

RESEARCH REPORT

# Solid State Revenue Growth in the Fourth Quarter of 2020, but Uneven Revenue Recovery across States

State Tax and Economic Review, 2020 Quarter 4

*Lucy Dadayan*

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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 Tax Revenue Data](#)

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

## [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.

## [Annual State Government Tax Revenue Collections versus Official Forecasts](#)

Data from nearly all states from fiscal year 2015 onward for actual revenue collections and revenue forecasts for the individual income tax, corporate income tax, and general sales tax.

## [Annual State and Local Government Gambling Revenue Data](#)

Data from all states for fiscal year 2000 onward for revenues collected on various types of gambling, including lottery, pari-mutuels, casinos and racinos, and video games.

## [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 5.6 percent higher in the fourth quarter of 2020 than in the fourth quarter the prior year and were stronger than the 2.9 percent average annual growth for the prior four quarters. However, despite overall national growth in state tax revenues, there is still a large variation in performance across the states. The pandemic had a very uneven impact on state and local government revenues, and the recovery from the pandemic-induced recession is also uneven across areas. Thus, the original revenue impact of the recession, shifting of revenues, and subsequent recovery all vary across places. Because of the unprecedented nature of recent events, we not only evaluate the most recent quarterly and annual revenue information, but we also present information about what revenues looked like in the second through fourth quarters of 2020 combined compared to previous years.
- **State government tax revenues** from major sources showed year-over-year growth at 7.3 percent for the fourth quarter of 2020, which is stronger than the 2.6 percent average growth for the prior four quarters. Growth in the fourth quarter of 2020 reflects recovery from the pandemic-induced recession. Revenue and economic recovery, however, is very uneven across the states. Further, revenue growth rates varied considerably among major revenue sources:
  - » **State personal income tax revenues** grew by \$8.1 billion or 9.0 percent in the fourth quarter of 2020 compared with the fourth quarter of 2019, but growth in the median state was weaker, at 4.7 percent. State personal income tax revenues showed extreme volatility in the recent quarters, in part because of federal and state policy decisions related to the pandemic and in response to investor expectations following the 2020 election outcomes. State personal income tax revenues increased 0.4 percent for the second through fourth quarters of 2020 combined compared with the same period in 2019.
  - » **State sales tax revenues** grew by \$2.5 billion or 3.0 percent in the fourth quarter of 2020, which contrasts with the 0.2 percent average decline for the prior four quarters. States saw steep declines in sales tax revenues in the second quarter of 2020, primarily because the pandemic led individuals, businesses, and governments to take actions that dramatically reduced business activity. State sales tax revenues had seen increases before the onset of the COVID-19 pandemic because states expanded sales tax rules to include collection of taxes from online sales. The ability of states to collect sales taxes on e-commerce transactions propped up sales taxes in many states during the pandemic as many

consumers switched from in-person to online shopping. Despite the growth observed in the fourth quarter of 2020, cumulative state sales tax revenues declined 2.7 percent for the second through fourth quarters of 2020 compared with the same period in 2019.

- » **State corporate income tax revenues** grew by \$3.1 billion or 24.1 percent in the fourth quarter of 2020 compared with the same quarter in 2019. As with personal income taxes, growth in the median state was weaker, at 14.9 percent. State corporate income tax revenues were 0.6 percent lower in the second through fourth quarters of 2020 compared with the same period in 2019.
- **Local government tax revenues** from major sources showed year-over-year growth of 4.3 percent for the fourth quarter of 2020, which was equal to the 4.3 percent average growth rates for the prior four quarters. Year-over-year growth in local government tax revenues from major sources was 3.1 percent in the second through fourth quarters of 2020 combined.
  - » **Local property tax revenues**, the largest source for local government revenues, increased 4.2 percent year over year for the fourth quarter of 2020, which is slightly weaker than the 4.9 percent average growth for the prior four quarters. Year-over-year growth in local government property tax revenues was 3.6 percent in the second through fourth quarters of 2020 combined.
- **Preliminary data for the first quarter of 2021** indicate continued year-over-year growth in overall state tax revenue collections as well as in major sources of tax revenues: personal income, corporate income, and sales taxes.
  - » **State personal income tax** collections grew 18.5 percent in the first quarter of 2021 compared with the same period a year earlier. Growth in the median state was slightly weaker, at 17.3 percent.
  - » **State sales tax** collections grew 2.5 percent in the first quarter of 2021 compared with the same period a year earlier. Growth in the median state was substantially stronger, at 7.0 percent.
  - » **State corporate income tax** collections grew 30.4 percent in the first quarter of 2021 compared with the same period a year earlier. Growth in the median state was 31.2 percent.
- **Economic factors** driving revenue growth showed a mixed picture in the fourth quarter of 2020, with housing prices soaring and other economic indicators remaining depressed. State economic performance plummeted last spring as governments, businesses, and individuals took actions with the spread of the pandemic across the nation. Some sectors have improved as

government restrictions have eased or individuals adapt to life during a pandemic. But growth in some sectors had been weakening since mid-2019, well before the COVID-19 pandemic began.

- » Real **gross domestic product** (GDP) declined 2.4 percent for the fourth quarter of 2020 compared with the same quarter in 2019. This is the third consecutive quarter of decline. Declines in real GDP were expected because of the massive economic disruptions caused by the COVID-19 pandemic and responses from governments, businesses, and individuals. Preliminary figures indicate a small growth in real GDP in the first quarter of 2021.
- » The seasonally adjusted **unemployment rate** was 6.8 percent in the fourth quarter of 2020, which was an improvement over much higher unemployment rates observed in the second and third quarters of 2020. However, the unemployment rate in the fourth quarter of 2020 was still substantially higher than the unemployment rates observed before the pandemic and was highly variable across different groups. The pandemic forced many businesses to shut down or dramatically reduce activity, leaving millions of Americans out of work, especially in the second quarter of 2020.
- » The year-over-year decline in **employment** was 6.6 percent for the fourth quarter of 2020. All 50 states but Idaho reported outright employment declines in the fourth quarter compared with a year earlier. However, overall employment growth had slowed even before the onset of the COVID-19 pandemic.
- » **Personal consumption expenditures** declined 1.5 percent for the fourth quarter of 2020 compared with the same quarter a year earlier. Declines in personal consumption spending were largely because of declines in spending on services and spending on energy goods. This was largely expected given that oil prices declined precipitously and that the COVID-19 pandemic stalled large portions of the economy beginning in mid-March 2020, leading to steep declines in spending on services.
- » **House prices** increased 6.1 percent in nominal terms for the fourth quarter of 2020 compared with a year earlier, which was the strongest growth since the first quarter of 2018. Although average house prices have been rising since the Great Recession, as of the fourth quarter of 2020, they were still below their pre-Great Recession peaks in four states.



# Trends in State and Local Revenues

The COVID-19 pandemic caused an unprecedented economic shock across the world. As a result, state and local government tax revenues saw steep declines in the spring of 2020. Some of the revenue losses were in response to government actions that deferred revenue collections to a later period; others were caused by underlying economic factors.

In the past few months, we have seen rebounding in some state tax revenues, in part because of federal aid provided early in the pandemic. We expect the impact of the COVID-19 pandemic on state and local government tax revenues to be ongoing and to differ widely across states and localities. Although some states have seen state revenues bounce back and even exceed prior levels, others have not. The American Rescue Plan Act (ARPA) enacted in March 2021 will cushion state and local budgets and should help protect recent signs of economic recovery. Although infection rates are falling and individuals are getting vaccinated, states' additional fiscal needs and recovery paths are still uncertain because of changes in consumer behavior in response to the pandemic and because of public health and economic risks associated with the new variants of the COVID-19 virus.

State and local tax revenues have become increasingly volatile and sensitive to economic, policy, and behavioral changes. State and local government tax revenues fluctuated wildly after the passage of the Tax Cuts and Jobs Act of 2017 (TCJA), as discussed in previous *State Tax and Economic Review* quarterly reports. Growth in state and local government tax revenues had finally normalized in the second half of 2019, but that did not last as the COVID-19 pandemic spread to the United States.

Table 1 shows state and local government tax revenues from major sources for the fourth quarter of 2019 and the fourth quarter of 2020 as well as the nominal percentage change between both quarters and the average quarterly year-over-year growth in the prior four quarters. Table 1 also shows revenues for the second, third, and fourth quarters combined for 2019 and 2020 as well as the nominal percentage changes between the two periods. Overall, states and localities reported solid revenue growth in the fourth quarter of 2020. Revenues in the second and third quarters of 2020 were especially volatile given the shifting of deadlines for filing income taxes and how delayed income tax revenues were accounted for, but this displacement did not greatly affect fourth-quarter revenues.

Major findings include the following:

- **State and local government tax revenues** from major sources grew 5.6 percent in the fourth quarter of 2020 compared with a year earlier, which is a substantial improvement compared with the average quarterly year-over-year growth rate of 2.9 percent in the prior four quarters.

As noted, growth in the fourth quarter of 2020 reflects recovery from the pandemic-induced recession. State and local revenues for the second through fourth quarters of 2020 combined increased 1.0 percent in nominal terms compared with the same period in 2019.

- **State government tax revenue** from major sources grew 7.3 percent in the fourth quarter of 2020 relative to a year earlier, which is substantially stronger than the average year-over-year growth of 2.6 percent observed for the prior four quarters. However, state government tax revenues from major sources declined 0.9 percent in the second through fourth quarters of 2020 combined, compared with the same period in 2019. The growth in **state personal income tax** revenues was 9.0 percent for the fourth quarter of 2020 compared with the fourth quarter of 2019. This is substantially stronger than the average quarterly year-over-year growth of 5.4 percent for the prior four quarters and the year-over-year growth of 0.4 percent in the second through fourth quarters of 2020 combined. **State corporate income tax** revenues increased 24.1 percent for the fourth quarter of 2020 compared with a year earlier. Corporate income tax revenues declined 0.6 percent in the second through fourth quarters of 2020 combined, compared with the same period in 2019. **State sales tax** collections increased 3.0 percent for the fourth quarter of 2020 compared with the fourth quarter of 2019. However, sales tax revenues declined 2.7 percent in the second through fourth quarters of 2020 combined, compared with the same period in 2019.
- **Local government tax revenue** from major sources grew 4.3 percent from a year earlier in the fourth quarter of 2020, which was in line with the 4.3 percent average quarterly year-over-year growth rate observed for the prior four quarters. Year-over-year growth in local government tax revenues from major sources was 3.1 percent in the second through fourth quarters of 2020 combined. **Local property taxes**, the single largest source of local government tax revenues, increased 4.2 percent from the prior year; average quarterly year-over-year growth was 4.9 percent for the prior four quarters. Year-over-year growth in local government property tax revenues was 3.6 percent in the second through fourth quarters of 2020 combined. **Local sales taxes** increased 8.0 percent for the fourth quarter of 2020 compared with the level a year earlier. **Local personal income taxes** increased 0.7 percent, while **local corporate income taxes** decreased 11.3 percent in the fourth quarter of 2020, but these constitute a relatively small share of local revenues (less than 10 percent in a typical quarter) and are concentrated in a few states.

TABLE 1

## State and Local Government Tax Revenue Trends

Tax source	2019 Q4	2020 Q4	Y-O-Y % change	Average quarterly Y-O-Y growth rate, prior four quarters (%)	2019 Q2 through 2019 Q4	2020 Q2 through 2020 Q4	Y-O-Y % change
<b>Total state and local major taxes</b>	<b>\$466,290</b>	<b>\$492,205</b>	<b>5.6</b>	<b>2.9</b>	<b>\$1,218,343</b>	<b>\$1,230,259</b>	<b>1.0</b>
<b>State major taxes</b>	<b>\$193,055</b>	<b>\$207,180</b>	<b>7.3</b>	<b>2.6</b>	<b>\$654,902</b>	<b>\$649,223</b>	<b>(0.9)</b>
Personal income tax	89,928	98,031	9.0	5.4	326,432	327,763	0.4
Corporate income tax	12,897	16,000	24.1	9.5	53,048	52,720	(0.6)
Sales tax	85,031	87,550	3.0	(0.2)	261,337	254,191	(2.7)
Property tax	5,199	5,599	7.7	3.7	14,085	14,549	3.3
<b>Local major taxes</b>	<b>\$273,235</b>	<b>\$285,025</b>	<b>4.3</b>	<b>4.3</b>	<b>\$563,441</b>	<b>\$581,036</b>	<b>3.1</b>
Personal income tax	9,517	9,580	0.7	2.2	30,650	29,719	(3.0)
Corporate income tax	2,019	1,791	(11.3)	7.9	6,690	6,771	1.2
Sales tax	24,010	25,936	8.0	2.4	70,395	72,660	3.2
Property tax	237,689	247,718	4.2	4.9	455,706	471,886	3.6

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

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

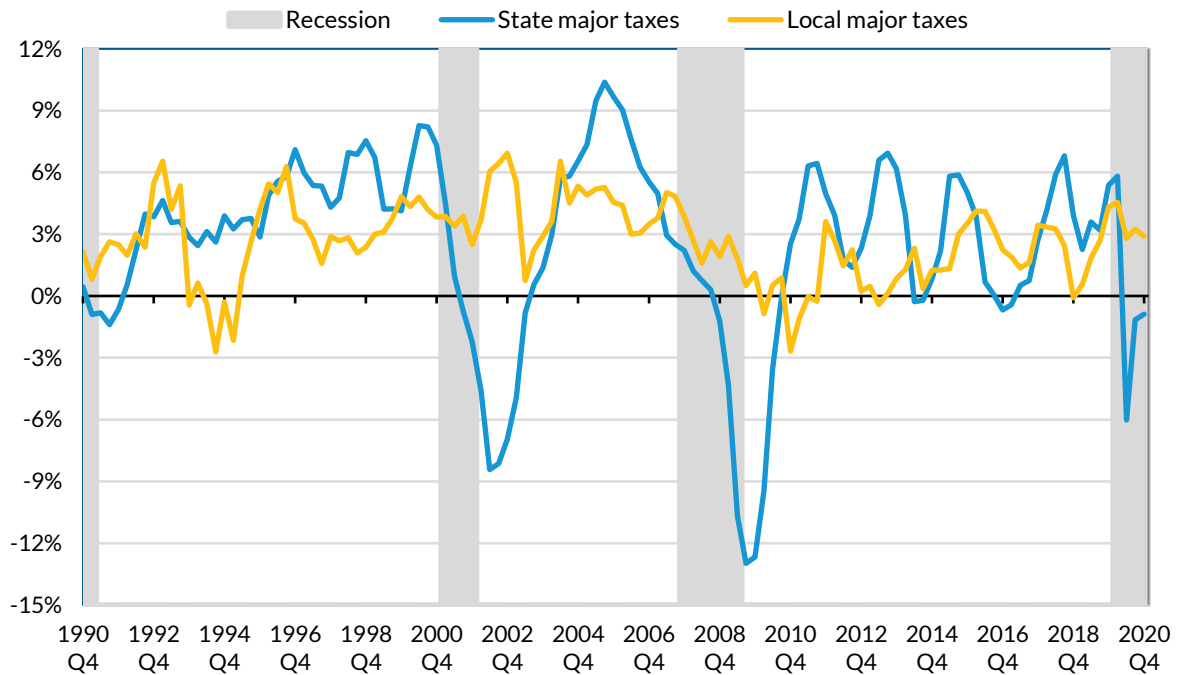
Figure 1 shows longer-term trends in state and local tax collections, specifically the year-over-year percentage change in the four-quarter moving average of inflation-adjusted state and local tax collections from major sources: personal income tax, corporate income tax, sales tax, and property tax. As shown in Figure 1, state tax revenues from major sources have 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. The pandemic caused further volatility in state and local taxes. State taxes from major sources, adjusted for inflation, declined 0.9 percent on average for the past four quarters relative to a year earlier. Most states rely heavily on three major sources of taxes (personal income, corporate income, and sales tax), all of which respond rapidly to economic upticks and declines as well as to government policy decisions.

The four-quarter moving average of inflation-adjusted local taxes from major sources showed a 2.9 percent increase for the fourth quarter of 2020. Most local governments rely heavily on property taxes, which are relatively stable and respond relatively slowly to changes in property values. Over the past two decades, property taxes have consistently made up at least two-thirds of total local tax collections.

FIGURE 1

**Growth Rates for State Major Tax Revenues Are Still Below Their Prepandemic Levels**

*Year-over-year inflation-adjusted change in 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.

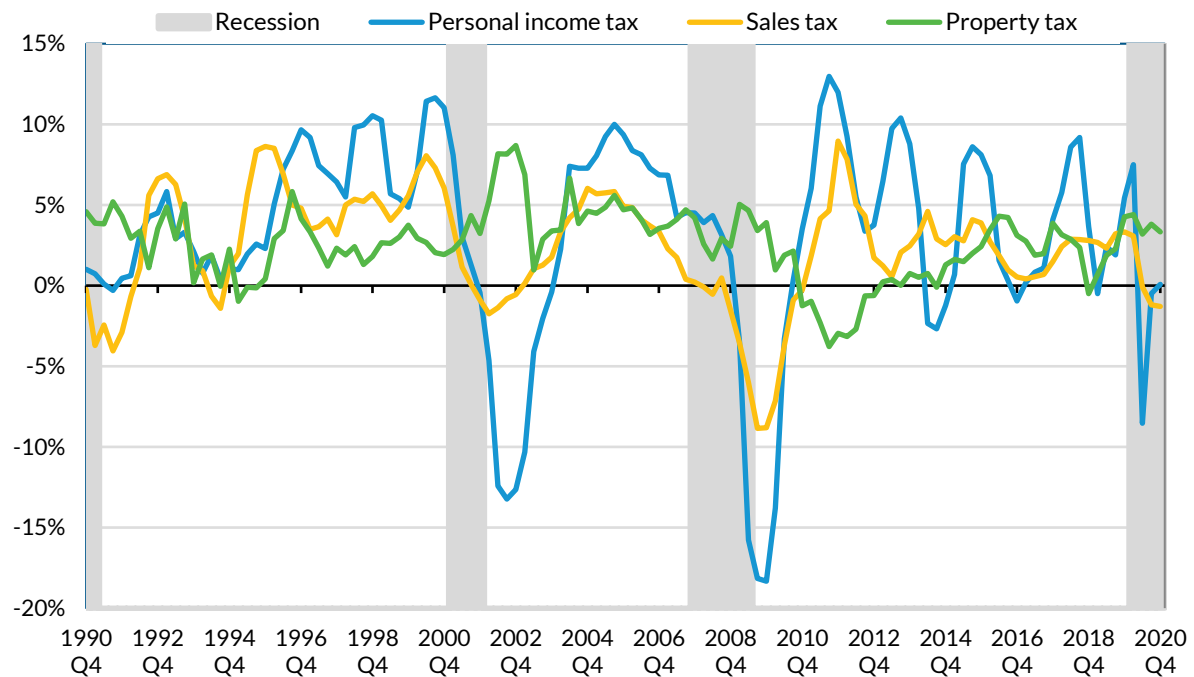
**Notes:** Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation. Data are for four major tax categories only: personal income, corporate income, general sales, and property.

Figure 2 breaks out inflation-adjusted state and local personal income, sales, and property tax revenue over the past 30 years. The graph shows the large fluctuations in real (inflation-adjusted) state and local personal income tax collections in recent years. State and local personal income tax revenues saw a 0.1 percent year-over-year increase in the fourth quarter of 2020. Real state and local sales tax revenues showed a 1.3 percent year-over-year decline in the fourth quarter of 2020. State and local property taxes, nearly all of which are collected by local governments, showed a 3.3 percent real growth rate from a year earlier for the fourth quarter of 2020.

FIGURE 2

**State and Local Sales Tax Revenues Showed Steady Recovery After Steep Declines in Early 2020**

Year-over-year inflation-adjusted change in 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 2020 Quarter 4

Total state tax revenue increased 6.0 percent in nominal terms in the fourth quarter of 2020 relative to a year earlier, according to US Census Bureau data adjusted by the author (Table A1).<sup>1</sup> All major sources of taxes (except for motor fuel taxes) showed growth in the fourth quarter of 2020. The year-over-year growth in state personal income tax revenues was 9.0 percent for the fourth quarter of 2020.

Corporate income tax revenue collections grew 24.1 percent for the fourth quarter of 2020 compared with a year earlier. State sales tax collections grew 3.0 percent while motor fuel tax collections declined 7.2 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 2020. The inflation-adjusted average annual growth rate in overall state tax revenues since 2010 was only 2.8 percent. Some of the growth in income taxes could be related to the presidential election results and actions taken in anticipation of potential federal tax policy changes under the new administration.

Regions differed in year-over-year total state tax revenue growth for the fourth quarter of 2020 (Table A2). State tax revenues saw growth in all regions but the Southwest region. The Far West and Rocky Mountain regions had the strongest year-over-year growth at 14.6 and 9.5 percent, respectively, while state tax revenues in the Southwest region declined 3.1 percent.<sup>2</sup>

Forty states reported growth in total state tax revenue collections for the fourth quarter of 2020 relative to a year prior, with seven states reporting double-digit growth. State tax revenues declined in 10 states, with Alaska and North Dakota reporting the steepest declines at 56.4 and 27.4 percent, respectively.

Because of effects of the pandemic and the deferral of tax filing deadlines for tax year 2020, it is important to analyze revenue growth trends over several quarters to understand where states stand in revenue recovery. State total tax revenues declined 2.2 percent in the second through fourth quarters of 2020 combined, compared with the same period in 2019, with a median decline of 1.6 percent (Table A3). State tax revenues declined in 28 states over that nine-month period, ranging from a 0.1 percent decline in Ohio to a 37.7 percent decline in Alaska. Twenty-two states reported growth, with Idaho and Utah reporting the largest growth at 11.1 and 7.6 percent, respectively.

## Personal Income Taxes

State personal income tax revenues increased 9.0 percent in nominal terms and 7.6 percent in inflation-adjusted terms in the fourth quarter of 2020 compared with the same period in 2019. Growth in the median state was weaker, at 4.7 percent in nominal terms. The average quarterly year-over-year growth rate in state personal income tax collections since 2010 has been 6.2 percent in nominal terms and 4.4 percent in real terms (Table A1).

Because the Internal Revenue Service delayed income tax filing deadlines in 2020 from April 15 to July 15 and states generally followed suit, states collected substantially less income tax revenue in April 2020 compared to previous years. 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. In 2020, large shares of estimated and final payments were shifted to July. These changes resulted in wild swings at the start of the pandemic and in wide variations compared to prior years, but these shifts were mainly during the second and third quarters of 2020.

Personal income tax collections increased across all regions in the fourth quarter of 2020 compared with the same period in 2019 (Table A2). The Far West region saw the largest growth, at 20.6 percent, largely reflecting substantial income tax growth in California.

Overall, personal income tax collections increased in 34 states, with 12 states reporting double-digit percentage-point growth in the fourth quarter of 2020 compared with the same quarter in 2019. The largest growth in dollar value was in California, where income tax revenues increased by \$4.8 billion or 24.1 percent.

Despite strong year-over-year growth in the third and fourth quarters of 2020, state personal income tax revenues were up only 0.4 percent for the second through fourth quarters of 2020 combined, compared with the same period in 2019 (Table A3). Moreover, personal income tax revenues in the median state were down 1.0 percent for the same nine-month period.

Personal income tax collections saw wild swings during the first six months of the pandemic. The latest data indicate steep declines in personal income tax collections in the second quarter of 2020, followed by significant growth in the third quarter of 2020, largely because most states delayed income tax filing deadlines from April 15 to July 15. Growth in personal income tax collections normalized during the fourth quarter of 2020, increasing 7.7 percent. Preliminary data for the first quarter of 2021 indicate strong growth in personal income tax collections, at 20.2 percent, mostly because of the strong growth in estimated payments.

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.

**TABLE 2**  
**Growth in State Government Personal Income Tax Components**  
*Year-over-year nominal percentage change*

Personal income tax components	Prepandemic period				Pandemic period			
	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1
Withholding	5.2	4.3	4.8	5.8	(1.3)	5.1	6.2	6.5
Estimated payments	16.3	2.4	9.1	9.7	(64.0)	102.9	16.7	35.9
Final payments	39.0	21.2	20.8	(10.3)	(55.7)	621.7	(8.4)	9.7
Refunds	(1.1)	8.2	7.4	9.9	(16.4)	106.0	(10.6)	(13.1)
<b>Total</b>	<b>18.7</b>	<b>3.9</b>	<b>6.2</b>	<b>4.4</b>	<b>(34.8)</b>	<b>47.5</b>	<b>7.7</b>	<b>20.2</b>

Source: Individual state data, analysis by the author.

Notes: CY = calendar year; 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.

Table 2 shows the growth for each major component of personal income tax collections in the past eight quarters, which corresponds to the prepandemic and pandemic periods, illustrating income tax volatility associated with the deferral of tax-filing deadlines. Personal income tax collections soared in the second quarter of 2019 because of an increase in estimated and final payments, which were shifted between tax years because of the TCJA (discussed in our prior *State Tax and Economic Review* reports). Growth in personal income tax collections moderated in the third and fourth quarters of 2019 as well as the first quarter of 2020. But, year-over-year growth in the first quarter of 2020 was weaker than the growth in the fourth quarter of 2019, largely because of final tax payments.

The economic impact of the pandemic on personal income tax revenues was not as bad as initially feared, largely because the pandemic has disproportionately affected low-income earners employed in service industries. Many states have progressive income tax structures, which means higher-income taxpayers pay a higher percentage rate on their income than lower-income taxpayers.

We expect personal income tax revenues to fluctuate further, particularly in the second and third quarters of 2021, reflecting the impact of federal and state policy changes implemented last year and because of extensions in filing deadlines this tax season.

## 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 salaries and is less volatile than estimated payments or final settlements. However, bonuses and stock options received by employees are also subject to withholding.

Table A4 shows year-over-year growth in withholding for the past eight quarters for all states with a broad-based personal income tax. Year-over-year growth in withholding was solid, ranging between 4.3 and 5.8 percent, before the pandemic. But withholding declined 1.3 percent year over year for the second quarter of 2020 because of the economic disruptions caused by the COVID-19 pandemic, which triggered mass layoffs and furloughs beginning in the second half of March. The employment situation improved in the third and fourth quarters of 2020, which led to the improvement of withholding tax collections as well. Year-over-year growth in withholding was 6.2 percent in the fourth quarter of 2020. Overall, withholding increased 3.4 percent in the second through fourth quarters of 2020 compared with the same period in 2019.



All regions showed year-over-year growth in withholding in the fourth quarter of 2020. The Rocky Mountain region reported the strongest growth at 13.7 percent, while the Mideast region reported the weakest year-over-year growth at 2.8 percent in the fourth quarter of 2020.

Thirty-five of the 41 states with a broad-based personal income tax reported growth in withholding in the fourth quarter of 2020 compared with a year earlier, with five states (California, Colorado, Idaho, Montana, and Utah) reporting double-digit growth.

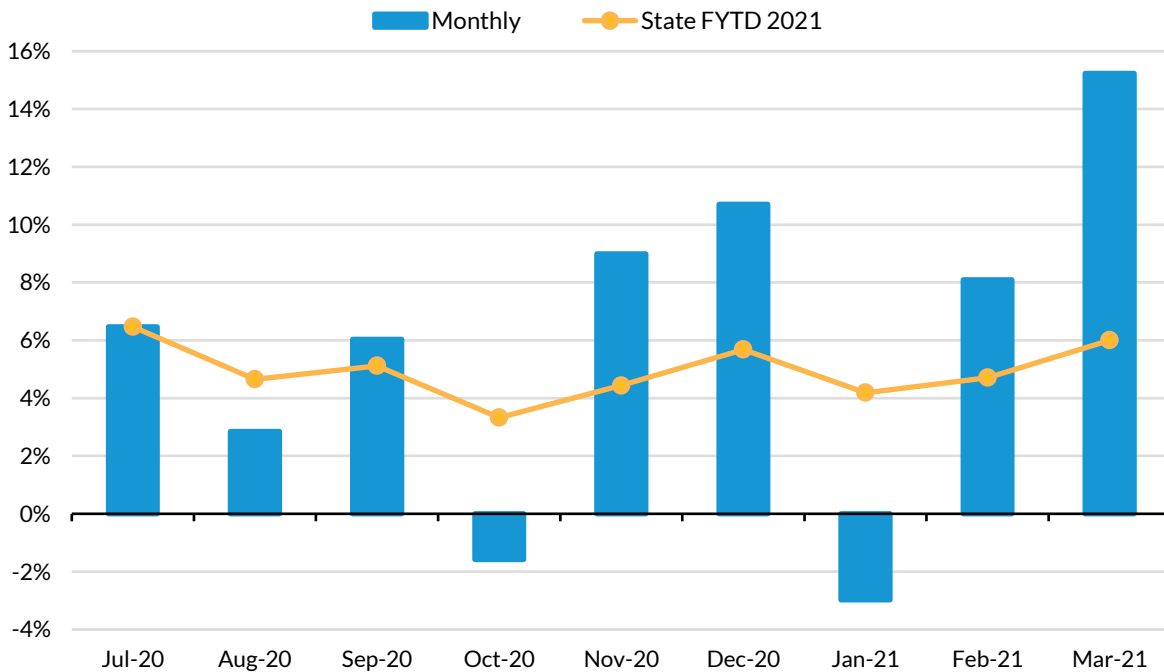
The Urban Institute’s preliminary data for the first quarter of 2021 indicate further growth in withholding, at 6.5 percent, with all regions reporting growth. However, growth in the median state was weaker, at 4.9 percent.

Figure 3 shows monthly and fiscal year-to-date growth rates in withholding between July 2020 and March 2021, which corresponds to the first nine months of state fiscal year 2021 in 46 states. Monthly data should be viewed with caution as they may include one-time payments that are not likely to recur, or a given month may have fewer tax-processing days compared with the same month in the prior year.

**FIGURE 3**

**Withholding Was Very Volatile throughout Fiscal Year 2021**

*Percentage change in withholding tax collections compared with the previous year, monthly and year-to date for state fiscal year 2021*



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Source: Individual state government agencies, analysis by the author.

Notes: FYTD = fiscal year to date.

Withholding was lower in October 2020 than in October 2019 and in January 2021 than in January 2020. The decline in withholding was likely caused by timing issues in some states. For example, Arizona reported one fewer tax processing day in October 2020 than in October 2019 and two fewer tax processing days in January 2021 than in January 2020.<sup>3</sup> Withholding showed double-digit growth in December 2020 and March 2021.

The largest growth in dollar value was in California, where withholding tax revenues increased by \$1.5 billion or 19.0 percent in December 2020 and by \$1.6 billion or 24.2 percent in March 2021. Strong growth in withholding taxes in December 2020 was largely because of the large year-end bonuses that led to higher withholding and because of large withholdings tied to the initial public offerings of shares of companies located in California, such as AirBnB and DoorDash.<sup>4</sup> And the strong growth in March 2021 is largely because of the initial public offerings of 13 California-based companies, including Roblox that had an initial valuation of \$30 billion. By contrast, no California companies went public in March 2020.<sup>5</sup>

Despite solid growth in withholding, unemployment rates remain higher in most states than their prepandemic levels. The disconnect between withholding tax collections and higher unemployment rates is largely because of the disproportionate impact of the pandemic-induced recession on lower-income taxpayers.

Year-to-date growth in withholding for the first nine months of fiscal year 2021 was 6.0 percent. States collected around \$283 billion in withholding revenues from July 2020 through March 2021. Thirty-five states reported growth while six states reported declines in withholding tax revenues for the July 2020 through March 2021 period.

## 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 7.1 percent of total personal income tax revenues in the fourth quarter of 2020 and 27.7 percent in the first quarter of 2021.

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 of 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 they 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 filing deadline for federal individual income tax returns in 2020 was extended from April 15 to July 15, and most states also delayed their filing deadlines.<sup>6</sup> The federal government also extended the filing deadline for estimated tax payments for tax year 2020 that were due on April 15. Twenty-nine states followed the federal government and extended the filing deadline for the first estimated payments attributable to tax year 2020 from April 15 to July 15 (Loughead 2020).

To make things more confusing, eight states (Delaware, Indiana, Montana, Nebraska, New Jersey, New York, Oklahoma, and Rhode Island) delayed the first estimated payments for tax year 2020, originally due on April 15, to July 15 but did *not* extend the deadline for the second estimated payments for tax year 2020, which were due on June 15. It appears that most taxpayers filed first estimated payments for tax year 2020 with their 2019 income tax returns, even in the states where the first estimated payments for tax year 2020 were due in April. That could be because of confusion caused by differences between federal and state due dates for filing estimated payments for tax year 2020.

As expected, because of delays in filing deadlines as well as the loss of earnings for some self-employed individuals, all states but Arizona and Illinois reported double-digit percentage-point declines from prior-year levels for the first estimated payments for tax year 2020, those that were to be filed in April 2020. Estimated payments due in April declined 82.3 percent on average compared with the prior year, but the decline in the median state was 72 percent (Table A5). Arizona and Illinois are among the states that had not extended the deadline for the first quarterly estimated payments for tax year 2020. That is the likely reason that those two states, in contrast with the others, saw growth in estimated payments in April.

Declines in the second estimated payments for tax year 2020 were also steep and widespread, again likely because of delayed filing deadlines from June 15 to July 15. Estimated payments due in June declined 47.9 percent on average compared with the prior year; the decline in the median state was 38.8 percent. States also reported declines in the third estimated payments for tax year 2020 that were due in September, although such declines were less severe, with an average of 1.5 percent.

Finally, states reported year-over-year growth of 33.5 percent for the fourth estimated payments for tax year 2020 (filed in December 2020 and January 2021). However, growth in the median state was 10.2 percent. The largest growth in dollar value was in California, where the fourth estimated payments increased by \$5.5 billion or 48.6 percent. The second largest growth in dollar value was in New York, reporting growth of \$0.9 billion or 21.9 percent in the fourth estimated payments for tax year 2020 ([Table A5](#)). Estimated payments in California alone represented nearly 50 percent of the total fourth estimated payments filed for tax year 2020. Therefore, strong growth for the fourth estimated payments is largely attributable to the growth in California.

Some taxpayers also likely held off making estimated payments during the year because of uncertainty around the pandemic and what their earnings would end up being. Strong growth in the fourth estimated payments for tax year 2020 might also reflect realization of higher capital gains from the strong stock market and shifts of capital gains into tax year 2020 by some taxpayers in anticipation of possible higher tax rates with a new federal administration.

In prior *State Tax and Economic Review* reports, we have warned that because of wide fluctuations in the performance of financial markets, possible declines in self-employment income, and other changes in the economy related to the COVID-19 pandemic, estimated payments were likely to be lower in 2020. Now we have data for estimated income tax payments through January 2021, and our data show that 26 states reported declines in estimated payments for the April 2020 through January 2021 period compared with the same period a year earlier. Estimated payments for the nation increased by \$1.6 billion or 2.0 percent between April 2020 to January 2021 compared with the same period a year earlier. However, this growth was attributable to California, where estimated payments increased by \$3 billion or 11.2 percent. California's estimated payments represented over one-third of the national total. If we exclude California, estimated payments for the rest of the nation declined 2.2 percent between April 2020 and January 2021 ([Table A6](#)).

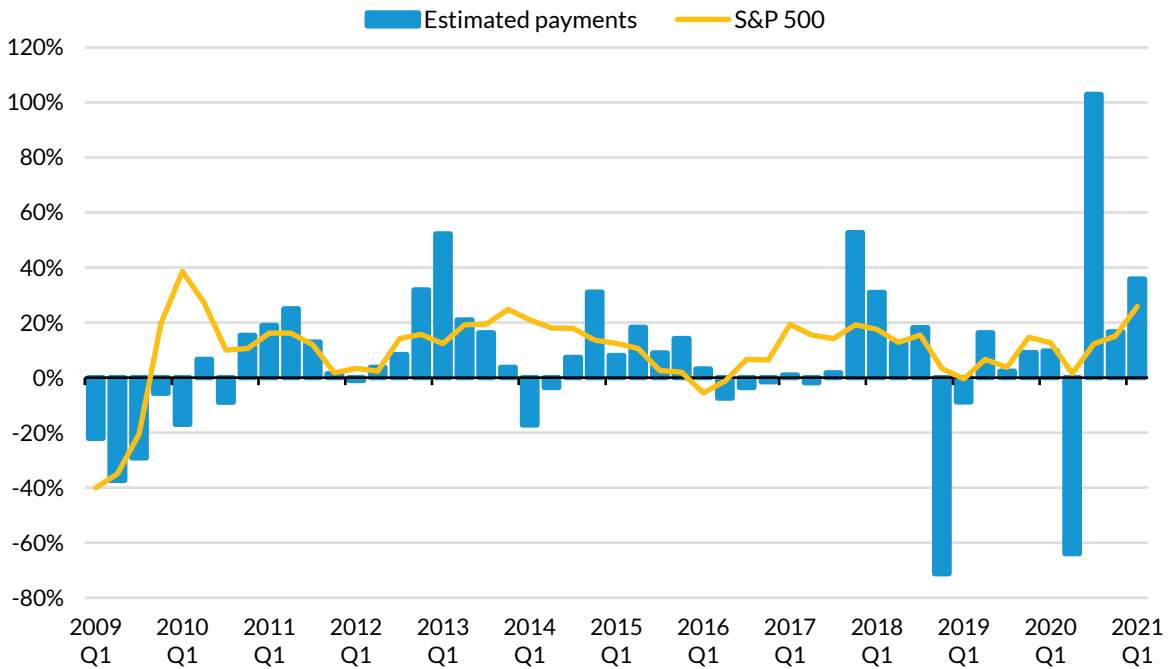
[Figure 4](#) shows year-over-year percentage change by quarter in estimated payments and in the S&P 500 Index for the past 12 years. The longer-term trends indicate substantial volatility in estimated payments, which is partially caused by volatility in the stock market but is also affected by federal tax policy changes and taxpayers' subsequent behavioral changes related to 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-over-year comparisons for estimated payments the following year.

Similarly, the substantial growth in estimated payments in the final quarter of 2017 and the first quarter of 2018, as well as the steep declines in estimated payments in the final quarter of 2018, were 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. 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 showed strong growth in the second quarter of 2019 compared with their level a year earlier; growth in the stock market was weaker for the same period.

**FIGURE 4**  
**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.

Estimated payments showed continued year-over-year growth for the second half of 2019 and for the first quarter of 2020; growth in the stock market was stronger for the same period. Estimated payments

saw steep declines at 64 percent for the second quarter of 2020 compared with the same period in 2019, mostly because of filing-deadline extensions. For the second quarter of 2020, the stock market ended 1.6 percent higher than for the second quarter of 2019. Estimated payments showed abrupt growth in the third quarter of 2020, a mirror image of the steep declines in estimated payments in the second quarter of 2020 caused by the deferral of tax-filing deadlines. Year-over-year growth in the stock market was strong at 12.3 percent in the third quarter of 2020. Estimated payments increased 16.7 percent in the fourth quarter of 2020, which was more in line with the 15.2 percent growth in the stock market compared with a year earlier. Finally, growth in estimated payments was strong in the first quarter of 2021 at 35.9 percent, while growth in the stock market was 25.8 percent.

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. Estimated payments as a share of total personal income tax collections declined further in state fiscal year 2020, representing only 15.7 percent of the total, with the decline mostly attributable to the shifting filing deadlines. The volatility of estimated payments adds more uncertainty to state income tax revenues and makes them harder to forecast. This was especially true for fiscal year 2021 because of the shift in tax-filing deadlines.

## 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 personal income tax filing deadline.<sup>7</sup> 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 most states extended the filing deadline for income tax returns from April 15 to July 15 in 2020, a significant share of final payments were shifted into the third quarter of 2020. Therefore, final payments represented only 17.9 percent of personal income tax revenues in the second quarter of 2020 (compared with 26.3 percent in 2019) and 17.2 percent in the third quarter of 2020. The shifting of final payments from the second quarter of 2020 to the third quarter of 2020 caused large variations

in percentage changes. Final payments accounted for less than 6 percent of personal income tax revenues in the fourth quarter of 2020 and the first quarter of 2021.

Table A7 shows year-over-year final payment amounts and growth rates for April 2020 through March 2021. In prior *State Tax and Economic Review* reports, we presented quarterly data. However, the alternative 12-month range paints a clearer picture of final payment tax collections during the pandemic. Final payments on average declined by \$0.5 billion or 1.0 percent for April 2020 through March 2021 from a year earlier but increased 0.4 percent in the median state. By contrast, final payments showed a 28.3 percent year-over-year growth in the prior year, for April 2019 through March 2020.

Eighteen states reported declines in final payments for April 2019 through March 2021 compared with a year earlier, while 21 states reported growth. Once again California had the largest increase in final payments in dollar value (\$846 million) during April 2020 through March 2021. Final payments in California represented nearly one-fifth of the national total.

## Refunds

By definition, personal income tax refunds represent a negative share of personal tax revenues and usually are 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 with the prior year increased 9.9 percent for the first quarter of 2020 but declined 16.4 percent for the second quarter of 2020 as people delayed filing their taxes. In total, states paid out \$3.9 billion less in tax refunds in the second quarter of 2020 than in the second quarter of 2019, mostly because of the later processing of income tax refunds caused by delayed income tax filing deadlines. This subsequently led to strong year-over-year growth in refunds in the third quarter of 2020, and states paid out \$5.6 billion more in tax refunds in the third quarter of 2020. States paid out \$0.9 billion less in tax refunds in the fourth quarter of 2020 than in the fourth quarter of 2019 and \$4.2 billion less in the first quarter of 2021 than in the first quarter of 2020.

In total, 35 states paid out less in tax refunds in the first quarter of 2021 than in the same quarter in 2020. California had the largest decline in refunds in dollar value (\$645 million) in the first quarter of 2021, followed by Oregon (\$562 million). The declines in refunds in the first quarter of 2021 are largely because of the start of federal income tax filing was delayed until mid-February, which in return affected the filing of state tax returns and led to lower state refunds.

## Actual versus Forecasted Income Tax Revenues

We collect data on actual and forecasted amounts for monthly personal income tax revenue from the states. Monthly personal income tax forecast information is currently available for 23 states (Table 3). In this section, we present data for the fourth quarter of 2020 to illustrate the large variance between actual and forecasted personal income tax revenues because of various uncertainties associated with the pandemic.

Actual personal income tax collections in the fourth quarter of 2020 were higher than in the fourth quarter of 2019 in 19 of the 23 states for which we have detailed data. Personal income tax collections showed double-digit growth in eight states in the fourth quarter of 2020.

TABLE 3

### Actual versus Forecasted State Personal Income Tax Revenues

Dollar amounts in millions

State	Oct-Dec 2019 actual	Oct-Dec 2020 actual	Oct-Dec 2020 forecast	Percent change, Oct-Dec 2020 vs Oct-Dec 2019	Percentage variance, Oct-Dec 2020 actual from forecast	Forecast date
<b>Median</b>				5.9	11.5	
<b>Average</b>	<b>\$51,018</b>	<b>\$57,453</b>	<b>\$46,859</b>	<b>12.6</b>	<b>22.6</b>	
Arizona	\$1,289	\$1,432	\$1,256	11.1	14.0	Oct-20
Arkansas	\$743	\$720	\$631	(3.0)	14.1	Apr-20
California	\$19,683	\$24,459	\$16,340	24.3	49.7	May-20
Colorado	\$1,883	\$2,256	\$2,361	19.8	(4.4)	Dec-20
Idaho	\$378	\$433	\$383	14.5	13.2	Aug-20
Indiana	\$1,298	\$1,308	\$1,311	0.7	(0.3)	Dec-20
Kansas	\$829	\$866	\$834	4.5	3.8	Nov-20
Maine	\$425	\$490	\$397	15.4	23.5	Dec-20
Minnesota	\$2,642	\$2,798	\$2,705	5.9	3.4	Nov-20
Mississippi	\$527	\$539	\$475	2.1	13.3	Nov-19
Montana	\$340	\$370	\$324	8.8	14.3	Jun-19
Nebraska	\$589	\$617	\$553	4.7	11.5	Aug-20
New Mexico	\$375	\$503	\$364	34.2	38.2	Sep-20
New York	\$9,336	\$9,939	\$8,598	6.5	15.6	Jul-20
North Dakota	\$64	\$76	\$74	19.1	2.8	Mar-19
Ohio	\$2,149	\$2,165	\$2,174	0.7	(0.4)	Mar-19
Oklahoma	\$693	\$672	\$557	(2.9)	20.7	Dec-20
Pennsylvania	\$3,059	\$2,868	\$2,832	(6.2)	1.3	Jun-20
Rhode Island	\$345	\$371	\$344	7.4	7.7	Nov-20
South Carolina	\$1,473	\$1,555	\$1,465	5.6	6.1	Nov-20
Vermont	\$198	\$221	\$180	11.9	22.6	Aug-20
West Virginia	\$470	\$469	\$461	(0.2)	1.6	Jan-20
Wisconsin	\$2,231	\$2,326	\$2,238	4.3	4.0	Nov-20

Source: Individual state data, analysis by the author.



Actual personal income tax collections in the fourth quarter of 2020 were higher than the forecasts in 20 states and below the forecasts in only 3 states, with an average underestimate of 22.6 percent and a median underestimate of 11.5 percent (Table 3). Some states regularly update their monthly revenue forecasts; other states prepare monthly revenue forecasts only once a year.

Even states that regularly update their monthly revenue forecasts faced difficulties forecasting revenues precisely. 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 predicting taxpayers' behavioral responses to the federal tax policy changes would be difficult.

State revenue forecasters continue facing considerable challenges in forecasting revenues because of uncertainties about the length of the pandemic and associated economic damage (Dadayan 2020a). Recent federal policy changes are complicating revenue forecasting further. Specifically, the federal legislation changed the definition of taxable income for tax year 2020. The ARPA gives a tax break on the first \$10,200 unemployment benefits received in tax year 2020. Although states did not have to follow suit, about 25 states did so and exempted unemployment benefits from income tax for tax year 2020. Few states extended the exemption to tax year 2021. (Among the 41 states with a broad-based income tax, only 6 do not include unemployment benefits as taxable income: Alabama, California, Montana, New Jersey, Pennsylvania, and Virginia.)

## Corporate Income Taxes

State corporate income tax revenue is highly volatile because corporate profits and the timing of tax payments can vary and shift across quarters. Further, most states collect a small share of state revenues from corporate taxes and can therefore experience large fluctuations in percentage terms, with little overall budgetary impact. Average quarterly year-over-year growth rates in state corporate income tax collections were 5.5 percent in nominal terms and 3.8 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 levels observed before the Great Recession. This growth weakened substantially in early 2020 and fell off because of the COVID-19 pandemic. Year-over-year corporate income tax receipts grew by double digits in percentage-point terms for seven consecutive quarters, from the second quarter of 2018 through the fourth quarter of 2019. However, the strong growth observed during that time was largely 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 income tax rates.

Under the Coronavirus Aid, Relief, and Economic Security 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 may also be retrospectively lowered for prior fiscal years in those states that have rolling conformity with the Internal Revenue Service tax code and have adopted the NOL carryback provisions. More than half of the states (including states with large shares of corporate income tax revenues, such as California, Illinois, New Jersey, and New York) have decoupled 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 the pandemic, the Internal Revenue Service extended the filing deadline for corporations filing calendar-year income tax returns from March 15, 2020, to July 15, 2020.<sup>8</sup> Many states followed and extended corporate income tax return and payment due dates as well. This led to steep declines in state corporate income tax revenues in the second quarter of 2020 followed by a spike in the third quarter of 2020.

State corporate income tax revenues increased 24.1 percent in the fourth quarter of 2020 compared with a year earlier. Growth in the median state was weaker, at 14.9 percent. The strong growth in corporate income tax revenues might be caused by corporations shifting income from tax year 2021 into tax year 2020, to avoid paying higher tax rate in 2021 as President Biden had made clear his plans to increase the corporate income tax rate. Thirty-three states reported year-over-year growth in corporate income tax collections, while 12 states reported declines ([Table A2](#)).

All regions but the Southwest reported double-digit growth, with the New England region reporting the strongest year-over-year growth in corporate income tax revenues, at 39.8 percent. Corporate income tax revenues declined 0.1 percent in the Southwest region. State corporate income tax revenues were 0.6 percent lower in the second through fourth quarters of 2020 combined than in the same period in 2019. Twenty-five states reported year-over-year declines over that nine-month period; 19 states reported growth ([Table A3](#)).

The future of corporate income tax collections is unpredictable not only because of the impact of the COVID-19 pandemic but also because of the various provisions of the TCJA, some of which are phasing out or being altered under the Biden administration. (See prior [State Tax and Economic Review](#) reports for detailed discussions of the TCJA provisions and the law's impact on state corporate income taxes.)

Even before the pandemic, states were forecasting lower corporate income tax collections for fiscal year 2021, mostly because of higher costs for business inputs and a weaker global economy (Dadayan 2020a). Moreover, data from the Bureau of Economic Analysis indicated substantial prepandemic weakness in business investment,<sup>9</sup> which implied lower corporate income tax revenue collections. The outlook for state corporate income tax revenues remains unclear for the coming months because of the pandemic-induced economic downturn, which had a strong negative impact on some industries (such as hospitality, entertainment, travel, and oil and gas) but a positive impact on others (such as construction).

## General Sales Taxes

General state sales tax collections increased 3.0 percent in nominal terms and 1.7 percent in inflation-adjusted terms for the fourth quarter of 2020 compared with the same period in 2019 (Table A1). Sales tax collections saw sharp declines in the second quarter of 2020 that were the first in a decade and were primarily caused by the pandemic. Before the pandemic, sales tax collections had grown continuously since the first quarter of 2010 in nominal terms, and growth generally has been steady if unspectacular. State sales tax revenues were 2.7 percent lower in the second through fourth quarters of 2020 combined, compared with the same period in 2019 (Table A3).

Year-over-year sales tax collections increased in all regions but the Southwest and Mideast for the fourth quarter of 2020 (Table A2). The Far West region reported the largest average growth at 6.2 percent; the Plains region reported the smallest average growth at 1.9 percent. The Southwest and Mideast regions reported declines in sales tax revenues at 1.2 and less than 0.1 percent, respectively.

Thirty-three of 45 states with broad-based sales taxes reported growth in sales tax collections for the fourth quarter of 2020 compared with the prior year. Six states reported double-digit percentage-point increases. States that saw declines in sales tax revenues in the fourth quarter of 2020 include those whose economies rely on the tourism and hospitality industry (e.g., Hawaii and Nevada) and that reported higher COVID-19 caseloads because of densely populated metropolitan areas (e.g., California, Florida, and New York).

The recovery in sales tax collections was relatively slow following the Great Recession. Since 2010, the average quarterly year-over-year growth rate in state sales tax collections has been 3.6 percent in nominal terms and 2.0 percent in real terms. The weak annual growth rate in sales tax collections is partially attributable to tax dollars being lost because online retail sellers were not collecting and remitting sales tax on some or all sales. However, growth in sales tax revenue collections strengthened

in the recent past, largely because of sales tax base expansions 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*,<sup>10</sup> giving 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. Currently all states with general sales taxes have enacted laws or regulations to require sales tax collections by remote sellers. Florida and Missouri passed appropriate legislation only recently.

States have set different sales and volume thresholds for internet sales taxation (Table A8). Finally, most states have also enacted laws or regulations requiring marketplace facilitators to collect sales taxes on behalf of their sellers. State implementation of online sales taxation does not address if and how local jurisdictions that operate independently and have independent taxing authority will collect sales taxes from remote sellers. However, some states (e.g., Alabama and Texas) have either passed legislation or continue 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 tax rates for the specific jurisdiction in which a sale is made.

The pandemic has had a detrimental impact on state sales tax revenue collections, particularly in states with high reliance on the tourism, entertainment, and hospitality industries. Federally mandated travel restrictions and state or regionally mandated restrictions on a wide range of businesses and services in addition to individual and business actions taken to mitigate virus exposure led to less business activity, less consumer spending, and therefore less sales tax revenue collections for states, particularly during the second quarter of 2020. Sales tax increases in the fourth quarter were caused in part by pent-up demand from consumers as well as growth in remote sales.

## Motor Fuel Taxes

State motor fuel sales taxes declined 7.2 percent year over year for the fourth quarter of 2020. This is the third consecutive quarterly decline in motor fuel sales taxes in nominal terms since the first quarter of 2013. Moreover, the declines in motor fuel sales taxes observed in the second, third, and fourth quarters of 2020 were much steeper than declines observed throughout the Great Recession, likely because of declines in travel related to the pandemic.

Motor fuel sales tax collections have fluctuated since the Great Recession. Average quarterly year-over-year growth in state motor fuel tax collections has been 3.1 percent in nominal terms and 1.5

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 2019 to the fourth quarter of 2020 varied widely across the states and the regions ([Table A2](#)). Motor fuel tax revenue collections decreased in all regions but the Rocky Mountain region, where revenues increased 1.0 percent. The steepest declines were in the New England, Mideast, and Great Lakes regions, all showing double-digit declines.

Thirty-nine states reported year-over-year declines in motor fuel sales tax collections for the fourth quarter of 2020; 14 states reported double-digit declines. In total, 11 states reported growth in motor fuel sales tax collections in the fourth quarter of 2020 compared with the same quarter in 2019. Growth in these states was mostly caused by motor fuel tax rate increases.

State motor fuel sales tax revenues declined 10.1 percent in the second through fourth quarters of 2020 compared with the same period in 2019, with a median decline of 10.6 percent ([Table A3](#)). Declines in motor fuel sales tax revenue collections in this nine-month period were largely anticipated because of stay-at-home orders across states earlier in the spring and because many employees continue to work remotely, which has drastically reduced commuting 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 product excise taxes, alcoholic beverage excise taxes, and motor vehicle and operators' license taxes. In [Table A9](#), 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 2020, states collected \$55.9 billion from all the smaller tax sources, which constituted 20.6 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 1.5 percent in real terms since 2010.

The four-quarter moving average of inflation-adjusted revenues from smaller tax sources showed a 3.8 percent decline for the fourth quarter of 2020 compared with the same quarter in 2019. State property taxes, which represent a small portion of overall state tax revenues, increased 2.9 percent. Tax revenue from motor vehicle and operators' licenses decreased 1.8 percent, and tax revenue from

alcoholic beverage sales decreased 5.1 percent. After eight consecutive quarters of decline, revenue from tobacco product sales increased 0.5 percent. Finally, revenues from all other smaller tax sources decreased 5.5 percent in the fourth quarter of 2020 compared with levels a year earlier.

## Preliminary Review of State Revenue in 2021 Quarter 1

Preliminary data collected from 48 states for the January–March quarter of 2021 ([Table A10](#)) show robust growth in overall state tax collections as well as in personal income, corporate income, and sales tax collections compared with the same quarter in 2020.

The pandemic caused wild swings in states' economic activity, consequently affecting state tax revenues. Overall state tax collections increased 10.3 percent in the first quarter of 2021 compared with the same quarter in 2020. Growth in the median state was at 9.8 percent. The strong growth was largely attributable to personal income tax revenues, which showed double-digit growth in part because of the delay in income tax filing deadlines, which subsequently delayed processing of income tax refunds.

Despite overall growth in state tax collections in the first quarter of 2021, a look at individual states as well as at different tax sources shows a mixed story. Forty-two states reported growth, with 22 states reporting double-digit increases. On the other hand, six states (Alaska, Hawaii, Maryland, North Dakota, Oklahoma, and Texas) reported declines in overall tax collections, with Alaska and North Dakota reporting the steepest declines at 55.3 and 11.6 percent, respectively. Both states 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 before the pandemic because of weakness in oil and natural gas prices throughout 2019 and the freefall decline in prices in April 2020. Although oil prices have rebounded since then, states such as Alaska and North Dakota are still contending with the consequences for severance and overall revenues.

Personal income tax collections increased 18.5 percent in the first quarter of 2021 compared with a year earlier; growth in the median state was 17.3 percent. All states but Tennessee reported growth in personal income tax collections. (Tennessee does not have a broad-based tax on personal income, and its tax on dividends and interest came to an end at the end of 2020. In 2016, legislators in Tennessee passed a bill that led to a gradual phaseout of the income tax on dividends and interest, lowering it by 1 percentage point a year.)

States that have progressive income tax rate structures have seen solid growth in personal income tax revenue collections during the pandemic, which largely spared the earnings of high-income taxpayers. Strong stock market prices likely also contributed to the strength of personal income tax revenues. Strong income tax revenues might also be caused by higher capital gains realizations if taxpayers forecast higher future tax rates on capital gains under the Biden administration.

State sales tax collections increased 2.5 percent for the first quarter of 2021 compared with the same quarter in 2020; growth in the median state was stronger, at 7.0 percent. Thirty-five states reported growth in sales tax collections, with 15 states reporting double-digit growth. Nine states reported declines in sales tax collections in the first quarter of 2021, with Maryland and Hawaii reporting the largest declines at 24.2 and 18.9 percent, respectively. Steep declines in Hawaii are largely because of the state's reliance on the tourism and hospitality industry.

Finally, corporate income tax revenues increased 30.4 percent year over year for the first quarter of 2021; growth in the median state was 31.2 percent. Thirty-three states reported growth in corporate income tax collections, with 30 states reporting double-digit growth. On the other hand, six states reported declines in corporate income tax collections.

Looking ahead at the coming months, state tax revenues will likely be volatile because of the uncertain impact of the pandemic, especially on the tourism, hospitality, and entertainment industries. Earlier in the pandemic, states were forecasting steep revenue shortfalls for fiscal year 2021 (Dadayan 2020c). Although revenues are performing substantially better than initially feared, many states continue facing fiscal challenges and will face a new fiscal cliff when ARPA provisions for states expire.

# 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.

On March 11, 2021, President Biden signed into law the ARPA, which includes \$350 billion in aid to help state, local, territorial, and tribal governments mitigate the impact of the pandemic on state budgets. However, the bill prevents states from using aid to fund pensions or offset revenue losses produced by a tax cut enacted on or after March 3, 2021. These restrictions on the use of federal aid will likely lead to some legislated tax changes in the coming months. The Urban Institute is closely monitoring the impact of the pandemic on state budgets.<sup>11</sup>

## Economic Indicators

Most state tax revenue sources are heavily influenced by the economy. In general, state tax revenues 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

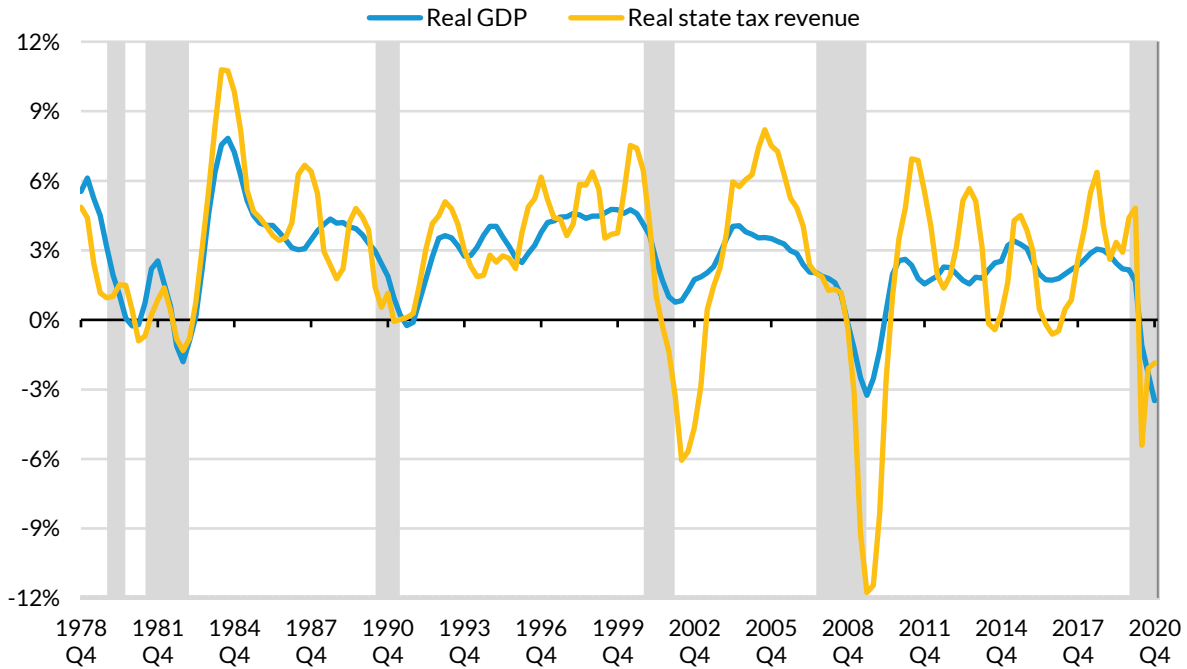
When the economy booms, tax revenues tend to rise rapidly, and when the economy declines, revenues tend to decline, though these changes have different patterns and timing. [Figure 5](#) shows year-over-year growth for four-quarter moving averages in real state tax revenue and GDP. We present moving averages to smooth short-term fluctuations and illustrate the interplay between the state of the economy and state revenues. As shown in [Figure 5](#), real GDP showed uninterrupted growth between the second quarter of 2010 and the second quarter of 2020. Real GDP growth weakened throughout 2019 and the first quarter of 2020 and declined in the second, third, and fourth quarters of 2020, based on the four-quarter moving-average measure. By this measure, real state tax revenues also declined in the final three quarters of 2020.

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 progressive and very dependent on volatile income sources such as stock options and capital gains.

**FIGURE 5**  
**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 6 shows for each state the four-quarter moving averages in real state tax revenue and real state GDP for the fourth quarter of 2020 compared with the same quarter in 2019. By this measure, real state tax revenues decreased in 30 states, and real state GDP decreased in all 50 states. (Alaska and North Dakota are outlier states and are excluded from Figure 6 to better display the overall relationship.) The year-over-year change in real state tax revenues ranged from negative 34.4 percent for Alaska and negative 25.7 percent for North Dakota to 11.3 percent growth for Idaho; the change in real state GDP ranged from negative 8.0 percent for Hawaii to negative 0.1 percent for Utah. The national average year-over-year decline in real state GDP was 3.5 percent, and the national average year-over-year decline in real state tax revenues was 1.9 percent, based on the four-quarter moving-average measure.

FIGURE 6

**Growth Disparity: State Tax Revenues versus State GDP**

Year-over-year change in real state taxes and real GDP, 2020 quarter 4 versus 2019 quarter 4



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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.

Red lines show US averages. Figure excludes Alaska and North Dakota because both are outliers.

### State Unemployment and Employment

The national unemployment rate climbed to 9.9 percent in the fourth quarter of 2009, which until recently was the highest rate observed since 1982. Before March 2020, the unemployment rate had seen nearly uninterrupted decline from that peak. The unemployment rate was 3.6 percent in the fourth quarter of 2019, which was a 50-year low.<sup>12</sup> The unemployment rate increased to 3.8 percent in the first quarter of 2020 and increased to 13.0 percent in the second quarter of 2020, marking the highest level on record since 1948. However, the unemployment rate dropped to 8.8 percent in the third quarter of 2020 and dropped further to 6.7 percent in the fourth quarter of 2020 as state economies slowly reopened.

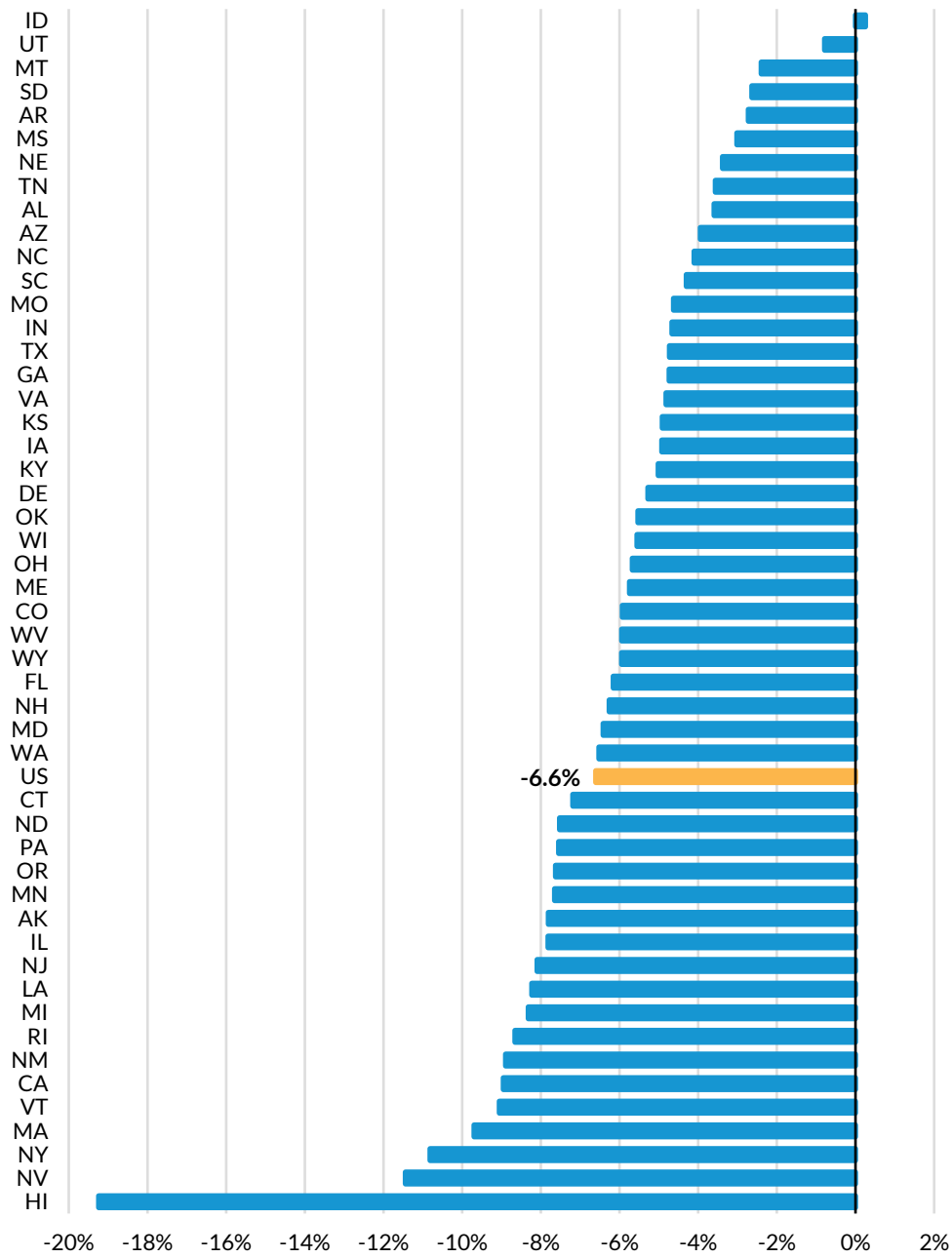
Unemployment rates ranged from 3.5 percent in Nebraska, South Dakota, and Utah to 11.5 percent in Hawaii for the fourth quarter of 2020, although unemployment rates varied by demographics in each

state, with unemployment rate increases being larger for women and people of color. According to latest data, the national unemployment rate dropped to 6.2 percent in the first quarter of 2021.

**FIGURE 7**

**Steep Declines in Employment in the Fourth Quarter of 2020, by State**

*Year-over-year change in seasonally-adjusted employment, 2020 quarter 4 versus 2019 quarter 4*



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

Nationwide employment declined 6.6 percent in the fourth quarter of 2020 compared with the same quarter in 2019 (Figure 7). Employment declines were particularly steep in states with a high reliance on the hospitality and tourism industries (such as Hawaii and Nevada) as well as in states that experienced high numbers of COVID-19 cases during the first phase of the pandemic (such as New York). All states but Idaho reported declines in employment in the fourth quarter of 2020. Employment declines year over year ranged from 0.8 percent in Utah to 19.2 percent in Hawaii for the fourth quarter of 2020, while in Idaho employment increased 0.3 percent.

Although the employment situation improved in the third and fourth quarters of 2020, as of May of this year, nearly 8 million fewer people are employed than were employed last February. Moreover, about 15 percent of people who lost their jobs during the pandemic had been employed by state and local governments. States and localities cut public-sector jobs to address budgetary challenges caused by the pandemic. The ARPA might help state and local governments rehire some of the employees who were laid off because of the pandemic.

## 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 states’ sales taxes. Figure 8 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 aggregate state real sales tax collections. We also show trends in the consumption of energy goods and services.

Before the pandemic, 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 the peaks observed before the Great Recession, although growth in sales tax revenues improved after the *Wayfair* decision as states started requiring remote sellers to collect and remit sales tax. Year-over-year spending on services declined an average of 6.5 percent in the fourth quarter of 2020, while year-over-year spending on both durable and nondurable goods increased.

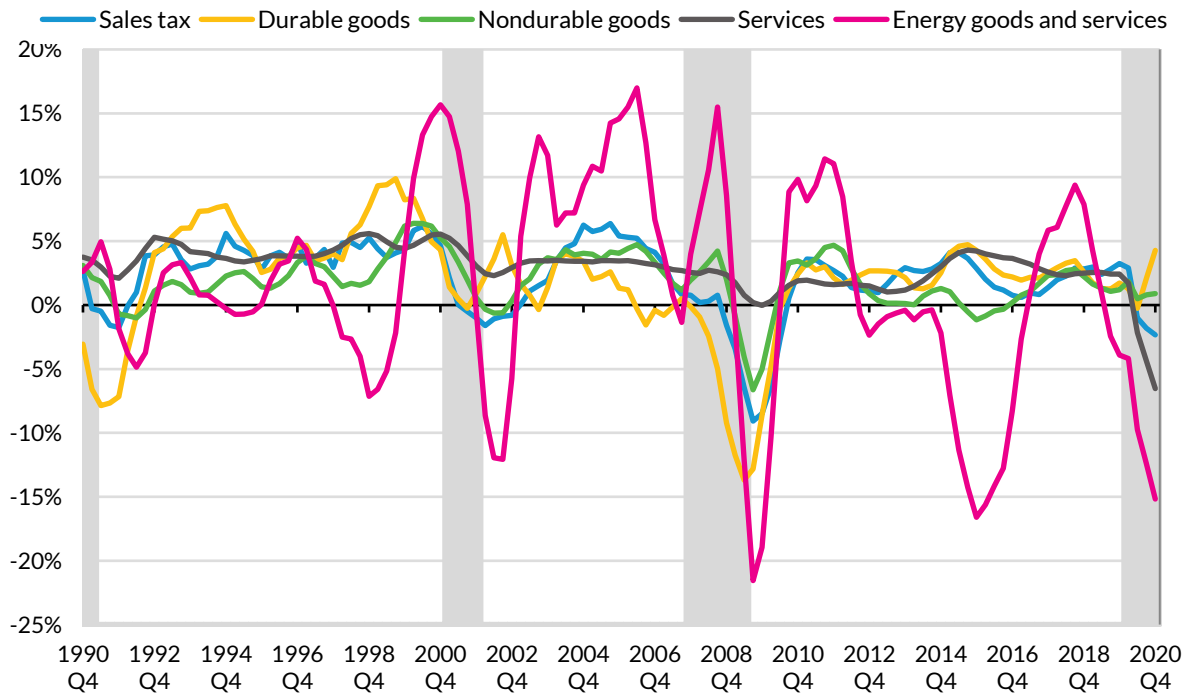
Before the pandemic, spending on services was resilient to economic downturns. However, spending on services declined in the second quarter of 2020, marking the first decline on record since 1948. Spending on services also declined in the third and fourth quarters of 2020. This is primarily because of the unique characteristics of the current downturn. American consumers spend substantially more on services (70 percent of total consumption) than on goods, and spending on

services as a share of total personal consumption has generally grown steadily throughout the past four decades. However, with the decline in travel and attending theater and other in person events, consumption of services fell temporarily. This current reversal in the long-term trend toward more spending on services is likely temporary.

Although some states have expanded their sales tax bases to include some services, many services are still not subject to state sales tax. And some states, such as Arizona and Missouri, have banned taxing services altogether.

Year-over-year growth in nondurable goods was 0.9 percent for the fourth quarter of 2020, largely because of increased consumption of grocery food as consumers ate more meals at home during the pandemic. This contrasts with earlier periods where the amount of nondurable spending was significantly affected by consumption of gasoline and other energy goods (spending on gasoline and energy goods represents about one-fifth of total spending on nondurable goods). Year-over-year growth on spending on durable goods was 4.3 percent for the fourth quarter of 2020.

**FIGURE 8**  
**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.

As shown in [Figure 8](#), year-over-year spending on energy goods and services declined for 19 consecutive quarters, from the third quarter of 2012 to 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 overall general sales tax revenues, which are based on prices as well as quantity consumed.

Overall consumption of 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 consumption of energy goods and services weakened substantially in the second quarter of 2019 and showed declines in the second half of 2019 and throughout 2020.

Because many people are commuting less and working remotely, spending on energy goods and services continued to decline. As offices reopen or families plan summer vacations in the months ahead, we might see some changes in these patterns. The year-over-year decline in spending on energy goods and services for the fourth quarter of 2020 was 15.2 percent.

## Housing Market

House prices are an important determinant of local property taxes, though changes in property tax revenues often lag property price changes. Assessment lags and assessment caps can affect how quickly house price changes translate into property tax revenue changes. Declines in house prices usually lead to declines in property taxes, while growth in house prices usually leads to growth in property tax revenues. There has been recent strength in housing markets as demand for new housing outstripped supply in the early months of the pandemic.

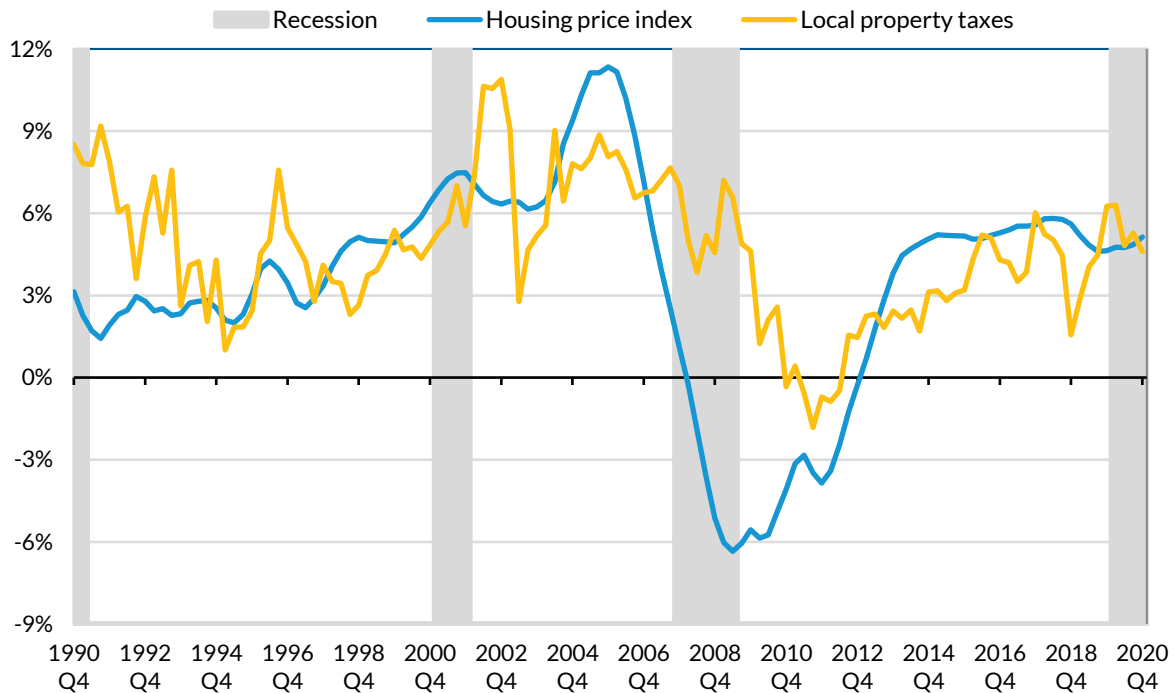
[Figure 9](#) shows year-over-year percentage changes in the four-quarter moving average of the house price index and local property taxes in nominal terms. House prices saw steep declines during the Great Recession, which led to a significant slowdown in local property tax growth and to an actual decline in property tax revenues during state fiscal years 2011 and 2012.<sup>13</sup> Growth in the house price index began weakening in mid-2005, and the price index 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 following the first quarter of 2019. National average house prices appreciated 5.1 percent for the fourth quarter of 2020 compared with one year earlier; year-over-year growth in local property taxes was 4.6 percent for the same period.

FIGURE 9

**Sustained Growth in Housing Prices Despite the Pandemic**

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.

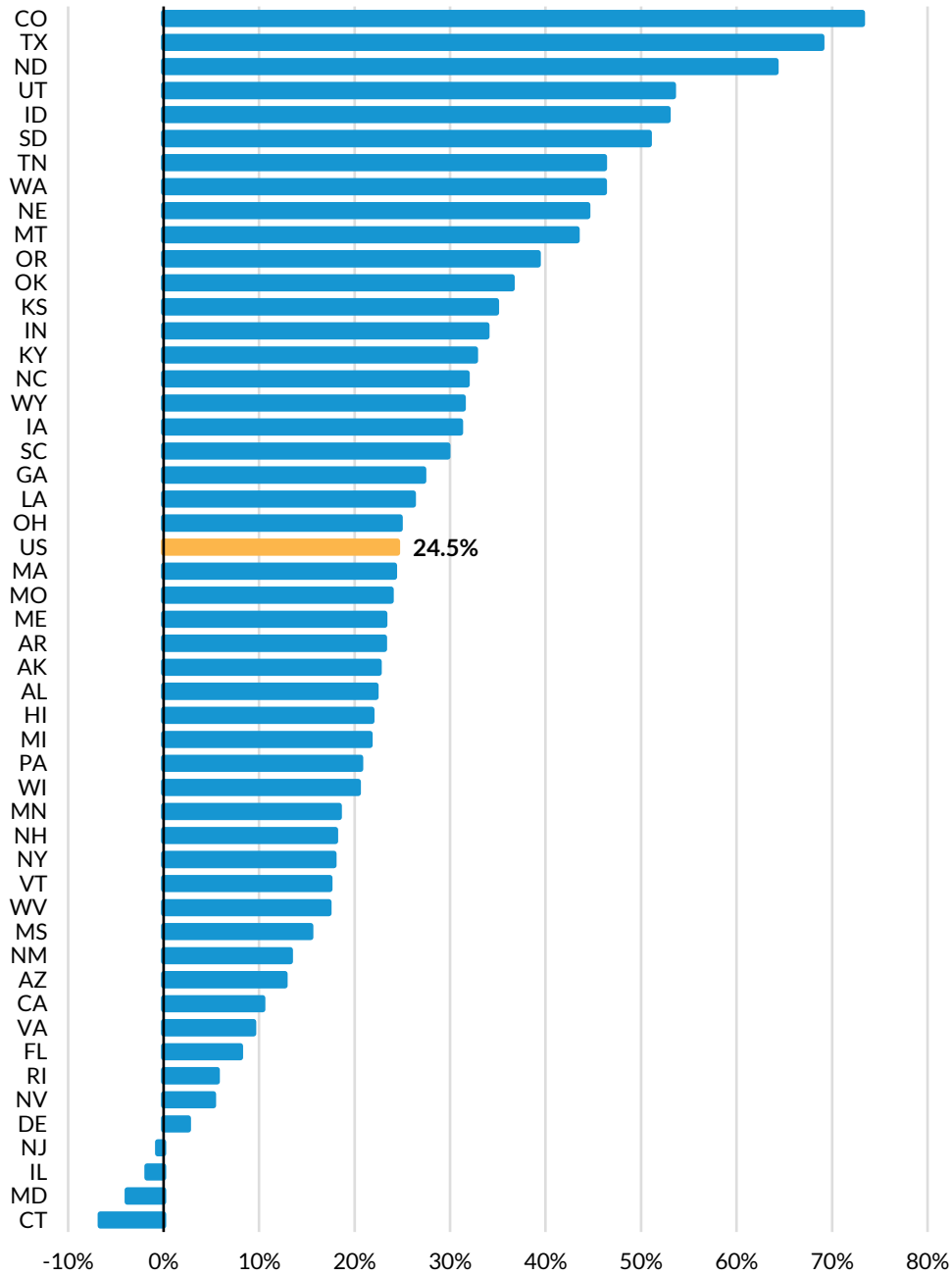
Statewide house price indexes increased in all states for the fourth quarter of 2020 compared with a year earlier, ranging from a 1.8 percent increase in Hawaii to a 12.6 percent increase in Idaho. Year-over-year growth was 6.1 percent for the nation.

Despite continuous and strong nationwide growth in the housing market, prices are still below their pre-Great Recession peaks in Connecticut, Illinois, Maryland, and New Jersey. Figure 10 shows the state-by-state nominal percentage change in house price indexes at the end of the fourth quarter of 2020 compared with the first quarter of 2007. National average house prices grew 24.5 percent in nominal terms between the first quarter of 2007 and the fourth quarter of 2020. However, house price movements varied substantially across the states. Housing prices in Connecticut were the hardest hit and are still on average 6.6 percent below their pre-Great Recession peak. On the other hand, statewide house price indexes increased by double-digit rates in 41 states over this period. In 21 states, growth in statewide average house prices since 2007 was over 25 percent, with Colorado, Texas, and North Dakota having the highest growth rates at 73.2, 68.9, and 64.1 percent, respectively.

FIGURE 10

Growth in House Price Indexes Since the Pre-recession Peak

Percent change in house prices from pre-recession peak level, 2020 quarter 4 versus 2007 quarter 1



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Source: Federal Housing Finance Agency (house price indexes for all transactions, seasonally not adjusted), analysis by the author.



The pandemic generally has not negatively impacted residential real estate property values. However, the pandemic's exact effects on commercial real estate property values, and thus commercial property tax revenues and potentially residential properties, remains uncertain. Most commercial property (hotels, retails, and offices) owners should expect reductions in commercial property values in their 2021 assessments. Further, residential properties in high-cost or densely populated cities such as San Francisco or New York City may also be negatively affected by the pandemic. Predicting the pandemic's long-term effects on real estate and commercial properties is difficult because it is still unclear whether remote work and online shopping will remain even after other prepandemic patterns resume.

## Tax Law Changes Affecting the Fourth Quarter of 2021

Anticipated and actual federal policy changes had a substantial impact on state tax revenues in the past few years. But changes in state tax laws also affect state tax revenue trends. Only a few states enacted tax changes for fiscal year 2021, partly because of the pandemic and shortened legislative sessions but also because of deep uncertainty surrounding revenue projections at the time and what federal assistance would look like.

We present analysis here based on the data and information retrieved from the National Association of State Budget Officers' Fall 2020 Fiscal Survey of the States. However, the analysis and forecasted effects are based on anticipated revenue gains or losses based on states' legislated tax changes and do not include the effects of changing economic conditions related to the COVID-19 pandemic. Because of decreased economic activity, actual revenue collections typically varied from expected tax revenues. Note these reports also do not include any tax changes proposed or passed as part of states' fiscal year 2022 budgets, including changes made in response to the receipt of ARPA funds.<sup>14</sup>

During the fourth quarter of 2020, enacted tax changes were forecasted to increase revenues by \$1.4 billion compared with the same period in 2019.<sup>15</sup> Overall, tax changes were expected to increase personal income taxes by \$94 million and increase corporate income taxes by \$1 billion. Enacted tax changes were also expected to increase sales taxes by \$24 million. Further, some states enacted tax changes in other taxes and fees, which were expected to increase state tax and fee revenues by approximately \$172 million (National Association of State Budget Officers 2020). Below, we discuss some of the major enacted tax changes for fiscal year 2021.

The estimated impact of all the enacted tax changes was a projected net increase of \$5.2 billion in state revenues in fiscal year 2021. By comparison, legislated tax actions in fiscal year 2020 were more substantial, with an estimated net revenue increase of \$8.1 billion. California and New Jersey enacted the most substantial changes, with estimated net revenue increases of \$5.0 billion and \$0.6 billion, respectively, for fiscal year 2021. Legislated changes were also substantial in Colorado, with an estimated net revenue increase of over \$236 million.

Three states enacted personal income tax increases, and 12 states enacted decreases for fiscal year 2021. Legislated tax changes were estimated to increase aggregate personal income tax revenues by \$250 million in fiscal year 2021. The largest estimated increase was in New Jersey, where Governor Phil Murphy extended the millionaire tax by raising the gross income tax rate from 8.97 percent to 10.75 percent for taxpayers with an annual income between \$1 million and \$5 million. The tax rate increase is retroactive to January 1, 2020. Previously, the 10.75 percent tax rate applied only to taxpayers with an annual income of \$5 million or more.<sup>16</sup> Lawmakers in Wisconsin reduced personal income tax rates by cutting the rates for the two lowest income tax brackets from 3.86 percent to 3.54 percent and from 5.04 percent to 4.65 percent.<sup>17</sup> These tax rate reductions were estimated to decrease personal income tax collections by \$179 million in fiscal year 2021.

Four states enacted corporate income tax increases, and five enacted decreases. Legislated tax changes were estimated to increase aggregate corporate income tax revenues by \$4.3 billion in fiscal year 2021, but this is almost entirely driven by actions in California. The largest corporate income tax change was in California, where Governor Gavin Newsom signed a tax bill that is estimated to increase corporate income tax revenues by \$4.1 billion in fiscal year 2021. The tax bill introduced two major changes pertaining to corporations. First, the tax bill suspended the NOL deductions for corporation with net income of over \$1 million for tax years 2020 through 2022. Second, the tax bill limited utilization of business credits for tax years 2020 through 2022; businesses can claim a maximum of \$5 million in tax credits. Some corporations have both NOLs and credits. Because the tax bill put restrictions on both NOLs and credits, the interaction between the two measures would increase the tax revenues even further.<sup>18</sup> In New Jersey, Governor Murphy signed a law that extended the 2.5 percent surtax imposed on corporations with annual net income over \$1 million through tax year 2023. The surtax, however, is not applicable on public utilities and S corporations. This measure is estimated to increase corporate income tax revenues by \$210 million in fiscal year 2021.<sup>19</sup>

Seven states enacted sales tax increases, and five states enacted decreases. Legislated tax changes were estimated to increase sales tax revenues by \$128 million in fiscal year 2021. The most significant legislative change was in Tennessee, where officials revised the law related to online sales taxation to

now require marketplace facilitators with sales over \$100,000 to remit sales and use tax. The revised law also lowered the annual sales economic nexus threshold from \$500,000 to \$100,000 for out-of-state marketplace sellers.<sup>20</sup>

Five states enacted changes for taxes on cigarettes and gaming, with an estimated overall decrease of \$42 million in fiscal year 2021. The estimated impact of each state's changes was not significant.

Twelve states enacted changes for some other taxes and fees, with an estimated overall increase of \$514 million in fiscal year 2021. These changes were estimated to increase state revenues in eight states but decrease revenue in four states. The largest estimated increase was in California, mostly because of the managed-care organization (MCO) tax. In California, officials urged an extension of the MCO tax that was set to expire on July 1, 2019.<sup>21</sup> Governor Newsom approved the bill to renew the MCO tax retroactively, subject to approval from the federal government.<sup>22</sup> The federal government initially rejected California's MCO tax on January 30, 2020,<sup>23</sup> but finally approved it for the period of January 1, 2020, through June 30, 2023.<sup>24</sup>

# Conclusion

State tax revenues and economies were strong and had a period of sustained growth before the onset of the global pandemic. However, the pandemic rapidly altered states' fiscal year 2020 trajectory (Dadayan 2020b). States saw steep declines in revenues in the second quarter of 2020, though some of this was caused by shifting revenues into the next quarter and next fiscal year. Many states cut spending, laid off or furloughed workers, or used federal aid or rainy-day funds while they waited to see what their revenues would be after the July 15 income tax filing deadline.

The pandemic-induced recession led to overall declines in state tax revenues in fiscal year 2020, ending a 10-year expansion. Before the spread of the COVID-19 pandemic, states were reporting steady revenue growth and forecasting solid growth for fiscal year 2020 (Dadayan 2020a). Although revenues declined in many states in fiscal year 2020, some of the declines and budget deficits at the end of fiscal year 2020 reflected the delay of income tax revenues into July and therefore into the first quarter of fiscal year 2021. While all states with broad-based income taxes received part of the April 2020 income tax revenues in July 2020 (which fell into fiscal year 2021), according to our analysis, about 15 states allocated some of these revenues back to fiscal year 2020, which explains why some states did not necessarily see the same declines in fiscal year 2020 revenues. Overall, the pandemic's impact on state personal income tax revenues has tended to be less severe than first expected, especially in states that have progressive income tax rates and thus have greater reliance on high-income taxpayers. This mostly reflects the fact that most Americans who have been economically affected by the pandemic's recession are low-wage earners.

Fiscal and monetary policies adopted by the federal government in response to the pandemic also helped state governments to sustain their revenue performance. For example, the \$600 weekly federal supplement to unemployment benefits under the Coronavirus Aid, Relief, and Economic Security Act may have helped states sustain their income tax withholding revenues. However, with the exemption of some 2020 unemployment compensation from federal income, some states also exempted these payments, which would likely lower state income taxes for the second quarter of 2021, when taxpayers file their income tax returns and request refunds for taxes paid on unemployment compensation.

Although states reported solid revenue growth in the fourth quarter of 2020, there is variation across states and across revenue sources. If we look at revenue changes over the nine-month period (April through December 2020), we find a 2.2 percent year-over-year decline.

Overall state tax revenues were stronger during the pandemic than initially feared, in part because of the generous federal stimulus packages that have injected trillions of dollars into the economy. (The federal government passed three substantial stimulus aid packages: the Coronavirus Aid, Relief, and Economic Security Act that included \$2.2 trillion in aid, the HEROES Act that included \$900 billion in aid, and the ARPA that included \$1.9 trillion in aid.) Further, the pandemic had a disproportionate impact on lower-income taxpayers, a majority of which were employed in service industries and lost their jobs during the pandemic. By contrast, higher-income taxpayers were able to work remotely, which helped states with personal income tax revenue collections. During the pandemic we have also witnessed a shift from spending on services to spending on goods; this helped states substantially because goods are usually subject to sales tax while many services are exempt from tax. The pandemic accelerated online sales purchases, and, thanks to the *Wayfair* ruling, most states had laws and regulations in place and were able to tax online sales transactions, which supported state sales tax revenues.

Despite a more positive fiscal and economic reality than initially feared, states continue to face fiscal uncertainties: compared with before the pandemic, unemployment rates are still higher than they were, state and local government employment is still down by 1.2 million jobs, and states and localities are still facing increased spending demands. Although vaccines, declining caseloads, easing of state restrictions, and additional support from the ARPA will likely lead to improving economic and fiscal conditions, a recovery will still take some time, and economic activity could look different in a postpandemic world. Despite strong revenue gains in recent months, states still need to be conservative in their budget and forecasting because of the high level of uncertainty remaining.

# Appendix: Additional Tables

TABLE A1

## Quarterly State Government Tax Revenue by Major Tax

2010 Q1–2020 Q4 average growth	Nominal Y-O-Y Percentage Change					Inflation rate	Real Y-O-Y Percentage Change				
	PIT	CIT	Sales	MFT	Total		PIT	CIT	Sales	MFT	Total
	6.2	5.5	3.6	3.1	4.5		4.4	3.8	2.0	1.5	2.8
2020 Q4	9.0	24.1	3.0	(7.2)	6.0	1.3	7.6	22.5	1.7	(8.4)	4.7
2020 Q3	42.7	63.8	2.9	(5.2)	18.9	1.1	41.1	62.0	1.8	(6.2)	17.6
2020 Q2	(32.1)	(44.2)	(13.3)	(17.9)	(24.4)	0.6	(32.5)	(44.6)	(13.8)	(18.4)	(24.9)
2020 Q1	5.0	(1.2)	3.9	5.2	4.1	1.7	3.3	(2.8)	2.1	3.4	2.4
2019 Q4	6.2	19.6	5.7	8.3	5.6	1.6	4.5	17.7	4.0	6.5	3.9
2019 Q3	4.3	11.6	7.1	6.0	5.5	1.7	2.5	9.7	5.3	4.2	3.7
2019 Q2	18.8	21.0	2.3	3.2	10.4	1.8	16.7	18.8	0.5	1.3	8.5
2019 Q1	(2.4)	40.5	5.6	1.8	2.7	2.0	(4.3)	37.8	3.5	(0.2)	0.6
2018 Q4	(9.2)	12.0	4.5	6.0	(0.1)	2.3	(11.3)	9.4	2.1	3.6	(2.4)
2018 Q3	7.9	26.4	6.3	8.8	8.4	2.5	5.2	23.3	3.7	6.2	5.7
2018 Q2	10.6	17.5	5.3	8.9	8.9	2.6	7.8	14.5	2.6	6.1	6.2
2018 Q1	15.3	(6.5)	5.0	10.9	8.9	2.1	12.9	(8.4)	2.8	8.6	6.6
2017 Q4	14.9	10.5	4.5	9.7	9.1	2.0	12.6	8.4	2.4	7.6	7.0
2017 Q3	4.6	6.5	3.1	2.0	3.9	1.9	2.6	4.5	1.2	0.0	2.0
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	(3.4)	1.7	1.2	1.2	1.5	(1.2)	(4.8)	0.2	(0.3)	(0.3)
2016 Q3	2.4	(9.0)	2.7	1.4	1.3	1.0	1.5	(9.8)	1.7	0.4	0.3
2016 Q2	(2.8)	(9.7)	1.2	0.3	(1.7)	0.9	(3.7)	(10.5)	0.2	(0.6)	(2.5)
2016 Q1	1.7	(5.9)	1.9	2.9	1.4	0.8	0.9	(6.6)	1.1	2.0	0.6
2015 Q4	5.1	(9.4)	2.7	3.5	2.4	0.8	4.3	(10.2)	1.8	2.7	1.5
2015 Q3	6.5	0.3	3.5	5.0	4.1	0.9	5.5	(0.6)	2.6	4.1	3.2
2015 Q2	14.0	6.0	3.6	2.5	7.1	1.1	12.8	4.8	2.5	1.5	5.9
2015 Q1	6.9	3.3	5.8	4.3	5.5	1.1	5.8	2.2	4.7	3.2	4.3
2014 Q4	8.4	10.1	6.5	2.4	5.7	1.5	6.8	8.5	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)	6.0	1.2	1.0	(1.3)
2013 Q4	1.1	3.6	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	0.1	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	(1.7)	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	8.6	2.3	2.2	3.1	1.8	2.8	6.7	0.5	0.3	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	4.2	4.6	1.3	3.7	2.1	1.9	2.1	2.5	(0.8)	1.6
2011 Q4	3.7	(6.5)	3.5	0.7	3.2	2.0	1.7	(8.3)	1.5	(1.2)	1.2
2011 Q3	9.7	2.5	3.7	(0.3)	6.2	2.4	7.2	0.1	1.3	(2.6)	3.7
2011 Q2	15.3	19.3	5.7	7.5	11.1	2.2	12.9	16.8	3.5	5.2	8.8
2011 Q1	12.1	4.4	6.3	13.4	10.0	1.9	10.1	2.5	4.4	11.3	8.0
2010 Q4	10.5	19.8	4.8	11.8	8.4	1.6	8.8	17.9	3.2	10.1	6.7
2010 Q3	4.8	(0.9)	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	2.8	1.5
2010 Q1	2.4	0.8	0.6	(0.2)	2.9	0.6	1.9	0.2	0.0	(0.7)	2.3

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, 2020 quarter 4 versus 2019 quarter 4

State/region	PIT	CIT	Sales	MFT	Total
<b>US (median)</b>	4.7	14.9	5.3	(5.7)	3.3
<b>US (average)</b>	9.0	24.1	3.0	(7.2)	6.0
<b>New England</b>	6.7	39.8	3.5	(11.6)	6.8
Connecticut	10.2	36.7	7.5	(10.4)	9.6
Maine	14.4	43.5	5.8	(4.9)	9.5
Massachusetts	4.7	50.6	(1.2)	(14.0)	5.1
New Hampshire	10.9	10.6	N/A	(37.0)	2.0
Rhode Island	0.1	114.1	7.7	35.0	6.6
Vermont	11.6	(2.3)	14.5	(13.3)	8.0
<b>Mideast</b>	4.1	18.3	(0.0)	(10.9)	4.6
Delaware	(41.1)	(52.8)	N/A	(18.6)	(22.2)
Maryland	15.0	71.8	(4.9)	(21.6)	3.4
New Jersey	3.6	17.0	5.1	(9.5)	16.7
New York	6.5	6.5	(5.6)	(10.8)	1.8
Pennsylvania	(5.1)	29.1	5.1	(6.7)	2.6
<b>Great Lakes</b>	3.0	12.8	4.7	(10.7)	3.8
Illinois	3.9	2.0	3.7	(19.9)	2.5
Indiana	2.4	(8.2)	6.4	(1.9)	2.4
Michigan	3.1	(4.5)	5.3	(12.0)	2.8
Ohio	0.7	NM	5.4	(8.5)	5.0
Wisconsin	4.3	62.5	1.6	(1.3)	8.1
<b>Plains</b>	3.1	13.1	1.9	(2.9)	0.9
Iowa	(4.0)	37.1	6.3	(1.1)	2.2
Kansas	4.9	4.7	5.6	(4.0)	3.3
Minnesota	5.9	23.6	(1.2)	(8.3)	3.7
Missouri	0.9	0.8	3.5	(0.5)	1.9
Nebraska	4.5	(21.2)	6.5	4.4	2.6
North Dakota	19.1	(17.6)	(19.1)	(9.9)	(27.4)
South Dakota	N/A	7.0	6.7	0.6	8.0
<b>Southeast</b>	4.7	24.2	3.2	(4.2)	4.7
Alabama	3.4	22.8	8.3	3.9	5.2
Arkansas	(2.9)	17.0	5.5	(5.7)	0.2
Florida	N/A	22.3	(0.8)	(5.7)	2.5
Georgia	6.4	7.6	6.0	1.4	5.8
Kentucky	5.5	41.3	4.8	(4.9)	5.1
Louisiana	1.3	99.3	(8.1)	(27.5)	2.2
Mississippi	5.0	(23.5)	11.1	1.0	4.8
North Carolina	8.3	221.9	4.6	(5.2)	6.8
South Carolina	5.6	46.1	9.8	26.1	8.4
Tennessee	(28.2)	6.8	6.5	(9.8)	7.8
Virginia	3.3	39.4	5.4	(10.8)	6.1
West Virginia	(0.2)	12.6	5.2	(9.4)	(2.7)
<b>Southwest</b>	12.4	(0.1)	(1.2)	(7.0)	(3.1)
Arizona	11.1	(16.9)	12.0	(5.7)	10.9
New Mexico	34.2	NM	(10.7)	(5.7)	(2.1)
Oklahoma	5.2	(17.5)	7.8	(13.3)	2.0
Texas	N/A	N/A	(3.9)	(6.4)	(8.3)
<b>Rocky Mountain</b>	13.5	37.0	6.1	1.0	9.5
Colorado	19.8	72.5	1.2	(0.5)	14.3

State/region	PIT	CIT	Sales	MFT	Total
Idaho	14.7	12.8	14.5	4.3	13.4
Montana	(14.9)	(15.1)	N/A	0.1	(7.5)
Utah	10.8	33.4	12.1	1.6	11.1
Wyoming	N/A	N/A	(12.2)	(1.5)	(9.3)
<b>Far West</b>	<b>20.6</b>	<b>34.0</b>	<b>6.2</b>	<b>(8.1)</b>	<b>14.6</b>
Alaska	N/A	(59.9)	N/A	0.0	(56.4)
California	24.1	37.1	12.0	(7.7)	19.1
Hawaii	(3.1)	81.3	(19.7)	(23.6)	(15.7)
Nevada	N/A	N/A	(5.9)	(4.7)	(6.4)
Oregon	(2.5)	8.7	N/A	(5.7)	0.2
Washington	N/A	N/A	2.2	(11.5)	13.9

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 Government Tax Revenue Trends During the Pandemic, by State

Nominal percentage change, April-December 2020 versus April-December 2019

State/region	PIT	CIT	Sales	MFT	Total
<b>US (median)</b>	<b>(1.0)</b>	<b>(2.5)</b>	<b>(0.3)</b>	<b>(10.6)</b>	<b>(1.6)</b>
<b>US (average)</b>	<b>0.4</b>	<b>(0.6)</b>	<b>(2.7)</b>	<b>(10.1)</b>	<b>(2.2)</b>
<b>New England</b>	<b>1.2</b>	<b>2.5</b>	<b>(2.6)</b>	<b>(15.5)</b>	<b>(1.8)</b>
Connecticut	0.8	5.3	(0.9)	(14.2)	(2.4)
Maine	8.2	(2.5)	(1.0)	(13.3)	2.3
Massachusetts	0.1	0.7	(5.4)	(20.8)	(3.0)
New Hampshire	14.4	1.9	N/A	(26.4)	(3.1)
Rhode Island	(0.2)	33.5	1.2	23.6	0.9
Vermont	13.1	(32.6)	8.7	(5.8)	3.2
<b>Mideast</b>	<b>(1.8)</b>	<b>(0.8)</b>	<b>(6.2)</b>	<b>(17.4)</b>	<b>(3.6)</b>
Delaware	(13.2)	(33.7)	N/A	(19.4)	(8.8)
Maryland	3.9	10.0	(11.0)	(23.1)	(4.7)
New Jersey	(4.5)	(9.7)	(4.3)	(12.4)	(2.3)
New York	(1.4)	6.2	(10.7)	(18.8)	(3.8)
Pennsylvania	(3.2)	0.8	0.1	(15.2)	(3.4)
<b>Great Lakes</b>	<b>(1.3)</b>	<b>0.2</b>	<b>(0.5)</b>	<b>(1.9)</b>	<b>(0.3)</b>
Illinois	(1.0)	(3.9)	(3.0)	9.2	1.1
Indiana	(1.1)	(9.0)	1.5	(9.1)	(2.4)
Michigan	2.1	(10.0)	(0.3)	(16.1)	(1.1)
Ohio	(4.3)	NM	0.5	5.1	(0.1)
Wisconsin	(2.9)	25.9	(0.5)	(9.1)	0.0
<b>Plains</b>	<b>(3.0)</b>	<b>(0.7)</b>	<b>(0.6)</b>	<b>(10.1)</b>	<b>(4.5)</b>
Iowa	(2.0)	11.3	0.7	(11.6)	(2.0)
Kansas	(5.3)	(7.9)	2.4	(10.4)	(3.1)
Minnesota	(3.3)	5.6	(3.6)	(14.6)	(2.9)
Missouri	(4.2)	1.3	1.8	(7.2)	(2.6)
Nebraska	3.1	(25.2)	6.1	(2.9)	0.9
North Dakota	(0.1)	(20.0)	(18.9)	(13.8)	(35.4)
South Dakota	N/A	(2.5)	6.1	(4.6)	5.0
<b>Southeast</b>	<b>1.0</b>	<b>(5.9)</b>	<b>(2.7)</b>	<b>(7.5)</b>	<b>(1.4)</b>
Alabama	(2.0)	11.0	4.5	12.7	3.3
Arkansas	(3.5)	(0.2)	5.8	3.0	0.7
Florida	N/A	(23.2)	(9.5)	(13.4)	(8.2)
Georgia	5.7	0.3	(2.9)	0.8	1.7
Kentucky	4.6	0.9	2.0	(10.1)	1.0
Louisiana	(7.4)	7.5	(6.1)	(19.6)	(5.2)
Mississippi	(2.9)	(13.4)	6.7	(5.2)	(0.6)
North Carolina	1.7	4.7	0.2	(10.4)	0.9
South Carolina	4.4	(23.3)	1.2	(1.5)	1.2
Tennessee	(27.7)	(3.2)	1.2	(8.5)	1.6
Virginia	0.2	16.8	(0.3)	(6.5)	1.2
West Virginia	(4.0)	0.1	3.1	(11.3)	(8.2)
<b>Southwest</b>	<b>2.5</b>	<b>9.4</b>	<b>(2.1)</b>	<b>(12.0)</b>	<b>(6.8)</b>
Arizona	0.9	(16.9)	6.9	(11.9)	2.3
New Mexico	15.4	NM	(2.9)	(12.3)	2.1
Oklahoma	(1.1)	(11.8)	1.5	(10.7)	(5.0)
Texas	N/A	N/A	(3.9)	(12.2)	(10.8)
<b>Rocky Mountain</b>	<b>10.3</b>	<b>(10.6)</b>	<b>2.8</b>	<b>(6.9)</b>	<b>4.4</b>
Colorado	11.0	(13.1)	(3.1)	(8.1)	3.4

State/region	PIT	CIT	Sales	MFT	Total
Idaho	18.3	(5.4)	11.3	0.4	11.1
Montana	(4.6)	(3.2)	N/A	(4.5)	(2.9)
Utah	10.9	(12.4)	8.7	(12.2)	7.6
Wyoming	N/A	N/A	(10.9)	(4.0)	(6.8)
<b>Far West</b>	<b>1.7</b>	<b>2.6</b>	<b>(4.2)</b>	<b>(13.8)</b>	<b>(1.3)</b>
Alaska	N/A	(62.2)	N/A	(6.8)	(37.7)
California	3.4	4.5	(2.1)	(11.8)	0.3
Hawaii	(5.7)	(32.4)	(23.0)	(27.1)	(19.9)
Nevada	N/A	N/A	(11.5)	(0.5)	(12.2)
Oregon	(12.0)	(0.0)	N/A	(10.9)	(9.9)
Washington	N/A	N/A	(2.9)	(25.8)	2.6

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 A4

## State Personal Income Tax Withholding

Year-over-year nominal percentage change

State/region	Pre-pandemic period				Pandemic period			
	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1
<b>US (median)</b>	5.3	5.0	4.3	6.9	(0.1)	4.0	4.0	4.9
<b>US (average)</b>	5.2	4.3	4.8	5.8	(1.3)	5.1	6.2	6.5
<b>New England</b>	3.2	4.5	3.1	4.7	2.5	4.7	5.1	6.6
Connecticut	7.3	5.5	2.8	2.0	1.9	4.0	6.6	2.3
Maine	5.3	7.4	6.7	7.6	2.8	9.2	7.8	10.7
Massachusetts	1.5	4.1	3.1	5.8	2.9	4.5	4.3	9.3
Rhode Island	1.2	3.8	2.0	6.9	1.1	3.4	4.0	0.2
Vermont	1.5	0.6	(0.3)	3.1	2.3	7.3	1.5	1.1
<b>Mideast</b>	5.0	5.1	4.6	5.6	(2.1)	4.3	2.8	4.7
Delaware	7.9	6.2	0.9	10.1	(2.3)	4.8	(39.8)	34.5
Maryland	4.0	6.7	5.5	8.9	2.7	5.3	7.7	0.6
New Jersey	4.5	6.2	3.2	7.0	(5.8)	7.5	9.5	7.3
New York	5.5	5.0	4.8	4.6	(1.8)	3.0	2.8	4.9
Pennsylvania	5.1	2.4	4.1	3.8	(6.7)	4.5	(6.7)	1.8
<b>Great Lakes</b>	5.3	4.0	4.1	4.2	(2.8)	4.7	3.6	5.2
Illinois	5.1	4.2	3.2	3.1	(0.0)	6.0	6.1	4.3
Indiana	8.7	1.4	4.8	7.3	(10.1)	9.6	2.3	6.0
Michigan	5.2	7.6	6.0	6.9	4.3	5.0	2.9	6.8
Ohio	3.5	2.5	1.9	1.6	(10.6)	1.3	0.4	1.6
Wisconsin	4.7	3.0	5.3	3.4	(1.3)	(0.0)	4.0	8.5
<b>Plains</b>	2.8	3.4	3.3	4.4	(1.9)	(0.6)	3.4	3.2
Iowa	(4.1)	(3.5)	(3.9)	3.0	0.8	3.6	1.2	3.2
Kansas	7.6	2.8	6.4	9.7	(4.0)	3.2	4.4	2.8
Minnesota	5.7	5.1	2.8	1.6	(2.2)	(6.0)	4.5	1.9
Missouri	(2.2)	6.0	6.4	4.7	(3.3)	0.1	1.9	5.5
Nebraska	8.2	2.1	6.5	10.9	2.3	8.2	6.2	5.4
North Dakota	5.5	10.2	3.7	13.3	(6.0)	2.5	(4.9)	(11.6)
<b>Southeast</b>	3.1	2.1	1.8	5.4	(0.6)	4.2	3.9	6.1
Alabama	8.3	1.7	5.4	9.0	(5.2)	1.9	3.9	4.8
Arkansas	8.2	1.9	5.7	9.3	(8.9)	(4.4)	(4.1)	(3.5)
Georgia	0.1	(2.4)	(2.3)	6.0	6.0	11.2	6.5	9.5
Kentucky	(4.0)	2.1	2.0	7.5	1.0	5.6	5.3	1.4
Louisiana	6.3	9.9	(4.7)	14.9	(7.9)	(11.0)	0.2	1.2
Mississippi	2.5	(1.0)	3.5	7.3	(4.7)	0.2	4.7	3.1
North Carolina	0.9	(1.0)	(0.2)	3.4	1.4	8.9	5.0	8.5
South Carolina	7.2	6.6	4.9	2.4	2.2	4.6	3.3	10.0
Virginia	4.5	5.8	5.8	2.9	(2.1)	2.4	3.4	5.1
West Virginia	6.8	(0.4)	1.2	4.1	(10.3)	(5.4)	(0.0)	1.9
<b>Southwest</b>	9.8	7.3	7.9	7.3	(0.4)	3.4	5.5	4.5
Arizona	8.4	7.1	8.7	10.3	2.5	2.4	8.5	7.6
New Mexico	20.1	13.2	13.9	12.8	(12.3)	3.2	5.3	(2.2)
Oklahoma	7.0	5.0	4.3	0.9	1.6	4.8	1.0	1.8
<b>Rocky Mountain</b>	2.8	6.1	5.8	10.8	7.7	9.3	13.7	9.9
Colorado	7.2	6.1	3.5	10.9	11.3	14.1	15.4	7.5
Idaho	(17.5)	3.2	9.7	12.1	8.0	11.5	14.9	18.9
Montana	5.6	7.6	4.2	9.7	0.7	2.8	11.2	9.7
Utah	3.3	6.5	9.0	10.3	3.3	1.6	10.9	11.3
<b>Far West</b>	8.4	5.3	8.2	7.2	(2.3)	8.4	12.6	10.4
California	9.4	5.1	8.2	7.5	(2.4)	9.2	14.2	11.1
Hawaii	(14.1)	4.1	5.6	4.4	(8.7)	(1.2)	(5.1)	(1.7)
Oregon	7.9	7.0	9.0	4.9	(0.1)	4.1	3.1	6.4

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.

Louisiana and New Mexico numbers exclude March 2021 revenues.

TABLE A5

## State Personal Income Tax: Estimated Payments/Declarations

Year-over-year nominal percentage change

State	Estimated Payments for Tax Year 2019				Estimated Payments for Tax Year 2020			
	April 2019, 1st payment	June 2019, 2nd payment	Sep. 2019, 3rd payment	Dec. 2019- Jan. 2020, 4th payment	April 2020, 1st payment	June 2020, 2nd payment	Sep. 2020, 3rd payment	Dec. 2020- Jan. 2021, 4th payment
<b>Median</b>	18.0	10.4	11.1	11.0	(72.0)	(38.8)	(2.3)	10.2
<b>Average</b>	35.7	1.3	0.4	10.5	(82.3)	(47.9)	(1.5)	33.5
Alabama	30.1	11.5	12.7	13.3	(74.8)	(61.2)	(3.6)	13.3
Arizona	(25.1)	13.4	13.3	15.1	16.4	(30.5)	0.3	33.2
Arkansas	(3.2)	3.1	14.3	9.8	(16.8)	(19.3)	11.2	21.9
California	7.6	(3.6)	(14.2)	8.6	(83.2)	(82.8)	11.3	48.6
Colorado	62.9	(0.5)	1.7	6.1	(92.0)	(66.3)	(2.2)	18.6
Connecticut	(18.3)	(31.1)	(15.9)	(11.0)	(76.1)	(75.8)	(5.5)	26.2
Delaware	11.2	12.3	15.0	13.5	(58.0)	(18.3)	9.0	17.9
Georgia	2.8	6.1	4.3	4.7	(76.4)	(69.7)	(9.5)	8.0
Hawaii	138.6	22.9	48.1	41.9	(66.8)	(39.9)	(17.6)	0.7
Illinois	19.7	12.3	8.9	7.2	9.5	(20.8)	(8.2)	10.2
Indiana	19.2	10.0	8.8	13.0	(72.2)	(52.8)	(0.1)	9.2
Iowa	9.4	7.3	15.7	18.2	(20.4)	(23.1)	4.2	(1.7)
Kansas	12.4	13.3	19.0	22.0	(56.7)	(31.9)	(1.3)	13.1
Kentucky	4.6	(0.7)	(1.0)	11.0	(82.8)	126.6	(1.4)	7.3
Louisiana	17.7	20.9	20.3	25.2	(45.4)	(31.3)	(2.5)	1.0
Maine	18.3	15.6	6.2	9.3	(66.0)	(51.6)	15.4	40.4
Maryland	(1.0)	19.9	20.7	16.5	(75.9)	41.1	1.7	74.4
Massachusetts	7.6	0.3	3.4	3.2	(77.2)	10.1	(4.0)	23.5
Michigan	9.9	5.5	3.8	3.6	(73.5)	(65.2)	(0.3)	20.7
Minnesota	71.0	9.3	9.3	11.6	(75.4)	103.3	2.4	12.1
Mississippi	97.8	20.1	11.0	14.0	(79.1)	(44.5)	(10.9)	9.8
Missouri	135.6	(68.7)	(74.7)	NM	(52.5)	54.1	15.2	NM
Montana	27.6	(0.8)	17.2	35.0	(66.1)	(26.3)	3.4	1.9
Nebraska	20.6	10.1	11.3	10.8	(63.7)	(20.7)	0.3	15.3
New Jersey	10.4	7.1	5.0	8.7	(75.0)	(43.7)	(7.9)	(4.3)
New York	57.1	7.5	2.8	7.3	(96.9)	(37.7)	(8.5)	21.9
North Carolina	15.1	13.2	11.8	16.2	(56.0)	(48.6)	1.0	9.6
North Dakota	40.6	12.7	16.0	9.6	(86.9)	(47.4)	(17.1)	4.6
Ohio	8.1	12.9	16.0	7.2	(66.0)	(55.5)	(6.1)	7.5
Oklahoma	31.6	3.6	(2.0)	(7.3)	(90.6)	(48.9)	(22.7)	(6.1)
Oregon	53.5	11.5	12.9	14.1	(77.1)	(1.8)	(4.4)	12.7
Pennsylvania	13.9	13.0	11.1	8.7	(70.0)	(59.0)	(10.8)	(50.7)
Rhode Island	5.3	10.6	9.9	16.6	(64.9)	(59.4)	(2.3)	(1.1)
South Carolina	157.4	18.2	11.1	16.8	(85.8)	28.3	4.4	18.5
Vermont	20.1	14.9	18.7	13.1	(71.8)	(55.0)	3.2	12.6
Virginia	30.3	13.7	20.5	24.7	(45.5)	(8.5)	(9.4)	(2.0)
West Virginia	(9.9)	10.0	5.2	5.3	(62.7)	(46.7)	(11.3)	(1.6)
Wisconsin	51.9	0.9	2.7	1.6	(86.7)	110.4	(11.5)	10.0

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 are not available for Idaho, New Mexico, and Utah.

NM = not meaningful.

TABLE A6

## State Personal Income Tax: Estimated Payments/Declarations During the Pandemic

Amounts (dollars in millions) and year-over-year nominal dollar and percentage change

State	Dollars in millions			Dollar change		Percent change	
	Apr 2018- Jan 2019	Apr 2019- Jan 2020	Apr 2020- Jan 2021	Apr 2019- Jan 2020 vs Apr 2018- Jan 2019	Apr 2020- Jan 2021 vs Apr 2019- Jan 2020	Apr 2019- Jan 2020 vs Apr 2018- Jan 2019	Apr 2020- Jan 2021 vs Apr 2019- Jan 2020
<b>Median</b>						13.9	(2.2)
<b>Average</b>	<b>\$73,167</b>	<b>\$81,401</b>	<b>\$83,048</b>	<b>\$8,233.8</b>	<b>\$1,646.6</b>	<b>11.3</b>	<b>2.0</b>
Alabama	282	322	319	40.5	(3.0)	14.4	(0.9)
Arizona	551	627	706	76.1	79.6	13.8	12.7
Arkansas	330	355	393	24.4	38.2	7.4	10.8
California	26,178	26,829	29,828	650.8	2,999.2	2.5	11.2
Colorado	1,397	1,668	1,530	271.2	(138.1)	19.4	(8.3)
Connecticut	1,596	1,273	1,252	(322.3)	(21.5)	(20.2)	(1.7)
Delaware	199	221	238	22.6	16.8	11.4	7.6
Georgia	826	870	793	43.6	(77.1)	5.3	(8.9)
Hawaii	569	798	746	228.3	(51.8)	40.1	(6.5)
Illinois	1,977	2,219	2,254	241.5	34.9	12.2	1.6
Indiana	841	939	921	98.2	(18.4)	11.7	(2.0)
Iowa	452	528	506	75.4	(21.1)	16.7	(4.0)
Kansas	436	516	515	80.0	(0.2)	18.4	(0.0)
Kentucky	513	541	526	28.4	(15.1)	5.5	(2.8)
Louisiana	308	382	377	74.2	(4.7)	24.1	(1.2)
Maine	276	311	358	34.3	47.4	12.4	15.2
Maryland	1,958	2,232	2,686	273.7	454.1	14.0	20.3
Massachusetts	2,405	2,487	2,425	81.8	(62.3)	3.4	(2.5)
Michigan	1,206	1,266	1,266	60.3	0.1	5.0	0.0
Minnesota	2,091	2,640	2,520	549.1	(120.1)	26.3	(4.6)
Mississippi	392	480	444	88.5	(35.8)	22.6	(7.4)
Missouri	212	534	1,322	322.1	788.2	152.3	147.7
Montana	278	320	339	42.1	18.7	15.2	5.8
Nebraska	330	377	384	46.9	7.3	14.2	1.9
New Jersey	2,894	3,066	2,742	171.8	(324.2)	5.9	(10.6)
New York	13,785	16,798	16,158	3,013.4	(640.0)	21.9	(3.8)
North Carolina	1,192	1,356	1,344	163.8	(12.0)	13.7	(0.9)
North Dakota	68	83	78	14.2	(4.9)	20.8	(5.9)
Ohio	833	904	881	71.2	(22.7)	8.6	(2.5)
Oklahoma	434	472	352	38.9	(120.2)	9.0	(25.4)
Oregon	2,610	3,299	2,839	689.7	(460.1)	26.4	(13.9)
Pennsylvania	1,755	1,952	1,578	197.0	(374.1)	11.2	(19.2)
Rhode Island	217	242	220	25.4	(21.4)	11.7	(8.9)
South Carolina	342	413	423	71.2	10.4	20.8	2.5
Vermont	153	177	175	23.8	(1.7)	15.5	(0.9)
Virginia	1,845	2,290	2,140	444.8	(149.7)	24.1	(6.5)
West Virginia	255	261	245	5.7	(16.0)	2.2	(6.1)
Wisconsin	1,185	1,357	1,224	171.3	(132.2)	14.4	(9.7)

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 are not available for Idaho, New Mexico, and Utah.

TABLE A7

## State Personal Income Tax: Final Payments

Amounts (dollars in millions) and year-over-year nominal dollar and percentage change

State	Dollars in millions			Dollar change		Percent change	
	Apr 2018- Mar 2019	Apr 2019- Mar 2020	Apr 2020- Mar 2021	Apr 2019- Mar 2020 vs Apr 2018- Mar 2019	Apr 2020- Mar 2021 vs Apr 2019- Mar 2020	Apr 2019- Mar 2020 vs Apr 2018- Mar 2019	Apr 2020- Mar 2021 vs Apr 2019- Mar 2020
	\$41,450.5	\$53,176.0	\$52,626.9	\$11,725.5	\$(549.2)	26.4	0.4
						28.3	(1.0)
Alabama	476.7	634.4	618.1	157.7	(16.3)	33.1	(2.6)
Arizona	892.1	1,222.9	1,186.2	330.8	(36.7)	37.1	(3.0)
Arkansas	429.6	431.7	469.2	2.2	37.4	0.5	8.7
California	7,079.7	8,772.7	9,618.6	1,693.0	845.9	23.9	9.6
Colorado	898.2	1,047.2	1,106.7	149.0	59.5	16.6	5.7
Connecticut	1,581.5	1,448.9	1,420.4	(132.6)	(28.5)	(8.4)	(2.0)
Delaware	165.4	199.8	203.2	34.4	3.5	20.8	1.7
Georgia	926.6	1,378.4	1,399.7	451.7	21.3	48.7	1.5
Hawaii	232.3	282.7	318.8	50.4	36.1	21.7	12.8
Idaho	546.2	778.6	912.3	232.4	133.7	42.6	17.2
Illinois	1,982.9	2,888.1	2,328.1	905.2	(560.0)	45.6	(19.4)
Indiana	748.3	935.9	943.6	187.6	7.6	25.1	0.8
Iowa	423.4	648.0	523.7	224.5	(124.3)	53.0	(19.2)
Kansas	635.1	889.4	765.0	254.3	(124.5)	40.0	(14.0)
Kentucky	378.9	427.5	432.9	48.5	5.4	12.8	1.3
Louisiana	422.4	595.2	554.7	172.9	(40.6)	40.9	(6.8)
Maine	278.1	345.4	354.9	67.3	9.5	24.2	2.8
Maryland	1,875.7	2,513.7	2,340.1	638.0	(173.7)	34.0	(6.9)
Massachusetts	2,207.9	3,100.4	3,116.4	892.5	16.0	40.4	0.5
Michigan	984.5	1,330.6	1,332.3	346.0	1.8	35.1	0.1
Minnesota	1,625.3	2,000.1	2,008.7	374.8	8.6	23.1	0.4
Missouri	1,451.2	1,476.4	530.0	25.3	(946.5)	1.7	(64.1)
Montana	196.4	245.7	117.1	49.3	(128.6)	25.1	(52.3)
Nebraska	376.9	492.9	487.0	116.0	(5.9)	30.8	(1.2)
New Jersey	2,627.5	3,748.1	3,526.8	1,120.6	(221.3)	42.6	(5.9)
New Mexico	472.2	364.4	516.4	(107.8)	152.0	(22.8)	41.7
New York	2,577.7	3,342.6	3,455.8	764.9	113.2	29.7	3.4
North Carolina	2,003.3	2,557.7	2,497.3	554.3	(60.4)	27.7	(2.4)
North Dakota	64.4	74.5	72.4	10.1	(2.1)	15.7	(2.8)
Ohio	812.3	1,123.4	1,073.4	311.1	(50.0)	38.3	(4.4)
Oklahoma	377.4	449.2	436.1	71.8	(13.1)	19.0	(2.9)
Pennsylvania	1,401.6	1,744.3	1,715.5	342.7	(28.9)	24.4	(1.7)
Rhode Island	225.4	282.5	284.5	57.1	2.0	25.4	0.7
South Carolina	742.9	923.1	950.9	180.2	27.8	24.3	3.0
Utah	1,017.0	1,345.7	1,661.7	328.7	316.0	32.3	23.5
Vermont	147.7	178.2	194.0	30.5	15.8	20.7	8.9
Virginia	1,250.5	1,777.0	1,978.3	526.5	201.3	42.1	11.3
West Virginia	323.3	430.4	417.1	107.1	(13.3)	33.1	(3.1)
Wisconsin	591.9	748.4	759.1	156.5	10.7	26.4	1.4

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 are not available for Mississippi, New Mexico, and Oregon. Louisiana and New Mexico numbers exclude March 2021 revenues.

TABLE A8

**States with Economic Nexus and Marketplace Laws***Economic Nexus threshold levels and effective dates*

State	Current threshold levels for economic nexus	Marketplace nexus	
		Economic nexus effective date	effective date
Alabama	>\$250,000	10/1/2018	1/1/2019
Arizona	>\$100,000	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
Florida	>\$100,000	7/1/2021	7/1/2021
Georgia	>\$100,000 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	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	7/1/2020
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	10/1/2018	10/1/2019
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. Missouri has not yet enacted legislation on economic nexus.

States are hyperlinked to respective economic nexus guidelines.

TABLE A9

## Quarterly State Government Tax Revenue for Nonmajor Tax Revenue Sources

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

2020 Q4 collections (\$ millions)	Property tax	Tobacco product sales tax	Alcoholic beverage sales tax	Motor vehicle & operators' license taxes	Other taxes	Total nonmajor taxes
	\$5,599	\$4,891	\$1,829	\$8,201	\$35,342	\$55,862
<b>2010 Q1 - 2020 Q4 average growth</b>	<b>2.1</b>	<b>(0.5)</b>	<b>0.8</b>	<b>1.7</b>	<b>1.8</b>	<b>1.5</b>
2020 Q4	2.9	0.5	(5.1)	(1.8)	(5.5)	(3.8)
2020 Q3	2.5	(1.5)	(3.4)	(2.9)	(6.5)	(4.8)
2020 Q2	0.2	(2.5)	(2.0)	(2.9)	(4.5)	(3.6)
2020 Q1	1.2	(3.2)	3.3	1.8	1.5	1.1
2019 Q4	0.2	(4.1)	3.2	1.2	1.4	0.8
2019 Q3	(0.4)	(6.2)	0.5	1.3	3.4	1.8
2019 Q2	5.3	(7.7)	(1.2)	0.8	4.6	2.7
2019 Q1	6.4	(5.5)	(0.7)	4.3	5.2	3.9
2018 Q4	9.0	(5.3)	(1.5)	7.1	5.3	4.6
2018 Q3	8.1	0.8	0.0	4.4	5.2	4.8
2018 Q2	3.6	5.2	1.3	4.7	3.6	3.8
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	1.1
2017 Q2	0.4	1.8	2.2	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	2.6	(1.8)	(0.4)
2016 Q1	5.0	1.8	2.6	2.3	(1.4)	0.0
2015 Q4	8.7	0.1	1.5	2.8	(1.0)	0.4
2015 Q3	6.1	(0.8)	1.3	1.6	(0.4)	0.4
2015 Q2	5.2	(2.1)	1.6	1.2	(0.7)	(0.0)
2015 Q1	4.3	(4.0)	(0.2)	1.2	(0.4)	(0.1)
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	2.2	0.9
2012 Q2	(10.6)	(2.3)	3.0	3.1	4.1	2.1
2012 Q1	(10.8)	(2.5)	0.6	2.1	7.6	4.0
2011 Q4	(11.0)	(1.9)	(0.5)	1.8	11.8	6.5
2011 Q3	(7.5)	(0.9)	0.5	0.4	12.8	7.3
2011 Q2	(3.8)	0.8	1.6	1.6	12.2	7.6
2011 Q1	2.5	2.8	3.2	3.4	10.1	7.4
2010 Q4	8.2	3.2	3.3	4.1	7.9	6.7
2010 Q3	13.4	2.3	3.1	5.7	5.0	5.5
2010 Q2	13.4	0.6	2.1	3.8	(0.9)	1.2
2010 Q1	9.9	(1.2)	0.7	1.5	(8.6)	(4.7)

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



TABLE A10

## Preliminary Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2021 quarter 1 versus 2020 quarter 1

State/region	PIT	CIT	Sales	Total
<b>US (median)</b>	<b>17.3</b>	<b>31.2</b>	<b>7.0</b>	<b>9.8</b>
<b>US (average)</b>	<b>18.5</b>	<b>30.4</b>	<b>2.5</b>	<b>10.3</b>
<b>New England</b>	<b>18.9</b>	<b>20.3</b>	<b>6.6</b>	<b>13.2</b>
Connecticut	9.2	30.6	7.7	9.9
Maine	31.7	(8.3)	11.3	16.5
Massachusetts	22.0	18.0	4.1	15.7
New Hampshire	9.7	40.8	N/A	10.7
Rhode Island	25.8	(2.6)	9.2	12.0
Vermont	27.8	(38.3)	14.0	7.5
<b>Mideast</b>	<b>10.5</b>	<b>11.0</b>	<b>(0.4)</b>	<b>8.0</b>
Delaware	44.4	133.7	N/A	36.8
Maryland	2.9	32.7	(24.2)	(5.5)
New Jersey	9.0	14.2	7.1	13.7
New York	11.2	4.1	(2.9)	8.4
Pennsylvania	10.8	13.3	6.3	4.6
<b>Great Lakes</b>	<b>15.3</b>	<b>67.0</b>	<b>8.0</b>	<b>11.5</b>
Illinois	8.1	61.7	7.4	11.3
Indiana	12.5	33.7	6.8	8.3
Michigan	42.5	NM	14.5	22.3
Ohio	23.5	N/A	5.0	7.7
Wisconsin	17.9	11.9	6.0	9.9
<b>Plains</b>	<b>13.8</b>	<b>51.1</b>	<b>3.7</b>	<b>10.9</b>
Iowa	17.4	66.3	8.5	13.2
Kansas	9.6	31.2	5.6	8.5
Minnesota	20.6	51.6	2.3	17.4
Missouri	5.5	39.5	3.3	5.5
Nebraska	15.1	61.8	(2.1)	8.7
North Dakota	2.8	88.3	(10.3)	(11.6)
South Dakota	N/A	N/A	12.6	10.5
<b>Southeast</b>	<b>14.5</b>	<b>21.1</b>	<b>6.9</b>	<b>9.1</b>
Alabama	8.1	142.5	10.1	8.9
Arkansas	17.9	(20.0)	7.2	3.3
Florida	N/A	2.2	0.7	1.6
Georgia	19.9	17.4	13.9	15.2
Kentucky	N/A	146.6	5.8	5.2
Louisiana	12.6	NM	10.4	9.8
Mississippi	21.7	17.9	11.3	11.8
North Carolina	12.1	67.0	15.2	13.6
South Carolina	44.6	5.7	11.5	21.6
Tennessee	(13.0)	(3.6)	10.7	7.7
Virginia	12.0	17.8	6.7	10.9
West Virginia	9.3	10.6	6.6	3.8
<b>Southwest</b>	<b>29.8</b>	<b>18.7</b>	<b>(3.5)</b>	<b>(3.5)</b>
Arizona	44.0	97.7	8.9	21.3
New Mexico	ND	ND	ND	ND
Oklahoma	11.6	(44.0)	4.4	(0.2)
Texas	N/A	N/A	(6.1)	(7.8)
<b>Rocky Mountain</b>	<b>14.5</b>	<b>35.2</b>	<b>7.4</b>	<b>11.6</b>
Colorado	7.4	33.6	(0.8)	5.7
Idaho	25.8	11.4	18.0	16.5

Montana	25.9	33.4	N/A	16.4
Utah	21.5	48.8	14.6	16.9
Wyoming	N/A	N/A	(5.0)	ND
<b>Far West</b>	<b>30.1</b>	<b>51.5</b>	<b>(2.6)</b>	<b>16.2</b>
Alaska	N/A	NM	N/A	(55.3)
California	29.1	54.6	(5.9)	17.4
Hawaii	17.3	NM	(18.9)	(9.7)
Nevada	N/A	N/A	13.8	8.6
Oregon	51.3	54.4	N/A	42.2
Washington	N/A	N/A	10.2	9.2

Source: Individual state data, analysis by the author.

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

# Notes

- <sup>1</sup> The author made several adjustments for the fourth quarter of 2020 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.
- <sup>2</sup> In this report, the author uses US Bureau of Economic Analysis regions as the basis of analysis.
- <sup>3</sup> See Arizona Joint Legislative Budget Committee, “Monthly Fiscal Highlights, November 2020” and “Monthly Fiscal Highlights, February 2021” accessed June 5, 2021, <https://www.azleg.gov/jlbc/monthlyhighlights.htm>.
- <sup>4</sup> Justin Garosi and Brian Uhler, “Income Tax Withholding Tracker: December 1 - December 23,” California Legislative Analyst’s Office, December 23, 2020, <https://lao.ca.gov/LAOEconTax/Article/Detail/603>.
- <sup>5</sup> Justin Garosi and Brian Uhler, “Income Tax Withholding Tracker: March 1 – March 29,” California Legislative Analyst’s Office, March 30, 2021, <https://lao.ca.gov/LAOEconTax/Article/Detail/636>.
- <sup>6</sup> Thirty-seven of 41 states with broad-based personal income tax extended their filing deadlines to July 15, 2020. Among the remaining four states, Idaho extended it to June 15, Hawaii to July 20, Iowa to July 31, and Virginia to June 1.
- <sup>7</sup> 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).
- <sup>8</sup> See “IRS Extends More Tax Deadlines to Cover Individuals, Trusts, Estates, Corporations and Others,” news release, Internal Revenue Service, April 9, 2020, <https://www.irs.gov/newsroom/irs-extends-more-tax-deadlines-to-cover-individuals-trusts-estates-corporations-and-others>.
- <sup>9</sup> See “Section 5 – Saving and Investment, National Income and Product Accounts,” US Bureau of Economic Analysis, accessed June 5, 2021, <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>.
- <sup>10</sup> See *South Dakota v. Wayfair*, Brief of Amici Curiae Law Professors and Economists in Support of Petitioner, No. 17-494, March 5, 2018, [https://www.supremecourt.gov/DocketPDF/17/17-494/37603/20180305141434827\\_Brief%20of%20Amici%20Curiae%20Law%20Professors%20and%20Economists%20in%20Support%20of%20Petitioner.PDF](https://www.supremecourt.gov/DocketPDF/17/17-494/37603/20180305141434827_Brief%20of%20Amici%20Curiae%20Law%20Professors%20and%20Economists%20in%20Support%20of%20Petitioner.PDF).
- <sup>11</sup> See “How the COVID-19 Pandemic is Transforming State Budgets,” Urban Institute, accessed June 5, 2021, <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-fiscal-pages-covid-edition>.
- <sup>12</sup> See US Bureau of Labor Statistics, “Labor Force Statistics from the Current Population Survey,” accessed June 5, 2021, [https://www.bls.gov/web/empsit/cpsee\\_e08.htm](https://www.bls.gov/web/empsit/cpsee_e08.htm).
- <sup>13</sup> For more discussion of the relationship between property tax and house prices, see Dadayan (2012).
- <sup>14</sup> For state-by-state analysis on the impact of the Covid-19 related changes on state budgets, visit “How the COVID-19 Pandemic is Transforming State Budgets,” Urban Institute, accessed June 5, 2021, <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-fiscal-pages-covid-edition>.
- <sup>15</sup> Author’s analysis of data from National Association of State Budget Officers (2020), table A-1.

- <sup>16</sup> See State of New Jersey, Governor Phil Murphy, “Governor Murphy, Lt. Governor Oliver, Senate President Sweeney, Assembly Speaker Coughlin, Assembly Budget Chair Pintor Marin, and Senate Budget Chair Sarlo Announce Agreement to Include Millionaire’s Tax in Revised FY2021 Budget,” September 17, 2020, <https://nj.gov/governor/news/news/562020/approved/20200917a.shtml>.
- <sup>17</sup> See Wisconsin Department of Revenue, “Wisconsin Tax Bulletin. Number 212,” February 2021, <https://www.revenue.wi.gov/WisconsinTaxBulletin/212-02-21-WTB.pdf>.
- <sup>18</sup> See California Legislative Analyst’s Office, “The 2020-21 May Revision: Revenue Proposals in the 2020-21 May Revision,” May 20, 2020, <https://lao.ca.gov/Publications/Report/4238>.
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- <sup>22</sup> See California Department of Health Care Services, letter to Kristin Fan, Centers for Medicare and Medicaid Services, “California Request for Waiver For Manager Care Organization Tax,” September 30, 2019, <https://www.dhcs.ca.gov/services/Documents/MCOTax09302019.pdf>.
- <sup>23</sup> See US Department of Health and Human Services’ response letter addressed to the California Department of Health Care Services, January 30, 2020, <https://www.dhcs.ca.gov/services/Documents/CMS-Response-to-CA-Tax-Waiver-Request1-30-20.pdf>.
- <sup>24</sup> See California Legislative Analyst’s Office, “The 2020-21 Budget: Overview of the California Spending Plan,” October 5, 2020, <https://lao.ca.gov/Publications/Report/4263>.

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# About the Author

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

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