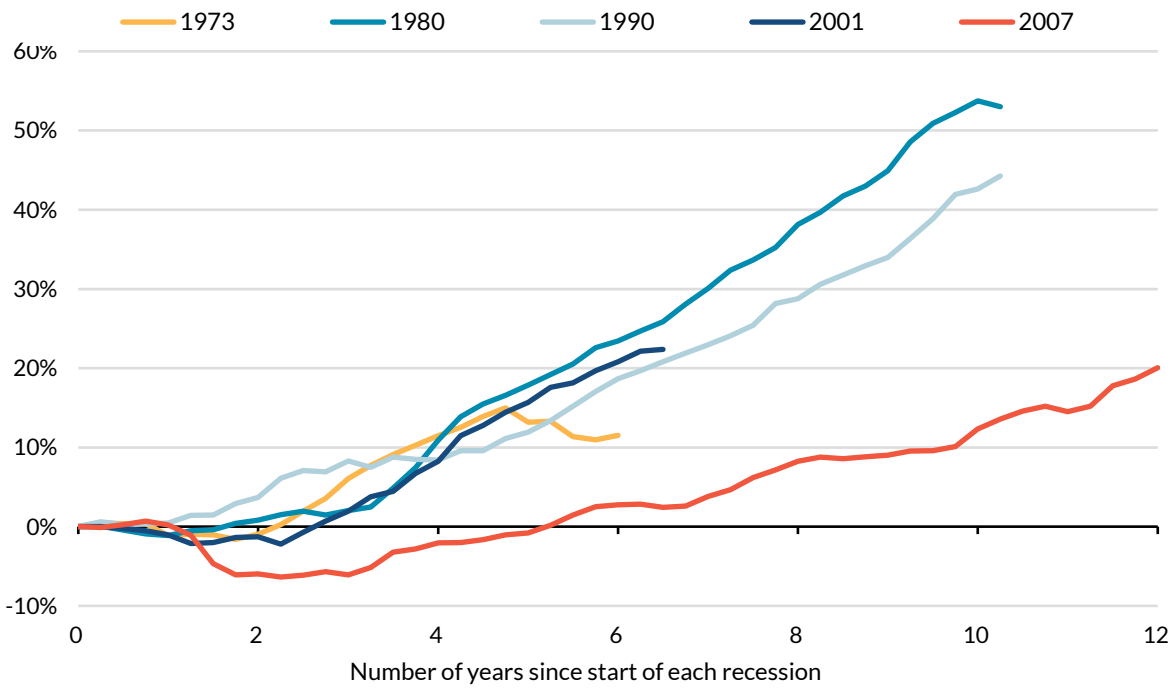
The COVID-19 pandemic has caused an unprecedented economic shock and paralyzed economies worldwide. As a result, state and local government tax revenues will undoubtedly see sharp declines in the coming quarters.

In the past five decades, the US has seen five economic downturns. State and local government tax revenues declined in each economic downturn, but the declines in the Great Recession were steeper than others, and the recovery was prolonged and weak (Figure 1). Moreover, state and local tax revenues have become increasingly volatile and sensitive to economic, policy, and behavioral changes. Unfortunately, we expect the impact of the COVID-19 pandemic on state and local government tax revenues to be far more detrimental. Declines in state and local tax revenues will be far steeper than in prior recessions and may last far longer than in past economic downturns.

FIGURE 1

Declines and Recovery of State and Local Tax Revenues During the Past Five Recessions

Cumulative percent change in real state and local taxes from major sources since start of each recession



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Source: US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP), analysis by the author.
Notes: Cumulative percent 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.

State and local government tax revenues have fluctuated wildly since the passage of the TCJA, which was the largest federal tax overhaul since 1986. Most states incorporated some of the TCJA provisions into their tax codes. Further, some taxpayers took advantage of some of the TCJA provisions to minimize their income tax liability. For example, some individual taxpayers adjusted their business affairs and employment status to take advantage of the provision that provides a federal income tax deduction of up to 20 percent of net business income to owners of domestic pass-through business entities. On the other hand, some businesses are still evaluating whether to change from a pass-through entity to a C corporation to take advantage of lower corporate income tax rates. The ambiguity about various provisions of the TCJA largely contributed to shifts in taxpayer behavior, which in turn increased volatility in state and local government tax revenues.

State and local government tax revenues showed normal growth in the third and fourth quarters of 2019 after declines in the fourth quarter of 2018, much weaker growth in the first quarter of 2019, and robust growth in the second quarter of 2019, each compared with the same quarter in the prior year. Most of the volatility in the prior quarters was attributable to the TCJA, which led some taxpayers to shift income tax payments from one quarter to the next or shift income and deductions (and the resultant tax liability) from one tax year to another. For example, because the TCJA placed a $10,000 annual cap on the federal deduction for taxpayers' state and local taxes beginning January 1, 2018, some high-income taxpayers prepaid their personal income and property taxes in December 2017 to take advantage of the uncapped state and local tax deduction in 2017. Firms also may have shifted nonwage income (e.g., bonus payments) from 2018 to 2017 to claim a deduction at the higher corporate income tax rate. Individual taxpayers also increased estimated payments or changed the time at which they realized capital gains or losses. (Thus, some of the revenue weakness in the fourth quarter of 2018 and the first quarter of 2019 was related to especially strong revenues in December 2017 and January 2018.)

Table 1 shows state and local government tax revenues from major sources for the fourth quarter of 2018 and the fourth quarter of 2019 as well as the nominal percentage change between both quarters and the average quarterly year-over-year growth in the prior four quarters. All sources of revenue saw healthy growth in the fourth quarter of 2019. Major findings include the following:

- **State and local government revenues** from major sources increased 6.0 percent in the fourth quarter of 2019 compared with a year earlier; the average quarterly year-over-year growth rate in the prior four quarters was 5.2 percent.
- **State government revenue** from major sources increased 6.6 percent in the fourth quarter of 2019 relative to a year earlier; the average quarterly year-over-year growth rate in the prior

four quarters was 4.7 percent. After showing declines in the first quarter of 2019 and nearly 20 percent growth in the second quarter of 2019, growth in **state personal income tax** revenues was back to normal levels in the third and fourth quarters of 2019. The growth in state personal income tax revenues was 6.2 percent in the fourth quarter of 2019 compared with the fourth quarter of 2018; in contrast, the average quarterly year-over-year growth rate in the prior four quarters was only 2.9 percent. **State sales tax** collections showed growth of 5.6 percent in the fourth quarter of 2019 compared with the fourth quarter of 2018, which was stronger than the average quarterly year-over-year growth rate of 4.9 percent in the prior four quarters. **State corporate income tax** revenues rose 17.3 percent in the fourth quarter of 2019 compared with a year earlier, marking the seventh consecutive quarter of double-digit growth. After more than 10 years since the end of the Great Recession, state corporate income tax revenues were finally above their prerecession peaks during the second half of 2019.

- **Local government revenue** from major sources increased 5.6 percent from a year earlier in the fourth quarter of 2019, which was slightly stronger than the 5.3 percent average quarterly year-over-year growth in the prior four quarters. **Local property taxes**, the single largest source of local government tax revenues, increased 5.8 percent from the prior year; the average quarterly year-over-year growth was 5.1 percent in the prior four quarters. Local property taxes saw some fluctuations in the past two years as some taxpayers shifted the timing of property tax payments in response to the TCJA. **Local sales taxes** grew 2.9 percent in the fourth quarter of 2019. Growth in **local personal income taxes** was at 5.6 percent and **local corporate income taxes** increased 13.0 percent, but these constitute a relatively small share of local revenues and are concentrated in a few states.

TABLE 1

State and Local Government Tax Revenue Trends

Tax source	2018 Q4 ($ millions)	2019 Q4 ($ millions)	Y-O-Y percentage change	Average quarterly Y-O-Y growth rate, prior four quarters
Total state and local major taxes	**$439,248**	**$465,595**	**6.0**	**5.2**
State major taxes	***$180,525***	***$192,410***	***6.6***	***4.7***
Personal income tax	84,459	89,675	6.2	2.9
Corporate income tax	10,749	12,613	17.3	21.5
Sales tax	80,446	84,965	5.6	4.9
Property tax	4,871	5,157	5.9	1.5
Local major taxes	***$258,723***	***$273,185***	***5.6***	***5.3***
Personal income tax	9,014	9,517	5.6	4.4
Corporate income tax	1,786	2,019	13.0	3.2
Sales tax	23,339	24,010	2.9	6.9
Property tax	224,584	237,639	5.8	5.1

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

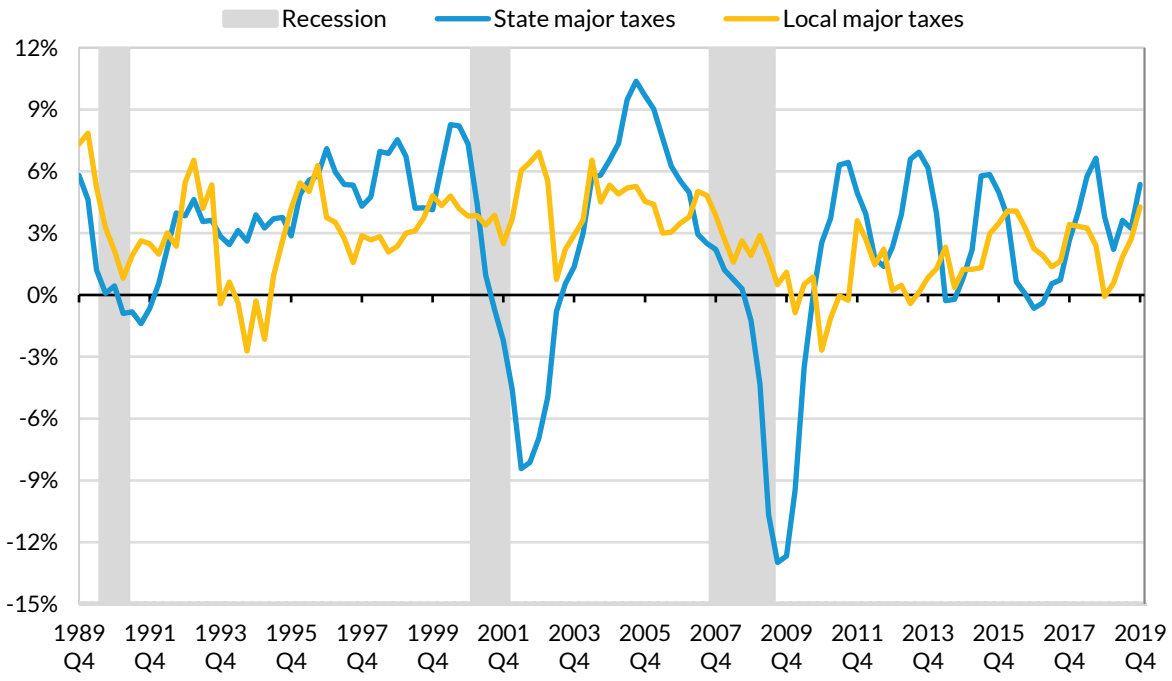
Notes: Q = quarter; Y-O-Y = year-over-year.

Figure 2 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 2, state tax revenues from major sources fluctuated greatly over the past few years, mostly driven by the impact of the federal fiscal cliff negotiations (in 2013), volatility in the stock market, and the impact of taxpayer behavior in response to the passage of the TCJA. Growth in both state and local taxes from major sources was stable in the fourth quarter of 2019. State taxes from major sources, adjusted for inflation, grew 5.4 percent in the past four quarters relative to the year earlier. The four-quarter moving average of inflation-adjusted local taxes from major sources showed a 4.3 percent increase for the fourth quarter of 2019, which was the strongest growth since the start of the Great Recession.

FIGURE 2

State and Local Major Tax Revenue Saw Healthy Growth Before the COVID-19 Pandemic

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



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

Most local governments rely heavily on property taxes, which are relatively stable and respond slowly to changes in property values. By contrast, the personal income, sales, and corporate taxes that

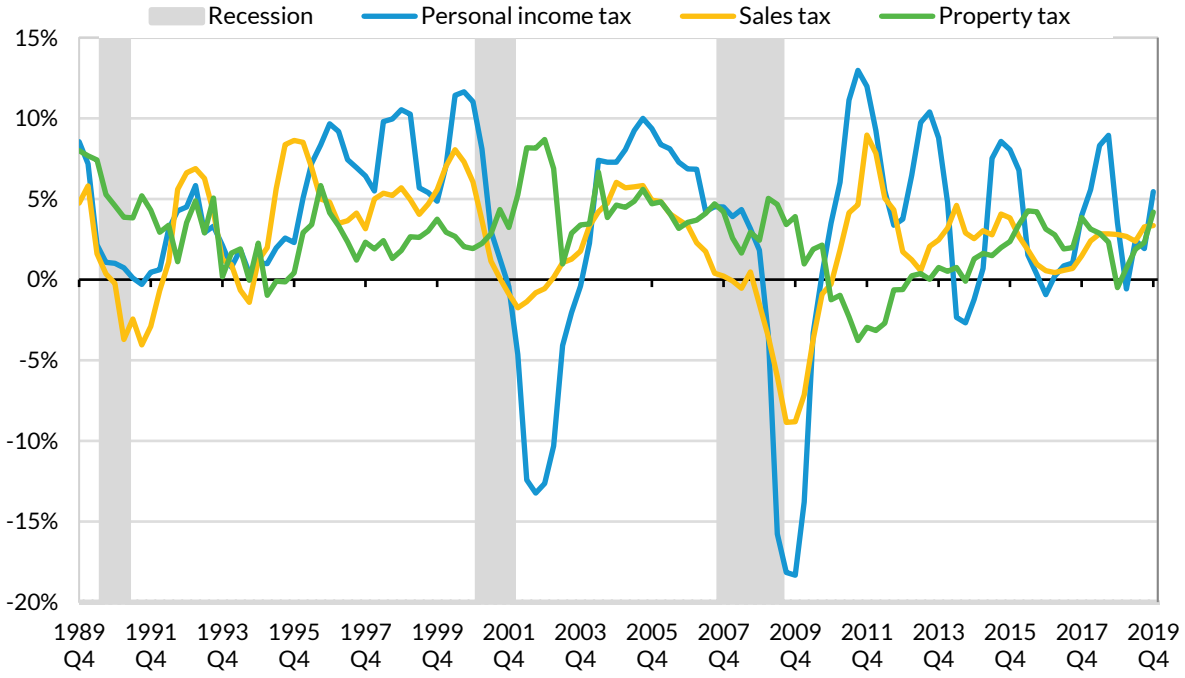
states heavily rely on respond more rapidly to economic upticks and declines. Over the past two decades, property taxes have consistently made up at least two-thirds of total local tax collections. As noted, the recent fluctuations in property tax receipts were mostly caused by payment shifts in response to the TCJA. However, growth in house prices has been weakening throughout 2019 and is likely to weaken further because of the impact of the COVID-19 pandemic, which may lead to weakness or even declines in local property taxes.

Figure 3 breaks out inflation-adjusted state and local personal income, sales, and property tax revenue over the same 30-year 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 5.5 percent in the fourth quarter of 2019. State and local sales tax revenues showed a 3.4 percent year-over-year growth rate for the fourth quarter of 2019, which was stronger than the growth observed since the fourth quarter of 2015. State and local property taxes, nearly all of which are collected by local governments, showed a4.2 percent growth rate from a year earlier in the fourth quarter of 2019.

FIGURE 3

Weaker Growth in State-Local Sales Tax Revenues Compared to Prior Expansion Periods

Year-over-year change in real major state-local taxes



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Source: US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP), analysis by the author.
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation.

Trends in State Tax Revenue in 2019 Quarter 4

Total state tax revenue grew 5.3 percent in nominal terms and 3.6 percent in inflation-adjusted terms in the fourth quarter of 2019 relative to a year earlier, according to US Census Bureau data adjusted by the author (Table A1).[1] Year-over-year growth for the fourth quarter of 2019 was back to normal after great fluctuations in the wake of passage of the TCJA. State personal income tax revenues declined in the fourth quarter of 2018 and the first quarter of 2019 compared with prior-year levels but soared in the second quarter of 2019. Year-over-year growth in state personal income tax revenues was back to normal levels at 6.2 percent in the fourth quarter of 2019. Declines in personal income tax revenues in the fourth quarter of 2018 and the first quarter of 2019 compared with prior-year levels were largely expected because state income tax revenues were artificially boosted in December 2017 and January 2018 as individuals adjusted their behavior after the TCJA was enacted. Robust growth in personal income tax revenues in the second quarter of 2019 was mostly caused by shifts in timing for estimated income tax payments by some taxpayers. States anticipated normalized growth rates in personal income tax revenues in the second half of 2019, mostly because of the waning impact of the TCJA. Corporate income tax collections grew by double digits for the seventh consecutive quarter, sales tax collections grew 5.6 percent, and motor fuel tax collections increased 5.3 percent relative to a year earlier. 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 between the first quarter of 2010 and the fourth quarter of 2019. Despite the prolonged economic expansion, the inflation-adjusted average annual growth rate in overall state tax revenues since 2010 was only 3.0 percent.

There were some regional disparities in terms of year-over-year growth in total state tax revenues in the fourth quarter of 2019 (Table A2). Year-over-year growth in the median state was 5.0 percent, compared with the national average growth of 5.3 percent. State tax revenues increased in all regions. The Far West and Rocky Mountain regions had the strongest year-over-year growth at 7.9 and 6.3 percent, respectively, while the New England and Southwest regions had the weakest growth at 2.4 and 3.9 percent, respectively.[2]

Forty-two states reported growth in total state tax revenue collections for the fourth quarter of 2019 relative to a year prior, with 25 states reporting growth of over 5 percent. Growth in state tax revenues was particularly strong in Nebraska and Oregon. State tax revenues declined in Alaska, Connecticut, Louisiana, New Hampshire, New Mexico, North Dakota, South Dakota, and West Virginia.

Personal Income Taxes

Overall, growth in personal income tax collections moderated in the fourth quarter of 2019. State personal income tax revenues increased 6.2 percent in nominal terms and 4.5 percent in inflation-adjusted terms in the fourth quarter of 2019 compared with the same period in 2018 (Table A1). As cautioned in previous *State Tax and Economic Review* quarterly reports, the federal policy changes under the TCJA created strong incentives for some high-income taxpayers to shift income and deductions between tax years. More specifically, personal income tax collections in the fourth quarter of 2017 and first quarter of 2018 were boosted by extension payments related to tax year 2017. In addition to behavior changes related to the TCJA, some of these extension payments were also 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 and include them in taxable income. Therefore, it was expected that personal income tax revenue would be weak in the final quarter of 2018 and first quarter of 2019 but would pick up in the second quarter of 2019. The average quarterly year-over-year growth rate in state personal income tax collections since 2010 has been 6.1 percent in nominal terms and 4.4 percent in real terms.

Personal income tax collections increased across all regions in the fourth quarter of 2019 compared with the same period in 2018 (Table A2). The Southwest region saw the largest growth at 12.1 percent, while the New England region saw the weakest growth at 1.7 percent.

Overall, personal income tax collections increased in all states but Connecticut, Georgia, and Ohio. In Connecticut, the declines were mostly attributable to legislative changes that shifted some tax burdens from the personal income tax toward the corporate income tax. Declines in personal income tax revenues in Georgia and Ohio were mostly attributable to tax rate reductions that took effect January 1, 2019.

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 the 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 first quarter of 2020.

Table 2 shows the growth for each major component of personal income tax collections in the past seven quarters, illustrating the volatility following enactment of the TCJA. Personal income tax collections declined in the fourth quarter of 2018 and first quarter of 2019. Personal income tax

revenues soared in the second quarter of 2019 because of an increase in extension and final payments. The volatility in personal income tax revenues was mostly observed in estimated payments and final payments, which were shifted between tax years as a result of the TCJA. Growth in personal income tax collections moderated in the third and fourth quarters of 2019. Preliminary figures for the first quarter of 2020 indicate another quarter of growth in overall personal income tax revenues. However, year-over-year growth in the first quarter of 2020 was weaker than the growth in the fourth quarter of 2019, likely because of the early impact of the COVID-19 pandemic. And it is expected that the second quarter of 2020 will be much weaker.

TABLE 2

Growth in State Government Personal Income Tax Components

Year-over-year nominal percentage change

Personal income tax components	State fiscal year 2019				State fiscal year 2020		
	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1
Withholding	6.2	6.7	1.2	5.2	4.4	4.8	5.8
Estimated payments	18.2	(71.3)	(8.8)	16.3	2.4	9.1	9.7
Final payments	12.8	(1.5)	18.5	39.0	21.2	20.8	(9.3)
Refunds	14.4	16.9	(0.3)	(1.1)	8.2	7.4	10.0
Total	**7.8**	**(10.4)**	**(0.2)**	**18.7**	**3.9**	**6.1**	**4.4**

Source: Individual state data, analysis by the author.

Notes: Q = quarter. The percentage changes for total personal income tax differ from data reported by the US Census Bureau. Red numbers in parentheses represent declines.

Withholding

Withholding is usually a good indicator of the current strength of personal income tax revenue and the economy 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 seven quarters for all states with a broad-based personal income tax.

The annual growth rates in withholding for 2019 were weaker for all quarters than the growth rates for 2018. The same observation holds for the median growth rates in withholding. The strength in withholding in 2018 was partially driven by one-time bonuses paid by employers in response to the TCJA. Year-over-year growth in withholding was weak in the first quarter of 2019, at 1.2 percent. Growth in withholding regained strength since then (Table A3) and was particularly strong in the first quarter of 2020, at 5.8 percent. These fluctuations are partly caused by employers shifting the timing of bonus payments from one quarter to another.

All regions showed year-over-year growth in withholding in the fourth quarter of 2019 and the first quarter of 2020. The Rocky Mountain region had the strongest year-over-year growth rate for the first

quarter of 2020 at 10.8 percent, while the Great Lakes region had the weakest year-over-year growth at 4.0 percent.

Year-over-year growth in withholding was widespread across states in the fourth quarter of 2019 and the first quarter of 2020. Thirty-six of 41 states with a broad-based personal income tax reported growth in withholding in the fourth quarter of 2019 compared with a year earlier. Georgia, Iowa, Louisiana, North Carolina, and Vermont reported declines in withholding for the fourth quarter of 2019, compared to a year earlier. The declines in Georgia, Iowa, and North Carolina are partially attributable to reductions in their state income tax rates. Georgia lowered its top personal income tax rate from 6 percent to 5.75 percent.[3] Iowa's tax reform legislation reduced tax rates for all income brackets effective January 1, 2019.[4] Finally, North Carolina reduced its personal income tax rate from 5.499 percent to 5.25 percent beginning in January 2019.[5] Preliminary data indicate that all states reported growth in withholding during the first quarter of 2020. However, that was largely before the economic disruptions caused by the COVID-19 pandemic, which triggered mass layoffs and furloughs.

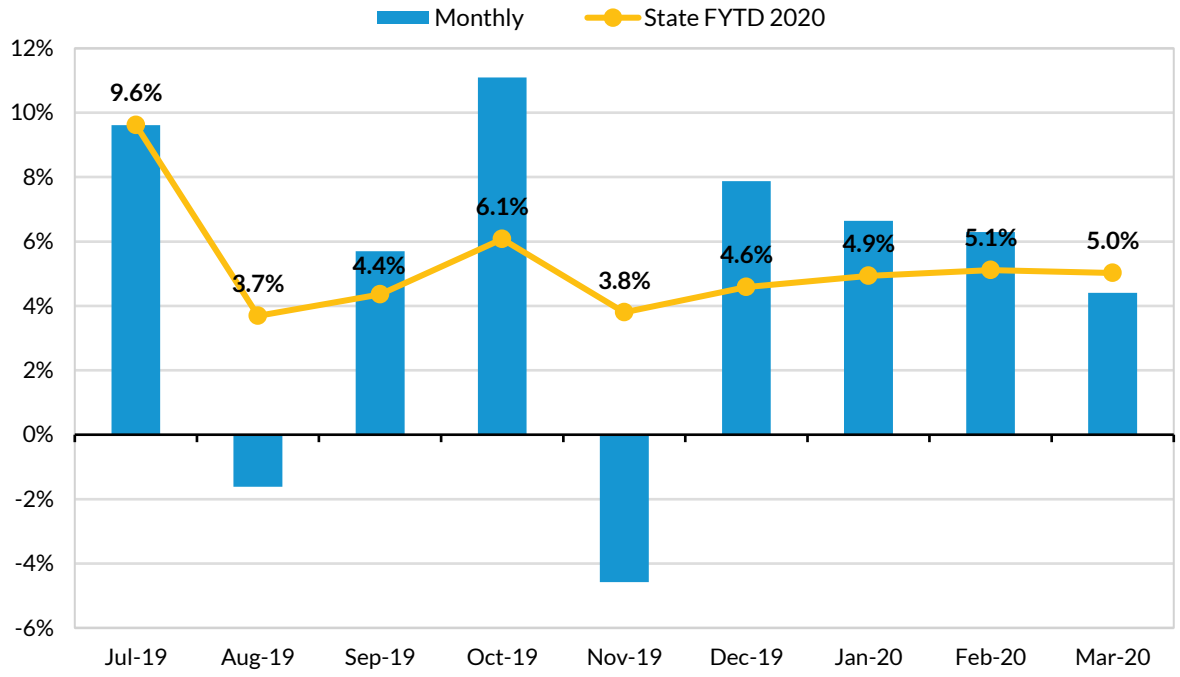
Figure 4 shows monthly and fiscal year-to-date growth rates in withholding between July 2019 and March 2020, which corresponds to the first nine months of state fiscal year 2020 in 46 states. Withholding was lower in August 2019 than in August 2018 and lower in November 2019 than in November 2018. These declines were likely linked to personal income tax rate cuts in about a dozen states. Further, the lower withholding in November 2019 relative to November 2018 was mostly attributable to a single state, California, where withholding was lower than a year earlier by $1.7 billion, or 24.9 percent. State officials interpreted November declines as a timing issue, because the large bonus day that usually follows Thanksgiving fell in December rather than November in 2019.[6] California's withholding rebounded in December 2019 and increased by $1.3 billion, or 19.1 percent, over the December 2018 level.

Year-to-date growth in withholding for the first nine months of fiscal year 2020 was slightly stronger than growth rates observed during the same period in the prior year. States collected around $267 billion in withholding revenues from July 2019 through March 2020. This represents approximately 93 percent of overall personal income tax collections over this period. Overall, withholding grew 5.0 percent during the first nine months of fiscal year 2020 compared with the same period of fiscal year 2019; the growth in withholding would have been stronger absent the income tax rate cuts in several states. Because millions of people lost jobs permanently or temporarily following the substantial spread of COVID-19 to the US, we expect to see substantial weakness in withholding in April and in subsequent months.

FIGURE 4

Withholding Weakened in March

Percentage change in withholding tax collections compared with the previous year, monthly and year-to date for state fiscal year 2020



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Source: Individual state government agencies, analysis by the author.
Notes: FYTD – fiscal year to date.

Estimated Payments

Higher-income taxpayers (and the self-employed) generally make estimated tax payments (also known as declarations) on their income not subject to withholding. 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 because of their volatility, they can have a large impact on the direction of overall collections. Estimated payments accounted for about 6.5 percent of total personal income tax revenues in the fourth quarter of 2019 and 24.5 percent in the first

quarter of 2020.

The first estimated 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, respectively (although many high-

income taxpayers make the last estimated 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 for the previous tax year and is thus related partly to income received in that previous tax year. Subsequent estimated payments are generally related to income for the current tax year, although that relationship is often quite loose.

As noted, because the first estimated payment contains a combination of payments related to the current and prior tax year, it is not a good indication for the current strength of the economy. The second and third estimated payments are easier to interpret because they are almost always related to the current year, and this can give a real-time look at how the economy and income tax base are doing. 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.

The median first estimated payment for tax year 2019 (filed in April 2019) was 18.0 percent higher than the median first estimated payment filed in April 2018 (Table A4). Most of the growth in terms of dollar amount was in New York, where first estimated payments grew by $2.5 billion, or 57.1 percent, in April 2019 compared with April 2018. The first estimated payment increased in 33 states, with 25 states reporting double-digit growth relative to a year earlier. Most of the growth in the first estimated payment in New York and elsewhere is likely attributable to tax year 2018 because some taxpayers opted to wait and pay a greater percentage of their tax year 2018 liabilities through extensions. First estimated tax payments declined in Arizona, Arkansas, Connecticut, Maryland, and West Virginia. The largest decline was in Arizona, at 25.1 percent, mostly because processing delays pushed a significant number of deposit payments into May 2019.[7]

The median second and third estimated payments for tax year 2019 (filed in June 2019 and September 2019) were 10.4 and 11.1 percent larger, respectively, compared with the second and third estimated payments filed in June 2018 and September 2018. However, the national average growth for the second and third estimated payments was only 1.3 and 0.4 percent, respectively, mostly because of large declines in dollar values in California and Connecticut.

Growth for the median fourth estimated payment for tax year 2019 (filed in December 2019/January 2020) was 11.0 percent compared to the prior-year level. Although 11 percent growth seems strong, it is relative to steep declines in estimated payments filed in December 2018 and January 2019 (the last payment for tax year 2018) because of the temporary impact of the TCJA. States collected $26.1 billion in estimated payments in December 2019 and January 2020, which is weaker than the fourth estimated payments received for tax years 2015, 2016, and 2017.

The median estimated payment for December 2017 was unusually strong, mostly in response to the TCJA, because some high-income taxpayers accelerated state income tax payments into December 2017 to take advantage of the uncapped state and local tax deduction for tax year 2017. Estimated payments grew from $10 billion in December 2016 to $16.9 billion in December 2017, an increase of 68.8 percent. Estimated payments in December 2018 were $2.9 billion; a steep decline from December 2017 and below December 2016 estimated payments, reflecting changes in the timing of income tax payments. Estimated payments in December 2019 were $3.2 billion, which, apart from estimated payments in December 2018, is the lowest amount states have collected in any December since at least 2007 (the earliest year we have estimated payment data for).

The largest weakness in dollar amounts were in California and New York, where estimated payments declined by $3.6 billion (or 77.4 percent) and by $1.3 billion (or 76.9 percent), respectively, for December 2019 compared with December 2016, before enactment of the TCJA. Big payment shifts 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 constituted about 12 and 6 percent of all US taxpayers in tax year 2017 but were the home states for about 17 and 11 percent, respectively, of all millionaire taxpayers. These millionaire taxpayers are usually able to shift income and expenses across tax years to minimize tax liability. Estimated state income tax payments in California and New York made up approximately 64 percent of the total estimated payments for the nation in December 2017 but only 50 percent in December 2018 and 45 percent in December 2019.

It is early to draw conclusions about December 2019 weakness in estimated payments in California and New York. We expect that high-income taxpayers in California and New York will once again shift estimated personal income tax payments into the extension and final payments period. However, since the filing deadline for federal income tax returns has been extended from April 15 to July 15 (and states have largely followed suit), it will be a while before states can gauge the strength of estimated payments attributable to tax year 2019. Further, because of wide fluctuations in financial markets and other changes in the economy related to the COVID-19 pandemic, estimated payments are likely to be lower in 2020.

Figure 5 shows year-over-year percentage change by quarter in estimated payments and in the S&P 500 Index for the past 11 years. The longer-term trends indicate large volatility in estimated payments, which is partially caused by volatility in the stock market but is also affected by various federal policy changes and taxpayers' subsequent behavioral changes in tax timing. For example, growth in estimated payments in the final quarter of 2012 and the first quarter 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

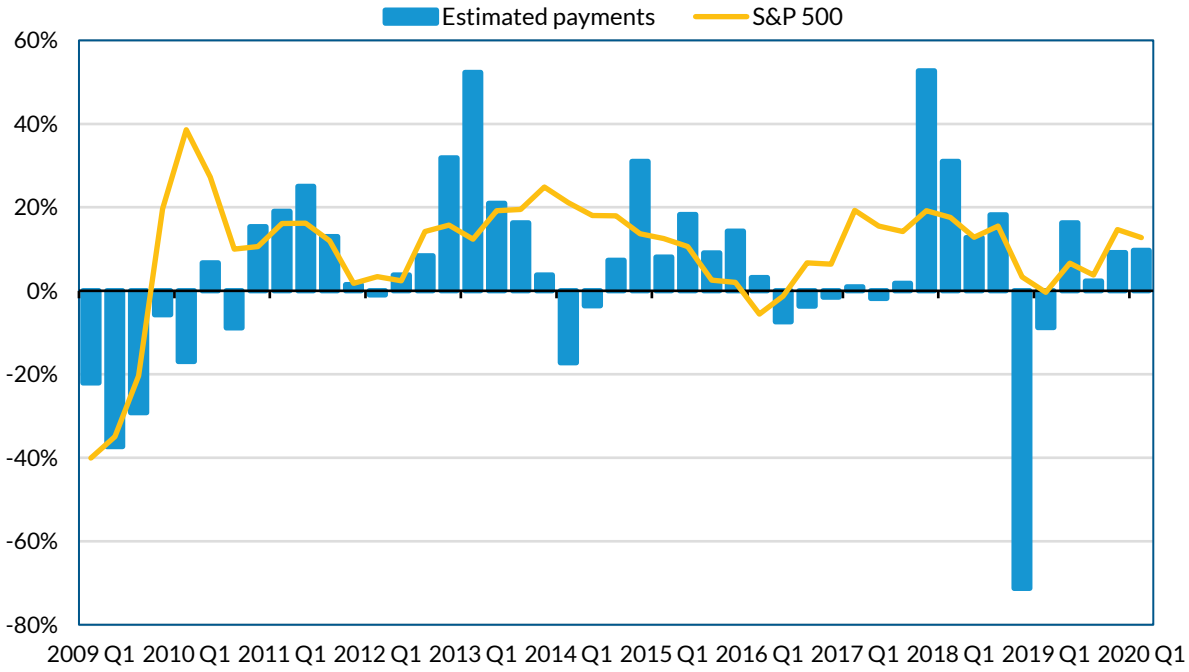
as Congress raised top federal income tax rates for tax year 2013. Therefore, some high-income taxpayers accelerated income into tax year 2012 to avoid higher tax rates for future years. This led to large declines in the year-to-year comparison for estimated payments the following year. Similarly, the substantial growth in estimated payments in the final quarter of 2017, as well as in the first quarter of 2018, and the steep declines in estimated payments in the final quarter of 2018 are mostly attributable to the passage of the TCJA. However, the further decline in estimated payments in the first quarter of 2019 was likely also driven by the weak stock market performance in December 2018 and January 2019. The stock market saw large fluctuations, with the S&P 500 Index being lower by an average of 3.6 percent in December 2018 compared with December 2017. The S&P 500 Index further declined, being lower by an average of 6.5 percent in January 2019 compared with January 2018 before rebounding later in the year. In response to declines in realized capital gains, some taxpayers may have reduced their December 2018 and January 2019 estimated payments. After two consecutive quarters of decline, estimated payments rebounded and grew 16.3 percent in the second quarter of 2019, compared to the year-earlier level; growth in the stock market was weaker, at 6.6 percent year-over-year, for the same period. Estimated payments showed continued year-over-year growth for the third and fourth quarters of 2019, at 2.4 and 9.1 percent, respectively. Year-over-year growth in the stock market was stronger for the same period, at 3.8 and 14.7 percent, respectively, for the third and fourth quarters of 2019. Finally, estimated payments increased 9.7 percent year-over-year for the first quarter of 2020. However, growth in the stock market varied widely within the first quarter of 2020, declining in March because of the pandemic.

In general, estimated payments as a share of overall personal income taxes have grown somewhat over time. In state fiscal year 2018, estimated payments made up 22.2 percent of total personal income tax collections, up from 17.7 percent in fiscal year 2010 and 19.9 percent in fiscal year 2014. However, estimated payments as a share of total personal income tax collections declined in state fiscal year 2019, representing around 19.1 percent of the total, mostly because of the TCJA and subsequent income tax-shifting behavior. The overall growth in estimated payments, as well as the volatility of estimated payments, adds more uncertainty to state income tax revenues and makes them harder to forecast.

FIGURE 5

Large Volatility in Estimated Payments

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



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Source: Individual state government agencies and Yahoo Finance (S&P500), analysis by the author.

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.[8] Final payments accounted for 26.3 percent of all personal income tax revenues in the second quarter of 2019 but less than 7 percent in the third and fourth quarters of 2019 as well as in the first quarter of 2020. Because this year most states have extended the filing deadline for income tax returns from April 15 to July 15, we expect final payments in the second quarter of 2020 to be much lower with these payments largely shifted into the third quarter of 2020.

Table A5 shows year-over-year growth in final payments for the most recent seven quarters. Final payments declined 1.5 percent in the fourth quarter of 2018 compared to the previous year but showed double-digit year-over-year growth for all four quarters of 2019. Growth in final payments was robust at 39 percent for the second quarter of 2019 compared with prior-year levels, reflecting changes in

taxpayer behavior as some taxpayers filed for extensions and made final payments. Final payments on average declined 9.3 percent compared to the prior year for the first quarter of 2020, but the decline in the median state was only 0.8 percent. In dollar values, California and New York had the largest declines in final payments in the first quarter of 2020.

Year-over-year growth rates in final payments varied widely across the states in the fourth quarter of 2019 and first quarter of 2020. (Because final amounts are relatively small as a share of total personal income tax revenues, small dollar changes can cause large variations in percentage changes.) Final payments year-over-year growth rates increased by double digits in 31 states for the fourth quarter of 2019. Connecticut, Missouri, and Virginia were the only states where final payments year-over-year growth rates declined for the fourth quarter of 2019. Declines in Connecticut were mostly because of legislated changes. 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 individual income 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 but increase corporate income tax revenues.

Declines in final payments were more widespread in the first quarter of 2020, with 20 states reporting declines compared to a year earlier. These declines are largely caused by the COVID-19 pandemic.

Refunds

By definition, personal income tax refunds represent a negative share of personal tax revenues and usually represent a small amount in the third and fourth quarters of the tax year and a much larger negative amount in the first and second quarters of the tax year.

Refunds compared to the prior year declined 0.3 percent for the first quarter of 2019 and 1.1 percent for the second quarter of 2019 but increased 8.2 and 7.4 percent, respectively, for the third and fourth quarters of 2019 compared with a year earlier. Refunds increased further, at 10.0 percent for the first quarter of 2020 compared with the first quarter of 2019. In total, states paid out $625 million more in refunds in the fourth quarter of 2019 than in the same quarter in 2018 and paid out $2.7 billion more in the first quarter of 2020 than in the first quarter of 2019. Overall, 24 states paid out more in refunds in the fourth quarter of 2019 than in the fourth quarter of 2018, and 32 states paid out more in refunds in the first quarter of 2020 than in the first quarter of 2019. California had the largest share of refund

payouts ($7.3 billion, or 24.3 percent of total refunds) followed by New York ($2.5 billion, or 8.4 percent of total refunds) in the first quarter of 2020. Oregon had the largest increase in refunds in dollar value ($574 million) in the first quarter of 2020, which is largely attributable to the "kicker" rebate. Oregon's "2 percent kicker" law requires the state to refund surplus revenue to taxpayers when actual general fund revenues exceed the forecast amount by more than 2 percent. Taxpayers in Oregon were expected to receive a credit on the 2019 income tax returns because the state incurred a $1.6 billion tax surplus for the 2017–19 biennium.[9]

Declines in refund payouts in the first and second quarters of 2019 were partially caused by income tax cuts under the TCJA, which effectively reduced 2018 federal income tax obligations for average taxpayers. Shortly after the passage of the TCJA, the Internal Revenue Service published guidelines for tax withholding. However, many taxpayers did not update their W-4 forms (employee's withholding certificate), which essentially meant larger paychecks for most taxpayers throughout the year, but it also meant less prepayment of taxes. As a result, some taxpayers saw reductions in their refunds when they filed their income tax returns for tax year 2018. Further, some states delayed processing individual income tax returns. Volatility is typical during the income tax filing season, but the TCJA fueled uncertainty during the last tax filing season: most states saw lower estimated payments but substantial extension and final payments. Subsequently, higher refunds in the third and fourth quarters of 2019 might be derived from refunds claimed on amended or extension returns.

Actual versus Forecasted Income Tax Revenues

We collected data for states that provide actual and forecasted data on monthly personal income tax revenue. Such information was available and easily retrievable for about two dozen states (Table 3). In this section, as well as presenting data for the fourth quarter of 2019, we present data for the first quarter of 2020 to give an early look at the most recent personal income tax revenue situation. (Personal income tax revenues presented in Table 3 are mostly for general fund revenues only; they therefore may differ from figures presented in Table A2, which are for all fund revenues.)

Overall growth rates for personal income tax collections were back to normal levels in the fourth quarter of 2019. As noted in previous *State Tax and Economic Review* quarterly reports, personal income tax revenues fluctuated greatly after passage of the TCJA because some taxpayers filed for extensions, several states adjusted their tax codes, and some states cut income tax rates. Thus, fluctuations in income tax revenues were not necessarily driven by the economy but were mostly because of policy changes at the federal and state levels that led to behavioral changes for some taxpayers.

TABLE 3

Actual versus Forecasted State Personal Income Tax Revenues

Dollar amounts in millions

	2018 Q4 actual	2019 Q4 actual	2019 Q4 forecast	Percent change, 2019 Q4 vs 2018 Q4	Percentage variance, 2019 Q4 actual vs forecast	2019 Q1 actual	2020 Q1 actual	2020 Q1 forecast	Percent change, 2020 Q1 vs 2019 Q1	Percentage variance, 2020 Q1 actual vs forecast
Median				***5.6***	***1.0***				***5.2***	***(0.5)***
Average	***$55,562***	***$59,590***	***$58,931***	***7.2***	***1.1***	***$67,506***	***$71,863***	***$69,159***	***6.5***	***3.9***
Arizona	$1,160	$1,282	$1,269	10.5	1.0	$801	$741	$809	(7.5)	(8.4)
Arkansas	$697	$743	$736	6.6	0.9	$619	$657	$649	6.1	1.2
California	$17,846	$19,683	$19,946	10.3	(1.3)	$23,963	$26,769	$24,055	11.7	11.3
Colorado	$1,786	$1,883	$1,956	5.4	(3.7)	$1,726	$1,958	$1,762	13.4	11.1
Idaho	$342	$378	$372	10.7	1.8	$269	$371	$252	37.9	47.0
Illinois	$4,554	$4,838	$4,806	6.2	0.6	$5,935	$6,248	$6,262	5.3	(0.2)
Indiana	$1,240	$1,298	$1,308	4.7	(0.7)	$1,179	$1,228	$1,281	4.1	(4.1)
Kansas	$769	$829	$801	7.8	3.4	$717	$827	$754	15.3	9.7
Maine	$413	$425	$430	3.0	(1.1)	$290	$308	$318	6.4	(3.0)
Massachusetts	$3,594	$3,741	$3,753	4.1	(0.3)	$3,676	$3,822	$3,874	4.0	(1.3)
Minnesota	$2,509	$2,642	$2,568	5.3	2.9	$2,598	$2,487	$2,765	(4.3)	(10.1)
Mississippi	$490	$527	$516	7.7	2.1	$226	$239	$243	6.1	(1.5)
Montana	$305	$340	$317	11.6	7.3	$295	$313	$289	6.0	8.1
Nebraska	$540	$589	$573	9.1	2.8	$504	$554	$510	9.8	8.6
New Mexico	$298	$375	$309	26.0	21.2	ND	ND	ND	ND	ND
New York	$8,867	$9,336	$8,583	5.3	8.8	$15,557	$16,342	$16,135	5.0	1.3
North Dakota	$68	$64	$72	(6.6)	(11.4)	$100	$87	$92	(12.7)	(5.1)
Ohio	$2,161	$2,149	$2,171	(0.5)	(1.0)	$1,699	$1,576	$1,613	(7.3)	(2.3)
Oklahoma	$524	$693	$610	32.2	13.6	$489	$521	$525	6.7	(0.8)
Pennsylvania	$2,895	$3,059	$3,016	5.6	1.4	$3,522	$3,576	$3,684	1.6	(2.9)
Rhode Island	$329	$345	$354	4.9	(2.4)	$258	$266	$254	3.3	4.8
South Carolina	$1,390	$1,473	$1,456	6.0	1.2	$606	$606	$624	(0.0)	(2.9)
Vermont	$193	$198	$195	2.4	1.4	$165	$184	$177	11.2	3.7
West Virginia	$461	$470	$482	1.9	(2.5)	$443	$461	$462	4.0	(0.0)
Wisconsin	$2,133	$2,231	$2,333	4.6	(4.4)	$1,869	$1,721	$1,769	(8.0)	(2.7)

Source: Individual state data, analysis by the author.

Notes: ND = no data.

Actual personal income tax collections in the fourth quarter of 2019 were higher than in the same quarter in 2018 in 23 of 25 states for which we have detailed data. Personal income tax collections grew more than 5 percent in the fourth quarter of 2019 in 16 states. The largest growth in terms of dollar amounts were in California and New York, where personal income tax collections grew by $1.8 billion and $0.5 billion, respectively, in the fourth quarter of 2019 compared with the same quarter of 2018.

Actual personal income tax collections in the fourth quarter of 2019 were above the forecasts in 15 states and below the forecasts in 10 states, with an average underestimate of 1.1 percent and a median

underestimate of 1.0 percent. Overall forecast errors were not as dramatic as observed in the first half of 2019.

Personal income tax revenues grew in 18 states and declined in 6 states for the first quarter of 2020 compared with the same quarter in 2019. Once again, California and New York had the largest growth in terms of dollar value. Ten states underestimated and 14 states overestimated personal income tax collections for the first quarter of 2020.

In the past two years, state revenue forecasters faced many uncertainties related to the passage of the TCJA and warned that forecasts were subject to higher-than-usual margins of error because forecasting taxpayers' behavioral responses to the federal tax policy changes would be difficult. The COVID-19 pandemic dramatically changed the outlook for the US economy and state budgets (Dadayan 2020). State revenue forecasters are now facing even larger challenges in forecasting because of uncertainties about the length of the economic shutdown as well as how much economic activity will return once restrictions on nonessential services are lifted.

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 of corporate income taxes with little overall budgetary impact. Average quarterly year-over-year growth rates in state corporate income tax collections were 4.9 percent in nominal terms and 3.2 percent in real terms since 2010 (Table A1).

State corporate income tax revenue saw steep declines during the Great Recession and only recently approached or surpassed the levels observed before the Great Recession, driven by the strong growth observed following enactment of the TCJA. Corporate income tax receipts grew by double digits year-over-year for the fourth quarter of 2019, marking the seventh consecutive quarter of double-digit growth. However, the strong growth observed in the past year seven quarters was likely attributable to the TCJA, which created an incentive for corporations to shift profits from tax year 2017 into tax years 2018 and beyond because of the law's lower federal corporate tax rates. With the introduction of the new rules related to the NOL carryback provisions under the CARES Act, some states may see revisions in prior state corporate income tax returns. More than half of the states (including states with large share of corporate income tax revenues, such as California, Illinois, New Jersey, and New York) decouple from the federal NOL carryback provisions. States that conform with

the federal NOL carryback provisions may have state-specific restrictions on either the timing or the amount of the allowable carrybacks.

To mitigate the impact of COVID-19, the Internal Revenue Service extended the filing deadline for corporations to July 15, 2020. [10] Many states followed and extended corporate income tax return and payment due dates as well. Therefore, we expect substantial weakness or even declines in state corporate income tax revenues in the second quarter of 2020.

Corporate income tax revenues increased 17.3 percent in nominal terms and 15.5 percent in inflation-adjusted terms for the fourth quarter of 2019 compared with a year earlier. Despite overall growth, large disparities exist among states and regions. Corporate income tax collections increased in all regions except the Southwest, where collections declined 5.1 percent compared to the prior year. The Great Lakes region saw the largest year-over-year growth in corporate income tax revenues, at 32.9 percent, followed by the Plains region, at 29.4 percent.

Overall, corporate income tax collections declined in 13 states but increased in 30 states for the fourth quarter of 2019 compared to the prior year level, with 25 states reporting double-digit year-over-year growth.

The volatility in state corporate income tax collections is related to the TCJA, which included the most significant structural changes to the federal corporate income tax since 1986. Many corporate taxpayers have continued to assess the new rules, making it hard to evaluate taxpayer behavior.

Immediately after the passage of the TCJA, state corporate income tax collections saw strong year-over-year increases, particularly in the states where tax bases conform to federal tax law but not rates. The strong corporate income revenue performance in recent months was also driven by the one-time taxation of deemed repatriated foreign corporate earnings. The TCJA provisions included a one-time tax on profits held overseas at a special low tax rate that raised revenue and allowed corporations to repatriate this preferentially taxed income back to the United States parent firm.

State corporate income tax revenues were expected to fluctuate further because of the reduction of the federal corporate income tax rate from 35 percent to 21 percent under the TCJA, which was accompanied by a substantially modified corporate income tax base. The TCJA also eliminated the corporate alternative minimum tax. With all these changes, states were 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 worry that future Congresses might raise tax rates. State revenue forecasters may not fully understand how businesses are responding to the TCJA for a long time. Added to that, state revenue forecasters are now facing

extraordinary challenges trying to evaluate the impact of the COVID-19 pandemic on state corporate income tax revenues.

Before the pandemic greatly affected the US economy, states were already forecasting lower corporate income tax collections for the rest of fiscal year 2020 and forthcoming fiscal year 2021, mostly because of higher costs for business inputs and a weaker global economy (Dadayan 2020). Moreover, data from the Bureau of Economic Analysis indicated substantial weakness in business investment even before the pandemic,[11] which meant lower corporate income tax revenue collections. Now state corporate income tax revenues are more certain to decline because of the crisis.

General Sales Taxes

General state sales tax collections grew 5.6 percent in nominal terms and 3.9 percent in real terms for the fourth quarter of 2019 compared with the same period in 2018. Sales tax collections have grown continuously since the first quarter of 2010 in nominal terms, and growth generally has been steady if unspectacular.

Year-over-year sales tax collections increased in all regions for the fourth quarter of 2019. The Far West and Rocky Mountain regions reported the strongest growth at 8.7 and 7.0 percent, respectively; the New England region reported the weakest growth at 3.2 percent. In dollar value, California had the largest increase at $1 billion or 11.1 percent. If we exclude California, sales tax collections for the rest of the nation saw weaker growth, at 4.9 percent.

All states except Connecticut, North Dakota, and Oklahoma reported increases in sales tax collections for the fourth quarter of 2019 compared to the prior year level. Twenty-three states reported growth of over 5 percent.

The recovery in sales tax collections was slow following the Great Recession. Since 2010, the average quarterly year-over-year growth rate in state sales tax collections was 4.1 percent in nominal terms and 2.4 percent in real terms. The weak annual growth rates in sales tax collections was partially attributable to tax dollars lost by online retail sellers not collecting sales tax on some or all sales. However, growth in sales tax revenue collections strengthened throughout 2019, largely because sales tax base expanded in several states and because of states' efforts to capture tax revenues from a larger share of online sales following the *Wayfair* decision.

On June 21, 2018, the US Supreme Court ruled in favor of South Dakota in *South Dakota v. Wayfair*,[12] 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, 43 of 45 states with general sales taxes have enacted laws or regulations to require sales tax collections by remote sellers. The remaining two states, Florida and Missouri, have bills under way that are likely to be enacted into law in the coming months. As of April 2020, 42 states are already enforcing sales tax collections on sales by remote sellers. Louisiana still needs to determine the effective date for its legislation. States have set different sales and volume thresholds for the internet sales taxation. Moreover, a few states have updated their legislation to revise the threshold levels. In 23 states, the threshold is set at sales of more than $100,000 or over 200 transactions, and in 10 states the threshold is set at sales of more than $100,000 regardless of the number of transactions. The remaining 10 states have other threshold levels. In four states, the threshold level is much higher, at $500,000 or above (Table A6). Finally, 41 states have also enacted laws or regulations requiring marketplace facilitators (entities that are not direct sellers but that make it easier for buyers and sellers to transact, such as Amazon Marketplace) to collect sales taxes on behalf of their sellers.

Implementing online sales taxation by states does not address if and how local jurisdictions that operate independently and have independent taxing authority will be able to collect sales taxes from remote sellers. However, some states (e.g., Alabama and Texas) have either passed or are debating regulations for creating a "single local use tax rate" that remote sellers can use to calculate the local tax due instead of applying local sales taxes for the specific jurisdiction in which a sale is made.

Growth in sales tax collections was boosted in the past year, mostly for two reasons. First, states' responses to the US Supreme Court's *Wayfair* decision certainly improved compliance with online sales taxation rules and likely boosted sales tax collections from remote sellers. Second, the TCJA effectively reduced the income tax for many taxpayers and thus put money into consumers' pockets, which was likely injected into the economy in the form of taxable spending.

Before the COVID-19 pandemic acutely hit the US, we had projected that growth in sales tax revenues would level off because of three factors. First, as a growing number of baby boomers retire, they will likely have less disposable income to spend. Second, many services and goods (e.g., digital goods such as streaming music and digital subscriptions) remain untaxed despite their growing popularity and make up a growing share of consumption. (This is particularly the case during the current pandemic, and cash-strapped states should consider expanding their sales tax bases to capture this activity.) Third, the Great Recession tightened consumers' wallets, and many Americans have been saving at higher levels in the past decade. The average savings rate (i.e., personal savings as a share of

disposable personal income) was 7.9 percent in 2019, which was substantially higher than the saving rates observed in the late 1990s and early 2000s.[13]

The pandemic will have a detrimental impact on state sales tax revenue collections. Federally mandated travel restrictions and state-mandated shutdowns of a wide range of businesses and services across all states means less business activity, less consumer spending, and therefore less sales tax revenue collections for states, particularly for the month of April and beyond. This also led to a spike in personal savings as most people stayed home and therefore reduced their spending. Additionally, because of mass layoffs and furloughs, many people likely tried to spend less and save more to weather the situation. The savings rate jumped from 8.0 percent in February 2020 to 13.1 percent in March 2020, which is the highest rate since mid-1970s, but this may be a temporary boost as individuals try to understand the likelihood of losing their jobs or facing reduced work hours. The higher savings rate, although beneficial for many individuals, means lower current demand. This is an early indication of the depressed state sales tax revenue outlook during the pandemic.

Motor Fuel Taxes

State motor fuel sales taxes grew 5.3 percent year-over-year for the fourth quarter of 2019, which is substantially stronger than the growth rates observed during the first half of 2019.

Motor fuel sales tax collections have fluctuated since the Great Recession. Average quarterly year-over-year growth in state motor fuel tax collections was 3.9 percent in nominal terms and 2.2 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 tax rates also affect tax collections.

Growth rates from the fourth quarter of 2018 to the fourth quarter of 2019 varied widely across the states and the regions. Motor fuel tax revenue collections declined in the Mideast and Plains regions, by 7.4 and 2.9 percent, respectively. The largest growth was in the Far West and Great Lakes regions, at 15.7 and 13.7 percent, respectively. The strong growth in the Great Lakes region is mostly attributable to Illinois and Ohio; both states have raised their motor fuel tax rates. Illinois doubled its motor fuel tax rate from 19 cents a gallon to 38 cents a gallon, effective July 1, 2019.[14] Ohio increased its gasoline tax rate from 28 cents a gallon to 38.5 cents a gallon and increased the diesel and all other fuel tax rate from 28 cents a gallon to 47 cents a gallon.[15]

Fourteen states reported year-over-year declines in motor fuel sales tax collections for the fourth quarter of 2019; nine states reported double-digit growth. We expect to see declines in state motor fuel tax revenue collections in the coming months because of stay-at-home orders across states, which drastically reduced traffic.

Other Taxes

The US Census Bureau's quarterly data on state tax collections provide detailed information for some of the smaller revenue sources, including state property taxes, tobacco products excise taxes, alcoholic beverage excise taxes, and motor vehicle and operators' license taxes. In Table A7, we show year-over-year growth rates for four-quarter moving average inflation-adjusted revenue for the nation as a whole. In the fourth quarter of 2019, states collected $53.1 billion from all the smaller tax sources, which constituted 20.9 percent of total state tax collections.

Compared with major tax sources, revenues from smaller taxes have been growing at a slower pace since the Great Recession. The average quarterly year-over-year growth rate in state tax revenues from smaller sources was 2.0 percent in real terms since 2010.

Year-over-year growth for four-quarter moving averages in inflation-adjusted revenues from smaller tax sources was 1.3 percent in the fourth quarter of 2019. State property taxes, which represent a small portion of overall state tax revenues, were fairly flat, declining 0.1 percent. Tax revenues from motor vehicle and operators' licenses increased 3.0 percent, and tax revenue from alcoholic beverage sales increased 2.8 percent. Revenue from tobacco product sales decreased 3.9 percent, marking the fifth consecutive quarter of decline. Finally, revenues from all other smaller tax sources increased 1.7 percent in the fourth quarter of 2019 compared with year earlier levels.

Overview of Tax Revenues in Fiscal Year-To-Date 2020

Through the first two quarters of state fiscal year 2020, states collected $510 billion in total tax revenues, a gain of 6.2 percent from $480 billion in the same period of state fiscal year 2019 (Table A8). All regions had growth in overall state tax collections in the first two quarters of fiscal year 2020. The Far West region had the strongest year-over-year growth at 9.1 percent, while the New England region had the weakest growth at 2.9 percent. Forty-five states reported year-over-year growth in overall state tax revenues for the first two quarters of fiscal year 2020, with 28 states reporting growth of over

5 percent. The strongest growth was reported in Nebraska and New York at 11.5 and 10.4 percent, respectively. (New York's state fiscal year runs from April 1 to March 31. Therefore, the figures reflect the first three quarters for New York's fiscal year 2020.) Overall state tax revenues year-over-year for the first half of fiscal year 2020 declined in Alaska, New Hampshire, New Mexico, North Dakota, and West Virginia. All these states, except for New Hampshire, have a high reliance on the oil and gas industry and thus on severance tax revenues (Dadayan and Boyd 2016). Severance tax revenues saw substantial declines in these states because of declines in oil and natural gas prices, which subsequently led to declines in overall state tax revenues.

All major sources of state tax revenues had solid growth in the first two quarters of fiscal year 2020 compared with the same period a year earlier. Personal income tax revenues totaled $194.7 billion, which was $12.9 billion or 7.1 percent higher in the first two quarters of fiscal year 2020. Growth in the median state was 6.0 percent. Although some states faced lingering effects of income tax shifting caused by the TCJA, this generally was to a smaller extent than in the prior year, and personal income tax revenues fared well in most states over this period, with only three states reporting declines.

Corporate income tax revenues totaled $26.6 billion, which was $3.2 billion or 13.8 percent higher year-over-year for the first half of fiscal year 2020. Growth in the median state, however, was weaker, at 7.2 percent. Overall, 31 states reported growth while 14 states reported declines in corporate income tax revenue collections for the first two quarters of fiscal year 2020 compared to year-earlier levels.

Sales tax revenues totaled $160.9 billion, which was $9.9 billion or 6.6 percent higher for the first half of fiscal year 2020 than for the year-earlier period. Growth in the median state was 5.2 percent. All states but Louisiana and Oklahoma reported year-over-year growth for the first half of fiscal year 2020.

Finally, motor fuel tax revenues totaled $26.1 billion, which was $1.3 billion or 5.1 percent higher for the first two quarters of fiscal year 2020 than for the same period in 2019. Growth in the median state was substantially weaker, at 1.6 percent. Forty-two states reported growth in motor fuel tax revenue collections; eight states reported declines. Unfortunately, the relatively strong revenue position of the states during the first half of fiscal year 2020 is almost certainly going to reverse by the time the fiscal year ends because of the impact of the COVID-19 pandemic.

Preliminary Review of State Tax Revenue in 2020 Quarter 1

Preliminary data collected from 47 states for the January-March quarter of 2020 (Table A9) show weaker growth rates in overall state tax collections as well as in personal income, corporate income, and sales tax collections compared with the growth rates observed in the fourth quarter of 2019.

Overall state tax collections grew 4.5 percent in the first quarter of 2020 compared with the same quarter in 2019. Total state tax collections increased in 38 states but declined in 9 states. Twenty-one states reported growth of over 5 percent.

The weakness in overall state tax collections in the first quarter of 2020 is mostly because of the economic disruptions caused by the COVID-19 pandemic. In fact, state revenues saw solid growth in the months of January and February but started declining in March as states announced stay-at-home mandates across the nation.

Personal income tax collections increased 5.5 percent in the first quarter of 2020 compared with a year earlier. Growth in the median state was also 5.5 percent. Thirty states reported growth; 11 states reported declines. The largest decline in dollar value was in Oregon, where personal income tax collections declined by $0.5 billion or 23.2 percent. As discussed, the declines were largely attributable to the "kicker" rebate, which provides a tax credit when revenues significantly exceed forecast levels.

State sales tax collections showed growth of 3.7 percent for the first quarter of 2020 compared with the same quarter in 2019; growth in the median state was stronger at 5.2 percent. Thirty-nine states reported growth in sales tax collections, with 23 states reporting growth of over 5 percent. Only four states reported declines.

Finally, corporate income tax revenues grew 2.8 percent year-over-year for the first quarter of 2020, which follows seven consecutive quarters of double-digit growth. Growth in the median state was stronger, at 9.9 percent. Growth varied substantially across the states. Twenty-two states reported growth in corporate income tax collections, with 20 states reporting double-digit growth for the first quarter of 2020 compared with the same quarter in 2019. Corporate income tax collections declined in 18 states.

We warned in prior *State Tax and Economic Review* reports that the large growth rates observed in corporate income tax collections following enactment of the TCJA were likely to subside in part because of the weakness in business investments and because of the waning impact of the TCJA, which created incentives for corporations to shift profits from 2017 into 2018 and 2019 because of lower

corporate tax rates. State corporate income tax revenues are likely to plummet in the coming months as various sectors of the economy shut down beginning in March.

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 resident incomes go up, sales taxes generate more revenue when consumers increase their purchases of taxable items, property taxes increase when house prices go up, and so on.

State Gross Domestic Product

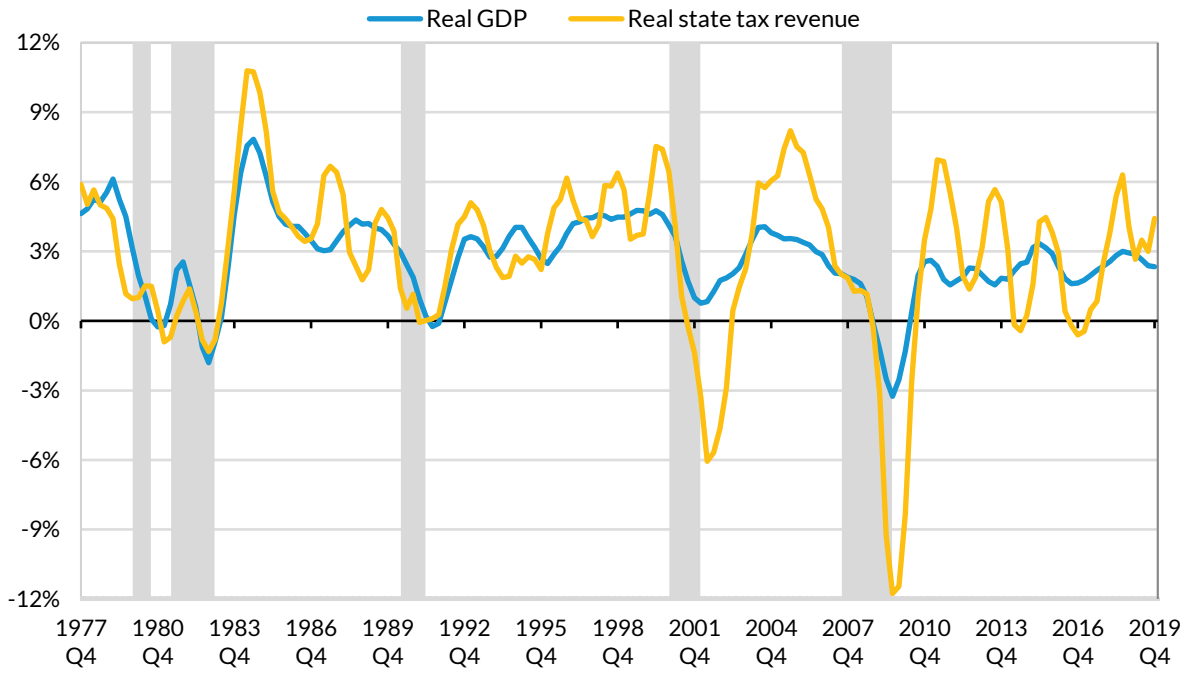
When the economy booms, tax revenues tend to rise rapidly, and when it declines, they tend to decline, though these changes have different patterns and timing. Figure 6 shows year-over-year growth for four-quarter moving averages in real state tax revenue and GDP. We present moving averages to smooth short-term fluctuations and illustrate the interplay between the economy and state revenues. As shown in Figure 6, real GDP showed uninterrupted growth since the second quarter of 2010. By contrast, real state tax revenues showed declines in 2014, 2016, and early 2017 and stronger growth than GDP for most of 2018 and 2019. These differences are largely related to changes in state tax rates and, as noted, changes in federal policy. Real GDP growth weakened throughout 2019 and is projected to decline in 2020 because of the impact of the global pandemic. Year-over-year growth in real state tax revenues was stronger in the fourth quarter of 2019 than the growth rates observed in the prior three quarters of 2019.

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 in the past two decades, mostly because of changes in state tax rates and states' growing reliance on income taxes, some of which are very progressive and very dependent on volatile income sources such as stock options and capital gains.

FIGURE 6

State Tax Revenue Is More Volatile Than the Economy

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



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Source: US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP), analysis by the author.
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 7 shows growth for each state for four-quarter moving averages in real state tax revenue and in real state GDP in the fourth quarter of 2019 compared with the same quarter in 2018. By this measure, real state tax revenues increased in 42 states, and real state GDP increased in all states. (Alaska is an outlier state and is excluded from Figure 7 to better display the overall relationship.) The year-over-year change in real state tax revenues ranged from negative 17.5 percent in Alaska to 11.0 percent in Wyoming; the change in real state GDP ranged from 0.6 percent in Nebraska to 4.4 percent in Texas. For the fourth quarter of 2019, year-over-year growth in real state tax revenues was lower than the national average of 4.3 percent in 31 states, and year-over-year growth in real state GDP was lower than the national average of 2.3 percent in 31 states.

FIGURE 7

Growth Disparity: State Tax Revenues versus State GDP

Year-over-year change in real state taxes and real GDP, 2019 quarter 4 versus 2018 quarter 4

Source: US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP), analysis by the author.
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 is excluded from the figure.

State Unemployment and Employment

The national unemployment rate climbed to 9.9 percent in the fourth quarter of 2009, which was the highest rate observed since 1982. Until very recently, the unemployment rate has seen nearly uninterrupted decline since then. The unemployment rate was 3.5 percent in the fourth quarter of 2019, which is a 50-year low.[16] However, the unemployment rate will increase drastically in the coming months because of the COVID-19 pandemic. Since the greater spread of COVID-19 in the United States in mid-March and state-mandated restrictions, total weekly unemployment insurance claims have exceeded 20 million, surpassing levels seen after the first 50 weeks of claims in the Great Recession after only four weeks (Dadayan and Charleston 2020). Economists surveyed by the *Wall Street Journal* are forecasting double-digit unemployment rates in the coming months, which will likely be the worst on record since 1948.[17]

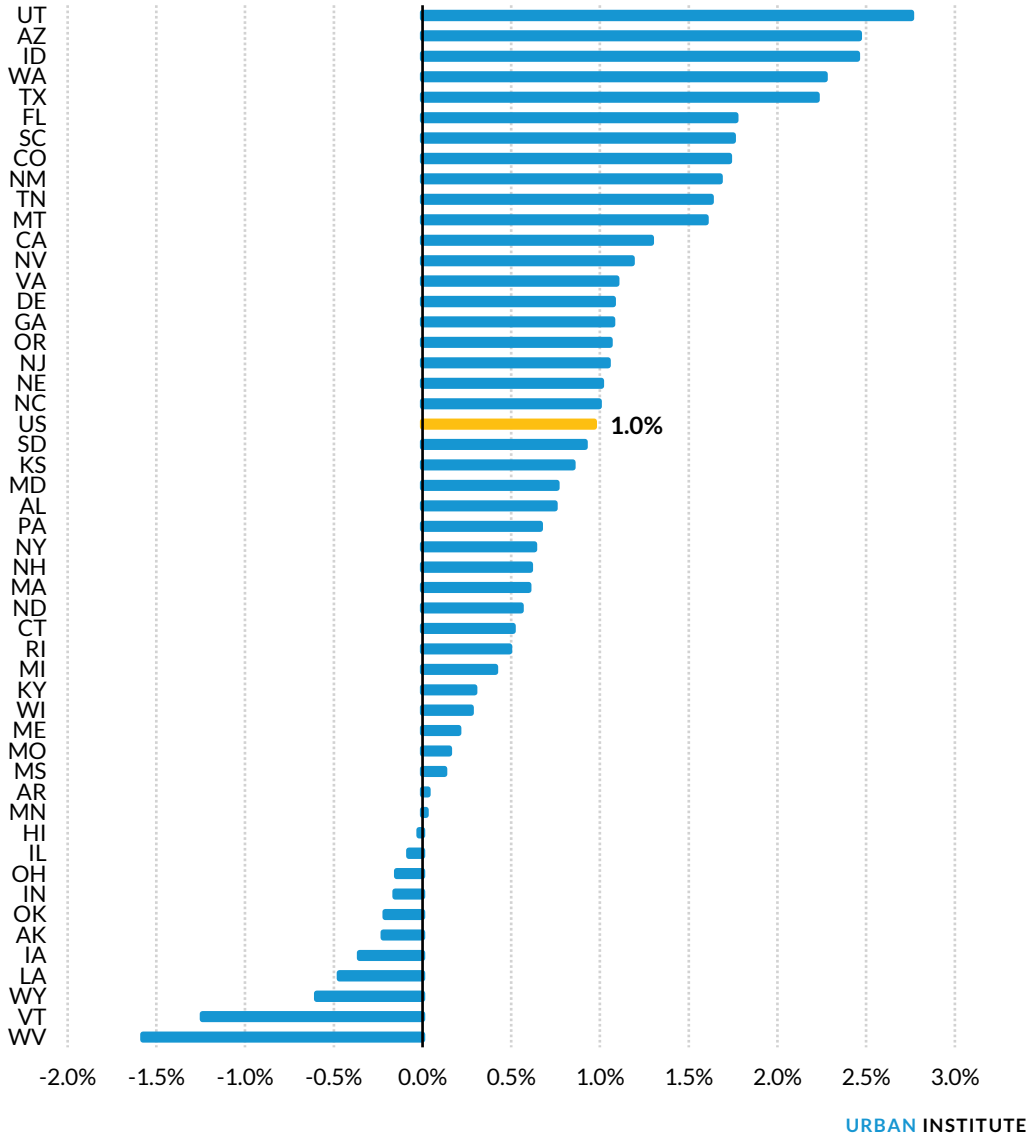
According to preliminary figures released by the US Bureau of Labor Statistics, the unemployment rate already jumped to 3.8 percent in the first quarter of 2020, mostly because of the increase in the

unemployment rate in March. Unemployment rates ranged from 2.2 percent in North Dakota to 5.8 percent in Alaska and Louisiana in the first quarter of 2020.

FIGURE 8

Growth in Employment for the First Quarter of 2020, by State

Year-over-year change in seasonally-adjusted employment, 2020 quarter 1 versus 2019 quarter 1



Source: Bureau of Labor Statistics, analysis by the author.

Nationwide employment grew 1.0 percent in the first quarter of 2020 compared with the same quarter in 2018 (Figure 8). Employment growth was weaker than the national average in 30 states, with 10 states reporting declines year over year, again because of the impact of the pandemic. Employment

growth year-over-year ranged from negative 1.6 percent in West Virginia to 2.8 percent in Utah for the first quarter of 2020. Overall employment growth had slowed before the spread of COVID-19, and most states will likely see dramatic declines in employment in the coming months.

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 9 displays the year-over-year percentage change in the four-quarter moving average of real personal consumption expenditures for services, durable goods, and nondurable goods, as well as for state real sales tax collections. We also show trends in the consumption of energy goods and services.

Year-over-year spending on durable and nondurable goods was stronger, while year-over-year spending on services was unchanged for the fourth quarter of 2019 compared with the year-over-year growth rates observed for the third quarter of 2019. Overall, growth rates for both goods and services were weaker than growth rates observed before the Great Recession. Growth rates in state sales tax revenues were also substantially weaker than their prerecession peaks, although growth in sales tax revenues improved after the *Wayfair* decision as states started requiring remote sellers to collect and remit sales and use tax.

American consumers spend substantially more on services (70 percent) than on goods, and spending on services as a share of total personal consumption has grown steadily throughout the past four decades. Although some states have expanded sales tax bases to include some services, many services are still not subject to sales tax. And then there are states like Arizona and Missouri, both of which have banned taxing services.

Growth in the consumption of durable goods, an important element of state sales tax bases, has been relatively volatile in recent years. Annual growth in durable goods spending was 2.4 percent in 2017 and 2.6 percent in 2018. However, growth in durable goods spending dropped to 1.3 percent in 2019 (as measured by the year-over-year percentage change in the four-quarter moving average of inflation-adjusted spending on goods).

Nondurable consumption spending declined between the third quarter of 2015 and third quarter of 2016 but has increased since then. Nondurable goods were largely affected by the declines in the consumption of gasoline and other energy goods, the latter of which represents over 20 percent of

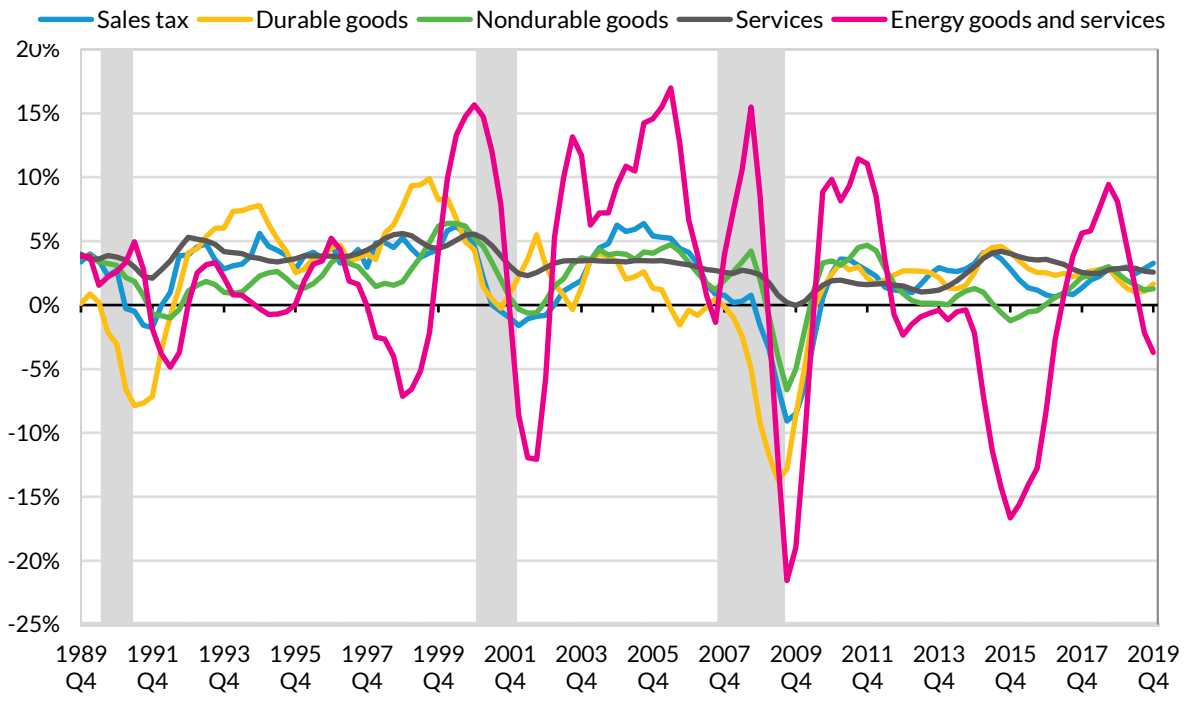
nondurable goods consumption. Growth in nondurable goods also weakened substantially in 2019 and the year-over-year growth rate for 2019 was 1.5 percent, which was substantially weaker than the 2.6 percent year-over-year growth for 2018.

As shown in Figure 9, year-over-year spending on energy goods and services declined for 19 consecutive quarters, between the third quarter of 2012 and the first quarter of 2017. The decline was particularly dramatic throughout 2015 and 2016 in response to steep declines in oil and gas prices. The decline in total spending in the energy sector led to declines in general sales tax revenues, which are based on prices as well as quantity consumed. Energy goods and services had been recovering since the second quarter of 2017 and showed strong year-over-year growth through the first quarter of 2019, largely bouncing back from previously depressed levels. However, year-over-year growth in energy goods and services weakened substantially for the second quarter of 2019 and once again declined for third and fourth quarters of 2019. Moreover, all indications are that these growth rates will fall even more dramatically this year.

FIGURE 9

Substantial Declines in Energy Goods and Services

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



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Sources: US Census Bureau (sales taxes) and Bureau of Economic Analysis (NIPA table 2.3.5), analysis by the author.
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation.

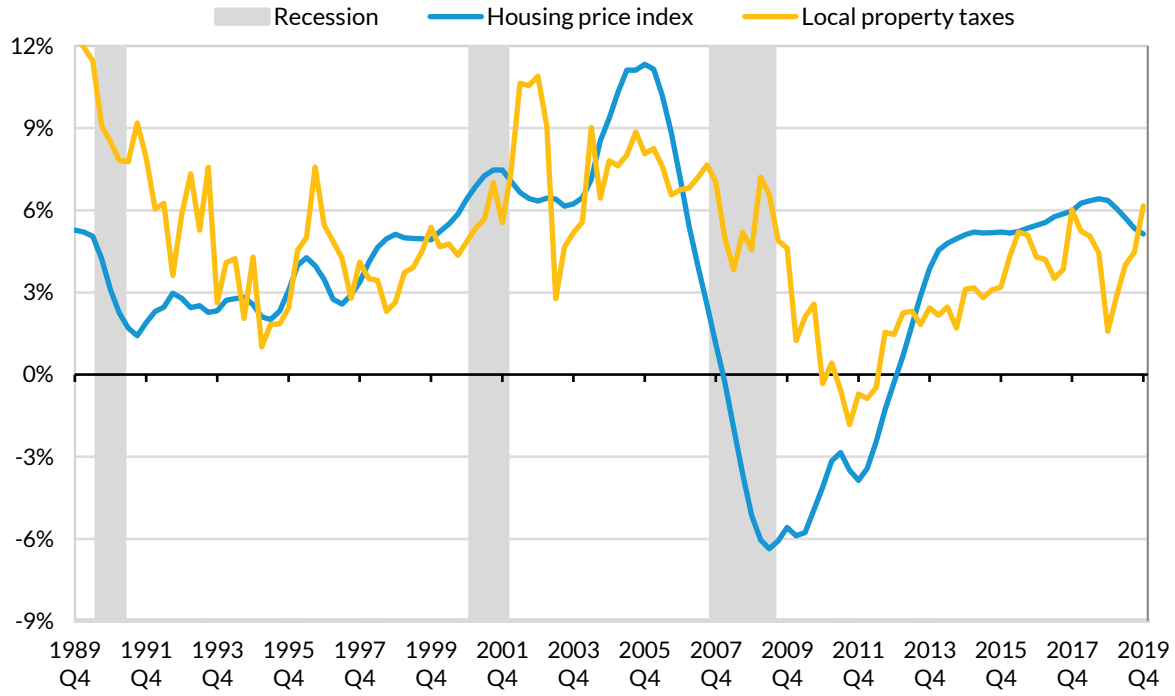
Housing Market

House prices are an important determinant of local property taxes, though property tax changes often lag property price changes. Assessment lags and assessment caps can affect how quickly house price changes translate into property tax revenue changes, but declines in house prices usually lead to declines in property taxes, while growth in house prices usually leads to growth in property tax revenues.

FIGURE 10

Slowing Growth in Housing Prices, Continued Growth in Local Property Taxes

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



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Sources: US Census Bureau (property taxes) and Federal Housing Finance Agency (house price indexes), analysis by the author.
Notes: Year-over-year change is the percentage change of four-quarter moving averages.

Figure 10 shows year-over-year percentage changes in the four-quarter moving average of the house price index and local property taxes in nominal terms. House prices saw steep declines during the Great Recession, which led to a significant slowdown in local property tax growth and to an actual decline in property tax revenues during state fiscal years 2011 and 2012.[18] Growth in the house price index began weakening in mid-2005, and the price index actually declined for five straight years, between the first quarter of 2008 and the fourth quarter of 2012, though patterns varied across states and regions. The trend in the house price index has been generally upward between 2013 and 2018 but

showed some weakness in 2019. National average house prices appreciated 5.1 percent for the fourth quarter of 2019 compared to one year earlier, while local property taxes grew 6.2 percent for the same period.

Statewide house price indexes increased in all states for the fourth quarter of 2019 compared with a year earlier, ranging from a 3.2 percent increase in Iowa to a 10.3 percent increase in Idaho. Year-over-year growth in 28 states was below the national average of 5.1 percent.

Despite continuous and strong nationwide growth in the housing market, prices are still below their prerecession peaks in some states. Figure 11 shows the state-by-state nominal percentage change in house price indexes at the end of the fourth quarter of 2019 compared with the first quarter of 2007, when house prices were at their peaks.

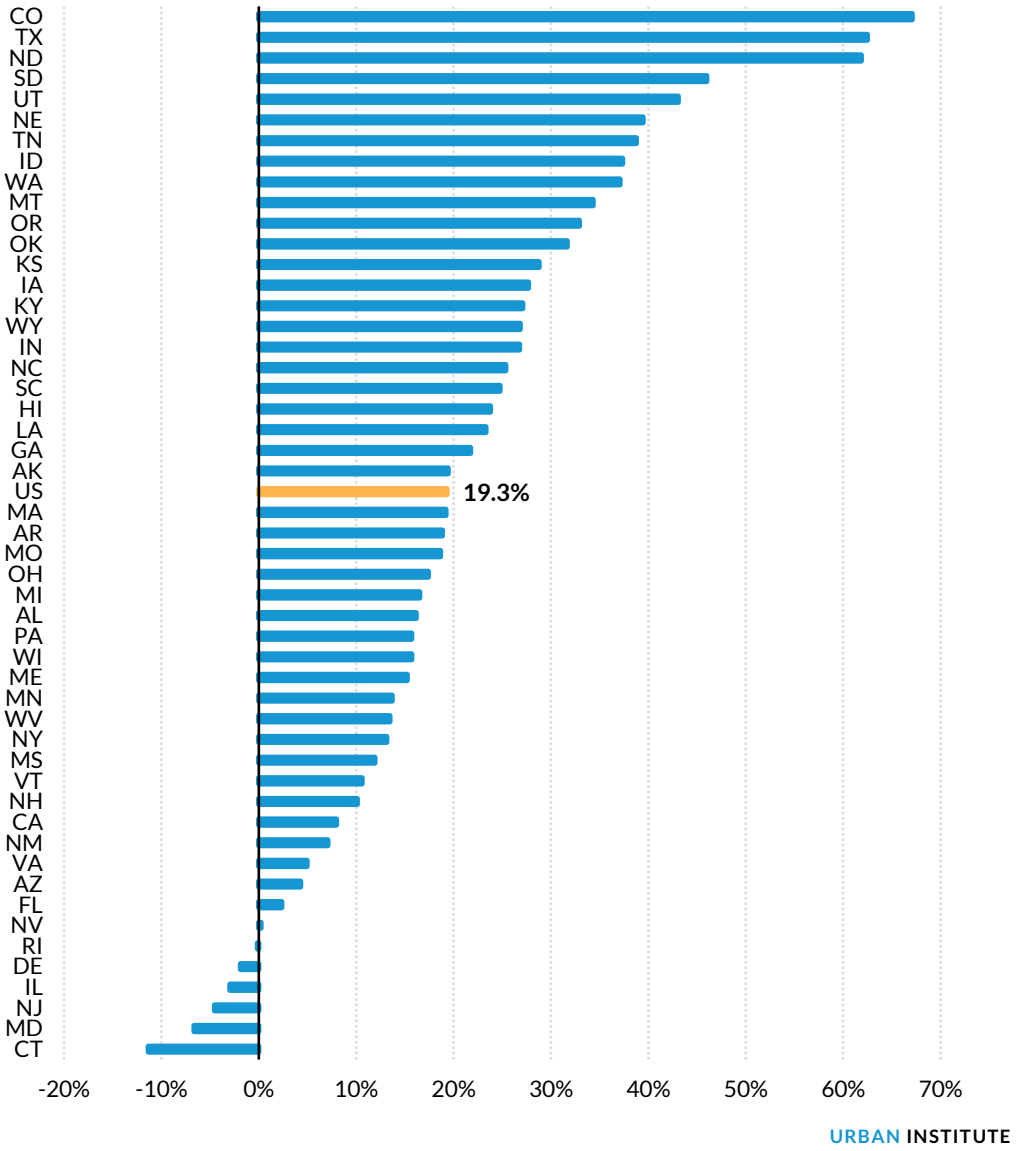
National average house prices grew 19.3 percent in nominal terms between the first quarter of 2007 and the fourth quarter of 2019. However, house price movements varied substantially across the states. House prices are above their prerecession peaks in 44 states in the fourth quarter of 2019 but are still lower in 6 states (in nominal terms). The three hardest-hit states, Connecticut, Maryland, and New Jersey, all still have average house prices 4.5 percent or more below their prerecession peaks, with Connecticut house prices still on average 11.3 percent below their peak. On the other hand, statewide house price indexes increased by double digits in 38 states over this period. In 22 states, growth in statewide average house prices was over 20 percent, with Colorado, Texas, and North Dakota having the highest growth rates at 67.1, 62.5, and 61.9 percent, respectively.

Many states have raised concerns about tight housing supply and rising demand. In 2007, before the fall in house prices, the interest rates on 30-year fixed-rate mortgages averaged around 6.3 percent. Mortgage rates have declined substantially since then, and interest rates on 30-year fixed-rate mortgages are currently averaging around 3.3 percent.[19] The low mortgage interest rates, widely available financing options, and stronger labor-market forces have raised the demand for housing, which pushed house prices higher. The growth in house prices poses a risk to affordability unless housing quantities increase. However, housing prices and the demand for home sales are likely to drop in the coming months because of the economic impact of the COVID-19 pandemic. The Fannie Mae Home Purchase Sentiment Index already shows sharp declines in consumer confidence in the housing market, largely because of concerns related to the job market and housing prices.[20]

FIGURE 11

Growth in House Price Indexes Since the Prerecession Peak

Percent change in house prices from pre-recession peak level, 2019 quarter 4 versus 2007 quarter 1



Source: Federal Housing Finance Agency (house price indexes), analysis by the author.

The Federal Reserve cut short-term interest rates in July 2019, which was the first cut in more than a decade. Since then and before the COVID-19 pandemic began, the Federal Reserve cut rates twice more. Cutting interest rates at a time when the economy was expanding was unusual. However, many economists believed that the interest rate cut was a strategic move to help the US economy weather concerns of a possible trade war with traditional allies and China as well as increasing global economic uncertainty.

To mitigate the negative economic impact of the pandemic, the Federal Reserve cut interest rates twice more, on March 3, 2020, and March 16, 2020, and they are the largest one-time cuts since 2008. Because interest rates are at a very low level now, there is virtually no room for further interest rate cuts to stimulate the economy.

Tax Law Changes Affecting the Fourth Quarter of 2019

Anticipated and actual federal policy changes had a substantial impact on state tax revenues in the most recent quarters. But changes in state tax laws also affect state tax revenue trends. Many states enacted tax changes for fiscal year 2020, partly responding to federal policy changes and partly reflecting policy preferences. Also, most states enacted tax changes in response to Supreme Court's *Wayfair* decision, which are expected to increase state sales tax revenues. We present analysis here based on the data and information retrieved from the National Association of State Budget Officers' Fall 2019 Fiscal Survey of the States. However, the analysis is based on anticipated revenue gains or losses based on states' legislated tax changes and do not consider the effects of changing economic conditions related to the COVID-19 pandemic. Because of decreased economic activity, it is likely that actual revenues raised will differ from expected tax revenues.

During the fourth quarter of 2019, enacted tax increases and decreases produced an estimated gain of $1.7 billion compared with the same period in 2018.[21] Overall, tax changes were expected to decrease personal income taxes by $40 million, increase corporate income taxes by $133 million, increase sales taxes by $458 million, and increase motor fuel taxes by $239 million in the fourth quarter of 2019 compared with a year earlier. Further, states enacted tax changes in other taxes and fees, which were expected to increase state tax and fee revenues by approximately $937 million (National Association of State Budget Officers 2019). Below, we discuss some of the major enacted tax changes for fiscal year 2020.

The estimated impact of enacted tax changes was a projected net increase of $8.1 billion in state revenues in fiscal year 2020. By comparison, legislated tax actions in fiscal year 2019 were less substantial, with an estimated net revenue increase of $3.3 billion. California and New York enacted the most substantial changes, with estimated net revenue increases of $1.8 billion and $1.0 billion, respectively, for fiscal year 2020. Legislated changes were also substantial in Connecticut and Illinois, with an estimated net revenue increase of over $900 million in each.

Four states enacted personal income tax increases, while 13 states enacted decreases for fiscal year 2020. Legislated tax changes are estimated to increase aggregate personal income tax revenues by

$310 million in fiscal year 2020. The largest estimated increase is in California, where conformity to federal tax reform and expansion of earned income tax credits are estimated to lead to a $0.7 billion increase in personal income tax collections in fiscal year 2020.[22] In New York, Governor Cuomo extended the "temporary" millionaire tax through 2024 (Office of New York Governor Andrew M. Cuomo 2019). The millionaire tax was first enacted in 2009, in response to the Great Recession. However, New York also lowered income tax rates for middle-class taxpayers. The net impact of these changes is estimated to lead to a $0.6 billion increase in personal income tax collections in fiscal year 2020. Officials in Ohio enacted a 4 percent across-the-board personal income tax cut (among other changes), which is expected to reduce personal income tax collections by $364 million in fiscal year 2020 (Ohio Legislative Service Commission 2019). Officials in Oregon slightly reduced personal income tax rates, which is estimated to reduce personal income tax revenues by $175 million in fiscal year 2020 (Oregon Legislative Revenue Office 2019). Lawmakers in Wisconsin also reduced personal income tax rates by cutting the rates for the two lowest income tax brackets from 4.00 percent to 3.86 percent and from 5.21 percent to 5.04 percent.[23] These tax rate reductions are estimated to decrease personal income tax collections by $167 million in fiscal year 2020. Finally, lawmakers in Minnesota enacted several changes to its personal income tax system, including conforming to the federal tax overhaul embodied in the TCJA and a reduction in the personal income tax rate for the second-tier tax bracket (Minnesota Department of Fiscal Analysis 2019). These changes are estimated to reduce Minnesota's personal income tax collections by $171 million in fiscal year 2020.

Seven states enacted corporate income tax increases; another 7 states enacted decreases. Legislated tax changes were estimated to increase aggregate corporate income tax revenues by $1.3 billion in fiscal year 2020. The largest corporate income tax change is in Oregon, where Governor Brown signed into law a new corporate tax activity tax that applies to all entities (i.e., individuals, partnerships, corporations, and others) with taxable commercial activity. The new tax is estimated to increase corporate income tax revenue collections by $799 million in fiscal year 2020 (Oregon Legislative Revenue Office 2019). Legislated changes related to conformity to the federal tax law changes in the TCJA are expected to increase corporate income tax revenues by $229 million in California and by $170 million in Minnesota in fiscal year 2020. New Mexico more than doubled the annual cap on rebate payments for film and televisions productions,[24] which is estimated to decrease corporate income tax revenues collections by $110 million in fiscal year 2020.

The National Association of State Budget Officers' Fall 2019 Fiscal Survey of the States reports 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. To date, 43 of 45 states with a sales tax base have

enacted economic nexus laws to collect sales and use taxes from remote sellers (Table A6). A few states, such as Massachusetts, Ohio, Pennsylvania, and Rhode Island, had adopted internet sales tax laws before the *Wayfair* ruling on June 21, 2018, and have since updated the laws or provided additional guidance for remote sellers. Florida and Missouri still have not enacted laws, but both states have proposed legislation on collecting sales and use tax from remote sellers. Legislated changes related to expansion of the sales tax base in response to the *Wayfair* decision are expected to increase state sales tax revenues by $1.3 billion in fiscal year 2020. The largest increases are expected in states with the largest populations, such as California, New York, and Texas. Officials in California are estimating that online and remote sales tax collections will produce an additional $616 million in fiscal year 2020.[25]

Apart from legislated changes related to the *Wayfair* decision, 7 states enacted sales tax increases, and 10 states enacted decreases. Legislated tax changes are estimated to increase sales tax revenues by $325 million in fiscal year 2020. The most significant legislative changes were in Connecticut and New Mexico. Lawmakers in Connecticut expanded the sales and use tax base and repealed several sales tax exemptions,[26] and these changes are estimated to increase sales tax revenues by $145 million in fiscal year 2020. Officials in New Mexico enacted policy changes that include the repealing of hospital credits and subjecting hospitals to a gross receipts tax.[27] These changes are estimated to increase New Mexico's sales tax revenue collections by $125 million in fiscal year 2020.

Four states enacted motor fuel tax increases, for an estimated overall increase of $939 million in fiscal year 2020. The largest increase was in Ohio, where lawmakers increased the gasoline tax rate from 28 cents a gallon to 38.5 cents a gallon and increased diesel and all other fuel tax rate from 28 cents a gallon to 47 cents a gallon effective July 1, 2019.[28] These rate increases are estimated to increase motor fuel tax revenues by $865 million in fiscal year 2020.

Fourteen states enacted changes for taxes on cigarettes, alcohol, and gaming, with an estimated overall increase of $139 million in fiscal year 2020. The estimated impact of each state's changes is not significant except in Illinois, where Governor Pritzker raised the tax on video gaming terminals from 30 percent to 33 percent for fiscal year 2020,[29] which is expected to increase gaming tax revenues by $89 million in fiscal year 2020.

Over half of the states also enacted changes for some other taxes and fees, with an estimated overall increase of $3.8 billion in fiscal year 2020. These changes are estimated to increase state revenues in 19 states but decrease in 8 states. The largest estimated increases are in California and Illinois, mostly because of the managed care organization (MCO) tax. In California, officials urged extending the MCO tax that was set to expire on July 1, 2019.[30] Governor Newsom approved the bill to renew the MCO tax retroactively, subject to approval from the federal government.[31] The MCO tax, if

approved by the federal government, would have increased state tax revenues by an estimated $915 million in fiscal year 2020. However, the federal government rejected California's MCO tax on January 30, 2020.[32] Officials in California continue discussions with the federal government, in the hopes of reaching an agreement on the MCO tax. Similarly, officials in Illinois also proposed a tax on MCOs, which would have increased state revenues by an estimated $500 million in fiscal year 2020, subject to approval by the federal government.[33]

Conclusion

State tax revenues showed continued growth in the first half of fiscal year 2020. However, growth has been less robust compared with prior years, mostly because of the waning impact of the TCJA. Moreover, growth in sales tax revenues has not materialized as substantially as states had hoped from the *Wayfair* decision, mostly indicating that the implementation, administration, and collection of tax revenues from online sales is complex and that some online sellers had already been collecting these taxes. It will take some time until state administrators as well as online sellers and marketplace facilitators figure out the specifics of online sales taxation.

Despite overall concerns about economic slowdown and despite weaknesses in some economic indicators before the COVID-19 pandemic fully hit the US, most states were on track to close state fiscal year 2020 budgets with no shortfalls. However, these projections are no longer valid.

Even before the pandemic reached the US, states had raised various concerns of conditions that could negatively impact state tax revenues. These related to the threat of instability in global markets, the nation's political climate, volatility in oil prices, political and economic risks associated with tariffs, the Federal Reserve Board's interest rate cuts in the second half of 2019, the changing consumption and spending habits of Americans, an aging workforce and long-term demographic changes, and anticipation of further tax policy changes at the federal level that could have direct impacts on state budgets. All these concerns still hold true, but the public health and economic conditions related to the COVID-19 pandemic pose a much bigger and immediate threat to state budgets and to the overall economy.

States are facing unprecedented fiscal uncertainties because of the unprecedented lockdowns that have paralyzed the economy. Governors in all states are facing the challenge of drastically falling revenues and rising spending. Although most states had robust rainy-day funds at the beginning of this fiscal year, they will likely not be a sufficient buffer for most states.

Looking at the next few months, states must address unforeseen revenue shortfalls and sudden increases in spending needs. Although most states had seen healthy growth in overall tax revenue collections during the first nine months of fiscal year 2020, the picture for the remainder of the fiscal year is bleak. Some states have already announced budget shortfalls for the current fiscal year 2020 and for upcoming fiscal year 2021.

Because the Internal Revenue Service has delayed income tax deadlines from April 15 to July 15 and states have generally followed suit, states will collect substantially less income tax revenue this April. Typically, April is the most important month for income tax payments. Usually states collect

around 13 to 15 percent of annual personal income tax revenues in April, with 70 to 75 percent coming from estimated and final payments. This year, large shares of estimated and final payments are likely to come in July, which falls in the next fiscal year, although some states will be able to assign these funds to the current fiscal year.

Second, the shutdown of a wide range of businesses and services across all states means less business activity, less consumer spending, and therefore less sales tax revenue collections for states, particularly for the month of April and beyond. Although some states are preparing to gradually relax restrictions and open their economies back up, business activity will not return to prior levels for a long time, with some activities and industries facing a very slow recovery.

Finally, many businesses, especially restaurants, bars, gyms, hair salons, and other businesses not deemed essential have laid off employees. Recent unemployment insurance claims have spiked to over 30 million in just six weeks. Even if new claims stabilize, states will continue to see drastic increases in unemployment insurance and health care spending and reductions in state tax revenues for the remainder of this fiscal year and the beginning of the next year.

Although there is much uncertainty regarding the level and duration of the current downturn, one thing is certain: the longest US economic expansion on the record is now over.

Appendix: Additional Tables

TABLE A1

Quarterly State Government Tax Revenue by Major Tax

	Nominal Y-O-Y Percentage Change					Inflation	Real Y-O-Y Percentage Change				
2010 Q1–2019 Q4	PIT	CIT	Sales	MFT	Total	rate	PIT	CIT	Sales	MFT	Total
average growth	*6.1*	*4.9*	*4.1*	*3.9*	*4.8*	*1.7*	*4.4*	*3.2*	*2.4*	*2.2*	*3.0*
2019 Q4	6.2	17.3	5.6	5.3	5.3	1.6	4.5	15.5	3.9	3.6	3.6
2019 Q3	4.3	11.7	7.1	4.5	5.5	1.7	2.5	9.8	5.3	2.8	3.7
2019 Q2	18.8	21.0	2.5	2.6	10.6	1.8	16.7	18.9	0.7	0.8	8.7
2019 Q1	(2.4)	41.2	5.6	1.4	2.8	2.0	(4.3)	38.5	3.6	(0.6)	0.8
2018 Q4	(9.2)	12.0	4.5	5.9	(0.2)	2.3	(11.3)	9.4	2.2	3.5	(2.4)
2018 Q3	7.8	26.4	6.3	8.8	8.5	2.5	5.2	23.3	3.7	6.1	5.8
2018 Q2	10.3	17.2	5.3	8.7	8.9	2.6	7.5	14.2	2.6	5.9	6.1
2018 Q1	14.9	(6.8)	5.0	10.9	8.8	2.1	12.5	(8.7)	2.8	8.6	6.5
2017 Q4	14.6	10.2	4.5	9.7	9.0	2.0	12.3	8.0	2.4	7.5	6.9
2017 Q3	4.3	6.2	3.1	2.0	3.8	1.9	2.4	4.2	1.2	0.0	1.9
2017 Q2	(0.0)	11.7	3.2	5.2	2.3	1.7	(1.7)	9.8	1.5	3.5	0.6
2017 Q1	8.9	(28.1)	2.3	0.9	3.3	2.0	6.7	(29.5)	0.3	(1.1)	1.2
2016 Q4	0.3	(2.6)	1.7	1.2	1.2	1.5	(1.1)	(4.1)	0.2	(0.3)	(0.3)
2016 Q3	2.4	(8.9)	2.7	1.3	1.3	0.9	1.5	(9.7)	1.7	0.4	0.3
2016 Q2	(2.8)	(9.7)	1.2	0.3	(1.7)	0.9	(3.7)	(10.5)	0.3	(0.6)	(2.5)
2016 Q1	1.7	(5.9)	1.9	2.9	1.4	0.8	0.9	(6.7)	1.1	2.1	0.6
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	3.5	5.0	4.1	1.0	5.5	(0.8)	2.5	4.0	3.1
2015 Q2	14.0	6.0	3.6	2.5	7.1	1.1	12.7	4.9	2.5	1.4	5.9
2015 Q1	6.9	3.3	5.8	4.3	5.5	1.1	5.8	2.2	4.6	3.2	4.3
2014 Q4	8.4	9.8	6.5	2.4	5.7	1.5	6.8	8.2	5.0	0.9	4.1
2014 Q3	4.4	7.4	6.6	0.6	4.3	2.0	2.4	5.3	4.5	(1.3)	2.2
2014 Q2	(6.7)	(0.3)	4.6	4.0	(1.0)	2.1	(8.6)	(2.4)	2.5	1.9	(3.0)
2014 Q1	(1.3)	7.9	3.0	2.8	0.5	1.8	(3.0)	5.9	1.2	1.0	(1.3)
2013 Q4	1.1	3.7	5.1	3.6	3.0	1.8	(0.7)	1.8	3.2	1.7	1.2
2013 Q3	4.9	1.8	5.5	2.8	5.3	1.7	3.1	0.2	3.7	1.1	3.5
2013 Q2	19.2	8.5	4.6	2.0	10.0	1.7	17.2	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	(0.8)	3.4
2012 Q3	4.7	8.7	2.3	2.2	3.1	1.8	2.8	6.7	0.5	0.4	1.3
2012 Q2	4.7	1.6	2.1	1.7	3.2	1.7	2.9	(0.2)	0.4	(0.1)	1.4
2012 Q1	4.0	4.3	4.6	1.3	3.7	2.1	1.9	2.1	2.5	(0.8)	1.6
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	(0.3)	6.2	2.4	7.2	0.2	1.3	(2.6)	3.7
2011 Q2	15.3	19.4	5.7	7.5	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	11.2	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	10.6	5.4	1.4	3.4	(2.3)	3.1	9.1	3.9
2010 Q2	2.2	(19.4)	4.8	4.0	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)	2.6	(10.5)	0.3	(11.6)	(21.1)	(10.0)	2.3	(10.7)
2009 Q2	(27.4)	0.9	(8.8)	(1.5)	(16.2)	1.0	(28.1)	(0.1)	(9.7)	(2.4)	(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)

Source: Bureau of Economic Analysis (GDP) and US Census Bureau (tax revenue), analysis 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, 2019 quarter 4 versus 2018 quarter 4

State/region	PIT	CIT	Sales	MFT	Total
US (median)	***5.6***	***12.9***	***5.0***	***0.7***	***5.0***
US (average)	***6.2***	***17.3***	***5.6***	***5.3***	***5.3***
New England	**1.7**	**2.8**	**3.2**	**1.1**	**2.4**
Connecticut	(4.2)	21.5	(1.9)	(0.3)	(1.2)
Maine	3.4	(33.6)	7.7	(1.2)	4.0
Massachusetts	3.9	10.6	5.0	(1.0)	4.4
New Hampshire	41.5	(21.7)	N/A	0.7	(3.5)
Rhode Island	3.9	6.3	7.6	0.7	5.3
Vermont	2.5	(13.4)	5.6	34.3	3.8
Mideast	**5.3**	**19.2**	**5.8**	**(7.4)**	**6.1**
Delaware	4.6	(4.4)	N/A	4.9	6.5
Maryland	2.1	12.1	5.9	(3.1)	6.9
New Jersey	7.3	23.6	7.2	(5.1)	7.3
New York	5.3	24.6	5.2	(2.3)	5.9
Pennsylvania	5.6	9.7	5.5	(12.0)	5.1
Great Lakes	**3.7**	**32.9**	**3.6**	**13.7**	**4.5**
Illinois	6.4	31.2	3.6	11.7	4.5
Indiana	5.5	9.9	2.9	0.6	4.2
Michigan	0.7	0.1	3.9	0.7	2.6
Ohio	(0.1)	NM	3.8	40.7	4.9
Wisconsin	4.7	99.3	3.3	0.7	7.4
Plains	**5.9**	**29.4**	**6.2**	**(2.9)**	**5.4**
Iowa	2.3	93.9	10.1	(10.6)	7.8
Kansas	8.1	33.1	5.3	1.2	7.5
Minnesota	5.4	13.3	6.0	(3.9)	5.2
Missouri	7.0	15.3	2.4	(2.8)	4.2
Nebraska	10.0	69.7	16.6	9.3	15.7
North Dakota	2.4	17.0	(3.3)	(3.2)	(5.8)
South Dakota	N/A	(16.9)	6.8	(1.0)	(0.1)
Southeast	**3.7**	**4.2**	**4.1**	**4.5**	**4.0**
Alabama	8.0	8.6	2.8	27.6	8.3
Arkansas	6.6	(0.3)	5.3	14.8	5.8
Florida	N/A	(10.2)	3.4	0.5	2.9
Georgia	(0.5)	20.3	2.0	0.1	0.4
Kentucky	2.3	(3.9)	4.9	0.5	3.2
Louisiana	1.2	(58.9)	0.2	0.7	(2.4)
Mississippi	6.5	23.0	4.6	0.1	4.6
North Carolina	2.6	461.7	4.7	2.9	3.9
South Carolina	6.0	438.7	7.6	15.1	8.4
Tennessee	18.9	33.0	4.9	15.0	6.6
Virginia	6.7	34.0	8.0	0.7	8.4
West Virginia	1.9	(6.2)	2.2	0.7	(2.6)
Southwest	**12.1**	**(5.1)**	**6.3**	**2.3**	**3.9**
Arizona	11.1	37.7	7.4	0.7	8.2
New Mexico	26.0	NM	11.5	0.7	(12.4)
Oklahoma	8.4	NM	(10.1)	2.0	3.9
Texas	N/A	N/A	7.1	2.8	5.1
Rocky Mountain	**8.3**	**12.8**	**7.0**	**0.5**	**6.3**
Colorado	5.4	12.9	4.3	(2.9)	4.2
Idaho	10.7	18.2	10.5	1.8	8.9

State/region	PIT	CIT	Sales	MFT	Total
Montana	11.6	42.4	N/A	2.7	5.4
Utah	11.9	(3.6)	9.3	1.2	9.7
Wyoming	N/A	N/A	3.6	6.7	4.5
Far West	**10.7**	**22.0**	**8.7**	**15.7**	**7.9**
Alaska	N/A	(29.3)	N/A	(21.4)	(18.4)
California	10.6	25.8	11.1	13.7	8.6
Hawaii	6.1	(50.6)	2.1	0.7	4.0
Nevada	N/A	N/A	8.7	2.0	7.4
Oregon	13.1	10.7	N/A	0.7	11.0
Washington	N/A	N/A	5.0	44.3	5.9

Source: US Census Bureau (tax revenue), analysis 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

State/region	State Fiscal Year 2019				State Fiscal Year 2020		
	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1
US (median)	***6.7***	***6.5***	***2.7***	***5.3***	***5.0***	***4.2***	***6.9***
US (average)	***6.2***	***6.7***	***1.2***	***5.2***	***4.4***	***4.8***	***5.8***
New England	**4.0**	**6.6**	**5.7**	**3.2**	**4.7**	**2.8**	**4.7**
Connecticut	8.8	9.4	6.4	7.3	5.5	2.8	2.0
Maine	4.9	8.5	3.6	5.3	10.0	2.0	7.6
Massachusetts	2.2	5.1	6.0	1.5	4.1	3.1	5.8
Rhode Island	(0.3)	5.4	3.9	1.2	3.8	2.0	6.9
Vermont	5.3	9.4	1.9	1.5	0.6	(0.3)	3.1
Mideast	**4.1**	**3.3**	**0.5**	**5.0**	**5.1**	**4.6**	**5.6**
Delaware	6.3	4.8	3.2	7.9	6.2	0.9	10.1
Maryland	3.0	4.9	0.9	4.0	6.7	5.5	8.9
New Jersey	3.0	3.9	4.8	4.5	6.2	3.2	7.0
New York	5.1	2.2	(1.5)	5.5	5.0	4.8	4.6
Pennsylvania	3.0	4.4	3.7	5.1	2.4	4.1	3.8
Great Lakes	**8.3**	**4.4**	**1.6**	**5.3**	**4.0**	**4.1**	**4.0**
Illinois	13.8	6.1	2.7	5.1	4.2	3.2	2.8
Indiana	7.0	2.9	(2.8)	8.7	1.4	4.8	7.3
Michigan	4.6	2.9	(2.5)	5.2	7.6	6.0	6.9
Ohio	5.5	5.9	2.3	3.5	2.5	1.9	1.6
Wisconsin	6.4	2.4	7.7	4.7	3.0	5.4	3.4
Plains	**4.8**	**4.8**	**0.4**	**2.8**	**3.4**	**3.3**	**4.4**
Iowa	6.6	10.8	(0.6)	(4.1)	(3.5)	(3.9)	3.0
Kansas	14.4	7.9	3.7	7.6	2.8	6.4	9.7
Minnesota	6.7	6.5	2.1	5.7	5.1	2.8	1.6
Missouri	(5.4)	(4.3)	(3.6)	(2.2)	6.0	6.4	4.7
Nebraska	9.6	6.8	(0.2)	8.2	2.1	6.5	10.9
North Dakota	12.4	12.2	13.3	5.5	10.2	3.7	13.3
Southeast	**6.3**	**7.4**	**(0.4)**	**3.1**	**2.1**	**1.8**	**5.4**
Alabama	11.3	7.6	3.9	8.3	1.7	5.4	9.0
Arkansas	5.7	5.4	1.3	8.2	1.9	5.7	9.3
Georgia	7.4	4.7	(4.0)	0.1	(2.4)	(2.3)	6.0
Kentucky	(2.5)	(0.8)	(2.4)	(4.0)	2.1	2.0	7.5
Louisiana	21.7	21.5	(2.8)	6.3	9.9	(4.7)	14.9
Mississippi	7.0	1.7	(0.4)	2.5	(1.0)	3.5	7.3
North Carolina	7.5	10.4	(1.6)	0.9	(1.0)	(0.2)	3.4
South Carolina	5.7	6.5	4.9	7.2	6.6	4.9	2.4
Virginia	1.1	7.7	1.2	4.5	5.8	5.8	2.9
West Virginia	15.9	9.9	6.6	6.8	(0.4)	1.2	4.1
Southwest	**8.1**	**6.5**	**3.8**	**9.8**	**7.3**	**7.9**	**6.4**
Arizona	9.1	6.6	2.3	8.4	7.1	8.7	10.3
New Mexico	4.8	2.4	3.5	20.1	13.2	13.9	ND
Oklahoma	8.0	8.3	6.0	7.0	5.0	4.3	0.9
Rocky Mountain	**6.7**	**5.6**	**4.6**	**2.8**	**6.1**	**5.8**	**10.8**
Colorado	9.6	10.0	5.6	7.2	6.1	3.5	10.9
Idaho	(16.2)	(20.4)	(19.9)	(17.5)	3.2	9.7	12.1
Montana	6.8	10.6	3.1	5.6	7.6	4.2	9.7
Utah	12.4	9.2	15.5	3.3	6.5	9.0	10.3
Far West	**7.7**	**12.0**	**0.9**	**8.4**	**5.3**	**8.2**	**7.2**
California	7.4	12.3	0.2	9.4	5.1	8.2	7.5
Hawaii	10.3	5.1	17.8	(14.1)	4.1	5.6	4.4
Oregon	9.1	11.0	3.3	7.9	7.0	9.0	4.9

Source: Individual state data, analysis by the author.

Notes: 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

	Payments for Tax Year 2018				Payments for Tax Year 2019			
State	April 2018, 1st payment	June 2018, 2nd payment	Sep. 2018, 3rd payment	Dec. 2018-Jan. 2019, 4th payment	April 2019, 1st payment	June 2019, 2nd payment	Sep. 2019, 3rd payment	Dec. 2019-Jan. 2020, 4th payment
Median	***12.6***	***9.3***	***9.6***	***(41.1)***	***18.0***	***10.4***	***11.1***	***11.0***
Average	**9.3**	**17.2**	**18.2**	**(41.1)**	**35.7**	**1.3**	**0.4**	**10.5**
Alabama	42.5	7.2	23.9	(42.5)	30.1	11.5	12.7	13.3
Arizona	8.3	11.8	14.9	(58.3)	(25.1)	13.4	13.3	15.1
Arkansas	3.9	3.3	1.9	(36.8)	(3.2)	3.1	14.3	9.8
California	13.2	20.9	33.5	(22.6)	7.6	(3.6)	(14.2)	8.6
Colorado	(7.1)	13.3	11.3	(47.5)	62.9	(0.5)	1.7	6.1
Connecticut	14.0	36.8	8.7	(71.5)	(18.3)	(31.1)	(15.9)	(11.0)
Delaware	12.2	(4.2)	(1.8)	(32.3)	11.2	12.3	15.0	13.5
Georgia	13.5	6.9	6.1	(58.1)	2.8	6.1	4.3	4.7
Hawaii	71.8	(19.5)	6.5	(33.5)	138.6	22.9	48.1	41.9
Illinois	46.6	41.7	29.3	(42.8)	19.7	12.3	8.9	7.2
Indiana	41.3	5.6	7.8	(33.6)	19.2	10.0	8.8	13.0
Iowa	(0.0)	(6.2)	(4.6)	(48.1)	9.4	7.3	15.7	18.2
Kansas	186.7	162.0	80.6	(54.0)	12.4	13.3	19.0	22.0
Kentucky	8.0	10.3	4.6	(43.9)	4.6	(0.7)	(1.0)	11.0
Louisiana	34.5	7.0	5.7	(39.8)	17.7	20.9	20.3	25.2
Maine	6.8	(11.7)	2.3	(18.0)	18.3	15.6	6.2	9.3
Maryland	36.5	5.5	11.2	(32.7)	(1.0)	19.9	20.7	16.5
Massachusetts	17.0	14.9	16.5	(49.8)	7.6	0.3	3.4	3.2
Michigan	23.2	9.9	12.3	(43.3)	9.9	5.5	3.8	3.6
Minnesota	(0.3)	9.4	5.8	(52.2)	71.0	9.3	9.3	11.6
Mississippi	(42.2)	(7.0)	2.6	(28.0)	97.8	20.1	11.0	14.0
Missouri	(5.5)	2.5	13.8	NM	135.6	(68.7)	(74.7)	NM
Montana	7.8	16.2	2.1	(36.1)	27.6	(0.8)	17.2	35.0
Nebraska	6.1	7.9	6.2	(35.6)	20.6	10.1	11.3	10.8
New Jersey	7.5	20.2	23.3	(32.5)	10.4	7.1	5.0	8.7
New York	4.5	15.9	15.2	(54.5)	57.1	7.5	2.8	7.3
North Carolina	30.7	1.0	2.7	(44.4)	15.1	13.2	11.8	16.2
North Dakota	12.5	11.3	7.4	(43.5)	40.6	12.7	16.0	9.6
Ohio	39.5	36.7	18.7	(43.3)	8.1	12.9	16.0	7.2
Oklahoma	14.5	9.2	9.9	(29.4)	31.6	3.6	(2.0)	(7.3)
Oregon	6.6	7.9	13.2	(46.9)	53.5	11.5	12.9	14.1
Pennsylvania	16.4	9.7	14.8	(33.2)	13.9	13.0	11.1	8.7
Rhode Island	14.5	(1.6)	12.8	(37.8)	5.3	10.6	9.9	16.6
South Carolina	(65.3)	1.8	5.3	(35.4)	157.4	18.2	11.1	16.8
Vermont	12.7	14.8	14.9	(25.5)	20.1	14.9	18.7	13.1
Virginia	28.3	16.3	8.8	(37.0)	30.3	13.7	20.5	24.7
West Virginia	9.7	4.3	10.0	(22.7)	(9.9)	10.0	5.2	5.3
Wisconsin	4.8	12.5	9.2	(42.8)	51.9	0.9	2.7	1.6

Source: Individual state data, analysis by the author.

Notes: 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. Data is not available for Idaho, New Mexico, and Utah.

NM = not meaningful.

TABLE A5

State Personal Income Tax Final Payments

Year-over-year nominal percentage change

	State Fiscal Year 2019				State Fiscal Year 2020		
State	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1
Median	***7.9***	***8.3***	***11.2***	***37.0***	***18.3***	***24.0***	***(0.8)***
Average	**12.8**	**(1.5)**	**18.5**	**39.0**	**21.2**	**20.8**	**(9.3)**
Alabama	20.7	3.1	(2.2)	40.7	18.3	28.4	17.7
Arizona	12.7	27.8	28.4	52.5	45.9	19.7	(22.9)
Arkansas	3.9	8.3	142.4	33.5	17.7	24.0	(55.0)
California	15.7	13.9	21.4	29.4	33.9	26.5	(12.1)
Colorado	12.0	7.1	0.7	26.5	4.0	9.1	(2.7)
Connecticut	2.6	(37.8)	(45.0)	(4.4)	(15.3)	(21.8)	(25.1)
Delaware	(11.6)	16.8	33.6	35.5	13.0	50.5	(39.1)
Georgia	32.2	15.8	22.0	51.6	46.9	40.9	38.6
Hawaii	25.0	(6.2)	33.8	22.1	4.5	48.2	7.9
Idaho	7.7	(45.5)	(48.7)	55.2	22.0	13.3	26.3
Illinois	53.7	25.5	25.8	52.8	25.7	41.3	(2.8)
Indiana	(1.4)	18.0	12.2	33.9	11.1	15.2	(4.6)
Iowa	16.3	30.3	(2.9)	65.6	26.8	77.8	15.5
Kansas	18.7	63.7	12.9	50.2	7.8	27.0	11.2
Kentucky	1.2	14.3	27.7	18.5	27.8	2.6	0.1
Louisiana	1.5	6.8	7.3	48.3	32.0	32.3	7.0
Maine	4.1	5.9	(2.9)	31.0	19.4	0.1	12.9
Maryland	7.5	6.2	21.1	49.7	24.7	24.4	(6.1)
Massachusetts	11.7	14.6	11.0	53.8	(0.2)	2.4	(0.7)
Michigan	21.2	19.1	(5.3)	46.4	6.6	13.3	0.6
Minnesota	7.1	(1.9)	3.1	28.4	17.3	24.7	7.3
Missouri	7.2	101.3	352.3	52.1	186.7	(55.0)	(47.1)
Montana	0.8	2.8	17.4	28.5	38.4	19.7	0.1
Nebraska	17.9	(4.9)	5.6	37.0	77.3	23.8	6.1
New Jersey	(21.7)	(42.8)	(13.4)	49.3	18.8	40.2	6.6
New Mexico	54.0	(47.2)	209.2	(43.6)	(2.8)	45.3	ND
New York	20.5	19.6	15.4	38.3	15.9	18.9	(3.4)
North Carolina	1.7	(10.2)	2.8	41.5	15.5	21.6	(5.9)
North Dakota	(9.1)	5.3	14.6	26.1	0.0	10.0	0.0
Ohio	51.5	45.6	25.2	52.5	30.8	13.0	(27.5)
Oklahoma	13.5	16.6	12.0	20.9	25.7	28.5	1.0
Pennsylvania	50.2	19.3	8.0	32.4	32.5	25.0	(23.1)
Rhode Island	6.4	20.4	11.2	31.4	30.2	29.2	(0.9)
South Carolina	7.9	14.1	10.0	25.6	12.8	45.8	(2.4)
Utah	5.6	(71.6)	36.5	59.4	23.6	15.4	(21.6)
Vermont	(2.3)	13.2	9.9	23.6	18.2	14.1	(1.9)
Virginia	77.6	(120.2)	(16.6)	62.5	(55.1)	(63.7)	(15.3)
West Virginia	20.7	(1.0)	(7.2)	39.0	10.0	31.5	34.0
Wisconsin	2.0	(11.1)	(23.1)	29.7	13.5	25.7	16.1

Source: Individual state data, analysis by the author.

Notes: 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. Data is not available for Missouri and Oregon. ND = no data.

TABLE A6

States with Economic Nexus and Marketplace Laws

Economic Nexus threshold levels and effective dates

State	Current threshold levels for economic nexus	Economic nexus effective date	Marketplace nexus effective date
Alabama	>$250,000	10/1/2018	1/1/2019
Arizona	> $150,000 in CY 2020, >$100,000 in CY 2021	10/1/2019	10/1/2019
Arkansas	>$100,000 or over 200 transactions	7/1/2019	7/1/2019
California	>$500,000	4/1/2019	10/1/2019
Colorado	>$100,000	6/1/2019	10/1/2019
Connecticut	>$100,000 and over 200 transactions	12/1/2018	12/1/2018
Georgia	>$100,000 in CY 2020 or over 200 transactions	1/1/2019	4/1/2020
Hawaii	>$100,000 or over 200 transactions	7/1/2018	1/1/2020
Idaho	>$100,000	6/1/2019	6/1/2019
Illinois	>$100,000 or over 200 transactions	10/1/2018	1/1/2020
Indiana	>$100,000 or over 200 transactions	10/1/2018	7/1/2019
Iowa	>$100,000	1/1/2019	1/1/2019
Kansas	TBD	10/1/2019	10/1/2019
Kentucky	>$100,000 or over 200 transactions	10/1/2018	7/1/2019
Louisiana	>$100,000 or over 200 transactions	7/1/2020	
Maine	>$100,000 or over 200 transactions	7/1/2018	10/1/2019
Maryland	>$100,000 or over 200 transactions	10/1/2018	10/1/2019
Massachusetts	>$100,000	10/1/2019	10/1/2019
Michigan	>$100,000 or over 200 transactions	10/1/2018	1/1/2020
Minnesota	>$100,000 or over 200 transactions	10/1/2018	10/1/2018
Mississippi	>$250,000	9/1/2018	
Nebraska	>$100,000 or over 200 transactions	1/1/2019	4/1/2019
Nevada	>$100,000 or over 200 transactions	10/1/2018	10/1/2019
New Jersey	>$100,000 or over 200 transactions	11/1/2018	11/1/2018
New Mexico	>$100,000	7/1/2019	7/1/2019
New York	>$500,000 and over 100 transactions	6/21/2018	6/1/2019
North Carolina	>$100,000 or over 200 transactions	11/1/2018	2/1/2020
North Dakota	>$100,000	10/1/2018	10/1/2019
Ohio	>$100,000 or over 200 transactions	8/1/2019	8/1/2019
Oklahoma	>$100,000	7/1/2018	7/1/2018
Pennsylvania	>$100,000	7/1/2019	7/1/2019
Rhode Island	>$100,000 or over 200 transactions	7/1/2019	7/1/2019
South Carolina	>$100,000	11/1/2018	11/1/2018
South Dakota	>$100,000 or over 200 transactions	11/1/2018	3/1/2019
Tennessee	>$500,000	10/1/2019	10/1/2020
Texas	>$500,000	10/1/2019	10/1/2019
Utah	>$100,000 or over 200 transactions	1/1/2019	10/1/2019
Vermont	>$100,000 or over 200 transactions	7/1/2018	6/1/2019
Virginia	>$100,000 or over 200 transactions	7/1/2019	7/1/2019
Washington	>$100,000	10/1/2018	10/1/2018
West Virginia	>$100,000 or over 200 transactions	1/1/2019	7/1/2019
Wisconsin	>$100,000 or over 200 transactions	10/1/2018	1/1/2020
Wyoming	>$100,000 or over 200 transactions	2/1/2019	7/1/2019

Source: Individual state information, compiled by the author.

Notes: CY = calendar year; TBD = to be determined. Alaska, Delaware, Montana, New Hampshire, and Oregon do not have sales tax. Florida and Missouri have not yet enacted legislations on economic nexus. States are hyperlinked to respective economic nexus guidelines.

TABLE A7

Quarterly State Government Tax Revenue for Nonmajor Tax Revenue Sources

Year-over-year real percentage change; four-quarter moving averages

2019 Q4 collections ($ millions)	Property tax $5,157	Tobacco product sales tax $4,695	Alcoholic beverage sales tax $1,814	Motor vehicle & operators' license taxes $7,775	Other taxes $33,653	Total nonmajor taxes $53,094
2010Q1–2019Q4 average growth	***2.1***	***(0.3)***	***1.1***	***2.4***	***2.4***	***2.0***
2019 Q4	(0.1)	(3.9)	2.8	3.0	1.7	1.3
2019 Q3	(0.4)	(5.9)	0.1	4.4	3.3	2.2
2019 Q2	5.3	(7.5)	(1.9)	5.0	4.6	3.3
2019 Q1	6.4	(5.3)	(0.4)	7.5	5.0	4.3
2018 Q4	9.0	(5.2)	(1.5)	9.3	5.2	4.9
2018 Q3	8.1	0.8	(0.0)	5.4	5.5	5.0
2018 Q2	3.6	5.2	1.3	4.7	3.8	3.9
2018 Q1	1.0	4.7	1.1	1.1	2.6	2.4
2017 Q4	(0.6)	6.1	2.9	(0.3)	1.9	1.8
2017 Q3	(1.2)	3.6	3.0	3.7	0.5	1.2
2017 Q2	0.4	1.8	2.3	1.5	(0.4)	0.2
2017 Q1	3.0	1.2	1.1	2.3	(1.7)	(0.4)
2016 Q4	2.3	1.4	0.4	2.7	(1.7)	(0.4)
2016 Q3	4.9	1.2	0.7	1.0	(2.5)	(1.0)
2016 Q2	4.1	0.6	1.6	2.5	(1.8)	(0.4)
2016 Q1	5.0	1.7	2.6	2.2	(1.4)	(0.0)
2015 Q4	8.7	0.0	1.5	2.7	(1.1)	0.3
2015 Q3	6.1	(0.8)	1.3	1.6	(0.4)	0.3
2015 Q2	5.2	(2.1)	1.6	1.2	(0.7)	(0.1)
2015 Q1	4.3	(4.0)	(0.2)	1.2	(0.4)	(0.2)
2014 Q4	0.8	(4.6)	1.5	(0.7)	(1.9)	(1.7)
2014 Q3	3.2	(3.7)	1.3	0.6	(1.7)	(1.1)
2014 Q2	5.2	0.5	(0.1)	1.1	(0.4)	0.3
2014 Q1	5.1	1.8	1.3	0.8	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	7.5
2010 Q4	8.2	3.2	3.3	4.1	7.9	6.7
2010 Q3	13.4	2.3	3.1	5.7	5.1	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	(8.6)	(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)	(6.2)	(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

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

TABLE A8

Fiscal Year-To-Date State Government Tax Revenue, by State

Nominal percentage change, state fiscal year to date 2020 versus state fiscal year to date 2019

State/region	PIT	CIT	Sales	MFT	Total
US. (median)	***6.0***	***7.2***	***5.2***	***1.6***	***5.3***
US (average)	***7.1***	***13.8***	***6.6***	***5.1***	***6.2***
New England	**1.8**	**1.1**	**5.5**	**2.3**	**2.9**
Connecticut	(6.4)	27.7	5.2	0.9	0.6
Maine	5.4	(19.3)	6.5	1.0	4.8
Massachusetts	4.2	(1.1)	4.9	(0.9)	3.8
New Hampshire	24.3	(20.2)	N/A	0.5	(4.8)
Rhode Island	4.0	(0.2)	7.3	1.5	5.3
Vermont	5.7	(17.5)	6.9	48.6	6.0
Mideast	**11.8**	**12.4**	**5.0**	**(1.1)**	**8.2**
Delaware	6.0	17.7	N/A	5.4	7.3
Maryland	6.4	5.4	5.4	8.1	5.3
New Jersey	5.7	16.8	7.6	(1.6)	6.5
New York*	14.7	13.8	5.1	0.7	10.4
Pennsylvania	5.5	6.3	3.0	(4.9)	3.9
Great Lakes	**3.8**	**25.0**	**3.8**	**8.5**	**4.4**
Illinois	6.2	20.1	2.8	0.1	3.4
Indiana	4.0	10.9	3.7	1.4	4.0
Michigan*	0.7	0.1	3.9	0.7	2.6
Ohio	1.5	(95.5)	4.8	25.2	6.3
Wisconsin	3.4	65.1	4.1	1.7	6.3
Plains	**4.9**	**16.7**	**6.6**	**2.2**	**5.0**
Iowa	(0.3)	34.0	9.1	5.9	6.2
Kansas	6.2	18.4	3.8	3.7	5.0
Minnesota	5.7	7.2	7.1	0.3	5.6
Missouri	4.9	20.8	4.3	(0.9)	4.2
Nebraska	8.1	46.0	11.5	7.9	11.5
North Dakota	6.4	(23.3)	5.4	(1.3)	(3.5)
South Dakota	N/A	(7.3)	4.9	(1.7)	0.9
Southeast	**3.8**	**9.3**	**4.0**	**4.4**	**4.0**
Alabama*	8.0	8.6	2.8	27.6	8.3
Arkansas	5.8	1.4	3.4	7.8	4.0
Florida	N/A	6.6	3.3	2.5	3.4
Georgia	(0.5)	10.7	1.8	(0.3)	0.0
Kentucky	2.0	(7.4)	6.3	1.3	2.4
Louisiana	6.8	2.1	(2.1)	6.3	2.3
Mississippi	3.0	13.0	3.8	(0.1)	3.4
North Carolina	2.4	(7.4)	5.9	2.4	3.9
South Carolina	6.4	20.1	7.5	12.7	7.4
Tennessee	65.8	29.8	5.1	10.3	6.8
Virginia	6.9	19.2	7.6	7.9	8.3
West Virginia	1.0	0.1	1.6	1.5	(1.4)
Southwest	**9.5**	**(10.4)**	**6.2**	**3.1**	**4.2**
Arizona	10.4	22.4	6.1	1.5	6.6
New Mexico	13.4	NM	8.9	1.1	(6.1)
Oklahoma	6.6	23.4	(1.8)	7.4	5.4
Texas*	N/A	N/A	7.1	2.8	5.1
Rocky Mountain	**7.1**	**12.7**	**6.3**	**1.5**	**6.2**
Colorado	4.6	36.2	4.2	0.9	5.6
Idaho	8.3	2.0	9.7	2.0	7.1

State/region	PIT	CIT	Sales	MFT	Total
Montana	11.9	19.9	N/A	1.8	5.7
Utah	9.9	(19.5)	6.7	1.3	6.9
Wyoming	N/A	N/A	5.5	2.7	6.2
Far West	**7.7**	**21.6**	**13.3**	**11.5**	**9.1**
Alaska	N/A	(42.9)	N/A	2.6	(27.6)
California	7.3	26.9	18.0	11.7	9.9
Hawaii	9.9	(19.5)	3.5	0.8	6.0
Nevada	N/A	N/A	8.1	2.1	7.4
Oregon	11.0	(1.0)	N/A	1.6	8.3
Washington	N/A	N/A	6.1	17.6	8.8

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

Notes: CIT = corporate income tax; PIT = personal income tax; MFT = motor fuel tax; N/A = not applicable, NM = not meaningful. The state fiscal year runs from July 1 to June 30 in all states except Alabama, Michigan, New York, and Texas. Fiscal year-to-date data reported for Alabama, Michigan, New York, and Texas correspond to their own fiscal year quarters.

TABLE A9

Preliminary Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2020 quarter 1 versus 2019 quarter 1

State/region	PIT	CIT	Sales	Total
US (median)	**5.5**	**9.9**	**5.2**	**4.5**
US (average)	**5.5**	**2.8**	**3.7**	**4.5**
New England	**5.3**	**(2.9)**	**8.5**	**3.1**
Connecticut	7.9	(10.4)	11.2	(0.1)
Maine	6.4	38.0	8.9	5.5
Massachusetts	3.6	(9.1)	6.6	3.8
New Hampshire	7.4	(4.9)	N/A	(1.1)
Rhode Island	3.3	205.9	10.2	15.1
Vermont	11.2	84.6	5.2	10.8
Mideast	**5.7**	**2.2**	**4.0**	**4.7**
Delaware	10.3	(46.8)	N/A	(0.7)
Maryland	8.8	8.2	7.6	11.4
New Jersey	9.2	(14.0)	0.7	3.5
New York	5.0	13.7	3.9	5.3
Pennsylvania	1.9	(2.7)	5.7	2.3
Great Lakes	**0.6**	**7.7**	**4.7**	**3.5**
Illinois	5.5	(13.8)	4.2	2.9
Indiana	6.6	33.6	7.0	6.4
Michigan	(1.5)	11.4	3.6	3.2
Ohio	(6.5)	NM	5.4	4.5
Wisconsin	(7.7)	21.0	7.4	1.0
Plains	**1.7**	**(6.3)**	**6.7**	**3.1**
Iowa	(6.6)	23.1	8.0	1.8
Kansas	15.3	8.4	6.5	9.5
Minnesota	(4.3)	(11.9)	4.5	(2.0)
Missouri	7.9	(0.9)	0.5	3.8
Nebraska	9.8	(8.8)	19.1	12.9
North Dakota	(12.7)	(13.4)	4.9	9.7
South Dakota	N/A	N/A	9.5	11.1
Southeast	**5.8**	**12.2**	**4.3**	**5.0**
Alabama	10.0	78.7	3.6	10.0
Arkansas	(6.2)	(35.3)	5.2	(1.9)
Florida	N/A	(3.5)	4.2	4.0
Georgia	12.8	11.8	0.5	6.4
Kentucky	N/A	(57.7)	7.6	6.5
Louisiana	17.5	NM	(2.0)	7.2
Mississippi	8.6	24.1	4.1	4.6
North Carolina	2.1	84.3	1.1	2.8
South Carolina	(0.1)	34.4	6.5	4.4
Tennessee	(38.1)	19.7	7.4	8.7
Virginia	2.2	14.6	8.0	3.5
West Virginia	4.0	210.5	3.6	3.9
Southwest	**(2.3)**	**526.1**	**4.9**	**4.1**
Arizona	(7.6)	NM	10.8	5.8
New Mexico	ND	ND	ND	ND
Oklahoma	5.4	245.2	(3.8)	(3.2)
Texas	N/A	N/A	4.8	4.7
Rocky Mountain	**11.7**	**0.6**	**7.1**	**8.1**
Colorado	13.4	(5.7)	4.7	10.2
Idaho	37.3	(13.5)	14.3	12.4

State/region	PIT	CIT	Sales	Total
Montana	6.0	(11.7)	N/A	(1.4)
Utah	1.8	26.3	7.6	5.2
Wyoming	N/A	N/A	(1.0)	ND
Far West	**8.6**	**(1.3)**	**(1.5)**	**5.3**
Alaska	N/A	114.5	N/A	(29.4)
California	11.4	(0.9)	(3.3)	6.9
Hawaii	6.8	NM	6.0	6.1
Nevada	N/A	N/A	ND	ND
Oregon	(23.2)	14.0	N/A	(17.0)
Washington	N/A	N/A	3.4	4.0

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.

Notes

[1] The author made several adjustments for the fourth quarter of 2019 and to several previous quarters of tax revenue data reported by the US Census Bureau based on information and data received directly from the states and from the Census Bureau.

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

[3] See Georgia Department of Revenue, "Employer's Tax Guide," last revised May 2019, https://dor.georgia.gov/document/form/2019employerstaxguidepdf/download.

[4] See Iowa Department of Revenue, "IDR Announces 2019 Interest Rates, Standard Deductions, Income Tax Brackets," news release, October 30, 2018, https://tax.iowa.gov/news-release/release-idr-announces-2019-interest-rates-standard-deductions-income-tax-brackets.

[5] See North Carolina Department of Revenue, "What's New for Tax Year 2019," accessed May 19, 2020, https://www.ncdor.gov/taxes-forms/individual-income-tax/whats-new-tax-year-2019.

[6] See Brian Uhler, Justin Garosi, Brian Weatherford, and Seth Kerstein, "November 2019 State Tax Collections," California's Legislative Analyst's Office, December 18, 2019, https://lao.ca.gov/LAOEconTax/Article/Detail/421.

[7] See Arizona Joint Legislative Budget Committee, "May 2019 Monthly Fiscal Highlights," May 2019, https://www.azleg.gov/jlbc/mfh-may-19.pdf.

[8] Individual income tax returns are due on April 15 in 35 of 41 states that have a broad-based personal income tax. The remaining six states have individual income tax return due dates later than April 15. Those states are Arkansas (May 15), Delaware (April 30), Hawaii (April 20), Iowa (April 30), Louisiana (May 15), and Virginia (May 1).

[9] See Oregon Department of Revenue, "2019 Kicker Credit," last updated March 4, 2020, https://www.oregon.gov/dor/press/Documents/kicker_fact_sheet.pdf.

[10] See US Internal Revenue Service, "IRS Extends More Tax Deadlines to Cover Individuals, Trusts, Estates, Corporations and Others," news release, April 9, 2020, https://www.irs.gov/newsroom/irs-extends-more-tax-deadlines-to-cover-individuals-trusts-estates-corporations-and-others.

[11] See US Bureau of Economic Analysis, "Section 5 – Saving and Investment, National Income and Product Accounts," accessed May 19, 2020, https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey.

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