

RESEARCH REPORT

State Revenues Take a Hit in the Second Quarter of 2023

State Tax and Economic Review, 2023 Quarter 2

Lucy Dadayan

November 2023







ABOUT THE URBAN INSTITUTE

The Urban Institute is a nonprofit research organization that provides data and evidence to help advance upward mobility and equity. We are a trusted source for changemakers who seek to strengthen decisionmaking, create inclusive economic growth, and improve the well-being of families and communities. For more than 50 years, Urban has delivered facts that inspire solutions—and this remains our charge today.

ABOUT THE TAX POLICY CENTER

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

Copyright © November 2023. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by Tim Meko.

Contents

Acknowledgments	iv
Get Real-Time Data	v
Executive Summary	vi
Trends in State and Local Revenues	9
State Tax Revenues in the Second Quarter of 2023	12
Personal Income Taxes	14
Withholding	15
Estimated Payments	17
Final Payments	19
Refunds	20
Actual versus Forecasted Personal Income Tax Revenues	20
Corporate Income Taxes	21
General Sales Taxes	23
Motor Fuel Taxes	24
Other Taxes	25
Preliminary Review of State Tax Revenues in the Third Quarter of 2023	25
Factors Driving State Tax Revenues	27
Economic Indicators	27
State Gross Domestic Product	27
State Unemployment and Employment	29
Housing Market	31
Personal Consumption Expenditures	34
Tax Law Changes Affecting the Second Quarter of 2023	35
Conclusion	38
Appendix: Additional Tables	39
Notes	51
References	53
About the Author	54
Statement of Independence	55

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.

Thanks to Richard Auxier, Tracy Gordon, and Alex Dallman for their thoughtful review of and feedback on the report.

iv ACKNOWLEDGMENTS

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.

Visit our project page to read previous *State Tax and Economic Review* reports and subscribe to gain direct access to the following datasets:

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.

GET REAL-TIME DATA v

Executive Summary

- State and local government tax revenues from major sources—personal income, corporate income, sales, and property—declined 9.6 percent in nominal terms and 12.7 percent in real terms in the second quarter of 2023 compared with the same quarter in 2022.¹
- State government tax revenues from major sources declined 15.4 percent in nominal terms and 18.2 percent in real terms in the second quarter of 2023 compared with the same quarter in 2022. The decline is in sharp contrast to double-digit revenue growth reported in the first half of 2022. In this report we also present preliminary revenue trends for state fiscal year 2023, which ended on June 30 in 46 states. State government tax revenues from major sources declined 11.0 percent in real terms in fiscal year 2023 compared with fiscal year 2022.
 - State personal income tax revenues declined 27.7 percent in nominal terms and 30.1 percent in real terms in the second quarter of 2023 compared with the second quarter of 2022. Personal income tax revenues were extremely volatile in recent quarters, reflecting numerous state income tax rate cuts as well as continued volatility and weakness in the stock market. State personal income tax revenues decreased 19.9 percent in real terms in fiscal year 2023 compared with fiscal year 2022.
 - » State corporate income tax revenues declined 10.8 percent in nominal terms and 13.8 percent in real terms in the second quarter of 2023 compared with the same quarter in 2022. This decline is in sharp contrast to strong corporate income tax revenue growth observed throughout calendar year 2022. However, some of that growth was merely recategorization of revenues as some states introduced an elective pass-through entity tax (i.e., collections were counted as corporate income tax revenue instead of personal income tax revenue). State corporate income tax revenues decreased 10.8 percent in real terms in fiscal year 2023 compared with fiscal year 2022.
 - State sales tax revenues increased 2.0 percent in nominal terms but declined 1.5 percent in real terms in the second quarter of 2023 compared with the same quarter in 2022. The growth in sales tax revenues has weakened substantially compared with strong growth observed throughout fiscal year 2022, which was largely related to high inflation. The current weakness in sales tax revenues is attributable to shifting consumption patterns, notably an increase in spending on services. State sales tax revenues increased 0.7 percent in real terms in fiscal year 2023 compared with fiscal year 2022.

vi EXECUTIVE SUMMARY

- Local government tax revenues from major sources increased 3.0 percent in nominal terms but declined 0.5 percent in real terms in the second quarter of 2023 compared with the same quarter in 2022. Local government tax revenues from major sources increased 0.9 percent in real terms in fiscal year 2023 compared with fiscal year 2022.
 - Local property tax revenues, the largest source of local government revenues, increased by 5.5 percent in nominal terms and 2.0 percent in real terms in the second quarter of 2023 compared with the second quarter of 2022. Local government property tax revenues increased 1.7 percent in real terms in fiscal year 2023 compared with fiscal year 2022. Growth in local property tax revenues weakened in the first half of 2023, potentially a reflection of the adverse impact of the COVID-19 pandemic on commercial property values.
- Preliminary data for the third quarter of 2023 indicate continued weakness in overall state tax revenue collections, largely driven by declines in personal income tax revenues. The declines in personal income tax revenues were expected given a weaker stock market and state policy actions that included tax rate cuts and rebate payments. Total state tax revenues declined 1.2 percent in nominal terms and 4.3 percent in real terms in the third quarter of 2023 compared with the same period in 2022. Year-over-year changes in major state tax revenues in the third quarter of 2023 were as follows:
 - » State personal income tax collections declined 3.0 percent in nominal terms and 6.0 percent in real terms.
 - State corporate income tax collections increased by 2.1 percent in nominal terms but declined by 1.2 percent in real terms.
 - State sales tax collections increased by 1.5 percent in nominal terms but declined by 1.7 percent in real terms.
- Economic factors that drive revenue growth largely remained positive in the second quarter of 2023 compared with the same quarter in 2022.
 - Year-over-year growth in real gross domestic product (GDP) was 2.4 percent for the second quarter of 2023.
 - » The seasonally adjusted unemployment rate was 3.6 percent in the second quarter of 2023. While the national unemployment rate is low, it masks large variations across geographic areas and different groups of workers.

EXECUTIVE SUMMARY vii

- » Seasonally adjusted nationwide employment increased 2.5 percent in the second quarter of 2023 compared with the same quarter in 2022, but in 12 states employment was still below levels in the second quarter of 2019.
- » House prices increased 4.5 percent in nominal terms and 1.0 percent in real terms for the second quarter of 2023 compared with a year earlier. Only two states, Maine and Vermont, reported year-over-year double-digit nominal growth in house prices.
- » Real personal consumption expenditures increased 2.2 percent for the second quarter of 2023 compared with the same quarter in 2022. Growth in real personal consumption spending was largely driven by the growth in spending on (often non-taxed) services, which comprised about two-thirds of total personal consumption spending. In contrast, inflationadjusted spending on goods declined by 1.3 percent year-over-year in the second quarter of 2023.

viii EXECUTIVE SUMMARY

Trends in State and Local Revenues

State and local tax revenues continue to reflect economic changes brought on by the COVID-19 pandemic and the policy responses to it. In the calendar years 2020 and 2021, the federal government injected trillions of dollars into the economy, providing crucial support for consumers, businesses, as well as state and local governments to weather the pandemic. These relief packages also may have contributed to elevated inflation. As a result of the unprecedented federal aid and high inflation, state and local government revenues substantially increased (especially in nominal terms).

Buoyed by federal fiscal support and robust tax collections, 13 states cut income tax rates for tax year 2022, with an additional 17 states doing so in 2023. Additionally, many other states passed other types of tax reductions, including refundable income tax credits, gas and sales tax holidays, and one-time rebate checks. Rebate types, amounts, 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 multiple 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 or household size and composition.

The unusually robust budget surpluses observed in the fiscal years 2021 and 2022 were driven by temporary factors and are not foreseen to recur. States' longer-term fiscal outlooks remain uncertain due to persistently high inflation, volatility in financial markets, higher interest rates, changes in consumption patterns, declining labor participation rates, and weakening in commercial and house prices. Furthermore, postpandemic shifts in consumer behavior (e.g., permanent remote work) as well as states' policy choices (e.g., cutting tax rates) will have a significant impact on state and local budgets.

TABLE 1
State and Local Government Tax Revenue Trends
Millions of dollars, adjusted for inflation

Tax source	2022 Q2	2023 Q2	YOY percent change	Fiscal year 2022	Fiscal year 2023	YOY percent change
Total state-local major taxes	\$563,943	\$492,472	(12.7)	\$2,116,337	\$1,988,497	(6.0)
State major taxes	\$387,749	\$317,118	(18.2)	\$1,232,325	\$1,096,901	(11.0)
Personal income tax	201,444	140,828	(30.1)	617,808	494,757	(19.9)
Corporate income tax	55,608	47,947	(13.8)	138,201	123,287	(10.8)
Sales tax	125,100	123,265	(1.5)	453,122	456,148	0.7
Property tax	5,597	5,078	(9.3)	23,194	22,708	(2.1)
Local major taxes	\$176,195	\$175,354	(0.5)	\$884,011	\$891,597	0.9
Personal income tax	15,964	14,940	(6.4)	49,923	47,898	(4.1)
Corporate income tax	4,000	4,630	15.7	12,919	12,917	(0.0)
Sales tax	31,651	28,726	(9.2)	121,036	119,092	(1.6)
Property tax	124,580	127,058	2.0	700,133	711,690	1.7

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

Notes: Q = quarter; YOY = year-over-year.

Table 1 displays real state and local government tax revenues from major sources for the second quarters of 2022 and 2023, fiscal years 2022 and 2023, and the percentage change between these periods. We present real growth rates to illustrate the impact of inflation on state and local government revenues and how state and local purchasing power may have changed.

Major findings include the following:

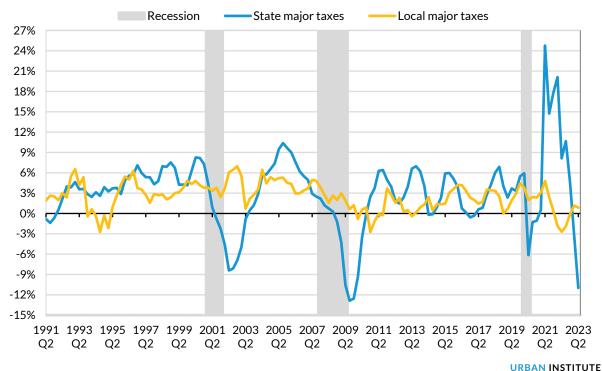
- State and local government tax revenues from major sources declined 12.7 percent in real terms in the second quarter of 2023 compared with a year earlier. Year-over-year real growth was negative 6.0 percent in fiscal year 2023.
- State government tax revenues from major sources declined 18.2 percent in real terms in the second quarter of 2023 relative to a year earlier. Year-over-year real growth for fiscal year 2023 was negative 11.0 percent. State personal income tax revenues declined 30.1 percent in real terms in the second quarter of 2023 relative to a year earlier. Year-over-year real growth for fiscal year 2023 was negative 19.9 percent. State corporate income tax revenues declined 13.8 percent in real terms in the second quarter of 2023 compared with a year earlier. Year-over-year real growth for fiscal year 2023 was negative 10.8 percent. State sales tax revenues declined 1.5 percent in real terms in the second quarter of 2023 compared with the second quarter of 2022. Year-over-year real growth for fiscal year 2023 was 0.7 percent.
- Local government tax revenue from major sources declined 0.5 percent in real terms for the second quarter of 2023 compared with the second quarter of 2022. Year-over-year real growth for fiscal year 2023 was 0.9 percent. Local property taxes, the single largest source of local government tax revenues, increased 2.0 percent in real terms in the second quarter of 2023 compared with the same quarter in 2022. Year-over-year real growth for fiscal year 2023 was 1.7 percent. Local sales taxes decreased 9.2 percent in real terms for the second quarter of 2023 compared with a year earlier. Local personal income taxes decreased 6.4 percent and local corporate income taxes increased 15.7 percent in real terms in the second quarter of 2023 compared with the same quarter of 2022, but these constitute relatively small shares 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 changes to income tax filing deadlines. State tax revenues from major sources decreased 11.0 percent in the second quarter of 2023 by this measure.

Local tax revenues were resilient at the outset of the COVID-19 pandemic due to a strong housing market and solid growth in residential property tax revenues. However, in recent quarters higher

mortgage interest rates and the decline in commercial property values have contributed to weaker local tax collections. Looking at only the second quarter of 2023, the four-quarter moving average of inflation-adjusted local tax revenues from major sources showed a 0.9 percent increase.

FIGURE 1
State Major Tax Revenues Declined in the First and Second Quarters of 2023
Year-over-year inflation-adjusted percentage change in state and local taxes from major sources



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

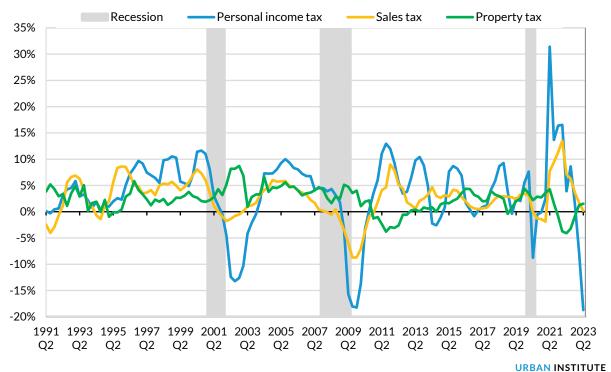
Notes: Year-over-year change is the percentage change of four-quarter moving averages. Data are adjusted for inflation. Data are for four major tax categories only: personal income, corporate income, general sales, and property.

Most local governments rely heavily on property taxes, which tend to respond relatively slowly to changes in property values. However, the values of commercial properties (such as hotels, retailers, and offices) have declined since the COVID-19 pandemic, and negatively affected overall local property tax collections, despite soaring residential property values observed throughout fiscal years 2021 and 2022. These trends could result in ongoing vulnerability for some local governments. In addition, because the Federal Reserve Board had substantially increased interest rates to counter inflation, mortgage costs are increasing. These changes in borrowing costs have led to a cooling in housing prices in some markets, 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 decreased 18.7 percent in the second quarter of 2023 compared with the same quarter of 2022, using the four-quarter moving average. Real

state and local sales tax revenues increased 0.2 percent and real state and local property taxes, the majority of which are collected by local governments, increased by 1.5 percent for the second quarter of 2023 compared with a year earlier.

FIGURE 2
State and Local Personal Income Tax Revenues Declined Steeply in the First Half of 2023
Year-over-year inflation-adjusted percentage change in major state-local taxes



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 2023

Total state government tax revenue collections declined 12.8 percent in nominal terms and 15.7 percent in real terms in the second quarter of 2023 relative to a year earlier, according to US Census Bureau data adjusted by the author (table A1).³ Personal income tax revenues declined 30.1 percent and corporate income tax revenues declined 13.8 percent in real terms in the second quarter of 2023 compared relative to a year earlier. Inflation-adjusted sales tax collections decreased 1.5 percent while motor fuel tax collections increased 4.4 percent in the second quarter of 2023 relative to a year earlier.

Table A1 shows (1) nominal and inflation-adjusted growth in state government tax revenue collections from major sources and (2) average quarterly year-over-year growth for fiscal year 2023.

The average quarterly year-over-year growth rate in overall state tax revenue collections for fiscal year 2023 was negative 3.2 percent in nominal terms and negative 8.4 percent in real terms.

Revenue varied across regions and states for the second quarter of 2023 (table A2). All regions reported year-over-year declines in nominal state tax revenue collections in the second quarter of 2023, with the Far West, Mideast, New England, and Rocky Mountain regions reporting double-digit declines. The Far West region reported the largest decline at 27.8 percent, while the Southwest region reported the smallest decline at 3.4 percent.⁴

Ten states reported year-over-year nominal growth in total state tax revenue collections for the second quarter of 2023, with two states (New Hampshire and Wyoming) reporting double-digit growth. State tax revenues declined in 40 states, mostly because of steep declines in personal income tax revenues. The largest revenue drop was in California and New York, where total states tax revenues declined 34.3 and 18.3 percent, respectively. The California drop reflects the state's delayed income tax filing deadline for Californians impacted by winter storms.⁵

This report also includes revenue growth patterns for the state fiscal year 2023, which ended in June 2023 in 46 states. Overall growth in state tax revenues weakened substantially in fiscal year 2023, which contrasts with the strong growth observed in fiscal year 2022. The boost in state tax revenues in fiscal year 2022 was driven by 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 COVID-19 pandemic, and the expectation of potential (if unrealized) federal tax hikes (Dadayan 2022a).

State total tax revenues declined 4.3 percent in nominal terms in fiscal year 2023 compared with fiscal year 2022. However, the average decline reflects particularly weak revenues in California and New York. In fact, the median state reported 1.4 percent growth (table A3). Similarly, large variations were observed across the regions and the states. The Far West, Mideast, and New England regions reported year-over-year declines in overall state tax revenue collections for fiscal year 2023, while the rest of the regions reported year-over-year growth. State tax revenues increased in 31 states and declined in 19 states in fiscal year 2023 in nominal terms, ranging from a 34.6 percent increase in Wyoming to a 22.6 percent decline in California. Four states (Alaska, New Mexico, North Dakota, and Wyoming) reported year-over-year double-digit growth in fiscal year 2023, while two states (California and New York) reported year-over-year double-digit declines.

In recent months, several states have enacted a pass-through entity tax, bringing the number of states with this option to 36. This is in part a workaround to the 2017 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 (Dadayan and Buhl 2023). In general, pass-through entity taxes enable some taxpayers to reduce their federal taxable liability by paying taxes at the entity 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. States also differ in their classification of pass-through entity taxes. Some states categorize these taxes as corporate income taxes (because they are paid by businesses), while others categorize them as personal income taxes (as they replace pass-through income). A few states even categorize them for both personal and corporate income taxes.

Personal Income Taxes

State personal income tax revenues declined 27.7 percent in nominal terms and 30.1 percent in real terms in the second quarter of 2023 compared with the same period in 2022. The median state reported a decline of 20.6 percent in nominal terms. The average quarterly year-over-year growth rate in state personal income tax collections in fiscal year 2023 was negative 13.5 percent in nominal terms and negative 18.2 percent in real terms (table A1).

Declines in personal income tax collections were steep and widespread; all regions reported double-digit declines in the second quarter of 2023 compared with a year earlier (table A2). The Far West and Southwest regions saw the steepest declines, at 44.7 and 34.0 percent, respectively.

Thirty-seven states reported year-over-year declines in personal income tax revenues in the second quarter of 2023, with 32 states reporting double-digit declines. The widespread declines in personal income tax revenues were largely expected and are, in part, due to state income tax rate cuts and the weakness in the stock market.

State personal income tax revenues declined 15.8 percent in nominal terms and 19.9 percent in real terms in fiscal year 2023 compared with fiscal year 2022 (table A3). Growth in the median state was negative 4.4 percent in nominal terms in fiscal year 2023. State personal income tax revenues increased in 10 states and declined in 32 states in fiscal year 2023, ranging from a 34.1 percent decline in California to 32.0 percent increase in New Mexico.

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 large fluctuations in nonwithholding income tax revenues during the COVID-19 pandemic. Income taxes have also become more volatile because a large share of income is generated from nonwage activities. Thus, swings in the stock market, coupled with taxpayer decisions on when to realize capital gains and losses, contributed to personal income tax collection volatility.

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

	Fiscal Year 202			Fiscal Year 2023				
Personal income tax components	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2
Withholding	12.1	15.4	12.9	7.5	3.1	(0.6)	0.3	3.8
Estimated payments	(34.2)	33.5	16.4	(5.9)	(18.4)	(16.2)	(44.6)	(44.5)
Final payments	(81.0)	44.7	45.2	41.3	31.0	53.9	(1.8)	(40.1)
Refunds	(39.4)	20.7	12.1	12.7	80.7	96.7	28.2	1.7
Total	(17.5)	19.0	17.7	14.0	(1.6)	(6.0)	(18.5)	(27.6)

Source: Individual state data, analysis by the author.

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

Personal income tax collections declined steeply in the second quarter of 2020 and soared in the third quarter of 2020, largely because of delayed income tax due dates at the outset of the COVID-19 pandemic. That pattern reversed in 2021, resulting in dramatic year-over-year growth in the second quarter but corresponding declines in the third quarter. Year-over-year growth in overall personal income tax revenues was strong in the first and second quarters of 2022, largely related to elevated inflation, which led to bracket creep in some states. However, personal income tax revenues declined in each single quarter of fiscal year 2023, largely because of stock market volatility. In addition, the declines are also partially due to newly enacted pass-through entity taxes that shifted revenues from personal income taxes to corporate income taxes in some states. Finally, weakness in personal income tax revenues was also caused by personal income tax rate cuts in several 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.

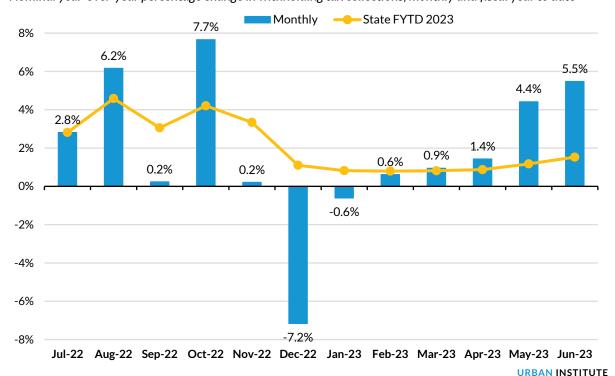
Table A4 shows year-over-year nominal growth in withholding for the past eight quarters for all states with a broad-based personal income tax. The strong growth in average wages as well as people taking higher-paying jobs led to stronger withholding tax revenue collections in fiscal year 2022. In

addition, heightened inflation 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 exceptionally strong growth observed throughout fiscal year 2022, withholding tax collections weakened substantially in fiscal year 2023. Year-over-year growth in withholding was 3.8 percent in nominal terms and 0.3 percent in real terms in the second quarter of 2023. In the second quarter of 2023, all regions, except the Southwest, reported year-over-year growth in nominal withholding. The New England region reported the strongest year-over-year growth at 7.1 percent, while the Southwest region experienced a decline of 5.1 percent.

Thirty-four of 41 states that levy tax on personal income reported growth in withholding in the second quarter of 2023 compared with a year earlier. Growth rates ranged from 0.8 percent in Missouri to 20.9 percent in North Dakota. Seven states reported year-over-year declines in withholding in the second quarter of 2023, with the largest declines observed in Arizona (16.5 percent) and lowa (13.0 percent), primarily attributed to income tax rate cuts.

FIGURE 3
Withholding Was Volatile Throughout Fiscal Year 2023
Nominal year-over-year percentage change in withholding tax collections, monthly and fiscal year to date



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

Notes: FYTD = fiscal year to date.

Figure 3 shows monthly and fiscal year-to-date nominal growth rates in withholding between July 2022 and June 2023, which corresponds to state fiscal year 2023 in 46 states. 6 Monthly data should be viewed with caution because they may include one-time payments or a given month may have fewer tax processing days than the same month in the prior year.

Withholding showed large volatility throughout fiscal year 2023, showing strong year-over-year growth in August 2022 and October 2022 and steep decline in December 2022, which was likely the result of reduced bonus payments compared to December 2021.

Growth in withholding for state fiscal year 2023 was 1.5 percent in nominal terms. States collected around \$431 billion in withholding revenues in fiscal year 2023. Thirty-four states reported year-over-year growth in withholding tax revenues in the fiscal year 2023, while seven states (Arizona, Arkansas, California, Iowa, Louisiana, New York, and Wisconsin) reported declines. Declines in California were largely caused by the sharp drop-off in salary bonuses and in initial public offerings activity. The declines in the rest of the states were largely due to income tax rate cuts.

Estimated Payments

Higher-income taxpayers (and self-employed taxpayers) 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.

In this report, we present estimated payments for June 2023, which corresponds to the second estimated payments for tax year 2023, as well as combined estimated payments for the April through June 2023 period, corresponding to the first two estimated payments for tax year 2023 (table A5).

The declines were widespread across the states. In the 38 states with complete data, the median second estimated payments for tax year 2023 (filed in June 2023) declined sharply by 23.8 percent from the previous year, in contrast with the 17.3 percent growth observed in the median second estimated payment for tax year 2022. Estimated payments in the April through June 2023 period saw a year-over-year decline of 44.5 percent, with the median state reporting a 27.2 percent decrease. All 38 states reported year-over-year declines in estimated payments both for the second estimated payment and for the first and second estimated payments combined. A significant decline was expected, primarily due to the poor stock market performance in 2022 and 2023, reduced capital gain realizations, and shifts of some partnership income to the entity level.

The largest decline in estimated payments was in California, where estimated payments decreased by \$7.3 billion or 69.1 percent in the April through June 2023 period compared with the same period a year earlier. The steep decline in California is partly caused by the weak stock market but also due to the delayed income tax filing deadline because of severe weather. It is likely that many Californian taxpayers chose to delay their estimated income tax payments.

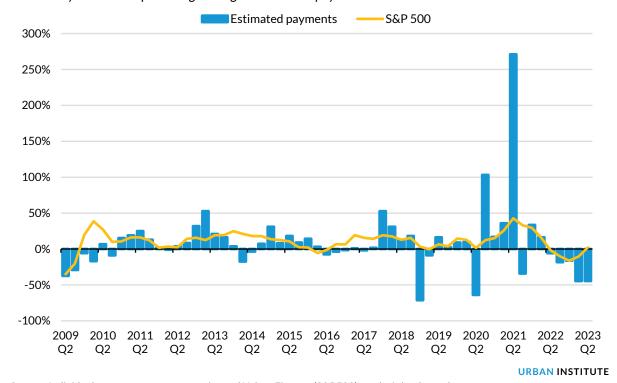
Figure 4 shows year-over-year quarterly percentage change in estimated payments and S&P 500 Index for the past 15 years. The longer-term trends indicate substantial volatility in estimated payments, which is partially caused by volatility in the stock market as well as by taxpayer responses to actual and expected federal and state tax policy changes, which affect timing of the capital gains realizations.

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 growth in the stock market in 2022. Both estimated payments and the stock market increased in the first quarter of 2022 but declined in the second, third, and fourth quarters of 2022. Both the stock market and estimated payments also declined in the first quarter of 2023. Although the stock market slightly improved in the second quarter of 2023, estimated payments saw significant declines.

FIGURE 4

Large Volatility in Estimated Payments

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



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

Final Payments

Final tax payments typically account for 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 due to the April 15 personal income tax filing deadline. Final payments accounted for 33.7 percent of all personal income tax revenues in the second quarter of 2022 and 27.8 percent in the second quarter of 2023.

Table A6 shows year-over-year nominal growth rates in final payments for the April through June period of 2022 and 2023. Year-over-year growth in final payments was robust for the April through June 2022 period, at 41.8 percent. All states but New Mexico reported growth in final payments for April-June 2022 compared with a year earlier, with 32 states reporting double-digit percentage growth.

Final payments fell sharply, by 39.4 percent, in April through June 2023 compared with the same period in 2022; the median state saw a 33.5 percent decline. Thirty-six states reported year-over-year declines in final payments in the April-June 2023 period. While most states anticipated a drop in personal income tax final payments, the actual year-over-year declines were more severe than anticipated, creating a downward pressure for fiscal year 2023 personal income tax revenues.

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 1.7 percent in the second quarter of 2023 compared with the same quarter in 2022. In total, states paid out \$0.6 billion more in refunds in the second quarter of 2023 than in the same quarter in 2022. Overall, 30 states paid out more in refunds in the second quarter of 2023 than in the second quarter in 2022. These larger amounts in part reflect less tax liability but also include rebates based on income tax filings. Officials in several states used budget surpluses to issue rebate checks to their residents to help offset the high inflation rate and these rebates were classified as income tax refunds in some states. In addition, the increase in refunds is in part due to income tax rate reductions enacted in several states.

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 2023.

Actual personal income tax collections in the second quarter of 2023 were higher than forecasted in 12 of 24 states, with an average forecast overestimate of 30.2 percent and a median overestimate of 0.3 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 forecasted revenues depends on the forecast date. In addition to the timing of the forecasts, the considerable variance between actual and forecast revenues in recent quarters also reflects the uncertainty generated by current global geopolitical crises, elevated inflation, federal monetary policy actions, and state fiscal policy actions.

April revenues are critical for understanding what annual state personal income tax revenues will look like and their connection to underlying economic conditions. While April surprises are not uncommon, the sharp decline in personal income tax revenue collections this April was largely expected, as it reflects the comparison to the unusually strong base. The weakening in state personal income tax revenues is also caused by the weak stock market and widespread income tax rate cuts over the past two years. With their budgets buoyed by federal fiscal support and robust revenue growth in fiscal years 2021 and 2022, 13 states cut personal income tax rates for tax year 2022 and 17 states cut

personal income tax rates for tax year 2023. These tax cuts will lead to further fluctuations in personal income tax revenue collections in the coming months.

TABLE 3
Actual versus Forecasted State Personal Income Tax Revenues

Stata	2022 Q2 actual	2023 Q2 actual	2023 Q2 forecast	Percent change, 2023 Q2 vs	Percentage variance, 2023 Q2 actual	Forecast
State Median	(\$ millions)	(\$ millions)	(\$ millions)	2022 Q2 -22.1%	from forecast -0.3%	date
	¢440.400	¢70.054	¢11015/	-22.1% -33.9%	-0.3% -30.2%	
Average	\$119,438	\$78,954	\$113,156			l 22
Arizona	2,992	1,262	1,497	(57.8)	(15.7)	Jun-22
Arkansas	1,260	803	749	(36.2)	7.3	Nov-22
California	44,523	22,486	49,334	(49.5)	(54.4)	May-22
Colorado	4,488	2,883	2,803	(35.8)	2.9	Mar-23
Idaho	1,030	780	790	(24.3)	(1.2)	Jul-22
Indiana	3,414	2,634	2,619	(22.9)	0.6	Apr-23
Kansas	1,902	1,412	1,505	(25.7)	(6.2)	Nov-22
Maine	1,028	806	768	(21.6)	4.9	May-23
Massachusetts	8,660	6,765	7,912	(21.9)	(14.5)	Jan-23
Minnesota	5,769	4,832	4,683	(16.2)	3.2	Feb-23
Mississippi	922	734	795	(20.4)	(7.7)	Nov-21
Montana	832	752	693	(9.6)	8.4	Nov-22
Nebraska	1,176	914	958	(22.3)	(4.6)	Apr-23
New Mexico	689	870	896	26.2	(2.9)	Dec-22
New York	21,639	14,538	20,754	(32.8)	(30.0)	Jan-23
North Dakota	221	190	99	(14.1)	92.5	Aug-21
Ohio	3,706	3,333	3,154	(10.1)	5.7	Jul-22
Oklahoma	1,110	1,043	919	(6.0)	13.5	Feb-22
Pennsylvania	6,900	5,635	6,086	(18.3)	(7.4)	Jun-22
Rhode Island	711	524	506	(26.3)	3.6	Nov-22
South Carolina	2,158	1,288	1,410	(40.3)	(8.6)	May-23
Vermont	547	400	453	(27.0)	(11.8)	Jul-22
West Virginia	862	858	632	(0.5)	35.9	Jan-22
Wisconsin	2,899	3,212	3,144	10.8	2.2	May-23

Source: Individual state data, analysis by the author.

Corporate Income Taxes

Corporate income tax revenues showed strong growth throughout 2022, but the picture for corporate income tax revenues was more mixed in the first and second quarters of 2023. Total state corporate income tax revenues declined 10.8 percent in nominal terms and 13.8 percent in real terms in the second quarter of 2022 relative to a year earlier (table A1). However, that decline was largely driven by steep declines in California, which delayed its income tax filing deadline to October 2023. If we exclude California, corporate income tax revenues for the rest of the nation actually increased 2.8 percent in nominal terms. The median state reported a 0.1 percent increase in nominal terms. Still, the average quarterly year-over-year growth rate in state corporate income tax collections for fiscal year 2023 was negative 3.7 percent in nominal terms and negative 8.9 percent in real terms.

State corporate income tax revenue is highly volatile because corporate profits and the timing of tax payments can vary and shift across quarters. Further, most states collect a small share of state revenues from corporate taxes and can therefore experience large fluctuations in percentage terms with little overall budgetary impact.

The Far West, Great Lakes, and New England regions reported year-over-year declines in state corporate income tax revenue collections in the second quarter of 2023, while the rest of the regions reported growth. The Rocky Mountain region saw the strongest increase, at 16.1 percent, followed by the Plains region, at 16.0 percent. The Far West region saw the steepest year-over-year decline in corporate income tax revenues, at 36.8 percent, driven by steep declines in California.

Twenty-two states reported year-over-year growth in corporate income tax collections, while another 22 states reported declines (table A2). The strongest growth in dollar value was in Florida, where corporate income tax revenues increased by \$0.7 billion, or 36.7 percent, in the second quarter of 2023 compared with the same quarter in 2022. The steepest decline in dollar value was in California, where corporate income tax revenues declined by \$6.8 billion, or 38.5 percent.

To assess the strength of corporate income tax revenues, we also examined trends for fiscal year 2023. Year-over-year nominal growth in state corporate income tax revenues was negative 6.3 percent for fiscal year 2023, with a median state growth of 5.8 percent. Thirty states reported year-over-year growth, while 15 states reported declines in nominal terms (table A3).

Before the COVID-19 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 overall growth after the initial shock of the pandemic, thanks in part to federal COVID relief. Now we are seeing a reversal of that trend. According to data from the Bureau of Economic Analysis, US corporate profits declined by \$88 billion, or 2.7 percent, in the second quarter of 2023 compared with the same quarter of 2022.9 Declines in corporate profits were particularly steep in the financial sector, which suffered a 15.3 percent year-over-year decline in corporate profits in the second quarter of 2023.

The future of corporate income tax collections remains unpredictable, driven in part by the potential for federal policy changes following the 2024 presidential elections. Furthermore, in an attempt to curb inflation, the Federal Reserve raised interest rates. According to the Conference Board's survey, the Consumer Confidence Index declined in October, marking the third consecutive monthly decline. Pessimism in consumer confidence is due to rising prices, higher interest rates, political instability, and concerns over new wars and conflicts. ¹⁰

General Sales Taxes

State general sales tax collections increased by 2.0 percent in nominal terms but declined by 1.5 percent in real terms for the second quarter of 2023 compared with the same period in 2022 (table A1). Growth in the median state was 1.9 percent in nominal terms. The average quarterly year-over-year growth rate in state general sales tax collections for fiscal year 2023 was 6.4 percent in nominal terms and 0.8 percent in real terms.

Sales tax collections declined in the Far West and Rocky Mountain regions but increased in the rest of the regions for the second quarter of 2023 compared with the same period in 2022. The Southwest region reported the largest average year-over-year growth at 8.1 percent, while the Far West and Rocky Mountain regions reported declines of 0.9 and 0.4 percent, respectively (table A2).

Thirty-three of 45 states with broad-based sales taxes reported year-over-year growth in sales tax collections for the second quarter of 2023, while 12 states reported declines. North Dakota saw the strongest year-over-year growth in sales tax revenues at 15.6 percent, while Louisiana reported the steepest decline at 11.1 percent.

State sales tax revenues increased by 6.2 percent in nominal terms in fiscal year 2023, compared with fiscal year 2022 (table A3). All states reported year-over-year growth in fiscal year 2023, with seven states reporting double-digit growth.

Overall growth in sales tax revenues weakened substantially in the first half of 2023. Strong growth in general sales taxes during 2022 was driven partly by price increases from high inflation. Yet, it seems consumers have adjusted their spending habits, reducing purchases because of persistent high inflation and falling real wages. During the COVID-19 pandemic, consumers shifted purchases from services to physical goods, but recent spending trends suggest a return to prepandemic patterns.

Many state officials have expressed concerns about the sales tax performance over the longer run, especially as 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. Instead, states should consider modernizing their tax structures and taxing services to better reflect the contemporary economy. Expanding the taxation of services would boost state revenues and provide additional funding for essential services.

Motor Fuel Taxes

Motor fuel tax collections increased 8.1 percent in nominal terms and 4.4 percent in real terms for the second quarter of 2023 compared with the same period in 2022 (table A1). Year-over-year growth in the median state was much weaker, at 1.7 percent in nominal terms. The average quarterly year-over-year growth rate in state motor fuel tax collections was 0.7 percent in nominal terms and negative 4.6 percent in real terms in fiscal year 2023.

All regions reported year-over-year growth in motor fuel tax revenue collections during the second quarter of 2023. The Southeast region reported the strongest growth at 18.3 percent while the Plains and Southwest regions had the weakest average growth at 1.5 percent each.

Forty-one states reported year-over-year growth in motor fuel sales tax collections for the second quarter of 2023, while 9 states reported declines (table A2). The largest year-over-year decline was in Massachusetts, with a 36.9 percent drop in motor fuel sales tax collections. Georgia saw the strongest year-over-year growth, largely due to a weak base for comparison.

State motor fuel sales tax revenues increased 0.7 percent in fiscal year 2023 compared with fiscal year 2022; the median state saw 0.8 growth (table A3). In fiscal year 2023, thirty states reported year-over-year growth in motor fuel sales tax revenue collections, while twenty states reported declines.

Enacted gas tax holidays were anticipated to result in a temporary reduction of motor fuel sales tax revenues. ¹¹ The growth observed in the second quarter of 2023 signifies a reversal of the earlier temporary decline. States that enacted gas tax holidays include Connecticut (from April 1, 2022, through December 31, 2022), Florida (for the month of October 2022), Georgia (from March 18, 2022, through January 11, 2023), Maryland (from March 18, 2022, through April 16, 2022), and New York (from June 1, 2022, through December 31, 2022). Additionally, several states, such as Colorado, Illinois, and Kentucky, temporarily suspended gas tax increases, which also had a detrimental effect on motor fuel sales tax revenue collections.

Changing fuel prices, general increases in fuel efficiency, purchases of electric or hybrid vehicles, 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.¹²

Gas and oil prices have increased substantially in the past year. The high prices are largely benefiting 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 a variable tax rate and that did not enact gas tax holidays or suspend motor fuel tax rate adjustments.

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 present year-over-year growth rates for a four-quarter moving average of inflation-adjusted revenues at the national level. In the second quarter of 2023, states collected \$77.1 billion from these smaller tax sources, constituting approximately 19.1 percent of total state tax collections.

Compared with major tax sources, revenues from smaller state taxes have seen less volatility. The four-quarter moving average of inflation-adjusted revenues from smaller state tax sources showed a 1.8 percent decline for the second quarter of 2023 compared with the same quarter in 2022. State property taxes, which represent a small portion of overall state tax revenues, declined 2.1 percent. Tax revenues from tobacco product sales declined 12.1 percent, tax revenues from alcoholic beverage sales declined 1.9 percent, and revenues from motor vehicle and operators' licenses declined 2.4 percent. Finally, revenues from all other smaller tax sources declined 0.7 percent.

Preliminary Review of State Tax Revenues in the Third Quarter of 2023

The Urban Institute regularly collects monthly state tax revenue data for all states. Preliminary data from 46 states show year-over-year declines in nationwide state tax revenue collections in the third quarter of 2023, marking the fourth quarterly decline in nominal terms. However, this decline has significantly eased. Nominal state tax revenue collections declined by 1.2 percent in the third quarter of 2023 compared with the same period in 2022, primarily due to declines in personal income tax revenues. The median state reported a 0.2 percent growth (table A9). State tax revenues increased in 24 states in nominal terms, while 22 states reported year-over-year declines for the third quarter of 2023.

Personal income tax collections decreased by 3.0 percent in the third quarter of 2023 compared with the same period a year earlier. The median state reported a 0.8 percent decline in nominal terms. According to preliminary data, 22 states reported year-over-year declines in personal income tax

revenues in the third quarter of 2023, with six states reporting double-digit declines. Overall, it appears that growth in withholding has moderated, partly due to personal income tax rate cuts in several states. Additionally, growth in estimated payments has substantially weakened in recent quarters, indicating that upper-income taxpayers reduced their tax payments in response to stock market declines and lower capital gain realizations.

Year-over-year growth in state corporate income tax revenues was 2.1 percent in the third quarter of 2023; growth in the median state was 2.7 percent. Large variations were observed across the states, with corporate income tax revenues increasing in 22 states, 12 of them reporting double-digit growth. Conversely, 21 states reported declines in corporate income tax revenues, with nine states reporting double-digit declines. The steepest decline was in Alaska, where corporate income tax revenues decreased by 50.4 percent in the third quarter of 2023 compared with the same quarter in 2022.

Finally, state general sales tax collections increased 1.5 percent in the third quarter of 2023 compared with the same quarter in 2022; growth in the median state was 1.6 percent. Twenty-nine states reported growth in sales tax collections, while 11 states reported declines.

Looking ahead, state tax revenues will likely show continued volatility in the short term due to uncertainties in the economy and the implications of both state policy decisions and federal monetary policies.

Previously, we warned that robust revenue growth observed in fiscal years 2021 and 2022 was in part due to a temporary boost in select economic drivers, including a soaring stock market, increased capital gains realizations, and a sharp increase in initial public offerings, all of which have substantially weakened in the recent months. Furthermore, several states enacted tax cuts in the past two years (Auxier and Weiner 2023). Depending on their size and structure, these tax cuts could leave some states with budget holes in the coming fiscal years as temporary federal aid funds diminish and the strength of the economy wanes. These tax cuts can also exacerbate the risk of structural deficits, leading states to either reverse earlier tax cuts or raise other taxes or cut funding for services to balance budgets (Lazere 2022).

Factors Driving State Tax Revenues

Tax revenues vary across states and time because of three major factors: changes in the economy (which often differ from state to state), the interaction of economic changes with a state's specific 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

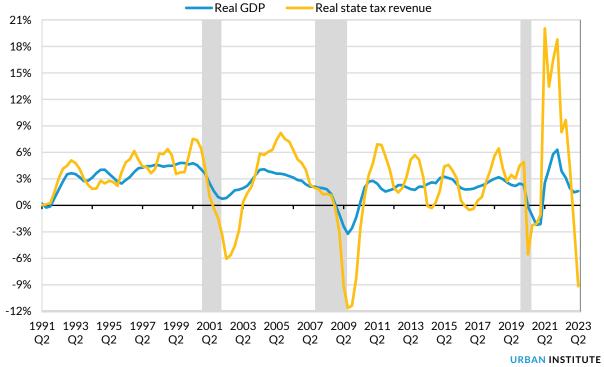
In general, total state tax revenues rise when the state's economy grows, income taxes grow when resident incomes rise, sales taxes rise with increased consumer purchase of taxable items, and property taxes increase with house prices. However, major events like the COVID-19 pandemic and the federal and state policy responses to it can alter these 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 real GDP weakened in the first half of 2023, while real state revenues saw steep declines. Year-over-year growth for the four-quarter moving average was 1.6 percent in real GDP and negative 9.1 percent in real state tax revenues in the second quarter of 2023.

However, 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 due to changes in state tax rates and states' growing reliance on income taxes, some of which are progressive and dependent on volatile non-wage income sources, such as stock options and capital gains. This was particularly true during the COVID-19 pandemic: the stock market soared and led to larger capital gains realizations and increases in nonwithholding income tax payments. However, after soaring for two years, the stock market declined in 2022 and the first half of 2023. The average annual change for the S&P 500 index was negative 4.1 percent in calendar year 2022, which is in sharp contrast to average annual growth of 32.8 percent in calendar year 2021.

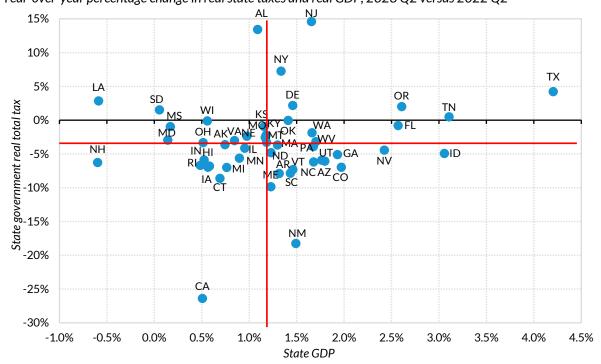
FIGURE 5
State Tax Revenue Is More Volatile Than the Economy
Year-over-year percentage change in real state taxes and real GDP



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 2023 compared with the second quarter in 2022. By this measure, real state GDP increased in 48 states, while real state tax revenues increased in only 10 states. The year-over-year change in real state GDP ranged from 4.2 percent in Texas to negative 0.6 percent in Louisiana; the change in real state tax revenues ranged from 27.9 percent in Wyoming to negative 26.4 percent in California. Large swings in Wyoming's and other energy-dependent states' revenue collections reflect volatile oil prices (Dadayan and Boyd 2016). In addition, the relationship between economic growth and revenue growth was also impacted by state tax cuts over the last two years.

FIGURE 6
Growth Disparity: State Tax Revenues versus State GDP
Year-over-year percentage change in real state taxes and real GDP, 2023 Q2 versus 2022 Q2



URBAN INSTITUTE

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 median. Wyoming is an outlier and is excluded from the figure.

State Unemployment and Employment

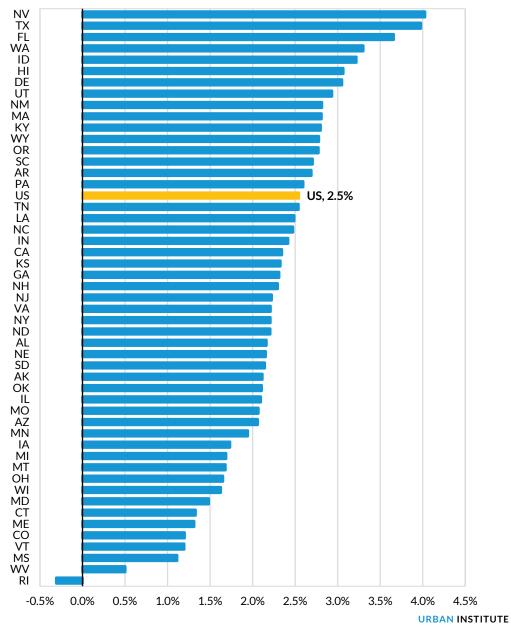
The unemployment rate for the nation averaged 3.5 percent in the second quarter of 2023. Unemployment rates ranged from 1.9 percent in South Dakota to 5.4 percent in Nevada for the second quarter of 2023, although unemployment rates varied for different socioeconomic and demographic groups in each state. According to the latest data, the national unemployment rate increased to 3.7 percent in the third guarter of 2023.

Nationwide employment increased 2.5 percent in the second quarter of 2023 compared with the same quarter in 2022 (figure 7). All states but Rhode Island reported year-over-year growth in employment in the second quarter of 2023, but at the same time, 12 states reported lower employment compared with the second quarter of 2019. Year-over-year growth in employment ranged from negative 0.3 percent in Rhode Island to 4.0 percent in Nevada for the second quarter of 2023.

FIGURE 7

Continued Employment Expansion in the Second Quarter of 2023

Year-over-year percentage change in employment, 2023 Q2 versus 2022 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 2023, state and local governments employed around 123,000 fewer people than they did before the COVID-19 pandemic, despite having 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 addition, 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, current employment numbers are now above prepandemic levels, but there are still large variations across different sectors and industries. The share of workers employed declined dramatically for the leisure and hospitality sector, which as of September 2023 employed around 242,000 fewer people than before the COVID-19 pandemic. On the other hand, the job market thrived for the trade, transportation, and utilities sector, which as of September 2023 employed around 1.1 million more people than before the pandemic.

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 robust growth during the COVID-19 pandemic, but this growth has been tapering off in the first half of 2023. House prices appreciated 10.0 percent for the second quarter of 2023 compared with a year earlier; year-over-year growth in local property taxes was 7.5 percent for the same period, based on four-quarter moving averages. Despite the strength in house prices, local government property tax revenues fluctuated substantially since the pandemic, likely because of declines in commercial property tax revenues caused by the pandemic and the increase in remote work.

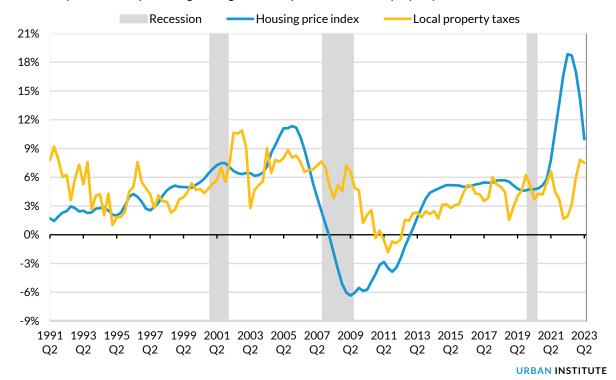
Figure 9 shows year-over-year nominal percentage change in house price indexes in the second quarter of 2023 for all states. House price indexes increased in 42 states but declined in eight states for the second quarter of 2023 compared to a year earlier, with changes ranging from a 3.4 percent decline in Idaho to a 10.9 percent increase in Vermont. Year-over-year growth for the nation in the second

quarter of 2023 was 4.5 percent, marking a significant slowdown compared to the 8.1 percent growth observed in the first quarter of 2023.

FIGURE 8

Housing Prices Skyrocketed During the Pandemic but Growth is Moderating Now

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



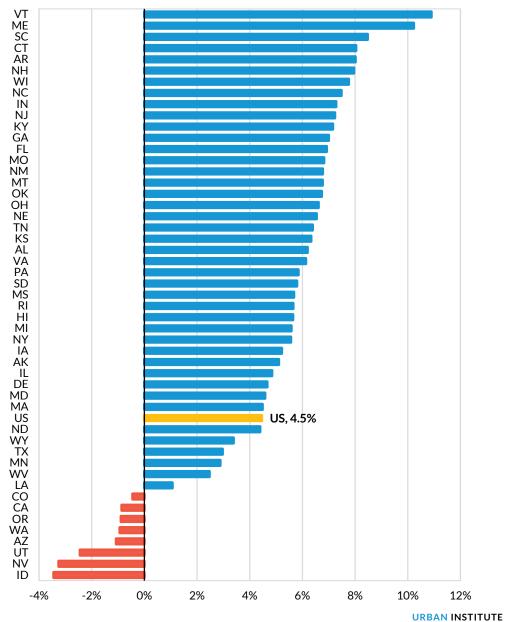
Sources: US Census Bureau (property taxes) and Federal Housing Finance Agency (house price indexes), analysis by the author. **Notes:** Year-over-year change is the percentage change of four-quarter moving averages.

The COVID-19 pandemic generally did not negatively affect residential real estate property values. In fact, housing markets experienced a boost as demand for new homes exceeded supply during the initial months of the pandemic (Duca and Murphy 2021). In contrast, the pandemic's impact on commercial real estate property values, and subsequently, commercial property tax revenues, has been negative and remains uncertain.

Forecasting the long-term impact of the COVID-19 pandemic on residential real estate and commercial properties remains challenging, given the uncertainty surrounding the persistence of remote work patterns amid the broader economic transition to prepandemic norms. In addition, it is also unclear how much the Federal Reserve Board's raising interest rates will continue to affect housing markets. Higher borrowing costs for mortgages have weakened home sales as interest rates increased. We could see a continued weakening in residential property values and associated property taxes, though this could be mitigated if mortgage interest rates stabilize or fall. The Fannie Mae Home

Purchase Sentiment Index reflects a lack of consumer confidence in the housing market, primarily driven by concerns related to housing affordability, economic uncertainty stemming from increased inflation, elevated housing costs, and rising mortgage rates. ¹³ The future of commercial property values and nonresidential property tax revenues is even less clear. As business leases come due, many companies are reevaluating their office space needs in terms of both size and location. This has resulted in a rise in commercial property vacancies in numerous urban centers.

FIGURE 9
Growth in Housing Prices Weakened in the Second Quarter of 2023
Year-over-year percentage change in house prices, 2023 Q2 versus 2022 Q2



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

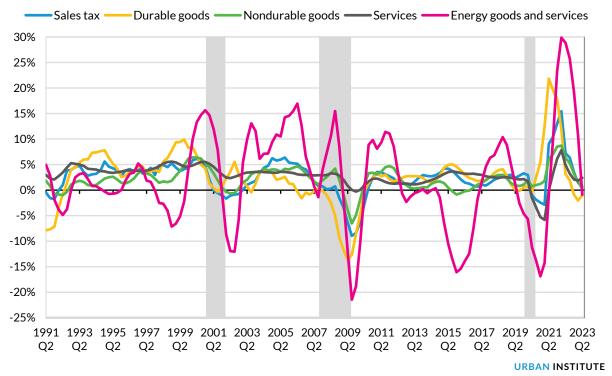
Personal Consumption Expenditures

"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.

FIGURE 10

Continued Weakness in Spending on Durable Goods in the Second Quarter of 2023

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



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 COVID-19 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 restrictions caused by the pandemic. As shown in figure 10, year-over-year spending on services increased an average 2.4 percent in the second quarter of 2023. Spending on both durable and nondurable goods increased significantly throughout the COVID-19 pandemic. However, this growth has substantially weakened since the second quarter of 2022. Year-over-year spending on nondurable

goods increased 0.2 percent, while spending on durable goods declined 1.0 percent in the second quarter of 2023.

Spending on gasoline and energy goods represents about one-fifth of total spending on nondurable goods. As shown in figure 10, following eight consecutive quarters of contraction, real spending on energy goods and services rekindled growth in the third quarter of 2021, which extended through the first quarter of 2023. The growth in spending on energy goods and services was partly due to the sharp increases in gas and oil prices. However, spending on gasoline and energy goods decreased by 0.9 percent in the second quarter of 2023 compared with the same quarter in 2022, primarily due to the downturn in energy prices.

Tax Law Changes Affecting the Second Quarter of 2023

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 the fiscal year 2023, many in response to surging state revenues.

We present analysis based on data and information retrieved from the National Association of State Budget Officers' Fall 2022 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 often deviate from estimated tax revenues, driven by the performance of underlying economic indicators, and these estimates may not fully account for inflation.¹⁴

During the second quarter of 2023, enacted tax changes were forecasted to decrease state revenues by \$4.7 billion compared with the same period in 2022 (this reflects both tax decreases and increases). ¹⁵ Overall, tax changes were expected to decrease personal income taxes by \$2.6 billion, corporate income taxes by \$1.1 billion, sales taxes by \$422 million, and motor fuel taxes by \$287 million. Other changes to taxes and fees were forecasted to decrease revenues by approximately \$377 million (NASBO 2022). Below, we discuss some of the major enacted tax changes for fiscal year 2023.

The estimated impact of all the enacted tax changes was a projected net decrease of \$16.2 billion in state revenues in fiscal year 2023. In comparison, legislated tax actions in fiscal year 2022 were estimated to decrease state revenues by only \$2.7 billion. California, New York, and Virginia enacted the most substantial tax cuts in terms of total revenue, with estimated net losses of \$4.6 billion, \$3.6 billion, and \$1.4 billion, respectively. However, some smaller states (e.g., lowa and Idaho) enacted tax cuts that were larger as a share of their revenue collections. Not only do these tax cuts 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 2023, 26 states enacted personal income tax and two states enacted increases. The net impact of these legislated tax changes was an estimated decrease of personal income tax revenues by \$8.3 billion. The largest estimated decline was in New York where officials introduced homeowner tax rebate credits for some 2.5 million eligible homeowners. Homeowners of Under this program, qualifying taxpayers will receive higher refund payments. In addition, New York's Governor Hochul accelerated personal income tax cuts for middle-class taxpayers and introduced some other relief measures, including creating new credits or increasing existing tax credits. These tax measures were estimated to decrease New York's personal income tax collections by \$2.9 billion in fiscal year 2023.

Virginia and South Carolina also enacted various laws that were expected to significantly reduce personal tax revenue collections in fiscal year 2023. Officials in Virginia increased the standard deduction from \$4,500 to \$8,000 for single individuals and from \$9,000 to \$16,000 for married individuals filing jointly, provided revenue targets are met (and if not, the standard deduction will increase to \$7,500 and \$15,000, respectively). In addition, Virginia's Governor Youngkin issued income tax rebates and introduced some other measures. ¹⁸ These tax measures were estimated to decrease Virginia's personal income tax collections by \$1.3 billion in fiscal year 2023.

Officials in South Carolina reduced the personal income tax rate from 7.0 percent to 6.5 percent ¹⁹ as well as exempted military retirement pay from income taxes. ²⁰ These tax measures were estimated to decrease personal income tax collections by \$0.7 billion in fiscal year 2023.

Lawmakers in Arkansas cut the top income tax rate from 5.9 percent to 4.9 percent as well as created an "inflationary relief" tax credit for 2022 income taxes.²¹ These tax measures were estimated to decrease personal income tax collections by 0.5 billion in fiscal year 2023.

other states also modified their personal income tax structures, which can have varying 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 (Auxier and Weiner 2023).

Sixteen states enacted corporate income tax decreases and 3 states enacted increases. Legislated tax changes were estimated to decrease aggregate corporate income tax revenues by \$4.0 billion in fiscal year 2023. The largest corporate income tax changes were in California. In 2020, California's Governor Newsom signed a tax bill that suspended the net operating loss deductions for corporations with net income of over \$1 million for tax years 2020 through 2022 as well as limited utilization of

business credits (maximum of \$5 million) for tax years 2020 through 2022. However, on February 9, 2022, Governor Newsom signed a law that among other measures reinstated net operating loss deduction as well as removed the temporary limitation on allowable tax credits. ²³ The net impact of these tax changes pertaining to businesses was an estimated decrease of \$3.5 billion in California's corporate income tax revenues for fiscal year 2023. Several other states modified their corporate income tax structures, with no significant estimated impact.

Nineteen states enacted sales tax decreases and 3 states enacted increases. The net impact of these legislated tax changes was an estimated decrease in sales tax revenues of \$1.6 billion in fiscal year 2023. The most significant legislative changes pertaining to sales tax revenues were in Florida, where sales tax revenues were estimated to decrease by \$0.5 billion. In Florida, Governor DeSantis authorized a substantial tax relief package, which included sales tax holidays for a variety of items including children's books, energy star appliances, fuel, disaster supplies, clothing, and diapers among others. ²⁴ Officials in California partially exempted sales and use tax on the sale, storage, use, or other consumption of diesel fuel effective October 1, 2022, through September 30, 2023. This tax measure is estimated to decrease California's sales tax revenue by \$0.3 billion in fiscal year 2023. ²⁵

Three states—Florida, Georgia, and New York—enacted gas tax holidays, with an estimated net loss of \$1.1 billion in motor fuel sales tax collections for fiscal year 2023. Three states enacted changes for cigarette taxes, two states enacted changes pertaining to gaming taxes, and nine states enacted changes pertaining to fees. However, the estimated revenue effect of these changes was not significant.

Twenty-one states enacted changes for some other type of tax, with an estimated overall decrease of \$1.2 billion in fiscal year 2023. These changes were estimated to decrease state tax revenues in 15 states and increase revenues in 6 states. The most significant legislated changes were in California and Connecticut, where tax measures were estimated to decrease other tax collections by \$0.5 billion and \$0.4 billion, respectively. Officials in California eliminated a cannabis cultivation tax effective July 1, 2022, 26 as well as did not renew a managed care organization tax which expired in December 2022. In Connecticut Governor Lamont enacted various tax measures, including a gas tax holiday, extending a child tax credit, and increasing a property tax credit. 28

Conclusion

State tax revenues have become increasingly volatile in recent years. Early in the COVID-19 pandemic, states were forecasting steep revenue shortfalls for fiscal years 2021 and 2022 (Dadayan 2020a). And state revenues did decline early in the pandemic. But the federal government swiftly provided generous relief packages that injected trillions of dollars into the economy. As a result, states saw surging revenues in fiscal years 2021 and 2022, exceeding projections in most states.

Although state revenue collections exhibited robust growth in fiscal year 2022, with revenue growth being widespread across states and revenue sources, overall state revenue collections significantly weakened in fiscal year 2023. The double-digit state revenue growth witnessed in fiscal year 2022 was driven by volatile sources and linked to temporary factors, including an exceptionally strong stock market, a record number of initial public offerings, elevated inflation, increased spending on taxable goods, and anticipation of potential federal tax hikes (Dadayan 2022a).

States initially projected sustained revenue growth for fiscal year 2023, but many later revised forecasts downward (Dadayan 2023a). Actual revenue collections significantly deteriorated during fiscal year 2023, with 19 states experiencing nominal declines. These declines were predominantly attributed to steep decreases in personal income tax revenue collections, which were, in turn, influenced by the weak stock market and widespread income tax rate cuts. In fiscal year 2023, states collectively enacted net tax cuts amounting to \$16.2 billion, representing the largest nominal reduction in revenues on record.

State revenues are also influenced by a combination of ongoing factors, including ongoing geopolitical crises, inflation, stock market and oil price volatility, federal monetary policy, banking instability, shifts in consumer spending patterns, and natural disasters, among others. As such, states are forecasting substantial weakness in revenue collections for fiscal year 2024 (Dadayan 2023b).

States' fiscal path forward remains highly uncertain, particularly for states that enacted permanent tax rate cuts. Large rainy-day funds could help ease the transition to slower revenue growth. However, if the economy falters and if revenue collections continue to deteriorate, states will be forced to grapple with the need for more revenue or spending cuts in the coming years.

Appendix: Additional Tables

TABLE A1

Quarterly State Government Tax Revenue by Major Tax

	Nominal YOY Percentage Change			Inflation	Real YOY Percentage Change				ge		
Year / quarter	PIT	CIT	Sales	MFT	Total	rate	PIT	CIT	Sales	MFT	Total
Average growth	_	-	•		-				•	=	
FY 2023	(13.5)	(3.7)	6.4	0.7	(3.2)	5.6	(18.2)	(8.9)	0.8	(4.6)	(8.4)
2023 Q2	(27.7)	(10.8)	2.0	8.1	(12.8)	3.5	(30.1)	(13.8)	(1.5)	4.4	(15.7)
2023 Q1	(18.4)	(25.5)	6.1	0.9	(6.8)	5.3	(22.5)	(29.2)	0.8	(4.2)	(11.5)
2022 Q4	(10.5)	11.2	6.5	(3.1)	(0.2)	6.4	(15.9)	4.5	0.1	(8.9)	(6.2)
2022 Q3	2.6	10.4	11.1	(3.3)	7.0	7.2	(4.3)	2.9	3.6	(9.8)	(0.2)
2022 Q2	14.7	35.9	9.1	(1.3)	15.3	7.7	6.6	26.2	1.3	(8.3)	7.1
2022 Q1	24.2	123.3	18.0	10.0	24.3	6.9	16.2	108.9	10.3	2.9	16.3
2021 Q4	28.4	61.1	18.6	8.1	24.2	6.1	21.0	51.8	11.7	1.8	17.0
2021 Q3	(16.6)	(3.0)	12.4	7.7	(0.5)	5.1	(20.7)	(7.7)	6.9	2.5	(5.3)
2021 Q2	75.5	163.0	40.3	27.6	59.3	4.5	68.0	151.8	34.3	22.1	52.5
2021 Q1	18.0	31.2	3.0	(7.3)	9.4	2.6	15.0	27.9	0.4	(9.6)	6.7
2020 Q4	8.9	24.3	3.4	(7.6)	6.1	1.7	7.1	22.3	1.6	(9.2)	4.3
2020 Q3	43.9	61.8	2.8	(4.2)	19.3	1.3	42.0	59.7	1.5	(5.4)	17.7
2020 Q2	(32.9)	(44.3)	(13.4)	(17.9)	(24.9)	0.8	(33.4)	(44.7)	(14.0)	(18.5)	(25.5)
2020 Q1	5.0	(0.8)	3.9	5.2	4.0	1.6 1.5	3.3	(2.3)	2.3	3.5	2.4
2019 Q4 2019 Q3	6.2	18.7 12.7	5.6 7.1	8.3	5.6		4.6	17.0 10.9	4.0 5.4	6.6	4.0
2019 Q3 2019 Q2	4.3 18.8	20.9	2.3	6.0 3.2	5.6	1.6	2.7	18.9		4.4 1.5	3.9
2019 Q2 2019 Q1	(2.4)	40.8	2.3 5.5	3.2 1.8	10.4 2.6	1.7 1.9	16.9 (4.2)	38.1	0.6 3.5	1.5 (0.1)	8.6 0.7
2019 Q1 2018 Q4	(9.2)	12.9	3.3 4.4	6.0	(0.1)	2.2	(11.2)	10.5	2.1	3.7	(2.3)
2018 Q4 2018 Q3	7.9	26.7	6.2	8.8	8.3	2.4	5.3	23.7	3.7	6.3	5.8
2018 Q3 2018 Q2	10.6	17.3	5.3	8.9	8.9	2.5	7.9	14.4	2.7	6.2	6.3
2018 Q2 2018 Q1	15.3	(6.7)	5.0	10.9	8.9	2.3	13.0	(8.5)	2.7	8.7	6.7
2017 Q4	14.9	10.4	4.5	9.7	9.1	1.9	12.7	8.3	2.5	7.6	7.1
2017 Q3	4.6	6.5	3.1	2.0	3.9	1.8	2.7	4.6	1.3	0.1	2.1
2017 Q2	(0.0)	11.7	3.2	5.2	2.3	1.6	(1.6)	10.0	1.6	3.6	0.7
2017 Q1	8.9	(28.0)	2.3	0.9	3.3	2.0	6.7	(29.4)	0.4	(1.0)	1.3
2016 Q4	0.3	(3.3)	1.7	1.2	1.2	1.4	(1.1)	(4.6)	0.3	(0.2)	(0.2)
2016 Q3	2.4	(9.1)	2.7	1.4	1.3	0.9	1.6	(9.8)	1.8	0.5	0.4
2016 Q2	(2.8)	(9.3)	1.2	0.3	(1.6)	0.8	(3.6)	(10.0)	0.3	(0.5)	(2.4)
2016 Q1	1.7	(6.0)	1.9	2.9	1.4	0.8	0.9	(6.7)	1.1	2.1	0.7
2015 Q4	5.1	(9.7)	2.7	3.5	2.3	0.8	4.3	(10.3)	1.9	2.7	1.6
2015 Q3	6.5	0.4	3.5	5.0	4.1	0.8	5.6	(0.4)	2.7	4.1	3.3
2015 Q2	14.0	5.6	3.6	2.5	7.0	1.0	12.9	4.5	2.6	1.5	6.0
2015 Q1	6.9	3.5	5.8	4.3	5.5	0.9	5.9	2.5	4.8	3.3	4.5
2014 Q4	8.4	10.0	6.5	2.4	5.7	1.4	6.9	8.5	5.1	1.0	4.2
2014 Q3	4.4	7.3	6.6	0.6	4.3	1.9	2.5	5.3	4.6	(1.2)	2.4
2014 Q2	(6.7)	(0.3)	4.6	4.0	(1.0)	2.0	(8.5)	(2.2)	2.6	2.0	(2.9)
2014 Q1	(1.3)	7.9	3.0	2.8	0.5	1.7	(2.9)	6.0	1.2	1.1	(1.2)
2013 Q4	1.1	3.7	5.1	3.6	3.1	1.7	(0.6)	2.0	3.3	1.8	1.3
2013 Q3	4.9	2.0	5.5	2.8	5.3	1.6	3.2	0.3	3.8	1.1	3.6
2013 Q2	19.2	8.6	4.6	2.0	10.0	1.7	17.2	6.8	2.8	0.3	8.1
2013 Q1	18.2	9.6	3.9	(1.7)	8.9	1.8	16.0	7.6	2.0	(3.4)	6.9
2012 Q4	10.4	2.7	3.3	1.3	5.6	2.1	8.1	0.6	1.1	(0.8)	3.4
2012 Q3 2012 Q2	4.7 4.7	8.7 1.6	2.3 2.1	2.2 1.7	3.1 3.2	1.8 1.7	2.9 3.0	6.8 (0.0)	0.5 0.5	0.4 0.0	1.3 1.5
2012 Q2 2012 Q1	4.7	4.2	4.6	1.7	3.7	2.0	2.0	2.2	2.6	(0.7)	1.7

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; YOY = year-over-year, FY = fiscal year.

TABLE A2

Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2023 Q2 versus 2022 Q2

State / region	PIT	CIT	Sales	MFT	Total
US (median)	(20.6)	0.1	1.9	1.7	(7.7)
US (average)	(27.7)	(10.8)	2.0	8.1	(12.8)
New England	(21.7)	(5.5)	2.5	8.0	(12.2)
Connecticut	(22.3)	(10.9)	3.1	80.7	(11.3)
Maine	(21.5)	7.9	(3.6)	1.8	(10.2)
Massachusetts	(21.5)	(6.7)	4.2	(36.9)	(15.9)
New Hampshire	1.9	5.2	NA	99.4	15.0
Rhode Island	(20.0)	NM	(3.1)	1.6	(11.7)
Vermont	(27.0)	13.8	5.3	(1.3)	(6.2)
Mideast	(24.3)	1.4	1.8	8.8	(11.3)
Delaware	17.5	7.5	NA	3.1	8.0
Maryland	(10.0)	12.9	(0.0)	1.7	(2.9)
New Jersey	(24.6)	(7.4)	2.2	1.7	(7.6)
New York	(29.5)	0.6	5.2	11.0	(18.3)
Pennsylvania	(19.4)	9.2	(1.9)	12.7	(7.1)
Great Lakes	(11.5)	(6.4)	0.0	4.7	(5.4)
Illinois	(16.1)	(3.3)	0.1	6.5	(7.7)
Indiana	(14.0)	(16.4)	0.5	1.0	(8.3)
Michigan	(16.8)	(9.0)	(4.1)	13.4	(6.7)
Ohio	(9.8)	NA	1.1	2.8	(2.8)
Wisconsin	10.8	(8.7)	3.0	1.1	2.7
Plains	(22.0)	16.0	2.2	1.5	(8.4)
lowa	(25.7)	(3.0)	(3.7)	0.7	(10.6)
Kansas	(25.7)	89.5	(0.5)	1.0	(2.9)
Minnesota	(19.3)	3.2	1.4	4.6	(9.0)
Missouri	(23.6)	21.2	3.8	(5.9)	(12.1)
Nebraska	(22.1)	(14.2)	8.2	18.1	(9.7)
North Dakota	(7.6)	56.3	15.6	2.3	(4.3)
South Dakota	NA (10.7)	(22.0)	4.5	(5.9)	2.5
Southeast	(19.7)	8.5	1.1	18.3	(5.0)
Alabama	(22.6)	(9.2)	1.9	1.2	(9.5)
Arkansas	(46.9)	17.1	9.3	1.7	(10.0)
Florida	NA (O.F. 4)	36.7	1.1	7.5	2.5
Georgia	(25.4)	(0.5)	2.8	431.6	(10.2)
Kentucky	(17.8)	2.9	8.6	8.9	(4.5)
Louisiana	5.8	31.5	(11.1)	26.2	6.7
Mississippi	(20.6)	(0.4)	0.4	18.9	(7.0)
North Carolina	(13.0)	(24.0)	0.3	11.9	(6.9)
South Carolina	(40.3)	1.0	2.7	9.7 0.9	(15.8)
Tennessee	NA (1 (1)	(0.4)	3.0		1.6
Virginia	(16.1)	15.6	(7.0) 3.2	(3.7)	(10.0)
West Virginia	(0.5)	6.9		0.2	(7.2)
Southwest Arizona	(34.0)	12.0	8.1	1.5	(3.4)
	(57.8)	42.1	3.3	1.7	(18.9)
New Mexico	NM (4.6)	(37.1)	5.4	1.7	(10.7)
Oklahoma	(4.6)	(6.8)	3.3	7.5	(6.3)
Texas	NA (22.0)	NA 14.1	9.4	0.5	2.7
Rocky Mountain	(32.8)	16.1	(0.4)	9.8	(15.6)
Colorado	(35.8)	45.6	0.6	13.1	(18.5)
Idaho Montana	(28.4)	(15.6)	(2.0)	(4.6)	(14.1)
Montana	(22.6)	8.5	NA (2.4)	(1.7)	(11.7)
Utah Wasaning	(33.2)	(1.8)	(2.6)	23.0	(20.7)
Wyoming	NA (44.7)	NA (24.9)	9.8	(10.1)	28.1
Far West	(44.7)	(36.8)	(0.9)	2.7	(27.8)

State / region	PIT	CIT	Sales	MFT	Total
Alaska	NA	(46.1)	NA	(11.5)	(57.6)
California	(49.5)	(38.5)	(2.5)	3.3	(34.3)
Hawaii	(18.2)	(2.4)	4.2	1.0	(8.1)
Nevada	NA	NA	1.3	1.7	(6.1)
Oregon	(5.2)	7.2	NA	1.7	(1.6)
Washington	NA	NA	1.3	1.7	0.9

 $\textbf{Source:} \ \mathsf{US} \ \mathsf{Census} \ \mathsf{Bureau} \ (\mathsf{tax} \ \mathsf{revenue}), \mathsf{analysis} \ \mathsf{by} \ \mathsf{the} \ \mathsf{author}.$

 $\textbf{Notes:} \ \mathsf{PIT} = \mathsf{personal} \ \mathsf{income} \ \mathsf{tax}; \\ \mathsf{CIT} = \mathsf{corporate} \ \mathsf{income} \ \mathsf{tax}; \\ \mathsf{MFT} = \mathsf{motor} \ \mathsf{fuel} \ \mathsf{tax}; \\ \mathsf{NA} = \mathsf{not} \ \mathsf{applicable}; \\ \mathsf{NM} = \mathsf{not} \ \mathsf{meaningful}.$

TABLE A3

State Government Tax Revenue Trends in State Fiscal Year 2023

Nominal percentage change July 2022-June 2023 versus July 2021–June 2022

State / region	PIT	CIT	Sales	MFT	Total
US (median)	(4.4)	5.8	6.1	0.8	1.4
US (average)	(15.8)	(6.3)	6.2	0.7	(4.3)
New England	(9.4)	(1.1)	5.8	(7.5)	(3.5)
Connecticut	(9.5)	(5.9)	4.4	(37.6)	(4.0)
Maine	(4.2)	8.5	4.9	(0.1)	0.3
Massachusetts	(10.2)	(0.4)	7.3	(11.6)	(5.1)
New Hampshire	(3.8)	3.9	NA	48.8	2.9
Rhode Island	(8.7)	(6.1)	3.5	0.5	(1.7)
Vermont	(4.6)	24.6	7.2	5.0	1.7
Mideast	(17.6)	10.6	3.8	2.0	(6.5)
Delaware	10.7	12.1	NA	(0.6)	7.6
Maryland	(0.6)	6.8	0.6	11.7	2.1
New Jersey	(9.1)	(3.9)	4.5	1.8	(1.5)
New York	(25.8)	20.5	7.0	(13.3)	(13.9)
Pennsylvania	(2.1)	14.1	0.8	6.1	1.3
Great Lakes	(2.9)	(1.5)	5.1	0.6	0.5
Illinois	(4.3)	4.7	4.8	1.7	0.3
		(20.3)	4.0 5.9	(0.4)	1.0
Indiana	(0.4)		5.9 5.2		
Michigan	(8.7)	(6.3)		2.7	(1.3)
Ohio	0.5	NA (7.4)	4.1	(0.5)	2.0
Wisconsin	2.2	(7.1)	6.8	(0.0)	2.0
Plains	(2.8)	(0.4)	7.2	2.2	2.0
Iowa	(6.0)	9.3	2.2	2.7	(0.8)
Kansas	(6.8)	79.8	2.1	(0.2)	4.3
Minnesota	0.2	(25.6)	10.0	(1.9)	(0.6)
Missouri	(3.0)	21.2	7.5	11.6	4.3
Nebraska	(7.2)	(3.1)	7.8	(2.8)	(0.9)
North Dakota	4.8	41.4	16.8	2.8	13.0
South Dakota	NA	(6.2)	11.4	(4.7)	7.2
Southeast	(6.4)	22.6	6.7	(0.7)	2.1
Alabama	(1.8)	9.7	6.0	1.4	1.6
Arkansas	(22.0)	30.8	8.8	0.5	(0.0)
Florida	NA	46.1	6.7	(0.1)	4.6
Georgia	(7.2)	51.7	8.4	(47.7)	(0.0)
Kentucky	(3.4)	3.0	10.1	3.0	3.1
Louisiana	1.4	18.7	6.1	30.3	8.5
Mississippi	(3.1)	18.5	4.6	5.2	2.7
North Carolina	(4.8)	(0.1)	5.8	7.1	0.7
South Carolina	(15.7)	12.7	6.5	7.0	(2.9)
Tennessee	NM	11.7	7.5	(0.1)	5.9
Virginia	(7.0)	2.6	3.3	13.7	(2.4)
West Virginia	6.4	14.6	5.7	1.1	5.2
Southwest	(12.2)	29.9	10.7	1.6	7.9
Arizona	(30.4)	55.3	8.2	0.7	(3.0)
New Mexico	32.0	30.1	14.7	20.9	20.7
Oklahoma	5.5	(6.6)	6.7	(0.7)	5.3
Texas	NA	(6.6) NA	11.3	0.7	9.9
					0.2
Rocky Mountain	(10.5)	20.8	6.8	2.9	
Colorado	(13.4)	56.4	7.5	6.3	(2.1)
ldaho Mantana	(17.3)	(0.6)	5.5	(1.7)	(2.1)
Montana	(4.2)	5.8	NA 5.2	(0.3)	1.7
Utah	(5.0)	(7.0)	5.3	4.7	(1.2)
Wyoming	NA (20.7)	NA	14.1	(2.2)	34.6
Far West	(30.7)	(33.1)	4.0	1.9	(16.7)

State / region	PIT	CIT	Sales	MFT	Total
Alaska	NA	5.7	NA	2.7	18.3
California	(34.1)	(34.9)	2.7	2.5	(22.6)
Hawaii	(17.6)	0.5	9.9	0.7	(1.8)
Nevada	NA	NA	4.8	7.0	1.2
Oregon	5.6	4.3	NA	0.4	7.4
Washington	NA	NA	5.6	(1.6)	3.6

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.

TABLE A4
State Personal Income Tax Withholding
Year-over-year nominal percentage change

ŕ	State Fiscal Year 2022				State Fiscal Year 2023			
State / region	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2
US (median)	9.3	10.9	12.0	9.8	7.2	6.3	2.4	4.5
US (average)	12.1	15.4	12.9	7.5	3.1	(0.6)	0.3	3.8
New England	9.4	10.3	11.1	6.3	2.5	5.6	4.1	7.1
Connecticut	8.4	8.8	16.3	5.3	(5.8)	7.0	6.4	7.0
Maine	14.8	9.8	18.1	13.3	5.4	8.3	15.1	3.8
Massachusetts	9.3	10.5	7.2	5.6	5.0	4.7	1.5	8.0
Rhode Island	7.7	13.4	11.4	5.8	8.0	2.1	2.4	3.6
Vermont	11.9	15.8	22.5	12.3	13.0	11.3	6.5	5.3
Mideast	11.1	20.0	17.8	7.7	3.5	(1.3)	(1.6)	5.3
Delaware	9.3	113.0	(14.9)	8.2	9.0	9.1	4.2	8.4
Maryland	8.1	7.7	11.8	3.3	4.3	5.1	2.0	9.9
New Jersey	7.6	10.9	10.9	11.3	8.3	5.3	2.4	2.9
New York	14.8	26.3	24.1	8.1	1.3	(7.0)	(4.9)	4.2
Pennsylvania	5.1	18.7	10.6	9.8	5.4	5.6	5.0	4.6
Great Lakes	5.8	10.1	15.8	9.0	4.0	4.5	0.1	5.1
Illinois	5.8	10.1	30.0	18.7	3.6	8.8	(6.4)	1.5
Indiana	2.7	10.5	13.0	15.9	7.0	8.9	4.9	8.7
Michigan	3.5	10.7	9.3	5.6	8.1	3.3	3.5	5.4
Ohio	6.7	8.0	11.1	5.8	6.4	9.1	11.4	6.2
Wisconsin	12.4	11.5	0.3	(7.8)	(8.1)	(11.4)	(3.2)	7.8
Plains	11.0	8.5	13.2	5.9	6.6	7.7	0.4	2.7
lowa	1.2	2.9	9.9	13.3	5.8	9.5	(5.7)	(13.0)
Kansas	11.1	9.7	14.6	8.3	7.3	9.1	3.9	9.3
Minnesota	16.5	7.5	13.4	(1.9)	5.9	6.2	3.3	6.0
Missouri	11.3	12.3	13.0	10.8	6.5	6.4	(2.5)	0.8
Nebraska	7.0	9.8	13.9	9.8	8.4	10.6	2.2	7.0
North Dakota	1.2	11.8	34.4	35.6	17.4	24.8	(7.1)	20.9
Southeast	8.2	13.2	10.1	8.3	6.9	1.9	2.3	1.2
Alabama	10.7	9.3	11.1	13.0	8.4	8.0	6.6	6.9
Arkansas	7.2	9.8	10.7	2.2	2.2	(3.8)	(8.3)	(1.3)
Georgia	4.1	15.5	10.6	10.0	10.1	3.6	7.1	4.7
Kentucky	5.2	10.1	13.3	14.9	8.0	7.5	(1.0)	(6.7)
Louisiana	12.0	12.4	8.0	(2.0)	(5.0)	(15.0)	2.1	4.5
Mississippi	18.7	7.5	11.2	11.8	9.8	7.3	1.2	(2.2)
North Carolina	7.4	15.7	8.4	3.8	1.0	(0.7)	0.7	2.4
South Carolina	10.6	18.7	12.0	13.1	10.4	4.7	(3.0)	(8.9)
Virginia	9.7	10.9	9.4	8.0	9.6	1.8	2.6	2.8
West Virginia	9.3	9.3	10.8	9.7	10.9	8.9	9.5	(0.1)
Southwest	8.1	13.2	12.5	11.3	10.9	5.0	(1.0)	(5.1)
Arizona	11.9	11.9	11.5	14.6	8.1	5.0	(9.3)	(16.5)
New Mexico	3.8	20.2	16.8	10.6	29.3	0.8	11.0	4.6
Oklahoma	4.5	12.0	12.1	6.6	7.2	7.3	6.6	9.2
Rocky Mountain	14.4	12.2	15.8	11.7	8.0	6.5	2.2	3.9
Colorado	11.0	12.2	16.4	10.7	7.3	6.9	2.9	3.6
Idaho	20.0	15.4	13.3	14.0	6.0	3.8	(0.6)	2.4
Montana	16.5	10.5	15.8	13.1	12.1	9.1	5.7	5.3
Utah	18.7	11.4	15.7	12.3	9.0	6.3	1.0	4.5
Far West	21.4	19.9	7.7	5.4	(2.8)	(9.1)	0.1	3.7
California	22.7	21.1	7.0	4.9	(3.9)	(10.8)	(0.3)	3.5
Hawaii	10.5	12.1	12.5	7.4	6.6	9.1	6.0	7.1
Oregon	12.6	10.2	12.5	8.9	4.9	4.5	2.6	4.1

Source: Individual state data, analysis by the author.

TABLE A5
State Personal Income Tax Estimated Payments or Declarations

Year-over-year nominal percentage change

	Tax ye	ear 2022	Tax year 2023		
State	June 2022, 2nd payment	April-June 2022, 1st & 2nd payments	June 2023, 2nd payment	April-June 2023, 1st & 2nd payments	
US (median)	17.3	14.3	(23.8)	(27.2)	
US (average)	(17.2)	(5.9)	(43.9)	(44.5)	
Alabama	7.8	(1.6)	(32.6)	(37.0)	
Arizona	22.2	(5.0)	(43.8)	(42.5)	
Arkansas	15.7	0.2	(54.2)	(56.2)	
California	(33.7)	(39.5)	(72.9)	(69.1)	
Colorado	14.8	67.2	(37.8)	(52.6)	
Connecticut	20.3	1.6	(27.3)	(28.8)	
Delaware	19.9	6.8	(14.9)	(11.5)	
Georgia	29.7	36.0	(37.4)	(34.6)	
Hawaii	6.5	31.1	(31.7)	(26.0)	
Illinois	(8.4)	(24.3)	(24.4)	(26.3)	
Indiana	36.6	32.4	(35.5)	(42.8)	
Iowa	(1.5)	10.3	(16.6)	(22.8)	
Kansas	25.3	11.8	(39.5)	(40.3)	
Kentucky	29.4	50.7	(33.2)	(37.3)	
Louisiana	19.0	43.6	(12.4)	(15.3)	
Maine	16.3	14.1	(7.6)	(13.4)	
Maryland	(13.5)	(4.2)	(10.4)	(0.8)	
Massachusetts	29.7	14.5	(13.4)	(19.7)	
Michigan	(22.0)	(29.7)	(24.1)	(25.4)	
Minnesota	(10.0)	6.8	(17.6)	(39.6)	
Mississippi	3.0	43.7	(27.0)	(37.3)	
Missouri	(6.9)	(13.5)	(14.6)	(25.8)	
Montana	37.6	86.0	(14.2)	(37.2)	
Nebraska	31.2	18.7	(23.2)	(24.2)	
New Jersey	2.5	(9.1)	(22.8)	(25.7)	
New York	(32.6)	5.9	(29.6)	(51.4)	
North Carolina	6.3	(0.7)	(42.0)	(42.1)	
North Dakota	80.5	154.0	(7.2)	(64.0)	
Ohio	16.6	8.3	(11.3)	(4.3)	
Oklahoma	(37.8)	74.1	(18.5)	(26.8)	
Oregon	18.0	37.2	(22.4)	(19.1)	
Pennsylvania	33.8	37.0	(19.0)	(20.7)	
Rhode Island	18.2	8.8	(23.4)	(27.6)	
South Carolina	20.9	20.0	(31.2)	(50.6)	
Vermont	31.4	17.9	(21.4)	(24.8)	
Virginia	25.0	23.9	(30.9)	(37.4)	
West Virginia	39.1	37.1	(29.8)	(19.9)	
Wisconsin	13.7	35.2	(21.9)	(26.3)	

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.

TABLE A6
State Personal Income Tax Final Payments

Year-over-year nominal percentage change

State	April-June 2022 vs April-June 2021	April-June 2023 vs April-June 2022		
US (median)	48.2	(33.5)		
US (average)	41.8	(39.4)		
Alabama	39.0	(36.7)		
Arizona	60.2	(57.4)		
Arkansas	43.8	(61.4)		
California	18.8	(60.0)		
Colorado	50.5	(42.2)		
Connecticut	67.2	(46.0)		
Delaware	49.6	(29.3)		
Georgia	147.9	(51.4)		
Hawaii	24.9	(28.0)		
Idaho	1.2	(34.1)		
Illinois	36.5	(44.6)		
Indiana	57.3	(38.3)		
Iowa	51.0	(18.6)		
Kansas	40.8	(47.5)		
Kentucky	40.6	(19.9)		
Louisiana	61.1	(15.0)		
Maine	57.5	(29.3)		
Maryland	57.3	(29.6)		
Massachusetts	40.9	(44.2)		
Michigan	0.6	(35.7)		
Minnesota	5.2	(27.5)		
Missouri	97.5	(33.3)		
Montana	76.2	(27.9)		
Nebraska	48.1	(29.4)		
New Jersey	46.1	(38.7)		
New Mexico	(47.7)	44.0		
New York	9.5	(35.9)		
North Carolina	48.3	(22.0)		
North Dakota	2.1	63.7		
Ohio	41.2	(14.6)		
Oklahoma	26.3	(15.2)		
Pennsylvania	82.0	(42.0)		
Rhode Island	163.0	(25.9)		
South Carolina	55.2	(33.7)		
Utah	57.1	(50.5)		
Vermont	73.4	(34.2)		
Virginia	54.6	(14.1)		
West Virginia	31.8	9.8		
Wisconsin	5.0	(15.1)		

Source: Individual state data, analysis by the author.

Notes: Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming have no broadbased personal income tax and are not shown in this table.

TABLE A7
States with Pass-Through Entity Elective Tax and Effective Dates

•	
State	Effective date
Alabama	Tax year 2021
Arizona	Tax year 2022
Arkansas	Tax year 2022
California	Tax year 2021
Colorado	Tax year 2022
Connecticut	Tax year 2018
Delaware	N/A
Georgia	Tax year 2022
Hawaii	Tax year 2023
Idaho	Tax year 2021
Illinois	Tax year 2022
Indiana	Tax year 2022
lowa	Tax year 2022
Kansas	Tax year 2022
Kentucky	Tax year 2022
Louisiana	Tax year 2019
Maine	N/A
Maryland	Tax year 2020
Massachusetts	Tax year 2021
Michigan	Tax year 2021
Minnesota	Tax year 2021
Mississippi	Tax year 2022
Missouri	Tax year 2023
Montana	Tax year 2023
Nebraska	Tax year 2018
New Jersey	Tax year 2020
New Mexico	Tax year 2022
New York	Tax year 2021
North Carolina	Tax year 2022
North Dakota	N/A
Ohio	Tax year 2022
Oklahoma	Tax year 2019
Oregon	Tax year 2022
Pennsylvania	N/A
Rhode Island	Tax year 2019
South Carolina	Tax year 2021
Utah	Tax year 2022
Vermont	N/A
Virginia	Tax year 2021
West Virginia	Tax year 2022
Wisconsin	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 broadbased 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

	Property	Tobacco product	Alcoholic beverage	Motor vehicle & operators'	Other	Total nonmajor
Year/quarter	tax	sales tax	sales tax	license taxes	taxes	taxes
2023 Q2	45.070	44.007	40.044	40.005	451001	477.405
collections	\$5,078	\$4,387	\$2,244	\$9,225	\$56,201	\$77,135
(\$ millions)	(0.4)	(40.4)	(4.0)	(0.4)	(0.7)	(4.0)
2023 Q2	(2.1)	(12.1)	(1.9)	(2.4)	(0.7)	(1.8)
2023 Q1	1.0	(13.3)	(3.4)	(4.9)	6.5	2.9
2022 Q4	1.3	(12.5)	(1.4)	(6.2)	9.2	4.6
2022 Q3	1.3	(12.2)	(0.7)	(7.2)	14.5	7.8
2022 Q2	0.7	(9.6)	2.5	(7.3)	18.2	10.3
2022 Q1	2.4	(5.2)	10.4	0.2	22.5	14.7
2021 Q4	2.8	(4.6)	8.7	1.2	19.6	12.9
2021 Q3	4.6	(1.3)	7.8	5.2	14.6	10.7
2021 Q2	5.8	0.8	5.3	7.7	7.6	6.8
2021 Q1	2.1 2.8	(0.7)	(5.5)	(3.1)	(6.0)	(4.4)
2020 Q4 2020 Q3	2.6	0.7	(5.1)	(2.5)	(6.1)	(4.3)
2020 Q3 2020 Q2	0.3	(1.1) (2.5)	(3.3) (2.3)	(3.4) (3.0)	(7.0) (4.8)	(5.1)
2020 Q2 2020 Q1	1.3	(3.1)	(2.3) 2.8	2.0	(4.8) 1.4	(3.8) 1.1
2020 Q1 2019 Q4	0.4	(4.0)	2.0	1.3	1.4	1.0
2019 Q4 2019 Q3	(0.2)	(6.1)	0.3	1.4	3.5	1.9
2017 Q3 2019 Q2	5.4	(7.6)	(1.2)	0.9	4.7	2.8
2017 Q2 2019 Q1	6.5	(5.4)	(0.5)	4.4	5.3	4.0
2017 Q1 2018 Q4	9.1	(5.4)	(1.4)	7.2	5.4	4.7
2018 Q3	8.2	0.9	0.1	4.5	5.3	4.8
2018 Q2	3.7	5.3	1.4	4.8	3.7	3.9
2018 Q1	1.1	4.8	1.2	1.2	2.7	2.5
2017 Q4	(0.5)	6.2	3.0	(0.2)	2.0	1.9
2017 Q3	(1.2)	3.6	3.0	3.8	0.5	1.2
2017 Q2	0.5	1.9	2.3	1.6	(0.3)	0.3
2017 Q1	3.1	1.3	1.1	2.4	(1.6)	(0.3)
2016 Q4	2.4	1.5	0.5	2.8	(1.6)	(0.3)
2016 Q3	5.0	1.3	0.8	1.1	(2.4)	(0.9)
2016 Q2	4.2	0.7	1.7	2.6	(1.7)	(0.3)
2016 Q1	5.1	1.8	2.7	2.3	(1.3)	0.1
2015 Q4	8.8	0.2	1.6	2.9	(0.9)	0.5
2015 Q3	6.2	(0.7)	1.4	1.7	(0.3)	0.5
2015 Q2	5.3	(2.0)	1.7	1.3	(0.6)	0.1
2015 Q1	4.4	(3.9)	(0.1)	1.3	(0.3)	(0.0)
2014 Q4	0.9	(4.6)	1.6	(0.6)	(1.8)	(1.6)
2014 Q3	3.3	(3.6)	1.4	0.7	(1.6)	(1.0)
2014 Q2	5.3	0.6	0.0	1.2	(0.4)	0.3
2014 Q1	5.2	1.9	1.4	0.9	0.5	1.0
2013 Q4	4.9	3.7	(0.7)	0.4	3.3	2.9
2013 Q3	3.3	3.6	(2.4)	(0.5)	3.7	2.9
2013 Q2	(0.3)	(1.0)	(1.8)	(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	(9.1)	(3.3)	3.5	3.2	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

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

TABLE A9
Preliminary State Government Tax Revenues in the Third Quarter of 2023, by State
Nominal percentage change, 2023 Q3 versus 2022 Q3

State/region	PIT	CIT	Sales	Total
US (median)	(0.8)	2.7	1.6	0.2
US (average)	(3.0)	2.1	1.5	(1.2)
New England	3.5	(3.1)	0.2	(0.5)
Connecticut	ND	ND	ND	ND
Maine	2.2	(14.2)	3.7	(2.6)
Massachusetts	4.6	(5.4)	(1.4)	0.9
New Hampshire	18.5	10.3	NA	5.5
Rhode Island	1.2	14.2	3.1	(9.5)
Vermont	(9.1)	(23.4)	0.9	(4.6)
Mideast	(1.9)	2.0	2.9	(0.9)
Delaware	8.6	(2.1)	NA	3.6
Maryland	4.1	4.6	0.7	4.3
New Jersey	(7.2)	(14.6)	0.3	(5.6)
New York	(2.3)	12.0	5.8	(0.5)
Pennsylvania	(0.4)	4.9	1.3	(0.7)
Great Lakes	3.1	(0.7)	0.7	1.4
Illinois	6.7	(0.1)	2.0	4.2
Indiana	8.3	(13.3)	(0.7)	3.2
Michigan	(6.1)	10.2	(3.3)	(3.2)
Ohio	0.1	NA	4.3	2.0
Wisconsin	2.0	(6.8)	1.7	0.2
Plains	(15.5)	11.6	6.1	(3.3)
Iowa	(14.8)	(18.8)	13.5	(7.4)
Kansas	(4.3)	47.1	8.7	5.1
Minnesota	(25.5)	20.8	1.2	(9.1)
Missouri	(8.8)	(8.9)	15.4	0.3
Nebraska	0.9	2.9	(0.3)	0.4
North Dakota	(43.7)	(2.2)	4.9	13.7
South Dakota	NA	82.5	(8.0)	1.4
Southeast	2.3	3.3	1.5	3.0
Alabama	3.4	3.6	2.7	3.5
Arkansas	(11.3)	5.2	2.8	(8.0)
Florida	NA	7.6	(0.4)	(0.1)
Georgia	(3.5)	2.7	0.0	6.2
Kentucky	10.0	(4.4)	5.5	5.8
Louisiana	(3.9)	4.5	(1.1)	0.2
Mississippi	(7.4)	(13.1)	5.1	(0.6)
North Carolina	2.8	8.3	2.6	2.1
South Carolina	(11.5)	(2.4)	3.0	(6.6)
Tennessee	NA	(4.3)	3.4	1.4
Virginia	18.8	18.7	1.3	14.9
West Virginia	(0.1)	22.4	5.0	(7.1)
Southwest	(19.5)	4.3	3.6	(4.5)
Arizona	(27.4)	11.4	1.6	(8.1)
New Mexico	ND	ND	ND	ND
Oklahoma	(4.1)	(9.9)	1.6	(9.3)
Texas	NA	NA	4.1	(3.2)
Rocky Mountain	(2.9)	36.3	0.3	1.1
Colorado	(5.4)	65.8	1.4	3.1
Idaho	9.2	30.0	(0.2)	1.2
Montana	(5.3)	(11.4)	NA	(11.5)
Utah	(1.2)	(2.8)	(0.6)	1.2
Wyoming	NA	NA	ND	ND
Far West	(6.5)	(5.7)	(1.7)	(5.2)

State/region	PIT	CIT	Sales	Total
Alaska	NA	(50.4)	NA	(64.9)
California	(8.1)	(5.5)	(2.7)	(4.5)
Hawaii	22.4	(18.1)	(0.2)	4.5
Nevada	NA	NA	ND	ND
Oregon	0.5	9.8	NA	(8.2)
Washington	NA	NA	1.2	(8.0)

Source: Individual state data, analysis by the author.

 $\textbf{Notes:} \ \mathsf{PIT} = \mathsf{personal} \ \mathsf{income} \ \mathsf{tax}; \\ \mathsf{CIT} = \mathsf{corporate} \ \mathsf{income} \ \mathsf{tax}; \\ \mathsf{NA} = \mathsf{not} \ \mathsf{applicable}; \\ \mathsf{ND} = \mathsf{no} \ \mathsf{data}.$

Notes

- ¹ 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 2023.
- ² 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.
- ³ The author made several adjustments for the second quarter of 2023 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.
- ⁴ In this report, the author uses US Bureau of Economic Analysis regions as the basis of analysis.
- ⁵ Office of Governor Gavin Newsom, "More Time to File State Taxes for Californians Impacted by December and January Winter Storms," March 2, 2023, https://www.gov.ca.gov/2023/03/02/more-time-to-file-state-taxes-for-californians-impacted-by-december-and-january-winter-storms/.
- ⁶ 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.
- Chas Alamo, "Why Has Income Tax Withholding Lagged, Despite Job Growth?" California Legislative Analyst's Office, November 16, 2022, https://lao.ca.gov/LAOEconTax/Article/Detail/759.
- 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).
- ⁹ "Table 6.16D. Corporate Profits by Industry," US Bureau of Economic Analysis, accessed November 5, 2023, https://apps.bea.gov/iTable/?reqid=19&step=3&isuri=1&1921=survey&1903=239.
- The Conference Board, "US Consumer Confidence Fell Again in October," October 31, 2023, https://www.conference-board.org/topics/consumer-confidence.
- 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.
- ¹² National Conference of State Legislatures, "Variable Rate Gas Taxes," July 14, 2021, https://www.ncsl.org/research/transportation/variable-rate-gas-taxes.aspx.
- ¹³ See "National Housing Survey," Fannie Mae, November 7, 2023, https://www.fanniemae.com/portal/research-insights/surveys/national-housing-survey.html.
- 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 5, 2023, https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-fiscal-pages-covid-edition.
- ¹⁵ Author's analysis of data from National Association of State Budget Officers (2020), table A-1.
- ¹⁶ New York State Department of Taxation and Finance, "Homeowner tax rebate credit (HTRC)," accessed November 5, 2023, https://www.tax.ny.gov/pit/property/homeowner-tax-rebate-credit.htm.

NOTES 51

- New York State Governor Kathy Hochul, "Governor Hochul Announces New Tax Relief for Thousands of Small Businesses and Millions of Middle Class New Yorkers," January 5, 2022, https://www.governor.ny.gov/news/governor-hochul-announces-new-tax-relief-thousands-small-businesses-and-millions-middle-class.
- ¹⁸ Virginia Tax, "New Virginia Tax Laws for July 1, 2022," accessed November 5, 2023, https://www.tax.virginia.gov/news/new-virginia-tax-laws-july-1-2022.
- ¹⁹ South Carolina Department of Revenue, "SC Withholding Tables Adjusted for Tax Cuts," accessed on November 5, 2023, https://dor.sc.gov/resources-site/media-site/Pages/SC-Withholding-tables-adjusted-for-tax-cuts.aspx.
- South Carolina Department of Revenue, "SC Military Retirement Pay Now Exempt From State Income Taxes," accessed on November 5, 2023, https://dor.sc.gov/resources-site/media-site/Pages/SC-military-retirement-pay-now-exempt-from-state-Income-Taxes.aspx.
- Arkansas Senate, "Legislature Cuts Income Taxes for Millions of Arkansans," August 17, 2022, https://senate.arkansas.gov/senate-news/posts/2022/august/legislature-cuts-income-taxes-for-millions-of-arkansans.
- ²² California Legislative Analyst's Office, "The 2020-21 May Revision: Revenue Proposals in the 2020-21 May Revision," May 20, 2020, https://lao.ca.gov/Publications/Report/4238.
- ²³ California Legislative Analyst's Office, "The 2022-23 Budget: Overview of the Governor's Budget," January 13, 2022, https://lao.ca.gov/Publications/Report/4492.
- Florida Governor Ron DeSantis, "Governor Ron DeSantis Signs Largest Tax Relief Package in Florida's History," May 6, 2022, https://www.flgov.com/2022/05/06/governor-ron-desantis-signs-largest-tax-relief-package-in-floridas-history.
- ²⁵ California Department of Tax and Fee Administration, "Tax Information Bulletin, Publication, 388," September 2022, https://www.cdtfa.ca.gov/formspubs/sept22tib.pdf.
- ²⁶ California Department of Tax and Fee Administration, "Tax Guide for Cannabis Businesses," accessed November 5, 2023, https://www.cdtfa.ca.gov/industry/cannabis.htm.
- ²⁷ California Legislative Analyst's Office, "The 2022-23 Budget: Analysis of the Medi-Cal Budget," February 9, 2022, https://lao.ca.gov/Publications/Report/4522.
- Office of Governor Ned Lamont, "Governor Lamont Signs Budget That Includes the Largest Tax Cut in Connecticut History," May 9, 2022, https://portal.ct.gov/office-of-the-governor/news/press-releases/2022/05-2022/governor-lamont-signs-budget-that-includes-the-largest-tax-cut-in-connecticut-history.

52 NOTES

References

- Auxier, Richard. 2022. How Post-Pandemic Tax Cuts Can Affect Racial Equity. Washington, DC: Urban Institute.
- Auxier, Richard, and David Weiner. 2023. Who Benefited from 2022's Many State Tax Cuts and What is in Store for 2023? Washington, DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy. 2020a. COVID-19 Pandemic Could Slash 2020-21 State Revenues By \$200 Billion. Washington, DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy. 2020b. State Revenue Forecasts Before COVID-19 and Directions Forward. Washington, DC: Urban Institute.
- Dadayan, Lucy. 2022a. Five Reasons Why States Should Proceed with Caution Despite Soaring Revenues. Washington, DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy. 2022b. The Winners and Losers of Rising Oil Prices. Washington DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy. 2023a. State Revenue Forecasts Look Bleak as Revenue Boom Subsides. Washington, DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy. 2023b. Navigating Fiscal Uncertainty: Weak State Revenue Forecasts for Fiscal Year 2024.
 Washington, DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy. 2012. The Impact of the Great Recession on Local Property Taxes. Albany, NY: Nelson A. Rockefeller Institute of Government.
- Dadayan, Lucy, and Donald J. Boyd. 2016. *Double, Double, Oil and Trouble*. Albany, NY: Nelson A. Rockefeller Institute of Government.
- Dadayan, Lucy, and Kim Rueben. 2021. Surveying State Leaders on the State of State Taxes. Washington, DC: Urban-Brookings Tax Policy Center.
- Dadayan, Lucy, and John Buhl. 2023. *Understanding Revenue Implications For State Pass-Through-Entity Taxes*. Washington, DC: Urban-Brookings Tax Policy Center.
- Duca, John V., and Anthony Murphy. 2021. Why House Prices Surged as the COVID-19 Pandemic Took Hold. Dallas, TX: Federal Reserve Bank of Dallas.
- Lazere, Ed. 2022. States with Temporary Budget Surpluses Should Invest in People, Not Enact Permanent Tax Cuts. Washington DC: Center on Budget and Policy Priorities.
- NASBO. 2022. The Fiscal Survey of States: Fall 2022. Washington, DC: National Association of State Budget Officers.

REFERENCES 53

About the Author

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

54 ABOUT THE AUTHOR

STATEMENT OF INDEPENDENCE

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

URBAN

· INSTITUTE · ELEVATE · THE · DEBAT

500 L'Enfant Plaza SW Washington, DC 20024

www.urban.org