

RESEARCH REPORT

# Strong State Tax Growth Continued in the Second Quarter of 2022 but Weakened in the Third Quarter

[State Tax and Economic Review, 2022 Quarter 2](#)

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*December 2022*





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# Acknowledgments

This report is funded in part by data subscribers, the Bill & Melinda Gates Foundation, and other State and Local Finance Initiative funders. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

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

Thanks to Kim Rueben, Tracy Gordon, Gabriella Garriga, and Michael Marazzi for their thoughtful review of and feedback on the report.

# 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—increased 12.8 percent in nominal terms and 4.8 percent in inflation-adjusted terms in the second quarter of 2022 compared with the same quarter in 2021.<sup>1</sup>
- Inflation-adjusted **state government tax revenues** from major sources increased 7.1 percent in the second quarter of 2022 compared with the same quarter in 2021. In this report we also present preliminary revenue trends for state fiscal year 2022, which ended on June 30 in 46 states.<sup>2</sup> State government tax revenues from major sources increased 8.1 percent in real terms in fiscal year 2022 compared with fiscal year 2021.
  - » Inflation-adjusted **state personal income tax revenues** increased 6.6 percent in the second quarter of 2022 compared with the second quarter of 2021. Income tax revenues have shown extreme volatility in recent quarters, in part because of pandemic-related federal and state policies (including changes in income tax filing deadlines) as well as changes in investor behavior based on expected if not realized changes in federal tax policy. State personal income tax revenues increased 4.5 percent in real terms in fiscal year 2022 compared with fiscal year 2021.
  - » Inflation-adjusted **state corporate income tax revenues** increased 27.1 percent in the second quarter of 2022 compared with the same quarter in 2021. State corporate income tax revenues increased 34.7 percent in real terms in fiscal year 2022 compared with fiscal year 2021. Exceptionally strong corporate income tax revenue growth throughout fiscal year 2022 stands in sharp contrast to the stagnant growth patterns observed after the Great Recession and before the global pandemic. This is partially due to some states introducing an elective pass-through entity tax and including payments with state corporate income taxes. In addition, corporations may have increased estimated payments or shifted realizations in anticipation of federal corporate tax rate increases under the Biden administration.
  - » Growth in inflation-adjusted **state sales tax revenues** was weak, at 1.2 percent in the second quarter of 2022 compared with the second quarter of 2021. State sales tax revenues increased 7.3 percent in real terms in fiscal year 2022 compared with fiscal year 2021. The stronger growth earlier in fiscal year 2022 was largely caused by high inflation; because general sales taxes are on the amount spent and not a per-unit basis,

general sales taxes grew as prices on goods increased. However, consumers now appear to be tightening their wallets in response to a rising cost of living.

- Inflation-adjusted **local government tax revenues** from major sources showed a year-over-year increase of 0.2 percent for the second quarter of 2022. Local government tax revenues from major sources declined 1.4 percent in real terms in fiscal year 2022 compared with fiscal year 2021.
  - » Inflation-adjusted **local property tax revenues**, the largest source for local government revenues, declined 1.7 percent year over year for the second quarter of 2022, marking the fourth consecutive quarter of decline in real terms. Local government property tax revenues declined 2.7 percent in real terms in fiscal year 2022 compared with fiscal year 2021. The declines in local property tax revenues likely reflect the pandemic's negative impact on commercial property values.
- **Preliminary data for the third quarter of 2022** indicate continued year-over-year nominal growth in overall state tax revenue collections as well as in major sources of state tax revenues. However, growth in quarterly state tax revenues has weakened substantially and will likely weaken further in the months ahead. Year-over-year growth in total state tax revenues was 7.2 percent in nominal terms and 0.1 percent in real terms.
  - » Year-over-year growth in **state personal income tax** collections was 2.4 percent in nominal terms and negative 4.3 percent in real terms in the third quarter of 2022.
  - » Year-over-year growth in **state corporate income tax** collections was 10.6 percent in nominal terms and 3.3 percent in real terms in the third quarter of 2022.
  - » **State sales tax** collections grew 11.0 percent in nominal terms and 3.7 percent in real terms in the third quarter of 2022 compared with the same period in 2021.
- **Economic factors** that drive revenue growth remained relatively strong in the second quarter of 2022 compared with the same quarter in 2021. Similar to the pandemic, patterns differed across places, industries, and occupations.
  - » Year-over-year growth in real **gross domestic product** (GDP) was 1.8 percent for the second quarter of 2022. However, real GDP declined 0.1 percent in the second quarter of 2022 compared with the first quarter of 2022.
  - » The seasonally adjusted **unemployment rate** was 3.6 percent in the second quarter of 2022, which was similar to prepandemic unemployment rates, but this masks large variations across different groups of workers and different states.

- » Seasonally adjusted nationwide **employment** increased 4.2 percent in the second quarter of 2022 compared with the same quarter in 2021, but in 30 states employment was still below the levels observed in the second quarter of 2019.
- » **House prices** increased 20.9 percent in nominal terms and 12.4 percent in real terms for the second quarter of 2022 compared with a year earlier. All 50 states reported year-over-year double-digit nominal growth in house prices in the second quarter of 2022.
- » Real **personal consumption expenditures** increased 1.5 percent for the second quarter of 2022 compared with the same quarter in 2021. Growth in real personal consumption spending was weak in the second quarter of 2022 compared with the first quarter of 2022 because of lower spending on durable goods.



# Trends in State and Local Revenues

State and local tax revenues are sensitive to policy and behavioral changes and continue to feel the effects of unprecedented federal assistance in the wake of the pandemic. The 2021 American Rescue Plan Act alone included \$350 billion in direct aid to state, local, territorial, and tribal governments which helped to stabilize state and local budgets. Direct payments to individuals and businesses also boosted incomes and consumption, which led to higher-than-expected state and local revenues.

The federal government did not send any stimulus checks to individual taxpayers in 2022. However, 18 states (California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Maine, Massachusetts, Minnesota, New Jersey, New Mexico, New York, Pennsylvania, South Carolina, and Virginia) used budget surpluses to issue rebate checks ranging from as little as \$75 per taxpayer in Illinois to as high as \$1,500 per taxpayer in New Jersey. Rebate types, timing, and qualification criteria varied significantly across the states. Some states (e.g., Delaware) issued income tax rebates, others (e.g., New York) issued property tax rebates, and a few (e.g., Illinois) issued both income and property tax rebates. Some states issued rebates in one payment (e.g., Hawaii), while others issued in two payments (e.g., New Mexico). Some states (e.g., Virginia) issued rebates regardless of income level, while others (e.g., California) issued rebates based on income, tax-filing status, and household size.

States' longer-term fiscal outlooks remain uncertain because of higher inflation rates, changes in consumption patterns, declining labor participation rates, and volatility in the stock market. It is likely that growth in the overall economy will be weaker in the coming months. Furthermore, post-pandemic shifts in economic activity will continue to affect state and local governments, for example as consumers resume travel and spending on services that are often not fully subject to sales tax.

TABLE 1

## State and Local Government Tax Revenue Trends

Millions of dollars, adjusted for inflation

Tax source	2021 Q2	2022 Q2	Y-O-Y percent change	Average quarterly Y-O-Y growth rate, prior four quarters (%)	State fiscal year 2021	State fiscal year 2022	Y-O-Y percent change
<b>Total state and local major taxes</b>	<b>\$517,587</b>	<b>\$542,668</b>	<b>4.8</b>	<b>11.7</b>	<b>\$1,978,163</b>	<b>\$2,054,918</b>	<b>3.9</b>
<b>State major taxes</b>	<b>\$349,137</b>	<b>\$373,965</b>	<b>7.1</b>	<b>22.1</b>	<b>\$1,099,971</b>	<b>\$1,189,453</b>	<b>8.1</b>
Personal income tax	182,525	194,531	6.6	21.2	571,066	596,721	4.5
Corporate income tax	42,117	53,543	27.1	75.3	98,570	132,806	34.7
Sales tax	119,272	120,736	1.2	16.0	408,097	437,821	7.3
Property tax	5,224	5,156	(1.3)	2.7	22,238	22,105	(0.6)
<b>Local major taxes</b>	<b>\$168,450</b>	<b>\$168,703</b>	<b>0.2</b>	<b>(0.1)</b>	<b>\$878,192</b>	<b>\$865,465</b>	<b>(1.4)</b>
Personal income tax	15,011	15,429	2.8	5.4	49,530	48,231	(2.6)
Corporate income tax	4,172	3,866	(7.3)	22.1	11,961	12,482	4.4
Sales tax	28,419	30,590	7.6	6.8	109,659	116,929	6.6
Property tax	120,848	118,818	(1.7)	(2.2)	707,041	687,823	(2.7)

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

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

Table 1 shows real state and local government tax revenues from major sources for the second quarter of 2021 and the second quarter of 2022 as well as the real percentage change between both quarters and the average quarterly year-over-year real growth in the prior four quarters. Table 1 also shows real revenues for state fiscal years 2021 and 2022 as well as real percentage change. We present real growth rates to illustrate the impact of inflation on state and local government revenues.

Major findings include the following:

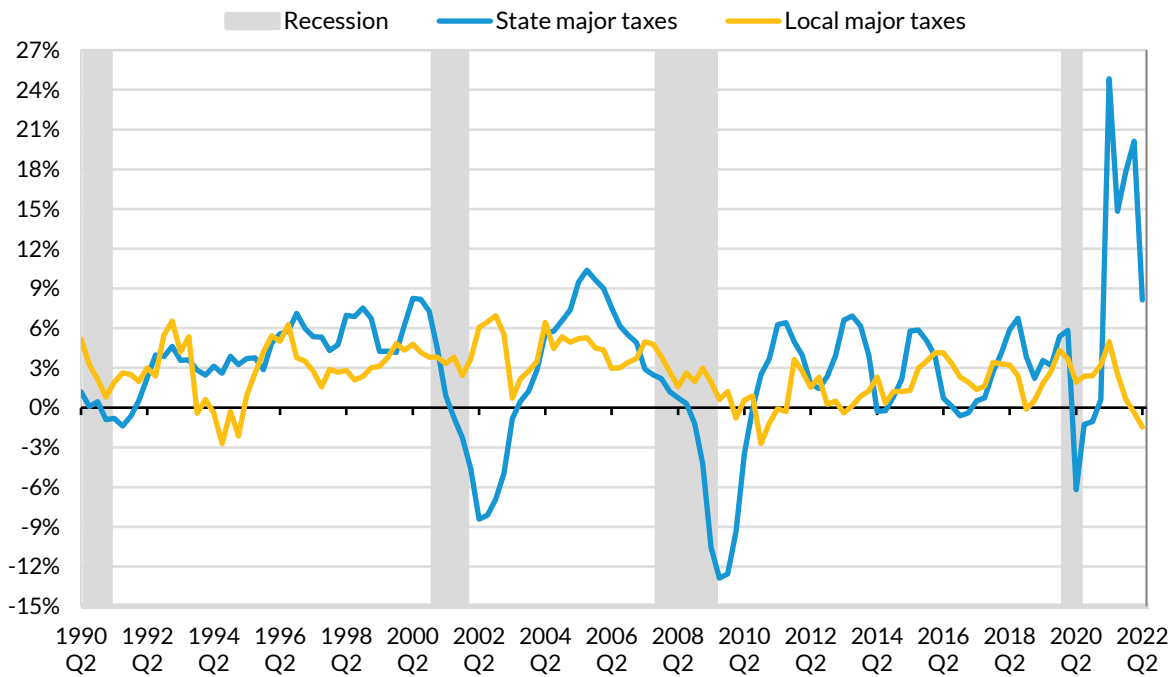
- **State and local government tax revenues** from major sources increased 4.8 percent in real terms in the second quarter of 2022 compared with a year earlier. Average quarterly year-over-year real growth was 11.7 percent in the prior four quarters. Year-over-year real growth was 3.9 percent in state fiscal year 2022.
- **State government tax revenues** from major sources increased 7.1 percent in real terms in the second quarter of 2022 relative to a year earlier. Average quarterly year-over-year real growth rate was 22.1 percent for the prior four quarters. Year-over-year real growth for state fiscal year 2022 was 8.1 percent. **State personal income tax** revenues increased 6.6 percent in real terms in the second quarter of 2022 compared with the second quarter of 2021. Average quarterly year-over-year real growth was 21.2 percent for the prior four quarters. Year-over-year real growth for state fiscal year 2022 was 4.5 percent. Inflation-adjusted **state corporate income tax** revenues increased 27.1 percent for the second quarter of 2022 compared with a year earlier. Average quarterly year-over-year real growth was 75.3 percent for the prior four quarters. Year-over-year real growth for state fiscal year 2022 was 34.7 percent. (This strong growth is largely attributable to California, where corporate income tax revenues skyrocketed, mostly because of the state's newly introduced pass-through entity elective tax.) **State sales tax** revenues increased 1.2 percent in real terms for the second quarter of 2022 compared with the second quarter of 2021. Average quarterly year-over-year real growth was 16.0 percent for the prior four quarters. Year-over-year real growth for state fiscal year 2022 was 7.3 percent.
- **Local government tax revenue** from major sources increased 0.2 percent in real terms for the second quarter of 2022 compared with the second quarter of 2021. The average quarterly year-over-year real growth rate was negative 0.1 percent for the prior four quarters. Local government tax revenues decreased 1.4 percent in real terms in state fiscal year 2022 compared with state fiscal year 2021. **Local property taxes**, the single largest source of local government tax revenues, declined 1.7 percent in real terms in the second quarter of 2022 compared with the second quarter in 2021. Local government property tax revenues decreased 2.7 percent in real terms in state fiscal year 2022 compared with state fiscal year 2021, related to declines in commercial property values. **Local sales taxes** increased 7.6 percent in real terms

for the second quarter of 2022 compared with a year earlier. **Local personal income taxes** increased 2.8 percent, while **local corporate income taxes** decreased 7.3 percent in real terms in the second quarter of 2022 compared with the same quarter of 2021, 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.

Figure 1 shows the year-over-year percentage change in the four-quarter moving average of inflation-adjusted state and local revenue collections from major sources: personal income tax, corporate income tax, sales tax, and property tax. The four-quarter moving average helps smooth responses to economic and policy changes such as changing income tax filing deadlines. State tax revenues from major sources increased 8.2 percent in the second quarter of 2022 by this measure.

Local tax revenues were resilient throughout the pandemic mostly because of a strong housing market and solid growth in residential property tax revenues. However, local tax revenues have weakened substantially in the past few months and face uncertainty as the housing markets weaken in response to higher mortgage interest rates. The four-quarter moving average of inflation-adjusted local tax revenues from major sources showed a 1.4 percent decline in the second quarter of 2022.

**FIGURE 1**  
**State and Local Major Tax Revenues Weakened in the Second Quarter of 2022**  
*Year-over-year inflation-adjusted percentage change in state and local taxes from major sources*



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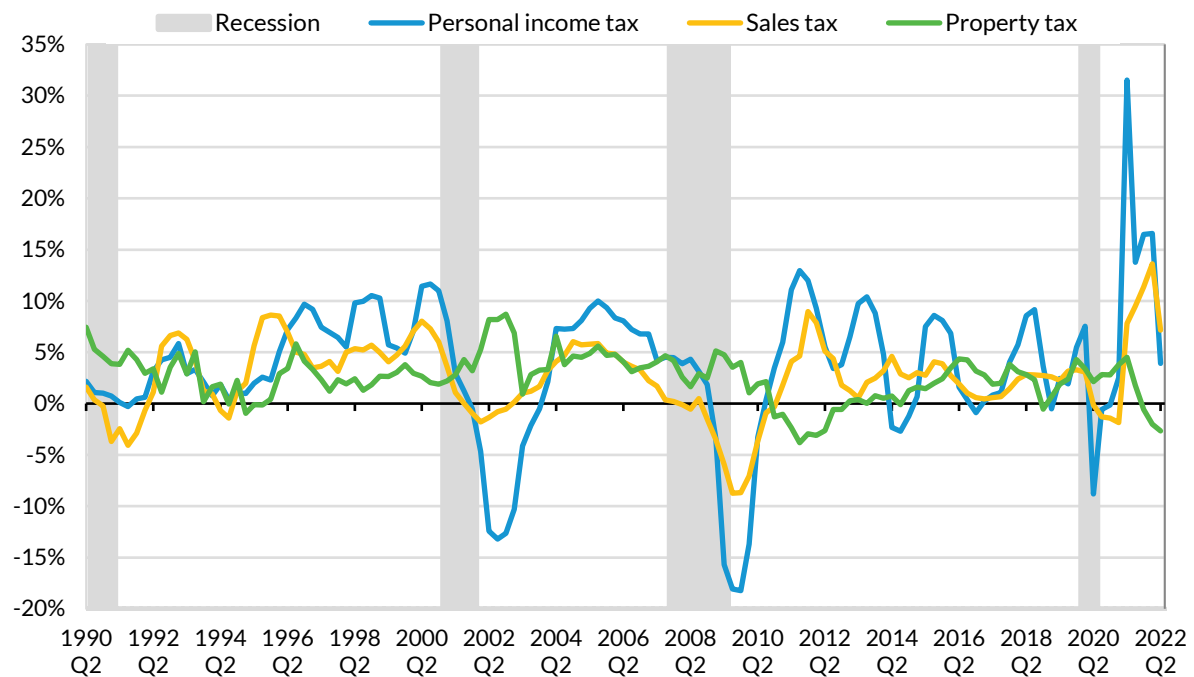
**Source:** US Census Bureau (tax revenue) and Bureau of Economic Analysis (GDP), analysis by the author.

**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.

Most local governments rely heavily on property taxes, which have been relatively stable during the pandemic and respond relatively slowly to changes in property values. However, in many places the pandemic caused declines in the value of commercial properties (such as hotels, retailers, and offices) that have led to lower commercial property tax assessments. These declines in commercial property values have had a negative impact on overall local property tax revenues despite soaring residential property values observed throughout the pandemic. These trends could lead to ongoing vulnerability for some local governments. In addition, as the Federal Reserve Board increases interest rates to counter inflation, mortgage costs are increasing. These changes in borrowing costs have led to a cooling in housing prices, which in turn can be expected to weaken future residential property tax revenues.

Figure 2 breaks out inflation-adjusted state and local personal income, sales, and property tax revenues. Real state and local personal income tax revenues increased 3.9 percent in the second quarter of 2022 compared with the second quarter of 2021, using the four-quarter moving average. Real state and local sales tax revenues increased 7.1 percent in the second quarter of 2022 compared with a year earlier. Real state and local property taxes, nearly all of which are collected by local governments, declined 2.7 percent for the second quarter of 2022 compared with a year earlier.

**FIGURE 2**  
**State and Local Property Tax Revenues Weakened Substantially**  
*Year-over-year inflation-adjusted percentage 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.

# State Tax Revenues in the Second Quarter of 2022

Total state government tax revenue collections increased 14.5 percent in nominal terms and 6.4 percent in real terms in the second quarter of 2022 relative to a year earlier, according to US Census Bureau data adjusted by the author (Table A1).<sup>3</sup> Both personal and corporate income tax revenues saw year-over-year real growth in the second quarter of 2022, at 6.6 and 27.1 percent, respectively. State sales tax collections grew 1.2 percent in real terms while motor fuel tax collections declined 11.8 percent in the second quarter of 2022 relative to a year earlier. Declines in motor fuel tax revenues are largely attributable to gas tax holidays implemented by Connecticut, Florida, Georgia, Maryland, and New York.

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 since the start of the pandemic, between the first quarter of 2020 and the second quarter of 2022. The average quarterly year-over-year growth rate in overall state tax revenue collections since 2020 is 13.5 percent in nominal terms and 9.3 percent in real terms.

There were some variations across regions and states for the second quarter of 2022 (Table A2). All regions reported double-digit growth in nominal state tax revenue collections, with the Rocky Mountain reporting the largest year-over-year growth at 26.5 percent and the Far West reporting the weakest growth at 10.7 percent.<sup>4</sup>

All states reported year-over-year nominal growth in total state tax revenue collections for the second quarter of 2022, with 16 states reporting growth of over 20 percent. The largest growth was in Alaska, where total state tax revenues increased 187.6 percent, but that growth is largely because of the lower baseline in 2021. The weakest growth was in New Mexico, where total state tax revenues increased 0.9 percent. This weak revenue growth in New Mexico was largely due to the state's rebate checks that were issued to provide financial relief.

In this report we also provide revenue growth patterns for state fiscal year 2022, which ended in June 2022 in 46 states. State total tax revenues increased 15.1 percent in nominal terms and 8.0 percent in real terms in state fiscal year 2022 compared with state fiscal year 2021 (Table A3). All regions but the Great Lakes saw double-digit nominal growth during that period, with the Southwest region reporting the strongest growth at 20.0 percent; growth in the Great Lakes region was 9.3 percent. State tax revenues increased in all 50 states in fiscal year 2022 in nominal terms, ranging from a 4.9 percent increase in Wisconsin to a 129.9 percent increase in Alaska. Eleven states reported year-over-year growth of over 20 percent in state fiscal year 2022.

The strong growth in overall state tax revenues in fiscal year 2022 is largely attributable to the following factors: the robust stock market observed throughout 2021, the record number of initial

public offerings in 2021, the high inflation rate, the boost in spending on taxable goods caused by the pandemic, and the expectation of potential (if unrealized) federal tax hikes (Dadayan 2022a).

In recent months, several states have enacted a pass-through entity tax, bringing the number of states with this option to 29. This is in part a workaround to the Tax Cuts and Jobs Act's \$10,000 cap on the federal individual income tax deduction for state and local taxes because state and local taxes are fully deductible as a business expense in calculating business earnings for determining federal tax liability. In general, pass-through entity taxes enable some taxpayers to reduce their federal taxable liability by paying taxes at the entity level rather than the individual owner level.

[Table A7](#) lists all states that enacted a pass-through entity tax and their respective effective dates. State pass-through entity tax structures and rules vary widely, which can lead to complications, especially for businesses operating across state lines. Further, in some states pass-through entity taxes are counted toward personal income taxes, in other states they are counted toward corporate income taxes, and in very few states they are counted toward both personal income and corporate income taxes. Some taxpayers have likely been reducing their estimated personal income tax payments and instead paying more on newly enacted pass-through entity taxes.

## Personal Income Taxes

State personal income tax revenues increased 14.7 percent in nominal terms and 6.6 percent in real terms in the second quarter of 2022 compared with the same period in 2021. Growth in the median state was 26.7 percent in nominal terms. The average quarterly year-over-year growth rate in state personal income tax collections since 2020 is 16.9 percent in nominal terms and 12.6 percent in real terms ([Table A1](#)).

Personal income tax collections increased in all regions but the Far West in the second quarter of 2022 compared with the same period in 2021 ([Table A2](#)). The Rocky Mountain region saw the strongest increase, at 36.5 percent, while personal income tax revenues in the Far West region declined 0.3 percent. The decline in the Far West region is largely attributable to California, which introduced an elective pass-through entity tax in 2021. This tax shifted revenues from personal income taxes to corporate income taxes.<sup>5</sup>

Thirty-seven states reported year-over-year growth in personal income tax revenues in the second quarter of 2022, with 34 states reporting double-digit growth. Six states—California, Delaware, Idaho, New Mexico, Tennessee, and Wisconsin—reported year-over-year declines in personal income tax revenues in the second quarter of 2022, though this is in part due to state tax policy changes.

State personal income tax revenues increased 11.5 percent in nominal terms and 4.5 percent in real terms in fiscal year 2022 compared with fiscal year 2021 (Table A3). Growth in the median state was 10.5 percent in nominal terms in fiscal year 2022.

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 shows the growth for each major component of personal income tax collections in the past eight quarters. Delayed income tax filing due dates led to wild fluctuations in nonwithholding income tax revenues during the pandemic. The large swings observed in recent quarters highlight variance related to the deferral of tax filing deadlines. Income taxes have also become more volatile because a large share of income is generated from nonwage activities. Thus, the increasing swings in the stock market, coupled with taxpayer decisions on when to realize capital gains and losses, has also increased personal income tax volatility.

TABLE 2

**Growth in State Government Personal Income Tax Components**

*Year-over-year nominal percentage change*

Personal income tax components	FY 2021				FY 2022			
	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2
Withholding	5.0	6.2	6.5	14.5	9.6	15.4	12.9	7.5
Estimated payments	102.9	16.6	35.9	269.9	(35.5)	33.7	16.4	(5.9)
Final payments	621.8	(8.4)	10.2	172.2	(81.6)	44.6	45.1	40.8
Refunds	106.1	(10.6)	(13.1)	58.4	(40.6)	20.9	12.2	11.6
<b>Total</b>	<b>47.5</b>	<b>7.7</b>	<b>20.2</b>	<b>79.8</b>	<b>(19.4)</b>	<b>19.0</b>	<b>17.7</b>	<b>14.2</b>

Source: Individual state data, analysis by the author.

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

Personal income tax collections declined steeply in the second quarter of 2020 and soared in the third quarter of 2020. This pattern reversed in 2021, resulting in dramatic year-over-year growth in the second quarter of 2021 followed by declines in the third quarter of 2021. Year-over-year growth was strong in the first and second quarters of 2022, largely related to elevated inflation, which led to bracket creep in some states.

## 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 and can have a significant impact on withholding growth rates.

Table A4 shows year-over-year nominal growth in withholding for the past eight quarters for all states with a broad-based personal income tax. Before the pandemic, growth in withholding was solid and was not subject to large swings. Withholding declined 1.2 percent year over year for the second quarter of 2020 because of the initial reaction to economic disruptions caused by the pandemic, including mass layoffs and furloughs beginning in the second half of March 2020.

The employment situation greatly improved after the third quarter of 2020, which also led to improvement in withholding tax collections. Further, the strong growth in average wages as well as people moving to higher-paying jobs led to stronger withholding tax revenue collections in state fiscal year 2022. Finally, heightened inflation (7.6 percent, a 40-year high, in the second quarter of 2022) also contributed to the stronger growth in withholding, particularly in states that have progressive income tax structures but do not adjust their tax brackets for inflation.

After four consecutive quarters of double-digit growth, withholding tax collections weakened substantially in the second quarter of 2022. Year-over-year growth in withholding was 7.5 percent in nominal terms and negative 0.1 percent in real terms in the second quarter of 2022. All regions showed year-over-year growth in withholding in nominal terms in the second quarter of 2022. The Rocky Mountain region reported the strongest year-over-year growth in the second quarter of 2022 at 11.7 percent, while the Far West region reported the weakest growth at 5.4 percent.

Thirty-eight of 41 states that levy tax on personal income reported growth in withholding in the second quarter of 2022 compared with a year earlier, with 19 states reporting double-digit growth. Growth rates ranged from 2.2 percent in Arkansas and Connecticut to 35.6 percent in North Dakota. Three states—Louisiana, Minnesota, and Wisconsin—reported year-over-year declines in withholding in the second quarter of 2022.

Figure 3 shows monthly and fiscal year-to-date nominal growth rates in withholding between July 2021 and June 2022, which corresponds to state fiscal year 2022 in 46 states. Monthly data should be viewed with caution because they may include one-time payments that are not likely to recur, or a given month may have fewer tax processing days than the same month in the prior year.

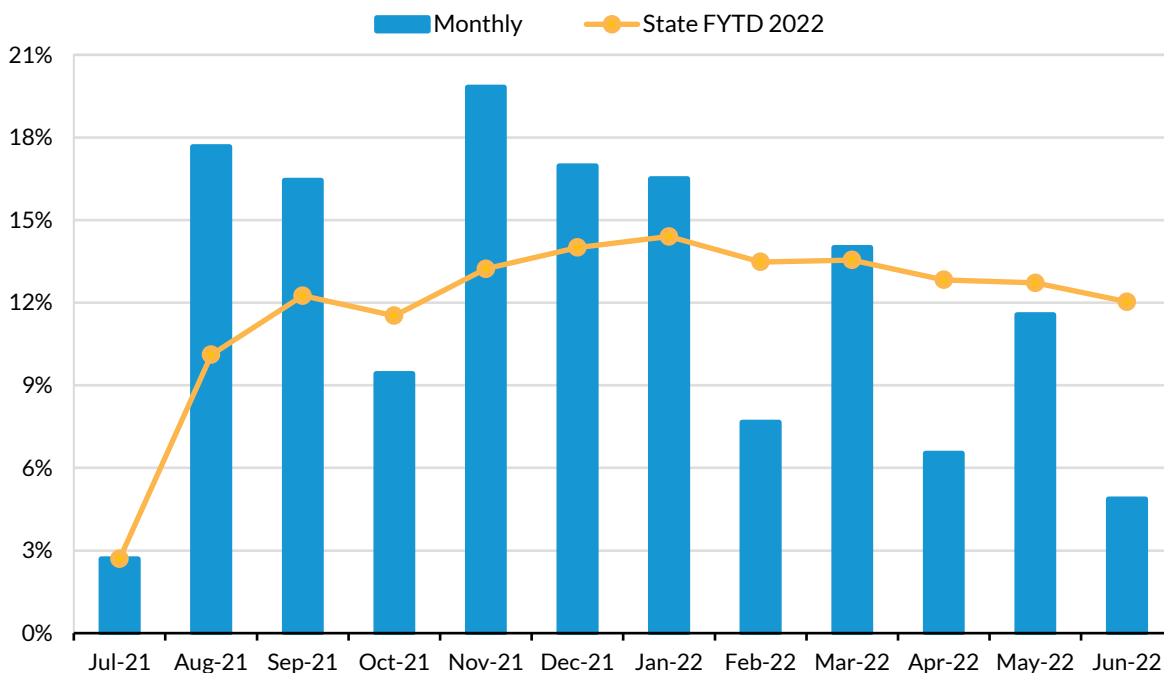
Withholding showed robust growth in most months between July 2021 and June 2022 but has weakened substantially since then. In late 2021, withholding was particularly strong in California, likely because of large year-end bonuses and withholding related to public offerings of California companies. For example, in November 2021, 14 California companies held initial public offerings, including Aurora, which had an initial valuation of \$14 billion.<sup>6</sup>



FIGURE 3

### Withholding Is Strong, Fueled by Inflation

Nominal percentage change in withholding tax collections compared with the previous year, monthly and year-to-date for state fiscal year 2022



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

Notes: FYTD = fiscal year to date.

Growth in withholding for state fiscal year 2022 was 11.8 percent in nominal terms and 5.1 percent in real terms. States collected around \$423 billion in withholding revenues from July 2021 through June 2022. All states reported year-over-year growth in withholding tax revenues in state fiscal year 2022.

### Estimated Payments

Higher-income taxpayers (and self-employed taxpayers) 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 less than a quarter of overall income tax revenues, but because of their volatility, they can have a large impact on the direction of overall collections.

The first estimated payment for each tax year is typically 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 their 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 indicator of the current strength of the economy. The second, third, and fourth 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.

Estimated payments accounted for 23.8 percent of total personal income tax revenues in the second quarter of 2022. The filing deadline for federal individual income tax returns in 2020 was extended to July 15 and the deadline for 2021 was extended to May 17; most states delayed their filing deadlines as well.

Because of unusual changes in income tax filing deadlines in 2020 and 2021, we present combined data for the April through September period, which largely corresponds to the first three estimated payments for a given tax year. Estimated payments showed year-over-year declines of 9.7 percent for the April 2022 through September 2022 period, but the median state reported growth of 16.4 percent. Thirty states reported growth in estimated payments during April 2022 through September 2022 period, while seven states reported declines ([Table A5](#)).

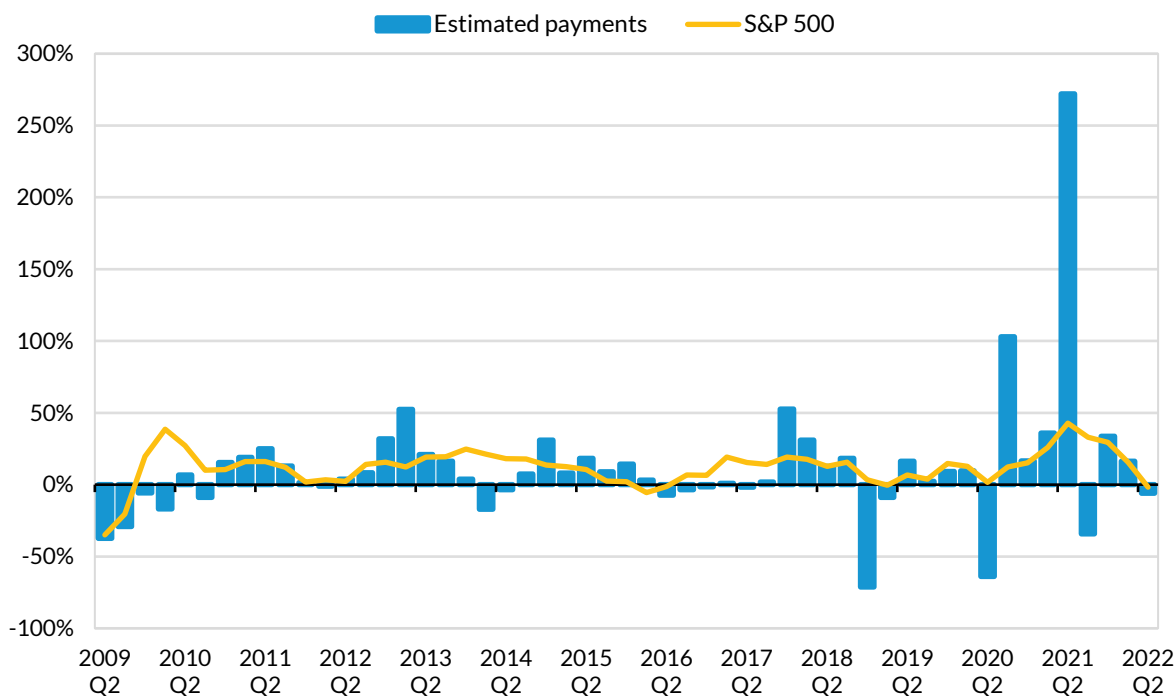
States that have higher reliance on high income taxpayers (i.e., California, Connecticut, New Jersey, and New York) reported declines in estimated payments in the most recent months, largely because of the volatility in the stock market. The largest decline in dollar value was in California, where estimated payments decreased by \$10.1 billion or 41.3 percent in the April 2022 through September 2022 period compared with the same period a year earlier. The nationwide decline in estimated payments is largely attributable to California. The decline in California is partially caused by the weak stock market. It is also likely due to a decline in personal estimated payments from owners in partnerships or S-corporations that opted to pay taxes through the newly enacted pass-through entity tax. This would have lowered personal income tax liability while raising expected liability that is classified as corporate income tax.

[Figure 4](#) shows year-over-year percentage change by quarter in estimated payments and in the S&P 500 Index for the past 13 years. The longer-term trends indicate substantial volatility in estimated payments, which is partially caused by volatility in the stock market but also by actual and expected federal (and state) tax policy changes and taxpayer responses, which affect capital gains realizations and tax timing.

FIGURE 4

**Large Volatility in Estimated Payments**

Year-over-year nominal 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.

Because temporary changes in timing can alter revenue patterns significantly, we strongly encourage relying on combined quarterly numbers and longer-term trends. Year-over-year growth in estimated payments was more in line with the year-over-year growth in the stock market in first and second quarters of 2022. Both estimated payments and the stock market increased in the first quarter of 2022 but declined in the second quarter of 2022 on a year-over-year basis. Estimated payments showed a 5.9 percent year-over-year decline in the second quarter of 2022, while the stock market showed a 1.7 percent year-over-year decline.

**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>

Table A6 shows year-over-year nominal growth rates in final payments for April through September period for the last three years. Year-over-year growth in final payments was robust for April 2022 through September 2022 period, at 39.0 percent. All states but Idaho reported growth in final payments for April 2022 through September 2022 compared with a year earlier, with 32 states

reporting double-digit percentage growth. Georgia had the largest increase in final payments in dollar value (\$1.9 billion or 141.1 percent) from April 2022 through September 2022.

## Refunds

By definition, personal income tax refunds represent a negative share of personal income 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.

Refund payments increased 12.2 percent in the first quarter of 2022 and 12.8 percent in the second quarter of 2022. In total, states paid out \$4.0 billion more in refunds in the second quarter of 2022 than in the same quarter in 2021. Overall, 20 states paid out more in refunds in the second quarter of 2022 than in the second quarter in 2021. New York had the largest share of refund payouts (\$6.1 billion, or 17 percent of total refunds).

## Actual versus Forecasted Personal 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 available for 24 states. In [Table 3](#) we present data for the second quarter of 2022.

Actual personal income tax collections in the second quarter of 2022 were higher than forecasted in 23 of 24 states, with an average forecast underestimate of 31.8 percent and a median underestimate of 34.4 percent ([Table 3](#)). Note that some states regularly update their monthly revenue forecasts, while others prepare monthly revenue forecasts only once a year. Therefore, the variance between actual and forecast revenues also depends on the forecast date.

The higher than usual variance between actual and forecast in the second quarter of 2022 was largely because the pandemic has upended many standard economic models, making forecasting more difficult. Income taxes have also become more volatile because a large share of income is generated from nonwage activities. Thus, increasing swings in the stock market, coupled with taxpayer decisions on when to realize capital gains and losses, has also increased personal income tax volatility. Current global geopolitical crises, continued uncertainties related to the ongoing pandemic, high inflation, and evolving federal monetary policy continue to complicate revenue forecasting for states.

TABLE 3

## Actual versus Forecasted State Personal Income Tax Revenues

State	2021 Q2 actual (\$ millions)	2022 Q2 actual (\$ millions)	2022 Q2 forecast (\$ millions)	Percent change, 2022 Q2 vs 2021 Q2	Percentage variance, 2022 Q2 actual from forecast	Forecast date
<b>Median</b>				<b>26.9%</b>	<b>34.4%</b>	
<b>Average</b>	<b>\$110,830</b>	<b>\$118,913</b>	<b>\$90,251</b>	<b>7.3%</b>	<b>31.8%</b>	
Arizona	2,108	2,992	1,874	42.0	59.7	Jan-22
Arkansas	1,047	1,260	864	20.3	45.8	Dec-21
California	45,626	44,523	34,892	(2.4)	27.6	May-21
Colorado	3,135	4,488	4,478	43.1	0.2	Mar-22
Idaho	1,064	1,030	820	(3.1)	25.7	Jul-21
Indiana	2,545	3,414	2,614	34.2	30.6	Dec-21
Kansas	1,569	1,902	1,566	21.2	21.5	Jun-21
Maine	743	1,028	693	38.3	48.4	Dec-21
Massachusetts	7,035	8,660	6,752	23.1	28.3	Dec-21
Minnesota	5,431	5,769	5,452	6.2	5.8	Feb-22
Mississippi	764	922	638	20.7	44.5	Nov-20
Montana	475	832	486	75.3	71.3	Jun-21
Nebraska	946	1,176	759	24.3	55.0	Feb-22
New Mexico	680	164	681	(75.9)	(75.9)	Feb-22
New York	22,179	21,639	12,858	(2.4)	68.3	Mar-22
North Dakota	147	221	81	50.8	173.0	Aug-21
Ohio	3,166	3,706	2,739	17.1	35.3	Mar-19
Oklahoma	842	1,110	819	31.8	35.5	Feb-21
Pennsylvania	5,075	6,900	5,230	36.0	31.9	Jun-21
Rhode Island	519	711	492	37.1	44.6	May-22
South Carolina	1,564	2,158	1,921	38.0	12.3	Feb-22
Vermont	361	547	386	51.7	41.7	Jul-21
West Virginia	666	862	646	29.4	33.6	Jan-21
Wisconsin	3,146	2,899	2,513	(7.8)	15.4	Jan-22

Source: Individual state data, analysis by the author.

## Corporate Income Taxes

Year-over-year growth in state corporate income tax revenues was strong at 36.8 percent in nominal terms and 27.1 percent in real terms in the second quarter of 2022 (Table A1). Growth in the median state was weaker, at 28.0 percent.

State corporate income tax revenue is highly volatile because corporate profits and the timing of tax payments can vary and shift across quarters. Further, some 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.

The strong growth in corporate income tax revenues in the final quarter of 2021 and the first and second quarters of 2022 might be partially caused by corporations accelerating income so they could avoid paying potentially higher tax rates if the federal government increased the corporate income tax rate, as previously proposed by President Biden.

All regions reported year-over-year growth in state corporate income tax revenue collections in the second quarter of 2022. The Great Lakes region reported the strongest year-over-year growth in corporate income tax revenues at 54.0 percent, while the Mideast region reported the weakest growth at 16.2 percent. Forty-two states reported year-over-year growth in corporate income tax collections, while two states (Maryland and Montana) reported declines (Table A2).

The strongest growth in dollar value was in California, where corporate income tax revenues increased by \$6.0 billion, or 51.6 percent, in the second quarter of 2022 compared with the same quarter in 2021. The strong growth in California's corporate income tax revenues is largely attributable to the introduction of an elective pass-through entity tax in 2021, which enables some taxpayers to reduce their federal taxable liability by paying taxes at the entity level rather than the individual owner level.<sup>8</sup> Further, the strong growth in corporate income tax revenues is also attributable to (1) a temporary decrease in the use of certain tax credits and deductions and (2) a temporary increase in profits for businesses that benefited from high consumption demand arising from the pandemic.<sup>9</sup>

To assess the strength in corporate income tax revenues this year, we also examine trends for state fiscal year 2022. Year-over-year nominal growth in state corporate income tax revenues was 43.9 percent for fiscal year 2022; growth in the median state was weaker, at 26.0 percent. All states but Iowa reported year-over-year growth in fiscal year 2022 (Table A3).

Before the pandemic, states were forecasting lower corporate income tax collections, mostly because of higher costs for business inputs and a weakened global economy (Dadayan 2020b). State corporate income tax revenues, however, showed strong growth in fiscal year 2022 largely because of strong rebounding in corporate profits in 2021 and the first half of 2022. According to data from the Bureau of Economic Analysis, US corporate profits increased by \$215 billion, or 7.7 percent, in the second quarter of 2022 compared to the second quarter of 2021.<sup>10</sup> However, not all industries showed growth in corporate profits; the financial sector suffered a 10.2 percent decline in corporate profits in the second quarter of 2022 compared to the same period in 2021.

The future of corporate income tax collections remains unpredictable, in part because of the expiration of or changes in various provisions in the TCJA. (See prior *State Tax and Economic Review* reports for discussions of the TCJA provisions and the law's impact on state corporate income taxes.)

## General Sales Taxes

State general sales tax collections increased 8.9 percent in nominal terms and 1.2 percent in inflation-adjusted terms for the second quarter of 2022 compared with the same period in 2021. Sales tax collections increased in all regions but New England for the second quarter of 2022 compared with the

same period in 2021. The Southwest region reported the largest average year-over-year growth at 16.0 percent, while the Plains region reported the smallest average growth at 2.3 percent. Sales tax revenues declined 0.5 percent in the New England region (Table A2).

Thirty-nine of 45 states with broad-based sales taxes reported year-over-year growth in sales tax collections for the second quarter of 2022, with 17 states reporting double-digit growth. New Mexico had the strongest year-over-year growth in sales tax revenues at 29.9 percent, while Mississippi had the weakest growth at 2.6 percent. Six states—Arkansas, Connecticut, Maryland, Massachusetts, Minnesota, and Virginia—reported year-over-year declines in state sales tax revenues in the second quarter of 2022.

State sales tax revenues were 14.2 percent higher in fiscal year 2022 compared to fiscal year 2021 (Table A3). All states reported year-over-year growth in fiscal year 2022, with 34 states reporting double-digit growth.

Before the pandemic, sales tax growth generally had been steady if unspectacular. This was 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 US Supreme Court's decision in *South Dakota v. Wayfair*. (See prior *State Tax and Economic Review* reports for detailed discussion of the internet sales taxation by states.)

Sales tax collections saw sharp declines in the second quarter of 2020 primarily caused by the pandemic. Declines were steep in states with high reliance on the tourism, entertainment, and hospitality industries. Increases in the following quarters reflect pent-up demand from consumers as well as growth in remote sales.

Strong growth in general sales taxes (typically calculated as a percentage of spending as opposed to excise taxes, which are calculated on a per-unit basis) is also caused in part by price increases from high inflation. However, it appears many consumers are adjusting their spending habits and reducing their purchases because of persistent high inflation and declines in real wages.

Many state officials have expressed concerns about the sales tax performance over the longer run, especially once consumers shift back to spending more on services, which are largely not subject to sales tax (Dadayan and Rueben 2021). 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.

## Motor Fuel Taxes

Motor fuel tax collections declined 5.1 percent in nominal terms and 11.8 percent in inflation-adjusted terms for the second quarter of 2022 compared with the same period in 2021 (Table A1). Declines in motor fuel tax revenues are largely attributable to gas tax holidays implemented by five states (Connecticut, Florida, Georgia, Maryland, and New York) to ease consumer prices.

Motor fuel tax revenue collections increased in some regions but declined in others for the second quarter of 2022 compared with the same period in 2021. The New England region reported the largest average growth at 3.2 percent while the Great Lakes region reported the largest average decline at 25.8 percent. Thirty-five states reported year-over-year growth in motor fuel sales tax collections for the second quarter of 2022; four states reported double-digit growth (Table A2).

State motor fuel sales tax revenues increased 4.6 percent in fiscal year 2022 compared with fiscal year 2021; growth in the median state was 5.6 percent (Table A3). Forty-two states reported year-over-year growth in fiscal year 2022; eight states (Connecticut, Georgia, Louisiana, Michigan, Mississippi, Nebraska, Nevada, and Ohio) reported declines.

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 motor fuel sales tax collections. States differ in their motor fuel sales tax structures. In 28 states, motor fuel sales taxes are structured as a fixed cent-per-gallon rate, while in 22 states at least a portion of the motor fuel tax rate is tied to a variable, such as the price of gasoline, inflation, or another metric.<sup>11</sup>

Gas and oil prices have increased substantially in 2022, largely because of supply disruptions caused by current geopolitical tensions. The high prices will benefit oil-dependent states, at least in the short-term (Dadayan 2022b). The increases in prices were expected to boost motor fuel tax revenues in states with variable tax rate.

Enacted gas tax holidays are expected to reduce motor fuel revenues by \$2.1 billion, which includes \$90 million in Connecticut (effective from April 1 through November 30), \$200 million in Florida (effective in the month of October), \$1.1 billion in Georgia (effective from March 18 through December 11), \$94 million in Maryland (effective from March 18 through April 16), and \$585 million in New York (effective from June 1 through December 31).<sup>12</sup>

## Other Taxes

The US Census Bureau's quarterly data on state tax collections provide detailed information for some smaller revenue sources, including state property taxes, tobacco product excise taxes, alcoholic



beverage excise taxes, and motor vehicle and operators' license taxes. In [Table A8](#) we show year-over-year growth rates for four-quarter moving average inflation-adjusted revenue for the nation as a whole. In the second quarter of 2022, states collected \$78.8 billion from all the smaller tax sources, which constituted one-fifth of total state tax collections.

Compared with major tax sources, revenues from smaller state taxes have been growing at a slower pace. The four-quarter moving average of inflation-adjusted revenues from smaller state tax sources showed an 8.8 percent increase for the second quarter of 2022 compared with the same quarter in 2021. State property taxes, which represent a small portion of overall state tax revenues, declined 0.6 percent. Tax revenues from tobacco product sales declined 10.2 percent, tax revenues from alcoholic beverage sales increased 2.5 percent, and revenues from motor vehicle and operators' licenses declined 8.1 percent. Finally, revenues from all other smaller tax sources increased 16.3 percent.

## Preliminary Review of State Tax Revenues in the Third Quarter of 2022

The Urban Institute regularly collects monthly state tax revenue data for all states. Preliminary data from 47 states show continued but weakening year-over-year growth in overall state tax collections in the third quarter of 2022.

Nominal growth was widespread across states and among the major sources of tax revenues. Overall state tax collections increased 7.2 percent in the third quarter of 2022 compared with the same period in 2021; growth in the median state was 9.5 percent ([Table A9](#)). Overall state tax revenues increased in 44 states for which we have preliminary data, with 20 states reporting double-digit growth.

Personal income tax collections increased 2.4 percent in the third quarter of 2022 compared with the same period a year earlier; growth in the median state was 8.7 percent. Thirty-five states reported year-over-year growth in personal income tax revenues in the third quarter of 2022. As mentioned, the strength in personal income tax revenues is partially attributable to elevated inflation. Moreover, it appears that growth in withholding has moderated while growth in estimated payments has weakened substantially in the third quarter of 2022, indicating that upper-income taxpayers are reducing their tax payments in light of the volatile stock market.

State corporate income tax revenues increased 10.6 percent in the third quarter of 2022 compared with the same quarter in 2021; growth in the median state was stronger, at 17.8 percent. Corporate income tax revenues increased in 33 states, with 24 states reporting double-digit growth. Nine states reported year-over-year declines in corporate income tax revenues in the third quarter of 2022.

Finally, state general sales tax collections increased 11.0 percent in the third quarter of 2022 compared with the same quarter in 2021; growth in the median state was 10.4 percent. Forty states reported growth in sales tax collections. As mentioned, strong growth in sales tax revenue collections is partly because of high inflation and a temporary boost in consumption of taxable goods.

Looking ahead, state tax revenues will likely show continued but weakening growth in the short term. We expect continued recovery in sectors of the economy that were most negatively affected by the pandemic, including tourism, hospitality, and entertainment. Recovery in these sectors will boost consumption of services and therefore boost state tax revenues, although this boost will be less than the revenue increases related to consumption of goods because most states tax services less intensively than goods.

Some of the economic drivers for robust revenue growth in 2021, such as the soaring stock market and the sharp increase in initial public offerings, have already weakened or reversed; this will slow down state tax revenue growth. Furthermore, several states enacted tax cuts during the current or prior fiscal year. Depending on the size and structure of these tax cuts, state revenues will decline and could leave some states with budget holes in the coming fiscal years as temporary federal fiscal funds are spent and depending on the strength of the economy. These tax cuts can also exacerbate the risk of structural deficits and force states to either reverse them or to cut funding for important services to balance budgets (Lazere 2022).

# Factors Driving State Tax Revenues

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

## Economic Indicators

Most state tax revenue sources are heavily influenced by the economy. In general, state 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. However, the pandemic and policy responses have altered many standard revenue and economic trends.

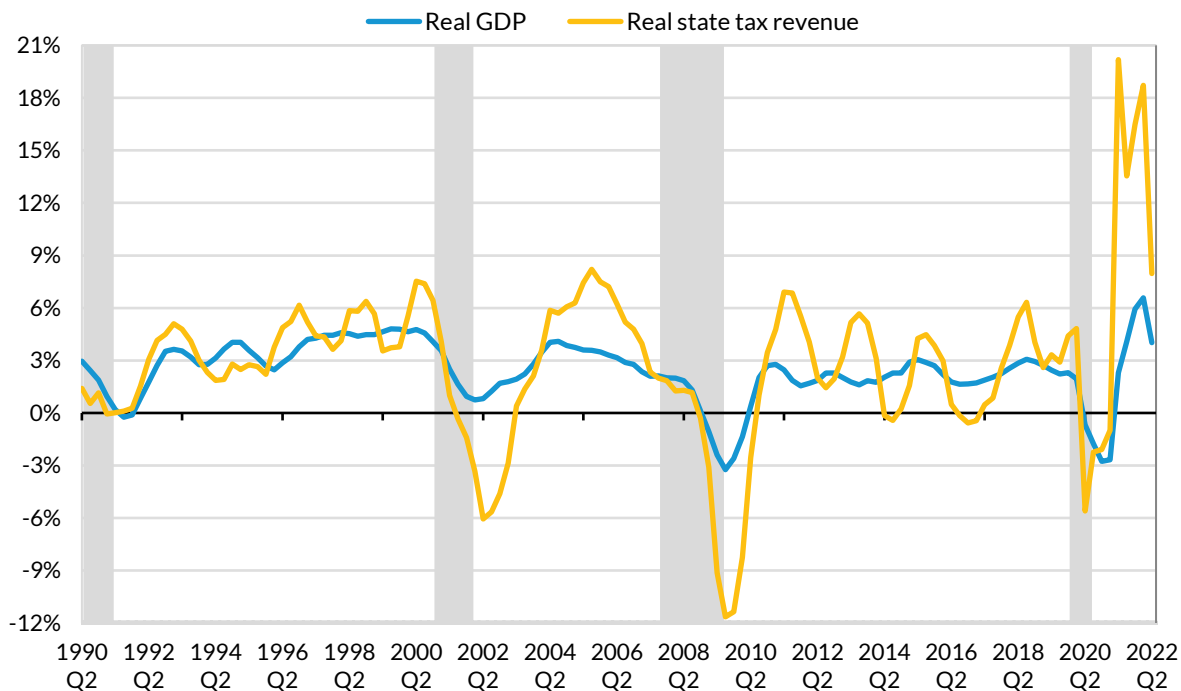
### State Gross Domestic Product

Figure 5 shows year-over-year growth for four-quarter moving averages in real GDP and real state tax revenue. 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, growth in both real GDP and real state tax revenues weakened substantially in the second quarter of 2022. Year-over-year growth for four-quarter moving average was 8.0 percent in real state tax revenues but only 4.0 percent in real GDP in the second quarter of 2022.

Even excluding the most recent volatility related to the pandemic and government actions, 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 dependent on volatile income sources such as stock options and capital gains. This was particularly the case during the pandemic: the stock market soared despite the real-world turmoil and led to larger capital gains realizations and increases in nonwithholding income tax payments.

**FIGURE 5**  
**State Tax Revenue Is More Volatile Than the Economy**

Year-over-year percentage 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.

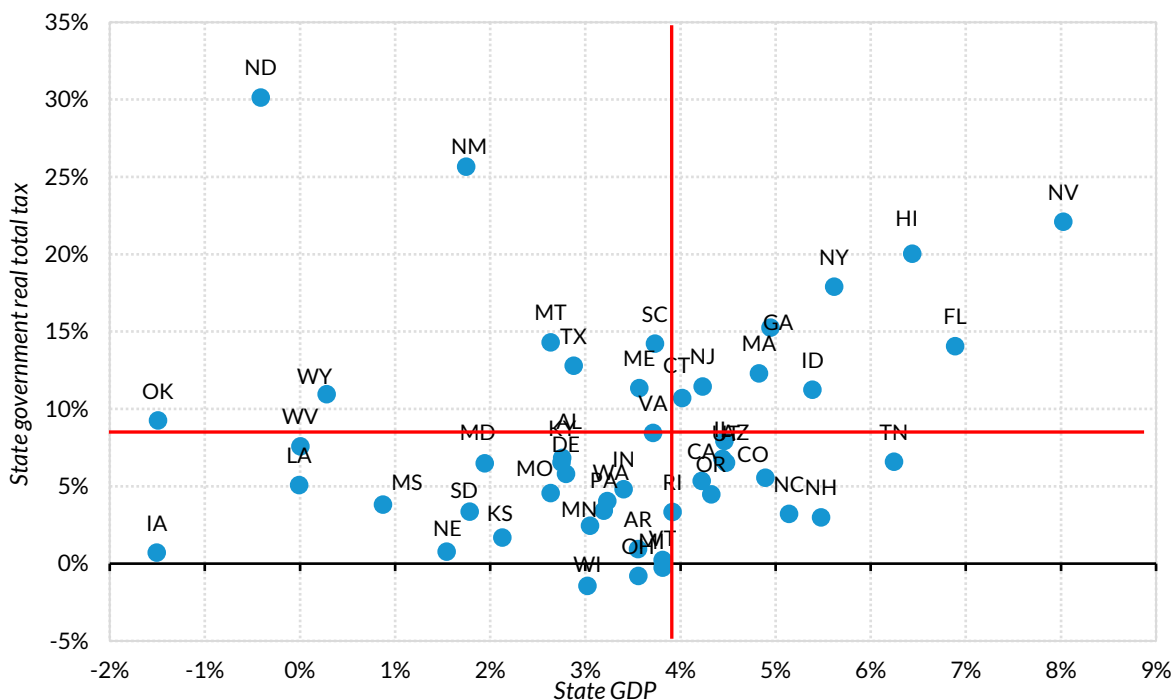
**Notes:** Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation.

States vary substantially in correlations between growth rates in real GDP and real state tax revenues. Figure 6 shows for each state the four-quarter moving averages in real GDP and real state tax revenues for the second quarter of 2022 compared with the same quarter in 2021. By this measure, real state GDP increased in 45 states, while real state tax revenues increased in 47 states. The year-over-year change in real state GDP ranged from 8.0 percent in Nevada to negative 1.5 percent in Iowa and Oklahoma; the change in real state tax revenues ranged from 114.6 percent in Alaska to negative 1.4 percent in Wisconsin. Large swings in Alaska’s and other energy-dependent states’ revenue collections reflect volatile oil prices (Dadayan and Boyd 2016). The national average year-over-year growth in real state GDP was 3.9 percent, and the national average year-over-year growth in real state tax revenues was 8.0 percent, based on four-quarter moving averages.

FIGURE 6

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

Year-over-year percentage change in real state taxes and real GDP, 2022 Q2 versus 2021 Q2



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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. Alaska is an outlier and is excluded from the figure.

### State Unemployment and Employment

The unemployment rate for the nation averaged 3.6 percent in the second quarter of 2022.

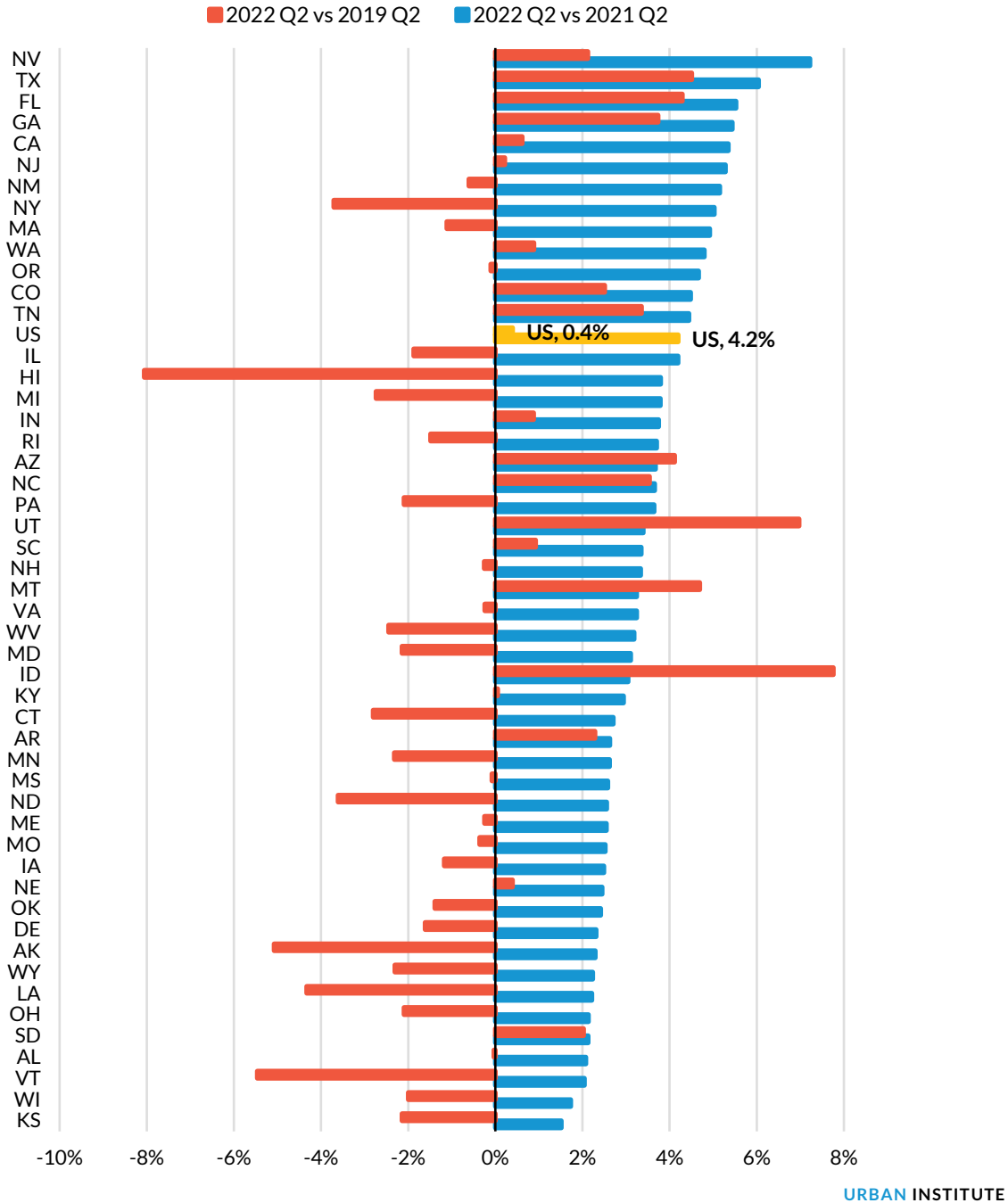
Unemployment rates ranged from 1.9 percent in Nebraska to 5.1 percent in New Mexico for the second quarter of 2022, although unemployment rates varied for different socioeconomic and demographic groups in each state. According to the latest data, the national unemployment rate dropped to 3.5 percent in the third quarter of 2022.

Nationwide employment increased 4.2 percent in the second quarter of 2022 compared with the same quarter in 2021 and was 0.4 percent above the employment levels observed in the second quarter of 2019 (Figure 7). Widespread employment growth observed in the second quarter of 2022 is partially attributable to the lower baseline employment rate observed in the second quarter of 2021. All 50 states reported growth in employment in the second quarter of 2022 compared with the second quarter of 2021, but at the same time, 30 states reported declines in employment compared with the second quarter of 2019. Year-over-year growth in employment ranged from 1.5 percent in Kansas to 7.2 percent in Nevada for the second quarter of 2022.

FIGURE 7

**Employment Saw Solid Growth in the Second Quarter of 2022 but is Still Down in 30 States Compared to Prepandemic Levels**

Year-over-year percentage change in employment, 2022 Q2 versus 2021 Q2 and 2019 Q2



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

Notes: Year-over-year change is the percentage change of seasonally-adjusted employment.

As of September 2022, state and local governments employed around 563,000 fewer people than they did before the pandemic, despite many vacancies advertised. Early in the pandemic, states and localities cut public-sector jobs to address actual and anticipated budgetary challenges caused by the

pandemic or in response to reduced demand. In the aftermath, some government sector workers (especially teachers) retired or did not return to the public sector. Even with federal aid and stronger budgets, many state and local governments have been unable to refill positions, and these early declines have not been fully reversed.

Among private-sector jobs, the share of workers employed also declined dramatically for the leisure and hospitality sector, which as of September 2022 employed around 1.1 million fewer people than before the pandemic. On the other hand, the job market thrived for the trade, transportation, and utilities sector, which as of September 2022 employed around 960,000 more people than before the pandemic. Although the employment situation has improved substantially in recent months, current employment numbers are only slightly above the prepandemic levels, and there are large variations across different sectors and industries.

## 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.

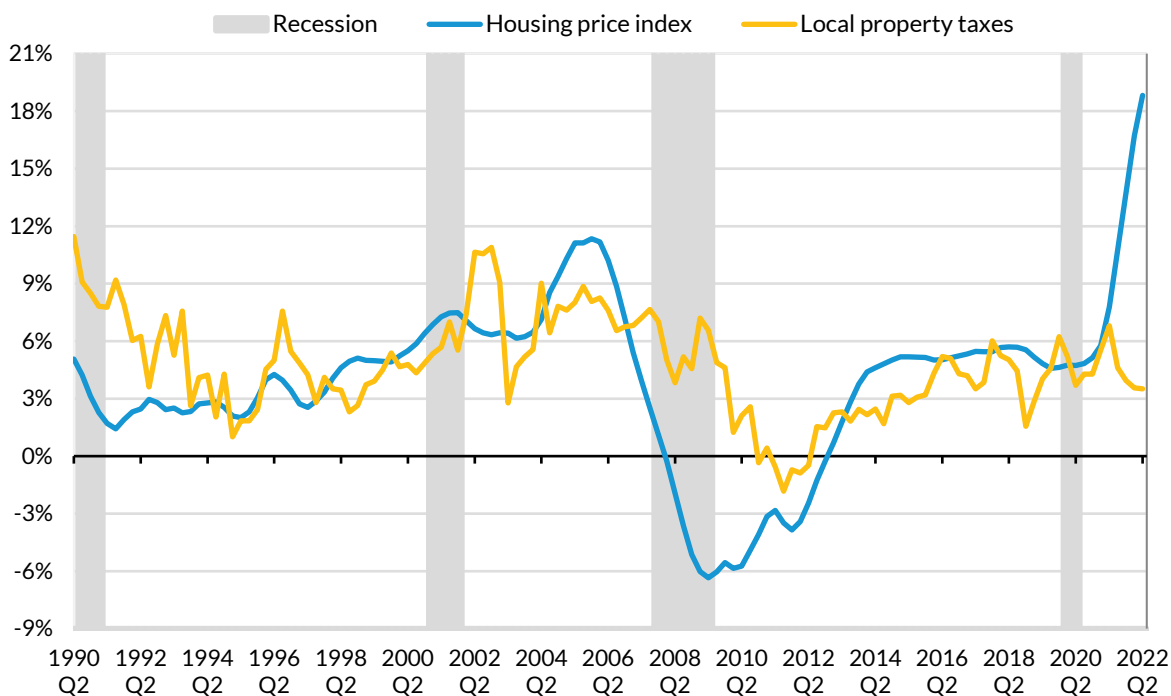
Figure 8 shows year-over-year percentage changes in the four-quarter moving average of the house price index and local property taxes in nominal terms. House prices saw steep declines during the Great Recession, which led to a significant slowdown in local property tax growth and to an actual decline in property tax revenues during state fiscal years 2011 and 2012 (Dadayan 2012). 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).

National average house prices showed strong growth during the pandemic and appreciated 18.8 percent for the second quarter of 2022 compared with one year earlier; year-over-year growth in local property taxes was 3.5 percent for the same period, based on four-quarter moving averages. Despite the strength in house prices, local government property tax revenues weakened substantially since the second quarter of 2021, likely because of declines in commercial property tax revenues caused by the pandemic and the increase in remote work.

FIGURE 8

**Strong Growth in Housing Prices; Growth in Local Property Taxes Ticked Downward**

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



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Sources: US Census Bureau (property taxes) and Federal Housing Finance Agency (house price indexes), analysis by the author.

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

Figure 9 shows the nominal year-over-year percentage change in house price indexes in the second quarter of 2022 for all states. Statewide house price indexes increased in all states for the second quarter of 2022 compared with a year earlier, ranging from a 13.0 percent increase in North Dakota to a 29.7 percent increase in Florida. Year-over-year growth was 20.9 percent for the nation.

The pandemic generally did not negatively affect residential real estate property values. In fact, housing markets strengthened as demand for new housing outstripped supply in the early months of the pandemic (Duca and Murphy 2021). In contrast, the pandemic's effects on commercial real estate property values, and thus commercial property tax revenues, has been negative and remains uncertain. Declines in the value of commercial properties (such as hotels, retails, and offices) appear to have already led to lower property tax assessments and revenues.

Predicting the pandemic's long-term effects on residential real estate and commercial properties is difficult because it is still unclear whether current patterns of remote work will remain even after other aspects of the economy revert to prepandemic trends. In addition, it is also unclear how much the Federal Reserve Board's raising interest rates will affect housing markets. If higher borrowing costs for

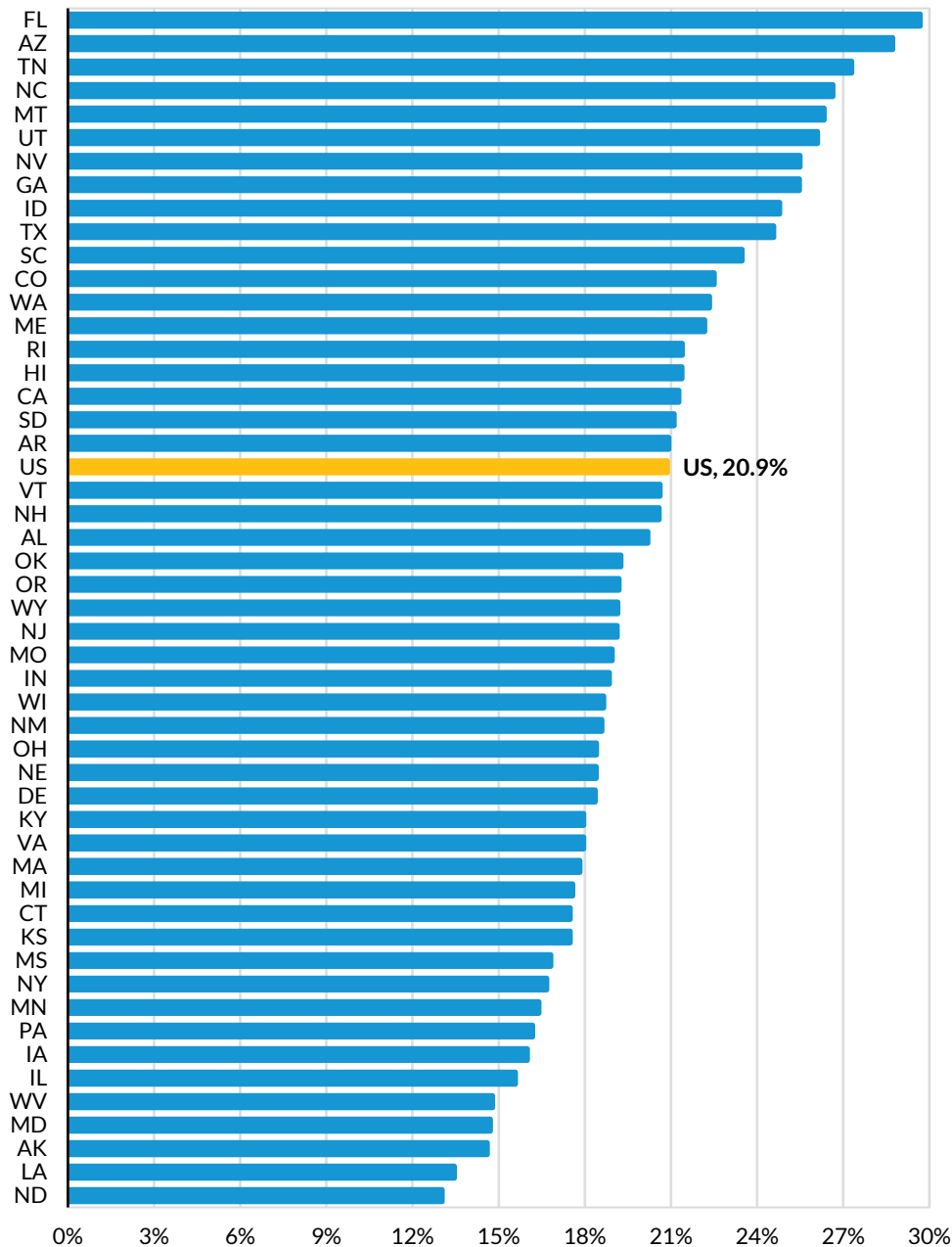


mortgages depress home sales, we could see a weakening in residential property values and associated property taxes.

**FIGURE 9**

**All States Saw Double-Digit Growth in Housing Prices in the Second Quarter of 2022**

*Year-over-year percentage change in house prices, 2022 Q2 versus 2021 Q2*



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

## Personal Consumption Expenditures

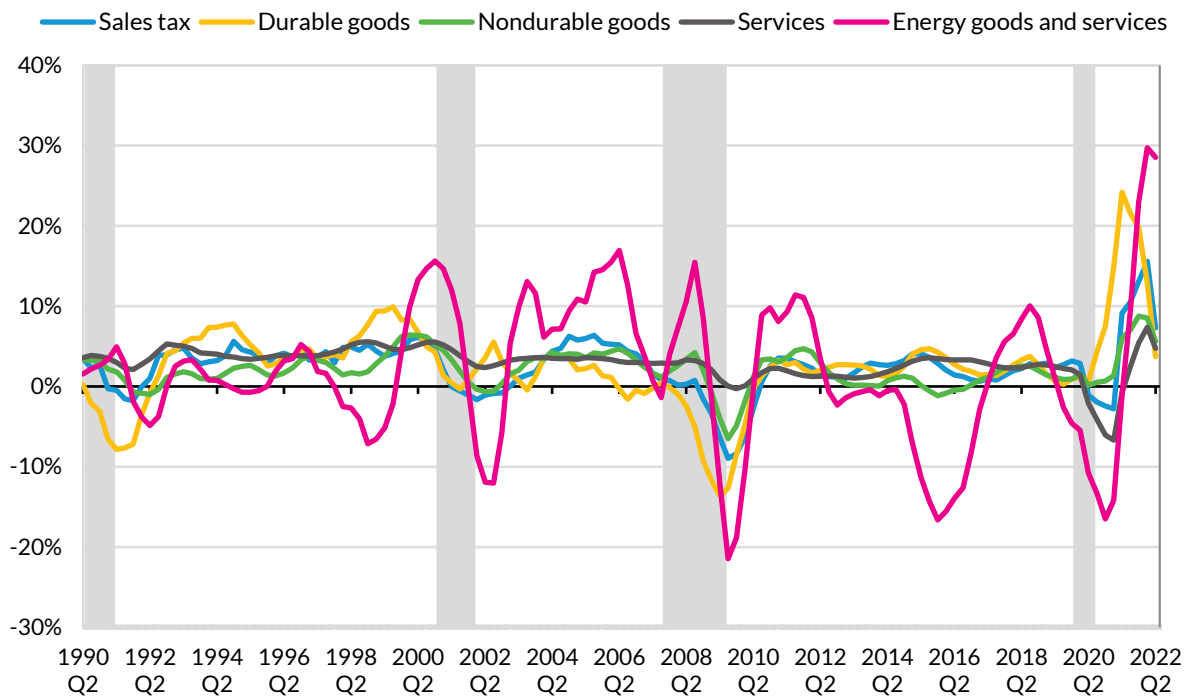
“Personal consumption expenditures” is a measure of national consumer spending. The measure shows the value of the goods and services purchased by American consumers and is correlated with the base for states’ sales taxes. [Figure 10](#) displays the year-over-year percentage change in the four-quarter 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.

As shown in [Figure 10](#), year-over-year spending on services increased an average 4.7 percent in the second quarter of 2022, in part reflecting declines in service consumption earlier in the pandemic. Spending on both durable and nondurable goods increased consistently throughout the pandemic, although growth weakened substantially in the first half of 2022. Year-over-year spending on durable and nondurable goods increased 3.7 and 5.6 percent, respectively, in the second quarter of 2022.

**FIGURE 10**

### Personal Consumption Spending Weakened in the Second Quarter of 2022

*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.

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 continued to decline for another year, primarily because of the decline in

travel and attendance of in-person events caused by the pandemic. However, spending on services resumed growth in the second half of 2021 and is likely to continue increasing, absent new waves of the pandemic.

Spending on gasoline and energy goods represents about one-fifth of total spending on nondurable goods. As shown in [Figure 10](#), after eight consecutive quarters of declines, real spending on energy goods and services resumed growth in the third quarter of 2021; year-over-year growth was robust in the second quarter of 2022, at 28.5 percent. The growth in spending on energy goods and services is partly because it is in comparison to a lower base, but it is also because of the hike in gas and oil prices. With travel resuming and because gas and oil prices have seen steep increases, we will likely see continued rebounding in spending on energy goods and services in the coming months.

## Tax Law Changes Affecting the Second Quarter of 2022

Anticipated and actual federal policy changes had a substantial effect on state tax revenues in the past few years. But changes in state tax laws also affect state tax revenue trends. Several states enacted tax changes for fiscal year 2022, partly in response to surging state revenues and in response to residents' need for financial relief. We present analysis here based on the data and information retrieved from the National Association of State Budget Officers' Fall 2021 Fiscal Survey of the States. However, the analysis and forecasted effects are based on anticipated revenue gains or losses in response to states' legislated tax changes and do not include the effects of changing economic conditions. Actual revenue collections typically vary from estimated tax revenues depending on the performance of underlying economic indicators, and estimates may not fully control for growing inflation.<sup>13</sup>

During the second quarter of 2022, enacted tax changes were forecasted to decrease revenues by \$0.8 billion compared with the same period in 2021 (though this reflects tax decreases in some states and increases in others).<sup>14</sup> Overall, tax changes were expected to decrease personal income taxes by \$1.3 billion and increase corporate income taxes by \$176 million. Enacted tax changes were also expected to increase sales taxes by \$343 million. Further, some states enacted changes in other taxes and fees, which were expected to decrease state tax and fee revenues by approximately \$27 million (NASBO 2021). Below, we discuss some of the major enacted tax changes for fiscal year 2022.

The estimated impact of all the enacted tax changes is a projected net decrease of \$2.7 billion in state revenues in fiscal year 2022. In contrast, legislated tax actions in fiscal year 2021 were estimated to increase state revenues by \$5.2 billion. New York and Illinois enacted the most substantial tax increases, with estimated net gains forecasted at \$3.6 billion and \$1.3 billion, respectively, for fiscal year 2022. In contrast, California, North Carolina, and Wisconsin enacted the most substantial tax cuts, with estimated net losses of \$1.6 billion, \$1.3 billion, and \$1.0 billion, respectively. Not only do these increases and

decreases reflect differences in anticipated revenue, but they can also have disparate impacts on different individuals within a state, based on the details of the changes.

For fiscal year 2022, 24 states enacted personal income tax decreases and 5 states enacted increases. The net impact of legislated tax changes is an estimated decrease of personal income tax revenues by \$4.7 billion in fiscal year 2022. The largest estimated increase was in New York, where officials temporarily expanded the top state personal income tax rate from 8.82 percent to 9.65 percent for income over \$1,077,550 but below \$5 million. Officials in New York also established two new brackets at rates of 10.30 percent for taxpayers with income over \$5 million but below \$25 million and 10.9 percent for taxpayers with income over 25 million. These tax rate changes went into effect on January 1, 2021, and will last through 2027.<sup>15</sup> These tax rate increases are estimated to increase New York's personal income tax collections by \$2.8 billion in fiscal year 2022.

Officials in California, North Carolina, and Wisconsin enacted various laws estimated to decrease personal tax revenue collections in fiscal year 2022 by more than \$1 billion in each of these states. To mitigate the impact of the pandemic, officials in California enacted a bill to conform to the exclusion from gross income of Paycheck Protection Program covered loan amounts provided pursuant to the Coronavirus Aid, Relief, and Economic Security (CARES) Act.<sup>16</sup> California's bill is estimated to decrease California's personal income tax revenue collections by \$1.5 billion in fiscal year 2022. Officials in North Carolina enacted several tax law changes, including loan forgiveness under the Paycheck Protection Program, reducing personal income tax rates from 5.25 percent to 3.99 percent for six years, increasing the individual standard deduction and child deduction.<sup>17</sup> These tax law changes are estimated to reduce North Carolina's personal income tax revenue collections by \$1.1 billion in fiscal year 2022. Lawmakers in Wisconsin reduced personal income tax rates by cutting the third income tax bracket rate from 6.27 percent to 5.3 percent for individuals with taxable income between \$24,250 and \$266,930.<sup>18</sup> This tax rate reduction is estimated to decrease personal income tax collections by \$1 billion in fiscal year 2022.

Lawmakers in Arizona introduced a 4.5 percent cap on the top marginal income tax rate, which effectively wiped out the 3.5 percent income tax surcharges on high-income taxpayers under Proposition 208 that was adopted by Arizona voters in November 2020.<sup>19</sup> This income tax rate cap is estimated to reduce Arizona's personal income tax revenues collections by \$0.9 billion in fiscal 2022.

Officials in Ohio eliminated the top income tax bracket for taxpayers with income over \$221,300 and reduced the tax rate from 4.413 percent to 3.99 percent for individuals with taxable income over \$110,650. State legislators also slightly reduced income tax rates for the lower brackets.<sup>20</sup> These income tax rate cuts are estimated to reduce Ohio's personal income tax revenue collections by \$0.8 billion in fiscal year 2022. Several other states also enacted laws modifying their personal income tax structures, and those measures often have disparate impacts on different income and racial and ethnic

groups (Auxier 2022). Cutting income tax rates often largely benefits the highest-income taxpayers, while tax cuts that include expanded refundable credits (like the earned income tax credit or child tax credit) benefit lower-income households and taxpayers with children.

Six states enacted corporate income tax increases, and 15 states enacted decreases. Legislated tax changes were estimated to increase aggregate corporate income tax revenues by \$0.8 billion in fiscal year 2022. The largest corporate income tax changes were in Illinois and New York. Lawmakers in Illinois introduced several changes pertaining to corporate income tax structure, including placing a \$100,000 annual cap on the net operating loss deduction for corporations for tax years 2021 through 2024 as well as aligning the treatment of foreign-source dividends to domestic-source dividends.<sup>21</sup> These changes are estimated to increase the state's corporate income tax collections by \$1 billion in fiscal year 2022. Officials in New York enacted several tax changes pertaining to corporations, including increasing the business income tax rate from 6.5 percent to 7.25 percent for certain corporations for three years as well as extending the business capital base tax for certain corporations for another three years (it was initially set to phase out in 2021).<sup>22</sup> These changes are estimated to increase New York's corporate income tax revenues by \$0.9 billion in fiscal year 2022.

In California, Governor Gavin Newsom signed into law two major corporate income tax policies that have offsetting revenue impacts. First, as noted earlier California established a new elective pass-through entity tax that is estimated to increase corporate income tax revenues collections by \$1.3 billion in fiscal year 2022, though this revenue is largely a shift from from personal income tax to corporate income tax as personal income tax credits are provided to taxpayers to offset the elective taxes paid at the pass-through entity level. Second, California's conformity law regarding the tax treatment of forgiven Paycheck Protection Program loans is expected to decrease corporate tax revenues by \$1.5 billion in fiscal year 2022.<sup>23</sup> The net impact of these two tax changes pertaining to businesses is an estimated decrease of \$0.2 billion in California's corporate income tax revenues for fiscal year 2022.

Four states enacted sales tax increases, and 15 states enacted decreases. The net impact of these legislated tax changes is an estimated increase in sales tax revenues of \$1.3 billion in fiscal year 2022. The most significant legislative changes pertaining to sales tax revenues were in Florida and Colorado, where sales tax revenues were estimated to increase by \$0.9 billion and \$0.4 billion, respectively, in fiscal year 2022. In Florida, Governor DeSantis signed a law that imposes a sales and use tax collection obligation on certain remote sellers and marketplace providers.<sup>24</sup> Officials in Colorado expanded the sales and use tax base to impose taxes on digital goods as well as on amounts charged for accessing mainframe computers, photocopying, and packing and crating.<sup>25</sup>

Four states enacted changes for motor fuel taxes, with an estimated net increase of \$88 million in fiscal year 2022. Three states enacted changes for cigarette taxes, with an estimated net increase of

\$207 million in fiscal year 2022. Another three states enacted changes pertaining to gaming taxes, with an estimated overall increase of \$352 million in fiscal year 2022. Finally, two states enacted changes for alcohol taxes, with an estimated overall decrease of less than a \$1 million in fiscal year 2022. The estimated impact of each state's changes was not significant.

Twenty states enacted changes for some other taxes and fees, with an estimated overall decrease of \$0.8 billion in fiscal year 2022. These changes were estimated to increase state tax and fee revenues in 11 states but decrease revenues in 9 states. The most significant legislated changes were in Florida, where lawmakers revised the tax rates for the reemployment assistance, which is a federal-state partnership program and is funded through a reemployment tax paid by employers.<sup>26</sup> The net impact of the legislated changes is an estimated decrease of \$1.3 billion in Florida's state tax revenues for fiscal year 2022.

# Conclusion

Early in the pandemic, states were forecasting steep revenue shortfalls for fiscal years 2021 and 2022 (Dadayan 2020a). But fiscal and monetary policies adopted by the federal government in response to the pandemic helped states and localities keep their economies afloat. Overall state tax revenues were stronger during the pandemic than initially feared, in part because of generous federal stimulus packages that have injected trillions of dollars into the economy. Most states saw surging revenues both in fiscal years 2021 and 2022, surpassing projections in most states.

Although state revenue collections have grown rapidly in state fiscal year 2022 and reported revenue growth is widespread across states and among various revenue sources, these trends must be viewed with caution. The double-digit growth in state tax revenues is from very volatile sources and is largely attributable to atypical revenue-enhancing factors such as an exceptionally robust stock market, a record number of initial public offerings, elevated inflation, the boost in spending on taxable goods, and anticipation of possible federal tax hikes (Dadayan 2022a).

States continue forecasting growth in state tax revenues for fiscal year 2023, although recent forecasts have tempered or reversed expectations of revenue growth (Dadayan 2022c). State revenue forecasters are concerned that the current revenue patterns are not sustainable, and many are projecting a slowdown in the rapid pace of revenue growth. State revenues will be affected by current geopolitical crises, continued uncertainties related to the ongoing pandemic, high inflation, and evolving federal monetary policy. Further, revenue growth will also be limited or reversed when tax cuts enacted during fiscal year 2022 and 2023 are fully implemented.

Recent economic data are mixed with continued job growth but persistent high inflation and high interest rates, which have undermined consumer confidence. Although the short-term outlook for state budgets remains positive, economic uncertainty paired with recent state actions, including temporary or permanent tax cuts, could limit growth in fiscal year 2023 and may require budget reversals.

The longer-term outlook for state and local budgets also remains uncertain depending on federal monetary policy decisions and ongoing state actions, especially as federal assistance programs end and as temporary changes caused by the pandemic wane.

# Appendix: Additional Tables

TABLE A1

## Quarterly State Government Tax Revenue by Major Tax

Year / quarter	Nominal Y-O-Y Percentage Change					Inflation rate	Real Y-O-Y Percentage Change				
	PIT	CIT	Sales	MFT	Total		PIT	CIT	Sales	MFT	Total
<b>2020Q1 - 2022Q2 average growth</b>	<b>16.9</b>	<b>45.1</b>	<b>9.8</b>	<b>1.6</b>	<b>13.5</b>	<b>3.8</b>	<b>12.6</b>	<b>39.3</b>	<b>5.7</b>	<b>(2.2)</b>	<b>9.3</b>
2022 Q2	14.7	36.8	8.9	(5.1)	14.5	7.6	6.6	27.1	1.2	(11.8)	6.4
2022 Q1	24.2	123.4	18.2	9.8	24.1	6.9	16.2	109.0	10.6	2.8	16.1
2021 Q4	28.4	57.4	18.6	7.8	24.0	6.1	21.0	48.3	11.8	1.6	16.8
2021 Q3	(16.6)	(2.0)	12.4	7.6	(0.7)	5.0	(20.6)	(6.7)	7.0	2.5	(5.4)
2021 Q2	75.5	161.5	40.3	27.6	59.4	4.4	68.2	150.6	34.5	22.2	52.7
2021 Q1	18.0	31.1	3.0	(7.3)	9.4	2.4	15.2	28.0	0.5	(9.5)	6.8
2020 Q4	8.9	24.5	3.4	(7.6)	6.1	1.6	7.2	22.6	1.7	(9.1)	4.4
2020 Q3	43.9	63.6	2.8	(4.2)	19.3	1.3	42.1	61.5	1.5	(5.4)	17.8
2020 Q2	(32.9)	(44.3)	(13.4)	(17.9)	(24.9)	0.8	(33.4)	(44.8)	(14.0)	(18.5)	(25.5)
2020 Q1	5.0	(0.5)	3.9	5.2	4.0	1.7	3.2	(2.2)	2.2	3.4	2.3
2019 Q4	6.2	19.4	5.6	8.3	5.6	1.6	4.5	17.6	3.9	6.6	3.9
2019 Q3	4.3	11.8	7.1	6.0	5.5	1.7	2.6	9.9	5.3	4.3	3.8
2019 Q2	18.8	21.0	2.3	3.2	10.4	1.8	16.7	18.8	0.4	1.3	8.4
2019 Q1	(2.4)	40.5	5.5	1.8	2.6	2.0	(4.3)	37.8	3.4	(0.2)	0.6
2018 Q4	(9.2)	12.0	4.4	6.0	(0.2)	2.3	(11.3)	9.4	2.0	3.6	(2.4)
2018 Q3	7.9	26.4	6.2	8.8	8.3	2.5	5.2	23.3	3.6	6.1	5.6
2018 Q2	10.6	17.5	5.3	8.9	8.9	2.6	7.7	14.5	2.6	6.1	6.2
2018 Q1	15.3	(6.5)	5.0	10.9	8.9	2.2	12.8	(8.5)	2.8	8.6	6.5
2017 Q4	14.9	10.5	4.5	9.7	9.1	2.0	12.6	8.3	2.4	7.5	7.0
2017 Q3	4.6	6.5	3.1	2.0	3.9	1.9	2.6	4.5	1.1	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	(1.1)	(4.8)	0.2	(0.3)	(0.3)
2016 Q3	2.4	(9.0)	2.7	1.4	1.3	0.9	1.5	(9.8)	1.8	0.5	0.3
2016 Q2	(2.8)	(9.7)	1.2	0.3	(1.7)	0.9	(3.6)	(10.5)	0.3	(0.6)	(2.5)
2016 Q1	1.7	(5.9)	1.9	2.9	1.4	0.8	0.9	(6.6)	1.1	2.1	0.7
2015 Q4	5.1	(9.5)	2.7	3.5	2.4	0.8	4.3	(10.2)	1.9	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	1.4	5.9
2015 Q1	6.9	3.3	5.8	4.3	5.5	1.1	5.8	2.2	4.6	3.1	4.3
2014 Q4	8.4	10.1	6.5	2.4	5.7	1.5	6.8	8.5	4.9	0.9	4.1
2014 Q3	4.4	7.4	6.6	0.6	4.3	2.0	2.4	5.3	4.5	(1.4)	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	0.2	3.7	1.1	3.5
2013 Q2	19.2	8.5	4.6	2.0	10.0	1.7	17.2	6.6	2.8	0.3	8.1
2013 Q1	18.2	9.6	3.9	(1.7)	8.9	1.9	16.0	7.6	2.0	(3.5)	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	2.9	6.7	0.5	0.4	1.3
2012 Q2	4.7	1.5	2.1	1.7	3.2	1.7	2.9	(0.2)	0.4	0.0	1.5
2012 Q1	4.0	4.2	4.6	1.3	3.7	2.0	2.0	2.2	2.6	(0.7)	1.7
2011 Q4	3.7	(6.5)	3.5	0.7	3.2	1.9	1.7	(8.2)	1.6	(1.2)	1.3
2011 Q3	9.7	2.5	3.7	(0.3)	6.2	2.3	7.2	0.1	1.3	(2.5)	3.7
2011 Q2	15.3	19.4	5.7	7.5	11.1	2.2	12.9	16.9	3.5	5.2	8.8
2011 Q1	12.1	4.4	6.3	13.4	10.0	1.9	10.0	2.4	4.4	11.2	7.9

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

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



TABLE A2

## Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2022 Q2 versus 2021 Q2

State / region	PIT	CIT	Sales	MFT	Total
<b>US (median)</b>	26.7	28.0	7.9	1.2	17.1
<b>US (average)</b>	14.7	36.8	8.9	(5.1)	14.5
<b>New England</b>	25.8	35.0	(0.5)	3.2	16.8
Connecticut	29.8	36.2	(0.3)	(8.5)	18.7
Maine	38.3	43.5	5.4	4.9	20.4
Massachusetts	21.7	28.4	(3.4)	5.5	15.5
New Hampshire	88.4	11.0	NA	48.0	6.6
Rhode Island	13.2	NM	7.3	1.0	24.8
Vermont	51.1	20.5	2.9	8.7	12.9
<b>Mideast</b>	17.5	16.2	4.3	0.5	14.9
Delaware	(12.6)	64.5	NA	94.6	11.3
Maryland	18.8	(6.8)	(11.0)	1.2	5.7
New Jersey	25.5	8.6	8.0	1.2	16.8
New York	10.7	22.5	10.0	(4.9)	15.4
Pennsylvania	38.9	30.0	2.9	(2.3)	18.6
<b>Great Lakes</b>	13.6	54.0	5.6	(25.8)	11.5
Illinois	19.0	64.0	4.2	2.2	15.1
Indiana	31.7	18.9	6.7	3.7	18.8
Michigan	1.9	96.3	9.1	(4.7)	10.5
Ohio	16.9	NM	3.8	(99.5)	8.4
Wisconsin	(7.8)	22.3	4.9	0.2	1.3
<b>Plains</b>	21.9	18.9	2.3	0.4	13.4
Iowa	45.0	0.1	2.7	(8.4)	17.5
Kansas	20.3	12.8	7.9	(2.0)	12.7
Minnesota	6.5	20.7	(8.0)	2.8	3.7
Missouri	44.0	29.0	4.3	14.1	26.3
Nebraska	24.0	21.7	16.2	(13.8)	18.1
North Dakota	43.8	73.7	9.0	1.2	35.5
South Dakota	NA	48.1	10.0	0.4	10.7
<b>Southeast</b>	28.7	27.7	10.6	(2.8)	16.8
Alabama	32.5	25.2	4.3	5.8	16.9
Arkansas	19.1	28.4	(2.0)	39.0	7.5
Florida	NA	12.7	17.7	4.1	14.3
Georgia	54.2	52.9	11.8	(73.5)	33.0
Kentucky	30.5	24.9	4.5	(0.8)	17.0
Louisiana	27.5	60.7	11.8	7.9	21.9
Mississippi	25.8	17.8	2.6	(14.8)	9.7
North Carolina	9.3	10.4	7.9	2.3	8.7
South Carolina	38.0	44.7	15.4	7.0	24.2
Tennessee	NM	48.7	11.8	2.9	15.8
Virginia	28.5	10.4	(2.9)	6.9	17.2
West Virginia	29.4	28.0	3.2	1.2	20.8
<b>Southwest</b>	7.8	36.1	16.0	1.7	19.3
Arizona	42.0	18.5	15.2	1.2	22.6
New Mexico	NM	178.9	29.9	1.2	0.9
Oklahoma	29.0	38.0	7.3	0.0	19.5
Texas	NA	NA	15.9	2.3	20.8
<b>Rocky Mountain</b>	36.5	37.1	12.3	(2.8)	26.5
Colorado	43.1	28.0	13.8	(6.5)	30.3
Idaho	(3.2)	142.1	8.8	(1.0)	11.8
Montana	61.2	(4.8)	NA	(11.3)	34.8
Utah	39.5	17.8	12.0	2.7	28.1
Wyoming	NA	NA	19.2	4.3	21.2

State / region	PIT	CIT	Sales	MFT	Total
<b>Far West</b>	<b>(0.3)</b>	<b>51.6</b>	<b>10.3</b>	<b>(2.2)</b>	<b>10.7</b>
Alaska	NA	309.6	NA	9.3	187.6
California	(2.4)	51.6	10.9	1.2	9.2
Hawaii	20.9	1.3	20.4	3.8	22.6
Nevada	NA	NA	10.9	(65.0)	18.5
Oregon	19.3	29.0	NA	1.2	17.2
Washington	NA	NA	6.8	1.2	6.0

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

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

TABLE A3

## State Government Tax Revenue Trends in State Fiscal Year 2022

Nominal percentage change July 2021-June 2022 versus July 2020-June 2021

State / region	PIT	CIT	Sales	MFT	Total
<b>US (median)</b>	<b>10.5</b>	<b>26.0</b>	<b>12.1</b>	<b>5.6</b>	<b>13.5</b>
<b>US (average)</b>	<b>11.5</b>	<b>43.9</b>	<b>14.2</b>	<b>4.6</b>	<b>15.1</b>
<b>New England</b>	<b>21.9</b>	<b>32.1</b>	<b>10.8</b>	<b>5.8</b>	<b>17.4</b>
Connecticut	23.4	38.0	8.0	(1.1)	18.2
Maine	24.8	46.3	14.6	6.5	18.5
Massachusetts	23.9	25.0	11.8	9.0	19.6
New Hampshire	25.6	20.0	NA	9.0	9.7
Rhode Island	1.9	94.0	12.4	6.1	10.1
Vermont	2.8	44.1	7.6	11.2	6.6
<b>Mideast</b>	<b>24.3</b>	<b>18.7</b>	<b>12.7</b>	<b>6.0</b>	<b>19.5</b>
Delaware	1.1	54.5	NA	36.3	12.7
Maryland	15.7	16.3	18.5	10.4	13.5
New Jersey	20.1	16.0	11.2	7.3	18.9
New York	30.7	16.9	15.5	2.4	25.6
Pennsylvania	10.1	23.8	8.6	4.9	10.3
<b>Great Lakes</b>	<b>6.1</b>	<b>48.6</b>	<b>10.4</b>	<b>(2.0)</b>	<b>9.3</b>
Illinois	10.3	67.3	10.1	6.0	13.8
Indiana	11.1	13.6	12.1	9.2	11.7
Michigan	(0.1)	64.5	11.9	(3.0)	6.6
Ohio	5.5	NA	8.7	(18.2)	5.6
Wisconsin	(0.8)	15.7	9.5	4.5	4.9
<b>Plains</b>	<b>7.1</b>	<b>35.0</b>	<b>12.1</b>	<b>5.0</b>	<b>10.6</b>
Iowa	10.5	(8.6)	8.9	0.2	7.3
Kansas	4.7	19.4	13.3	4.7	8.4
Minnesota	3.3	65.4	8.5	6.6	9.2
Missouri	15.9	9.5	16.7	15.4	11.5
Nebraska	3.5	25.2	10.6	(7.4)	7.4
North Dakota	1.3	47.4	28.4	3.8	38.5
South Dakota	NA	4.1	11.0	5.9	10.0
<b>Southeast</b>	<b>17.3</b>	<b>24.1</b>	<b>17.9</b>	<b>6.2</b>	<b>15.9</b>
Alabama	20.4	23.2	9.6	5.2	13.5
Arkansas	6.8	33.3	8.1	14.5	7.5
Florida	NA	11.0	26.9	9.6	21.4
Georgia	28.6	43.4	19.7	(10.1)	22.8
Kentucky	17.6	34.4	11.0	3.5	13.8
Louisiana	8.2	25.3	11.4	(2.3)	12.0
Mississippi	11.4	9.6	13.5	(2.3)	10.5
North Carolina	10.2	7.0	12.6	4.2	9.9
South Carolina	25.9	62.7	18.0	18.5	21.6
Tennessee	(94.7)	22.3	16.4	5.2	13.5
Virginia	18.0	30.5	9.1	19.1	15.6
West Virginia	11.0	14.3	7.7	5.2	14.7
<b>Southwest</b>	<b>8.3</b>	<b>42.0</b>	<b>13.1</b>	<b>6.3</b>	<b>20.0</b>
Arizona	15.3	37.4	17.2	5.1	15.0
New Mexico	(20.9)	129.7	21.8	4.9	36.4
Oklahoma	10.4	26.7	13.4	5.6	16.4
Texas	NA	NA	11.6	6.8	20.2
<b>Rocky Mountain</b>	<b>12.3</b>	<b>41.2</b>	<b>16.0</b>	<b>5.0</b>	<b>15.0</b>
Colorado	11.8	14.7	15.8	6.1	12.6
Idaho	3.7	196.2	15.4	1.7	18.5
Montana	32.0	8.5	NA	3.1	22.0
Utah	10.8	26.0	18.0	6.4	13.7
Wyoming	NA	NA	11.3	7.3	18.4

State / region	PIT	CIT	Sales	MFT	Total
<b>Far West</b>	<b>0.8</b>	<b>74.9</b>	<b>15.3</b>	<b>6.1</b>	<b>13.5</b>
Alaska	NA	258.3	NA	8.3	129.9
California	(0.1)	76.3	15.7	8.1	12.3
Hawaii	12.1	64.4	30.2	15.6	27.8
Nevada	NA	NA	18.7	(29.3)	30.1
Oregon	8.2	28.1	NA	5.7	11.3
Washington	NA	NA	11.0	3.8	10.7

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

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

TABLE A4

## State Personal Income Tax Withholding

Year-over-year nominal percentage change

State / region	State fiscal year 2021				State fiscal year 2022			
	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2
<b>US (median)</b>	3.6	4.0	4.9	12.1	9.3	10.9	12.0	9.8
<b>US (average)</b>	5.0	6.2	6.5	15.4	11.4	15.4	12.9	7.5
<b>New England</b>	4.7	5.1	6.6	10.6	(1.4)	10.3	11.0	5.8
Connecticut*	4.0	6.6	2.2	10.3	(30.9)	8.8	16.3	2.2
Maine	9.2	7.8	10.7	14.3	14.8	9.8	18.1	13.3
Massachusetts	4.5	4.3	9.4	10.2	9.3	10.5	7.0	5.7
Rhode Island	3.4	4.0	0.2	12.1	7.7	13.4	11.4	5.8
Vermont	7.3	1.5	1.1	10.8	11.9	15.8	22.5	12.3
<b>Mideast</b>	4.3	2.8	4.7	15.0	11.1	20.0	17.8	7.7
Delaware	4.8	(39.8)	34.5	16.2	9.3	113.0	(14.9)	8.2
Maryland	5.4	7.8	0.7	13.7	8.1	7.7	11.8	3.3
New Jersey	7.5	9.5	7.3	21.2	7.6	10.9	10.9	11.3
New York	3.0	2.8	4.9	14.2	14.8	26.3	24.1	8.1
Pennsylvania	4.5	(6.7)	1.8	12.8	5.1	18.7	10.6	9.8
<b>Great Lakes</b>	4.3	3.7	5.2	12.2	5.8	10.1	15.8	9.0
Illinois	6.0	6.1	4.3	11.2	5.8	10.1	30.0	18.7
Indiana	9.6	2.3	6.0	19.7	2.7	10.5	13.0	15.9
Michigan	5.0	2.9	6.8	5.5	3.5	10.7	9.3	5.6
Ohio	(0.8)	0.7	1.6	18.3	6.7	8.0	11.1	5.8
Wisconsin	(0.0)	4.0	8.5	10.2	12.4	11.5	0.2	(7.9)
<b>Plains</b>	(0.6)	3.4	3.2	11.5	11.0	8.5	13.2	5.9
Iowa	3.6	1.2	3.2	3.9	1.2	2.9	9.9	13.3
Kansas	3.2	4.4	2.8	12.9	11.1	9.7	14.6	8.3
Minnesota	(6.0)	4.5	1.9	13.6	16.5	7.5	13.4	(1.9)
Missouri	0.1	1.9	5.5	13.0	11.3	12.3	13.0	10.8
Nebraska	8.2	6.2	5.4	11.5	7.0	9.8	13.9	9.8
North Dakota	2.5	(4.9)	(11.6)	2.8	1.2	11.8	34.4	35.6
<b>Southeast</b>	4.2	3.9	6.0	9.8	8.2	13.2	10.1	8.3
Alabama	1.9	3.9	4.8	10.7	10.7	9.3	11.1	13.0
Arkansas	(4.4)	(4.1)	(3.5)	7.8	7.2	9.8	10.7	2.2
Georgia	11.2	6.5	9.5	9.4	4.1	15.5	10.6	10.0
Kentucky	5.6	5.3	1.4	11.8	5.2	10.1	13.3	14.9
Louisiana	(11.0)	0.2	1.0	8.6	12.0	12.4	8.0	(2.0)
Mississippi	0.2	4.7	3.1	2.1	18.7	7.5	11.2	11.8
North Carolina	8.9	5.0	8.5	13.2	7.4	15.7	8.4	3.8
South Carolina	4.6	3.3	10.0	9.9	10.6	18.7	12.0	13.1
Virginia	2.4	3.4	5.1	8.1	9.7	10.9	9.4	8.0
West Virginia	(5.4)	(0.0)	1.9	11.9	9.3	9.3	10.8	9.7
<b>Southwest</b>	3.4	5.5	4.8	12.2	8.3	13.3	12.5	11.5
Arizona	2.5	8.5	7.5	13.6	12.2	12.0	11.6	15.0
New Mexico	3.2	5.3	2.2	21.2	3.8	20.2	16.8	10.6
Oklahoma	4.8	1.0	1.8	6.1	4.5	12.0	12.1	6.6
<b>Rocky Mountain</b>	9.3	13.7	9.9	13.7	14.4	12.2	15.8	11.7
Colorado	14.1	15.4	7.5	11.2	11.0	12.2	16.4	10.7
Idaho	11.5	14.9	18.9	20.9	20.0	15.4	13.3	14.0
Montana	2.8	11.2	9.7	18.2	16.5	10.5	15.8	13.1
Utah	1.6	10.9	11.3	14.7	18.7	11.4	15.7	12.3
<b>Far West</b>	8.3	12.6	10.4	26.0	21.4	19.9	7.7	5.4
California	9.2	14.2	11.1	27.9	22.7	21.1	7.0	4.9
Hawaii	(1.2)	(5.1)	(1.6)	15.4	10.5	12.1	12.5	7.4
Oregon	3.3	3.1	6.4	13.4	12.6	10.2	12.5	8.9

Source: Individual state data, analysis by the author.

Notes: Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming have no broad-based personal income tax. \*Preliminary; 2022 Q2 numbers for Connecticut are for the months of April and May only.

TABLE A5

## State Personal Income Tax: Estimated Payments or Declarations

Year-over-year nominal percentage change

State	Tax year 2020	Tax year 2021	Tax year 2022
	April-Sep. 2020 vs April-Sep. 2019	April-Sep. 2021 vs April-Sep. 2020	April-Sep. 2022 vs April-Sep. 2021
<b>Median</b>	(8.4)	27.9	16.4
<b>Average</b>	(13.2)	54.1	(9.7)
Alabama	(8.9)	27.7	(0.5)
Arizona	2.8	40.1	0.1
Arkansas	5.7	13.7	2.6
California	(18.1)	100.4	(41.3)
Colorado	(17.2)	28.1	47.5
Connecticut	(19.0)	47.5	ND
Delaware	2.3	40.2	5.7
Georgia	(19.3)	40.3	22.7
Hawaii	(10.7)	67.5	19.3
Illinois	3.2	16.8	(21.1)
Indiana	(7.6)	23.3	19.1
Iowa	(2.3)	18.2	16.4
Kansas	(7.4)	26.4	10.1
Kentucky	(6.0)	21.4	39.2
Louisiana	(3.3)	(4.4)	53.3
Maine	1.7	29.3	17.2
Maryland	(7.1)	33.2	2.2
Massachusetts	(17.1)	59.6	12.4
Michigan	(10.4)	54.7	(27.1)
Minnesota	(11.4)	35.9	2.3
Mississippi	(13.1)	37.3	39.2
Missouri	23.1	38.7	0.8
Montana	(0.7)	26.2	62.3
Nebraska	(5.5)	18.2	18.8
New Jersey	(14.7)	22.4	(3.8)
New York	(12.8)	46.5	(3.5)
North Carolina	(7.2)	42.8	(3.8)
North Dakota	(8.6)	7.9	116.7
Ohio	(8.1)	19.6	10.4
Oklahoma	(31.7)	13.9	63.1
Oregon	(18.2)	42.9	33.4
Pennsylvania	(7.1)	19.4	30.1
Rhode Island	(14.2)	27.3	9.9
South Carolina	(8.4)	27.2	13.5
Vermont	(7.7)	31.6	19.0
Virginia	(9.8)	36.2	18.6
West Virginia	(8.5)	21.0	36.7
Wisconsin	(16.8)	17.9	24.9

Source: Individual state data, analysis by the author.

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

TABLE A6

## State Personal Income Tax: Final Payments

Year-over-year nominal percentage change

State	Tax year 2020	Tax year 2021	Tax year 2022
	April-Sep. 2020 vs April-Sep. 2019	April-Sep. 2021 vs April-Sep. 2020	April-Sep. 2022 vs April-Sep. 2021
<b>Median</b>	(1.5)	22.1	45.5
<b>Average</b>	(1.1)	24.4	39.0
Alabama	(5.4)	37.3	31.7
Arizona	(6.1)	36.2	58.0
Arkansas	12.1	19.4	41.0
California	8.5	24.5	18.9
Colorado	7.5	26.1	46.3
Connecticut	(2.2)	12.3	ND
Delaware	(3.8)	30.4	53.7
Georgia	(0.6)	23.9	141.1
Hawaii	9.2	42.7	19.6
Idaho	19.7	23.8	(0.0)
Illinois	(21.5)	39.5	35.8
Indiana	(1.5)	22.1	56.1
Iowa	(22.5)	31.6	52.3
Kansas	(20.6)	38.2	40.7
Kentucky	5.0	23.9	37.4
Louisiana	(5.9)	17.2	53.9
Maine	(1.3)	31.9	56.3
Maryland	(7.9)	21.7	49.9
Massachusetts	(2.3)	23.5	41.9
Michigan	(4.7)	43.5	1.4
Minnesota	(1.3)	21.9	3.4
Missouri	(24.6)	16.2	98.7
Montana	59.9	(18.7)	74.6
Nebraska	(0.5)	15.5	46.6
New Jersey	(6.1)	21.6	44.6
New Mexico	59.1	(1.6)	ND
New York	3.3	30.2	11.0
North Carolina	(6.3)	36.4	45.5
North Dakota	(4.8)	6.5	4.9
Ohio	(9.8)	28.9	39.6
Oklahoma	(4.5)	10.4	25.5
Pennsylvania	(4.7)	20.2	77.0
Rhode Island	(0.3)	1.6	67.0
South Carolina	6.9	22.2	46.7
Utah	24.5	14.3	55.1
Vermont	6.5	(0.9)	74.1
Virginia	6.7	21.1	49.1
West Virginia	(6.3)	10.3	28.7
Wisconsin	(0.5)	10.3	5.3

Source: Individual state data, analysis by the author.

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

TABLE A7

## States with Pass-Through Entity Elective Tax and Effective Dates

State	Effective date
<a href="#">Alabama</a>	Tax Year 2021
<a href="#">Arizona</a>	Tax Year 2022
<a href="#">Arkansas</a>	Tax Year 2022
<a href="#">California</a>	Tax Year 2021
<a href="#">Colorado</a>	Tax Year 2022
<a href="#">Connecticut</a>	Tax Year 2018
<a href="#">Delaware</a>	NA
<a href="#">Georgia</a>	Tax Year 2022
<a href="#">Hawaii</a>	NA
<a href="#">Idaho</a>	Tax Year 2021
<a href="#">Illinois</a>	Tax Year 2022
<a href="#">Indiana</a>	NA
<a href="#">Iowa</a>	NA
<a href="#">Kansas</a>	Tax Year 2022
<a href="#">Kentucky</a>	NA
<a href="#">Louisiana</a>	Tax Year 2019
<a href="#">Maine</a>	NA
<a href="#">Maryland</a>	Tax Year 2020
<a href="#">Massachusetts</a>	Tax Year 2021
<a href="#">Michigan</a>	Tax Year 2021
<a href="#">Minnesota</a>	Tax Year 2021
<a href="#">Mississippi</a>	Tax Year 2022
<a href="#">Missouri</a>	Tax Year 2023
<a href="#">Montana</a>	NA
<a href="#">Nebraska</a>	NA
<a href="#">New Jersey</a>	Tax Year 2020
<a href="#">New Mexico</a>	Tax Year 2022
<a href="#">New York</a>	Tax Year 2021
<a href="#">North Carolina</a>	Tax Year 2022
<a href="#">North Dakota</a>	NA
<a href="#">Ohio</a>	Tax Year 2022
<a href="#">Oklahoma</a>	Tax Year 2019
<a href="#">Oregon</a>	Tax Year 2022
<a href="#">Pennsylvania</a>	NA
<a href="#">Rhode Island</a>	Tax Year 2019
<a href="#">South Carolina</a>	Tax Year 2021
<a href="#">Utah</a>	Tax Year 2022
<a href="#">Vermont</a>	NA
<a href="#">Virginia</a>	Tax Year 2021
<a href="#">West Virginia</a>	NA
<a href="#">Wisconsin</a>	Tax Year 2019

**Source:** Individual state information, compiled 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. NA = not applicable. State names are hyperlinked to their respective pass-through entity elective tax guidelines.



TABLE A8

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

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

Year / quarter	Property tax	Tobacco product sales tax	Alcoholic beverage sales tax	Motor vehicle & operators' license taxes	Other taxes	Total nonmajor taxes
2022 Q2 collections (\$ millions)	\$5,156	\$4,578	\$2,168	\$8,605	\$58,247	\$78,754
2022 Q2	(0.6)	(10.2)	2.5	(8.1)	16.3	8.8
2022 Q1	2.2	(5.1)	10.3	0.3	22.0	14.3
2021 Q4	2.6	(4.5)	8.5	1.3	19.8	13.0
2021 Q3	4.6	(1.2)	7.8	5.3	14.7	10.8
2021 Q2	5.9	0.9	5.4	7.8	8.2	7.3
2021 Q1	2.2	(0.6)	(5.4)	(3.0)	(5.8)	(4.3)
2020 Q4	2.8	0.7	(5.1)	(2.5)	(6.1)	(4.3)
2020 Q3	2.6	(1.2)	(3.4)	(3.4)	(7.0)	(5.1)
2020 Q2	0.2	(2.5)	(2.3)	(3.1)	(4.8)	(3.9)
2020 Q1	1.2	(3.2)	2.7	1.9	1.3	1.0
2019 Q4	0.3	(4.1)	2.8	1.2	1.4	0.9
2019 Q3	(0.3)	(6.2)	0.2	1.3	3.4	1.8
2019 Q2	5.3	(7.7)	(1.3)	0.8	4.6	2.7
2019 Q1	6.4	(5.5)	(0.7)	4.3	5.2	3.9
2018 Q4	8.9	(5.3)	(1.5)	7.1	5.3	4.6
2018 Q3	8.0	0.8	(0.0)	4.4	5.2	4.7
2018 Q2	3.6	5.2	1.2	4.7	3.6	3.8
2018 Q1	1.0	4.6	1.0	1.1	2.6	2.4
2017 Q4	(0.7)	6.1	2.9	(0.3)	1.9	1.8
2017 Q3	(1.2)	3.5	3.0	3.7	0.5	1.1
2017 Q2	0.4	1.8	2.3	1.5	(0.4)	0.2
2017 Q1	3.0	1.2	1.1	2.3	(1.7)	(0.4)
2016 Q4	2.4	1.4	0.5	2.7	(1.6)	(0.4)
2016 Q3	4.9	1.2	0.8	1.1	(2.5)	(1.0)
2016 Q2	4.2	0.7	1.6	2.6	(1.7)	(0.4)
2016 Q1	5.0	1.8	2.6	2.3	(1.3)	0.1
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	(2.2)	1.6	1.1	(0.7)	(0.1)
2015 Q1	4.3	(4.0)	(0.3)	1.2	(0.4)	(0.2)
2014 Q4	0.7	(4.7)	1.4	(0.7)	(1.9)	(1.7)
2014 Q3	3.1	(3.7)	1.3	0.6	(1.7)	(1.1)
2014 Q2	5.2	0.5	(0.1)	1.1	(0.4)	0.3
2014 Q1	5.1	1.8	1.3	0.9	0.4	1.0
2013 Q4	4.8	3.7	(0.7)	0.3	3.2	2.8
2013 Q3	3.2	3.6	(2.4)	(0.5)	3.6	2.8
2013 Q2	(0.3)	(1.0)	(1.9)	(0.9)	2.7	1.5
2013 Q1	(3.2)	(1.5)	(0.1)	0.3	2.5	1.3
2012 Q4	(4.8)	(2.5)	2.3	2.0	1.3	0.6
2012 Q3	(9.2)	(3.3)	3.5	3.1	2.2	1.0
2012 Q2	(10.5)	(2.2)	3.1	3.2	4.2	2.2
2012 Q1	(10.7)	(2.5)	0.7	2.1	7.6	4.0
2011 Q4	(11.0)	(1.8)	(0.5)	1.8	11.8	6.5
2011 Q3	(7.6)	(0.9)	0.5	0.3	12.8	7.3
2011 Q2	(3.8)	0.7	1.6	1.6	12.2	7.6
2011 Q1	2.5	2.8	3.2	3.3	10.1	7.4

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

TABLE A9

## Preliminary State Government Tax Revenues in the Third Quarter of 2022, by State

Nominal percentage change, 2022 Q3 versus 2021 Q3

State/region	PIT	CIT	Sales	Total
<b>US (median)</b>	8.7	17.8	10.4	9.5
<b>US (average)</b>	2.4	10.6	11.0	7.2
<b>New England</b>	7.1	(2.7)	8.7	5.9
Connecticut	ND	ND	ND	ND
Maine	9.0	28.9	8.1	9.3
Massachusetts	6.2	(7.8)	8.9	5.2
New Hampshire	4.9	(0.6)	NA	0.9
Rhode Island	5.5	(3.3)	8.3	6.3
Vermont	21.4	49.5	10.4	13.9
<b>Mideast</b>	10.3	9.7	5.5	8.5
Delaware	9.5	5.2	NA	5.6
Maryland	12.0	62.3	(1.5)	10.3
New Jersey	10.0	8.3	10.4	13.6
New York	9.7	(0.3)	7.4	8.2
Pennsylvania	11.9	7.2	2.6	4.9
<b>Great Lakes</b>	6.8	11.3	7.8	6.5
Illinois	7.6	18.9	7.2	8.0
Indiana	7.6	(18.6)	9.2	5.2
Michigan	14.3	9.6	10.8	9.6
Ohio	8.6	NA	3.6	4.8
Wisconsin	(6.1)	18.0	11.3	2.2
<b>Plains</b>	13.8	5.6	12.0	11.5
Iowa	14.5	29.7	(10.3)	3.9
Kansas	8.7	10.9	(2.8)	4.4
Minnesota	15.8	(10.5)	39.3	17.6
Missouri	14.8	42.7	4.2	13.2
Nebraska	8.0	1.2	11.3	9.7
North Dakota	17.6	24.0	20.9	(0.4)
South Dakota	NA	NM	18.4	16.4
<b>Southeast</b>	4.0	31.1	11.9	9.2
Alabama	9.6	45.2	9.0	10.6
Arkansas	5.0	17.6	9.6	6.5
Florida	NA	28.7	12.1	14.6
Georgia	12.8	65.8	11.9	7.0
Kentucky	8.4	16.0	12.8	9.6
Louisiana	5.6	33.5	15.9	14.2
Mississippi	12.9	45.2	8.5	10.4
North Carolina	2.9	0.4	13.6	7.8
South Carolina	9.4	35.6	6.6	13.1
Tennessee	(79.4)	60.4	10.8	10.1
Virginia	(11.4)	(5.2)	15.6	(2.2)
West Virginia	18.6	36.7	6.7	27.9
<b>Southwest</b>	9.7	48.2	14.6	19.0
Arizona	7.7	49.7	11.4	10.8
New Mexico	ND	ND	ND	ND
Oklahoma	13.7	45.4	6.8	17.6
Texas	NA	NA	15.7	21.0
<b>Rocky Mountain</b>	8.5	20.4	13.5	11.4
Colorado	7.8	29.1	14.6	11.2
Idaho	(2.0)	50.6	11.0	9.5
Montana	16.7	0.1	NA	17.5

Utah	11.1	(2.6)	13.5	11.6
Wyoming	NA	NA	17.2	ND
<b>Far West</b>	<b>(11.0)</b>	<b>(4.3)</b>	<b>12.7</b>	<b>(0.9)</b>
Alaska	NA	95.3	NA	216.2
California	(12.4)	(7.0)	14.4	(4.3)
Hawaii	(20.1)	3.9	12.0	1.1
Nevada	NA	NA	8.7	6.0
Oregon	6.2	5.7	NA	6.3
Washington	NA	NA	9.0	6.0

Source: Individual state data, analysis by the author.

Notes: PIT = personal income tax; CIT = corporate income tax; NA = not applicable; ND = no data, NM = not meaningful.

# Notes

- <sup>1</sup> In this report, all the references to inflation-adjusted (or real) revenues and growth rates are based on the adjustments using the GDP price index and relative to the second quarter of 2022.
- <sup>2</sup> The fiscal year in 46 states runs from July 1 to June 30. The fiscal year runs from October 1 to September 31 in Alabama and Michigan, from April 1 to March 31 in New York, and from September 1 to August 31 in Texas.
- <sup>3</sup> The author made several adjustments for the second quarter of 2022 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>4</sup> In this report, the author uses US Bureau of Economic Analysis regions as the basis of analysis.
- <sup>5</sup> See “Finance Bulletin, February 2022,” California Department of Finance, accessed November 15, 2022, <https://dof.ca.gov/wp-content/uploads/Forecasting/Economics/Documents/Feb-22.pdf>.
- <sup>6</sup> Justin Garosi and Brian Uhler, “Income Tax Withholding Tracker: November 1 – November 30,” California Legislative Analyst’s Office, November 30, 2021, <https://lao.ca.gov/LAOEconTax/Article/Detail/719>.
- <sup>7</sup> Income tax returns are usually 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 “Finance Bulletin, February 2022,” California Department of Finance, accessed November 15, 2022, <https://dof.ca.gov/wp-content/uploads/Forecasting/Economics/Documents/Feb-22.pdf>.
- <sup>9</sup> Brian Uhler, Justin Garosi, Brian Weatherford, and Seth Kerstein, “2022-23 Fiscal Outlook Revenue Estimates,” California Legislative Analyst’s Office blog, November 17, 2021, <https://lao.ca.gov/LAOEconTax/Article/Detail/712>.
- <sup>10</sup> See “Table 6.16D. Corporate Profits by Industry,” US Bureau of Economic Analysis, accessed November 15, 2022, <https://apps.bea.gov/iTable/?reqid=19&step=3&isuri=1&1921=survey&1903=239>.
- <sup>11</sup> See National Conference of State Legislatures, “Variable Rate Gas Taxes,” July 14, 2021, <https://www.ncsl.org/research/transportation/variable-rate-gas-taxes.aspx>.
- <sup>12</sup> See Jackson Brainerd, “Relief Is the Year’s Most Prominent Tax Policy Trend,” National Conference of State Legislatures, July 25, 2022, <https://www.ncsl.org/research/fiscal-policy/relief-is-the-year-s-most-prominent-tax-policy-trend-magazine2022.aspx>.
- <sup>13</sup> For state-by-state analysis on the impact of the pandemic-related changes on state budgets, visit “How the COVID-19 Pandemic is Transforming State Budgets,” Urban Institute, accessed November 15, 2022, <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-fiscal-pages-covid-edition>.
- <sup>14</sup> Author’s analysis of data from National Association of State Budget Officers (2020), table A-1.
- <sup>15</sup> See the New York State Senate, “Senate Majority Announces Highlights Of 2021-22 Budget,” April 6, 2021, <https://www.nysenate.gov/newsroom/press-releases/senate-majority-announces-highlights-2021-22-budget>.
- <sup>16</sup> See Burke et al., “Bill Analysis,” State of California, Franchise Tax Board, April 15, 2021, <https://www.ftb.ca.gov/tax-pros/law/legislation/2021-2022/AB80-021721-041521.pdf>.

- <sup>17</sup> North Carolina General Assembly, Fiscal Research Division, “NCGA 2021 Legislative Session Budget and Fiscal Policy Highlights,” January 10, 2022, [https://sites.ncleg.gov/frd/wp-content/uploads/sites/7/2022/01/NCGA\\_2021\\_Legislative\\_Session\\_Budget\\_and\\_Fiscal\\_Policy\\_Highlights\\_2022\\_01\\_20\\_Final.pdf](https://sites.ncleg.gov/frd/wp-content/uploads/sites/7/2022/01/NCGA_2021_Legislative_Session_Budget_and_Fiscal_Policy_Highlights_2022_01_20_Final.pdf).
- <sup>18</sup> See Wisconsin Department of Revenue, “Wisconsin Tax Bulletin. Number 214,” July 2021, <https://www.revenue.wi.gov/WisconsinTaxBulletin/214-07-21-WTB.pdf>.
- <sup>19</sup> See Arizona Joint Legislative Budget Committee, “Finance Advisory Committee Briefing Materials,” October 28, 2021, <https://www.azjllbc.gov/meetings/facag102821.pdf>.
- <sup>20</sup> See Ohio Department of Taxation, “Annual Tax Rates,” accessed November 15, 2022, <https://tax.ohio.gov/individual/resources/annual-tax-rates>.
- <sup>21</sup> See Illinois General Assembly, Commission on Government Forecasting and Accountability, “State of Illinois Budget Summary for Fiscal Year 2022,” June 2021, <https://cgfa.ilga.gov/Upload/FY2022BudgetSummary.pdf>.
- <sup>22</sup> New York State Senate, “Senate Majority Announces Highlights Of 2021-22 Budget.”
- <sup>23</sup> See California’s Department of Finance, “2021-22 May Revision to the Governor’s Budget, May 2021, <https://www.ebudget.ca.gov/2021-22/pdf/Revised/BudgetSummary/FullBudgetSummary.pdf>.
- <sup>24</sup> See Florida Department of Revenue, “Tax Information Publication, New Registration Requirement for Persons Making Remote Sales and for Marketplace Providers and Sellers,” May 14, 2021, [https://floridarevenue.com/taxes/tips/Documents/TIP\\_21A01-03.pdf](https://floridarevenue.com/taxes/tips/Documents/TIP_21A01-03.pdf).
- <sup>25</sup> See Colorado General Assembly, “An Act, House Bill 21-1312,” June 2021, [https://leg.colorado.gov/sites/default/files/2021a\\_1312\\_signed.pdf](https://leg.colorado.gov/sites/default/files/2021a_1312_signed.pdf).
- <sup>26</sup> See Florida Department of Revenue, “Tax Information Publication, 2021 Reemployment Tax Legislative Changes,” April 27, 2021, [https://floridarevenue.com/taxes/tips/Documents/TIP\\_2173B-01\\_Final.pdf](https://floridarevenue.com/taxes/tips/Documents/TIP_2173B-01_Final.pdf).

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