

RESEARCH REPORT

State Tax Revenues Still Strong, But for How Long?

State Tax and Economic Review, 2022 Quarter 1

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Get Real-Time Data

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

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

[Monthly State Government Marijuana Tax Revenue Data](#)

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

Executive Summary

- **State and local government tax revenues** from major sources—personal income, corporate income, sales, and property taxes—increased 14.3 percent in nominal terms and 7 percent in inflation-adjusted terms in the first quarter of 2022 compared with the same quarter in 2021.¹
- Inflation-adjusted **state government tax revenues** from major sources increased 16.4 percent in the first quarter of 2022 compared with the same quarter in 2021. Because the global pandemic and individual, business, and government responses had an unprecedented impact on state budgets, including shifting revenues between quarters and fiscal years, we also present the revenue picture for the second quarter of 2021 through the first quarter of 2022 combined compared with the same period a year earlier. State government tax revenues from major sources increased 19.6 percent in real terms for the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier.
 - » Inflation-adjusted **state personal income tax revenues** increased 11.3 percent in the first quarter of 2022 compared with the first quarter of 2021. Income tax revenues showed extreme volatility in recent quarters in part because of federal and state policy decisions related to the pandemic as well as changes in investor behavior based on expected if not realized changes in federal tax policy. State personal income tax revenues increased 16.3 percent in real terms for the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier.
 - » Inflation-adjusted **state corporate income tax revenues** increased 109 percent in the first quarter of 2022 compared with the same quarter in 2021. The growth rate in corporate income tax revenues in recent quarters has been very strong and stands in sharp contrast to the stagnant growth patterns observed after the Great Recession and before the global pandemic. However, the exceptionally strong growth observed in the first quarter of 2022 is largely attributable to a single state, California, where corporate income tax revenues skyrocketed because of the state’s introduction of an elective pass-through entity tax where payments are included with state corporate income taxes. (The passage of pass-through entity taxes is in part a workaround for the federal limit on the state and local tax deduction, which is capped at \$10,000 under the Tax Cuts and Jobs Act.) In addition, corporations likely expected increases in federal corporate tax rates under the Biden administration, and some may have increased their state estimated payments or shifted realizations to take advantage of the current

lower tax rate. State government corporate income tax revenues increased 67.4 percent in real terms for the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier.

- » Inflation-adjusted **state sales tax revenues** grew 10.5 percent in the first quarter of 2022 compared with the first quarter of 2021. State sales tax revenues had begun increasing even before the onset of the pandemic as states expanded sales tax rules to include collection of taxes from online sales. The ability of states to collect taxes on e-commerce transactions was especially valuable during the pandemic because many consumers switched from in-person to online shopping. Because general sales taxes are on the amount spent and not a per-unit basis, general sales taxes also grew in nominal terms as prices on goods increased. State government sales tax revenues increased 15.6 percent in real terms for the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier.
- Inflation-adjusted **local government tax revenues** from major sources showed a year-over-year decline of 3.7 percent for the first quarter of 2022. Local government tax revenues from major sources declined 0.8 percent in real terms in the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier.
 - » Inflation-adjusted **local property tax revenues**, the largest source for local government revenues, declined 6 percent year over year for the first quarter of 2022, marking the third consecutive quarter of decline in real terms. Local government property tax revenues declined 2.8 percent in real terms in the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier. The declines in local property tax revenues likely reflect the pandemic's negative impact on commercial properties, which led to lower assessed values and lower commercial property tax payments.
- **Preliminary data for the second quarter of 2022** indicate continued year-over-year double-digit nominal growth in overall state tax revenue collections as well as in major sources of state tax revenues. However, growth in quarterly state tax revenues will likely be less robust in the months ahead.
 - » Year-over-year growth in **state personal income tax** collections was 15.2 percent in nominal terms and 7.2 percent in real terms in the second quarter of 2022.
 - » Year-over-year growth in **state corporate income tax** collections was 34.9 percent in nominal terms and 25.5 percent in real terms in the second quarter of 2022.

- » **State sales tax** collections grew 10.0 percent in nominal terms and 2.3 percent in real terms in the second quarter of 2022 compared with the same period in 2021.
- **Economic factors** that drive revenue growth remained relatively strong in the first quarter of 2022 compared with the same quarter in 2021. State economic performance plummeted early in the pandemic as governments, businesses, and individuals took actions to curtail the spread of the virus across the nation. The pandemic had a very uneven impact on various sectors of the economy, which has translated into very different effects across different places, industries, and occupations. These patterns continued to fluctuate in the first quarter of 2022 as different regions experienced different ebbs and flows in COVID-19 cases and hospitalizations.
 - » Year-over-year growth in real **gross domestic product** (GDP) was 3.5 percent for the first quarter of 2022. However, real GDP weakened in the first quarter of 2022 and declined 0.4 percent compared with the fourth quarter of 2021.
 - » The seasonally adjusted **unemployment rate** was 3.8 percent in the first quarter of 2022, which was slightly higher than prepandemic unemployment rates. The average unemployment rate masks large variations still found in unemployment across different groups of workers and different states.
 - » Seasonally adjusted nationwide **employment** showed solid growth of 4.6 percent in the first quarter of 2022 compared with the same quarter in 2021, but employment was still slightly below the levels observed in the first quarter of 2019.
 - » **House prices** increased 19.4 percent in nominal terms and 11.7 percent in real terms for the first quarter of 2022 compared with a year earlier. All 50 states reported year-over-year double-digit nominal growth in house prices in the first quarter of 2022.
 - » Real **personal consumption expenditures** increased 4.0 percent for the first quarter of 2022 compared with the same quarter in 2021. Personal consumption spending was depressed in the second, third, and fourth quarters of 2020 as the pandemic temporarily stalled large portions of the economy. Growth in real personal consumption spending was weak in the first quarter of 2022 compared with the growth rate observed in the final quarter of 2021; this is partially attributable to weakness in spending on durable goods.

Trends in State and Local Revenues

The global COVID-19 pandemic caused unprecedented economic disruptions across the nation and the world. State and local government tax revenues as well as the economy declined steeply in the spring of 2020, but as the federal government intervened and people adapted to remote work, much of the economy and state revenues picked up. Indeed, two years later, state and local tax revenues have surpassed prepandemic levels and have grown rapidly, with revenue growth surpassing the recovery in economic conditions. The weakening of the traditional relationship between the economy and state and local revenues is in part related to federal programs and temporary factors. But as the country adapts to our new normal and as federal aid programs end, we are likely to return to prior trends, where the best indicator of state and local revenues will be changes in economic conditions.

The federal government provided unprecedented monetary aid to individuals, businesses, and state and local governments in response to the pandemic. The American Rescue Plan Act (ARPA) alone included \$350 billion in direct aid to state, local, territorial, and tribal governments. This federal aid significantly helped the economic recovery and stabilized state and local government budgets. Further, payments to individuals and support of businesses led to both continued economic activity and higher-than-expected consumption. However, states' longer-term fiscal outlooks remain uncertain because of changes in economic conditions and patterns, including higher inflation rates, changes in consumption patterns, declining labor participation rates, and the volatility in the stock market. It is likely that growth in the overall economy will be weaker in the coming months as federal aid programs end and because the country is closer to maximum employment. Furthermore, high inflation has reduced purchasing power, which will slow consumer spending growth and overall economic activity. Moreover, as consumers have adapted to living with the pandemic, some consumption is being shifted back from goods to travel and services, sectors that are often not fully subject to sales tax.

State and local government tax revenues have become increasingly volatile and sensitive to policy and behavioral changes since the Great Recession. State and local revenues fluctuated wildly after the passage of the Tax Cuts and Jobs Act (TCJA) in 2017, as discussed in prior *State Tax and Economic Review* quarterly reports. Growth in state and local revenues normalized in the second half of 2019, but that quickly changed as the pandemic and responses to it distorted normal revenue patterns with both changing consumption patterns and changing reporting and tax deadlines.

Table 1 shows real state and local government tax revenues from major sources for the first quarter of 2021 and the first quarter of 2022 as well as the real percentage change between both quarters and the average quarterly year-over-year real growth in the prior four quarters. Table 1 also shows real revenues in the second quarter of 2021 through the first quarter of 2022 combined as well as the real percentage changes from a year ago. We present year-over-year growth rates for the second quarter of 2021 through the first quarter of 2022 combined in recognition of the shifts in filing deadlines that

distorted revenue patterns. Moreover, because of unusually high inflation, we present real growth rates in this section of the report to illustrate the impact of inflation on state and local revenues.

Major findings include the following:

- **State and local government tax revenues** from major sources increased 7 percent in real terms in the first quarter of 2022 compared with a year earlier. Average quarterly year-over-year real growth was 11.4 percent in the prior four quarters. Year-over-year real growth was 9.9 percent for the second quarter of 2021 through the first quarter of 2022 combined.
- **State government tax revenues** from major sources increased 16.4 percent in real terms in the first quarter of 2022 relative to a year earlier. Average quarterly year-over-year real growth rate was 19.7 percent for the prior four quarters. Year-over-year real growth for the second quarter of 2021 through the first quarter of 2022 combined was 19.6 percent. **State personal income tax** revenues increased 11.3 percent in real terms in the first quarter of 2022 compared with the first quarter of 2021. Average quarterly year-over-year real growth was 20.7 percent for the prior four quarters. Year-over-year real growth for the second quarter of 2021 through the first quarter of 2022 combined was 16.3 percent. Inflation-adjusted **state corporate income tax** revenues increased 109 percent for the first quarter of 2022 compared with a year earlier. (This strong growth is largely attributable to California, where corporate income tax revenues skyrocketed mostly because of the state's newly introduced pass-through entity elective tax.) Average quarterly year-over-year real growth was 56.8 percent for the prior four quarters. Year-over-year real growth for the second quarter of 2021 through the first quarter of 2022 combined was 67.4 percent. **State sales tax** revenues increased 10.5 percent in real terms for the first quarter of 2022 compared with the first quarter of 2021. Average quarterly year-over-year real growth was 13.6 percent for the prior four quarters. Year-over-year real growth for the second quarter of 2021 through the first quarter of 2022 combined was 15.6 percent.
- **Local government tax revenue** from major sources declined 3.7 percent in real terms for the first quarter of 2022 compared with the first quarter of 2021, marking the third consecutive quarter of decline in real terms. The average quarterly year-over-year real growth rate was 2.0 percent for the prior four quarters. By contrast, local government tax revenues decreased 0.8 percent in real terms for the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier. **Local property taxes**, the single largest source of local government tax revenues, declined 6 percent in real terms in the first quarter of 2022 compared with the prior year, related to declines in commercial property values. **Local sales taxes** increased 6.2 percent in real terms for the first quarter of 2022 compared with a year earlier; the average quarterly year-over-year real growth rate for the

prior four quarters was weaker, at 5.7 percent. **Local personal income taxes** increased 2.3 percent while **local corporate income taxes** increased 18.7 percent in real terms in the first quarter of 2022 compared with the same quarter of 2021, but these constitute a relatively small share of local revenues (less than 10 percent in a typical quarter) and are concentrated in a few states.

TABLE 1
State and Local Government Tax Revenue Trends

Tax source	2021 Q1	2022 Q1	Y-O-Y % change	Average quarterly Y-O-Y growth rate, prior four quarters (%)	2020 Q2 through 2021 Q1	2021 Q2 through 2022 Q1	Y-O-Y % change
Total state and local major taxes	\$453,614	\$485,388	7.0	11.4	\$1,793,598	\$1,971,716	9.9
State major taxes	\$241,598	\$281,171	16.4	19.7	\$947,058	\$1,132,231	19.6
Personal income tax	129,252	143,888	11.3	20.7	485,376	564,636	16.3
Corporate income tax	14,231	29,746	109.0	56.8	71,481	119,646	67.4
Sales tax	92,755	102,471	10.5	13.6	369,024	426,667	15.6
Property tax	5,360	5,065	(5.5)	3.1	21,178	21,283	0.5
Local major taxes	\$212,016	\$204,217	(3.7)	2.0	\$846,539	\$839,485	(0.8)
Personal income tax	12,107	12,391	2.3	6.7	44,410	46,794	5.4
Corporate income tax	2,925	3,471	18.7	19.1	10,290	12,515	21.6
Sales tax	26,046	27,672	6.2	5.7	105,001	112,316	7.0
Property tax	170,938	160,683	(6.0)	0.6	686,837	667,860	(2.8)

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

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

Figure 1 shows longer-term trends in state and local tax collections, specifically the year-over-year percentage change in the four-quarter moving average of inflation-adjusted state and local revenue collections from major sources: personal income tax, corporate income tax, sales tax, and property tax. As shown in Figure 1, state tax revenues from major sources have fluctuated dramatically over the past few years because of federal policy changes (including filing deadlines), stock market volatility, and pandemic-induced economic and behavioral changes. Longer-term revenue trends illustrate the impact federal policy changes can have on the timing in state revenues, such as changes related to the fiscal cliff negotiations in 2013, changes related to the passage of the TCJA, and most recently, changes in federal policies in response to the pandemic, including changing income tax deadlines. Most states rely heavily on three major sources of taxes (personal income, corporate income, and sales tax), all of which respond relatively rapidly to economic upticks and declines as well as to government policy decisions. The four-quarter moving average of inflation-adjusted state tax revenues from major sources can help smooth these patterns and showed a 19.6 percent increase for the first quarter of 2022.

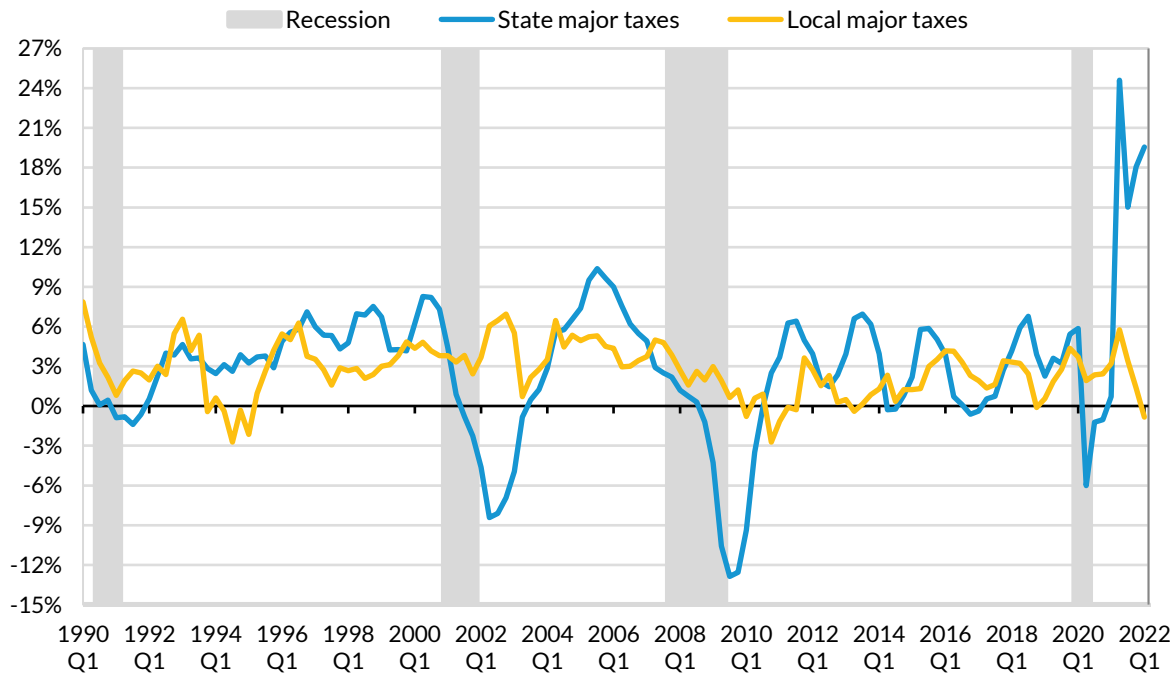
Local tax revenues were resilient throughout the pandemic mostly because of a strong housing market and solid growth in residential property tax revenues. However, local tax revenues have weakened substantially in the past few months and face uncertainty as new employment and consumption patterns develop that redistribute activity out of traditional business districts. The four-quarter moving average of inflation-adjusted local tax revenues from major sources showed a 0.8

percent decline in the first quarter of 2022. Most local governments rely heavily on property taxes, which have been relatively stable during the pandemic and respond relatively slowly to changes in property values. However, in many places the pandemic caused declines in the value of commercial properties (such as hotels, retailers, and offices) that have led to lower commercial property tax assessments. These declines in commercial property values have had a negative impact on overall local property tax revenue despite soaring residential property values observed throughout the pandemic. These trends, as well as declines in specific sales taxes for some local governments—especially those highly reliant on tourism or central business activity—could lead to ongoing vulnerability for some local governments.

FIGURE 1

Local Major Tax Revenues Weakened Substantially

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



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

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

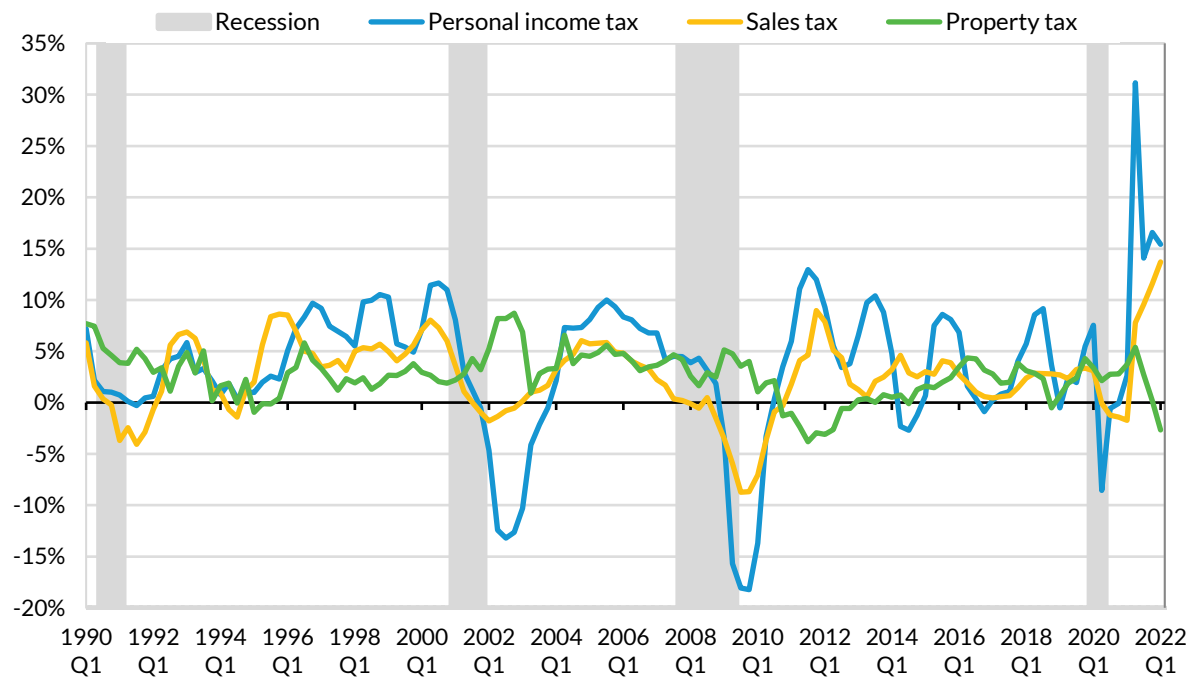
Figure 2 breaks out inflation-adjusted state and local personal income, sales, and property tax revenues over the past 30 years, using a four-quarter moving average. Using inflation-adjusted four-quarter moving averages helps temper fluctuations related to changing income tax deadlines. Still, the longer-term trends indicate large fluctuations in state and local personal income tax revenue collections during the pandemic. Real state and local personal income tax revenues increased 15.4 percent in the first quarter of 2022 compared with the first quarter of 2021, using the four-quarter moving average. Real state and local sales tax revenues increased 13.7 percent in the first quarter of 2022 compared

with a year earlier. Real state and local property taxes, nearly all of which are collected by local governments, declined 2.7 percent for the first quarter of 2022 compared with a year earlier. As discussed, the declines in overall local tax revenues are largely caused by declines in commercial property tax revenues. The persistence in remote work continues to erode commercial property values, leaving fiscal holes in some city budgets. Changes in what the future of work looks like and whether certain professions and industries will continue to have employees work outside of central locations can mean some of these changes are permanent or may require changes in the use of property.

FIGURE 2

State and Local Property Tax Revenues Weakened Substantially

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



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

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

State Tax Revenues in the First Quarter of 2022

Total state tax revenue collections increased 21.7 percent in nominal terms and 13.9 percent in real terms in the first quarter of 2022 relative to a year earlier, according to US Census Bureau data adjusted by the author (Table A1).² Both personal and corporate income tax revenues saw year-over-year real growth in the first quarter of 2022, at 11.3 and 109.0 percent, respectively. Much of the strength in corporate income tax revenues is driven by the newly enacted pass-through entity taxes in several states and whether the state characterizes these payments as corporate or personal income tax

revenues. State sales tax collections grew 10.5 percent in real terms while motor fuel tax collections increased 3.1 percent in the first quarter of 2022 relative to a year earlier.

Table A1 shows (1) nominal and inflation-adjusted growth in state government tax revenue collections from major sources and (2) average quarterly year-over-year growth between the first quarter of 2010 and the first quarter of 2022. The average quarterly year-over-year growth rate in overall state tax revenue collections since 2010 is 6.3 percent in nominal terms and 4.2 percent in real terms.

There were some variations across regions and states for the first quarter of 2022 (Table A2). All regions reported double-digit growth in state tax revenue collections, with the Far West reporting the largest year-over-year growth at 32.4 percent and the Great Lakes reporting the weakest growth at 13.4 percent.³

All states but Oregon and Wisconsin reported year-over-year growth in total state tax revenue collections for the first quarter of 2022, with 41 states reporting double-digit growth and 21 states reporting growth of over 20 percent. The largest growth was in Alaska, where total state tax revenues increased 235.7 percent, but that growth is largely because of the lower baseline in 2021. Declines in Oregon were mostly attributable to the state's kicker rebate, which led to large personal income tax revenue refunds, while declines in Wisconsin were largely because of income tax rate cuts.

Because the pandemic had distorted normal revenue patterns, we also analyze revenue growth trends for the second quarter of 2021 through the first quarter of 2022 combined to shed light on the revenue recovery after the brief (but sharp) pandemic-induced recession. State total tax revenues increased 24.5 percent in the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier, with a median increase of 19.6 percent (Table A3). All regions saw double-digit growth during that period, with the Far West region reporting the strongest growth at 31.5 percent and the Great Lakes region reporting the weakest growth at 16.6 percent. State tax revenues increased in all 50 states over that 12-month period, ranging from a 10.6 percent increase in Wisconsin to a 91.2 percent increase in Alaska. Twenty-two states reported year-over-year growth of over 20 percent in the second quarter of 2021 through the first quarter of 2022 combined.

The strong growth in overall state tax revenues for the second quarter of 2021 through the first quarter of 2022 is largely attributable to the following factors: the robust stock market observed throughout 2021, the record number of initial public offerings in 2021, the high inflation rate, the boost in spending on taxable goods caused by the pandemic, and the expectation of potential (if unrealized) federal tax hikes (Dadayan 2022a).

Personal Income Taxes

State personal income tax revenues increased 18.9 percent in nominal terms and 11.3 percent in real terms in the first quarter of 2022 compared with the same period in 2021. Growth in the median state was 17.3 percent in nominal terms. The average quarterly year-over-year growth rate in state personal income tax collections since 2010 is 8 percent in nominal terms and 5.9 percent in real terms (Table A1).

Personal income tax collections increased in all regions in the first quarter of 2022 compared with the same period in 2021 (Table A2). The Southwest region saw the strongest increase, at 41.3 percent, while the Great Lakes region saw the weakest growth at 11.4 percent. The strong growth in the Southwest region is largely attributable to New Mexico and driven by the state's strong growth in final payments in the month of March 2022, but that is in comparison to a weak base because of the delayed income tax filing deadline in 2021.

Thirty-eight states reported year-over-year growth in personal income tax revenues in the first quarter of 2022, with 30 states reporting double-digit growth. Five states—Delaware, North Dakota, Oregon, Tennessee, and Wisconsin—reported year-over-year declines in personal income tax revenues in the first quarter of 2022.

State personal income tax revenues increased 22.4 percent in the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period in 2021 (Table A3). Growth in the median state was 15.8 percent in nominal terms over that 12-month period.

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

Personal income tax collections declined steeply in the second quarter of 2020 and soared in the third quarter of 2020. This pattern reversed in 2021, resulting in dramatic growth in the second quarter of 2021 compared with 2020 followed by declines in the third quarter of 2021. Year-over-year growth was strong in the fourth quarter of 2021 and the first quarter of 2022, which is possibly related to (1)

elevated inflation, which led to bracket creep in some states and (2) acceleration of capital gains realizations by taxpayers in anticipation of possible federal tax rate hikes.

TABLE 2

Growth in State Government Personal Income Tax Components

Year-over-year nominal percentage change

Personal income tax components	Tax year 2020				Tax year 2021				Tax year 2022
	2020	2020	2020	2020	2021	2021	2021	2021	2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Withholding	5.8	(1.2)	5.0	6.2	6.5	15.4	11.4	15.4	12.9
Estimated payments	9.7	(64.0)	102.9	16.6	35.9	272.0	(34.3)	33.4	16.3
Final payments	(10.3)	(55.7)	621.8	(8.4)	10.2	174.8	(81.0)	44.6	45.1
Refunds	9.9	(16.5)	106.1	(10.6)	(13.1)	59.0	(39.5)	20.7	12.1
Total	4.4	(34.8)	47.5	7.7	20.2	81.1	(18.0)	19.0	17.7

Source: Individual state data, analysis by the author.

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

Inflation in the first quarter of 2022 was 6.8 percent, which is a 40-year high. Higher wages to attract workers back to vacant positions, large federal assistance, supply-side disruptions, and global geopolitical crises all have contributed to higher prices and elevated inflation rates. Although high inflation can limit the purchasing power of workers, unanticipated inflation can benefit governments, particularly those with progressive income tax structures that do not index income tax brackets for inflation. Thus, higher nominal wages can push taxpayers into higher marginal tax brackets. Nominal wages increased substantially in 2021, which led to stronger-than-usual growth in withholding. However, inflation-adjusted wages have been declining in recent months, putting a financial burden on many Americans.⁴ The bracket creep can lead to a further erosion in purchasing power for families.

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 seven quarters for all states with a broad-based personal income tax. Before the pandemic, growth in withholding was solid and was not subject to large swings. Withholding declined 1.2 percent year over year for the second quarter of 2020 because of the initial reaction to economic disruptions caused by the pandemic, including mass layoffs and furloughs beginning in the second half of March 2020. The employment situation greatly improved after the third quarter of 2020, which also led to improvement in withholding tax collections. In addition, the strong growth in average wages as well as people moving to

higher-paying jobs led to stronger withholding tax revenue collections in state fiscal year 2022. Finally, as discussed, 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.

Year-over-year nominal growth in withholding was 12.9 percent in the first quarter of 2022, marking the fourth consecutive quarter of double-digit growth. All regions showed solid growth in withholding in the first quarter of 2022 compared with the same quarter in 2021. The Mideast region reported the strongest year-over-year growth in the first quarter of 2022 at 17.8 percent, while the Far West region reported the weakest growth at 7.7 percent.

All states that levy tax on personal income except Delaware reported growth in withholding in the first quarter of 2022 compared with a year earlier, with 32 states reporting double-digit growth. Growth rates ranged from 0.2 percent in Wisconsin to 34.4 percent in North Dakota. The declines in Delaware are largely a timing issue caused by the implementation of a new accounting system.

Figure 3 shows monthly and fiscal year-to-date growth rates in withholding between July 2021 and May 2022, which corresponds to the first 11 months of state fiscal year 2022 in 46 states. Monthly data should be viewed with caution because they may include one-time payments that are not likely to recur, or a given month may have fewer tax processing days than the same month in the prior year.

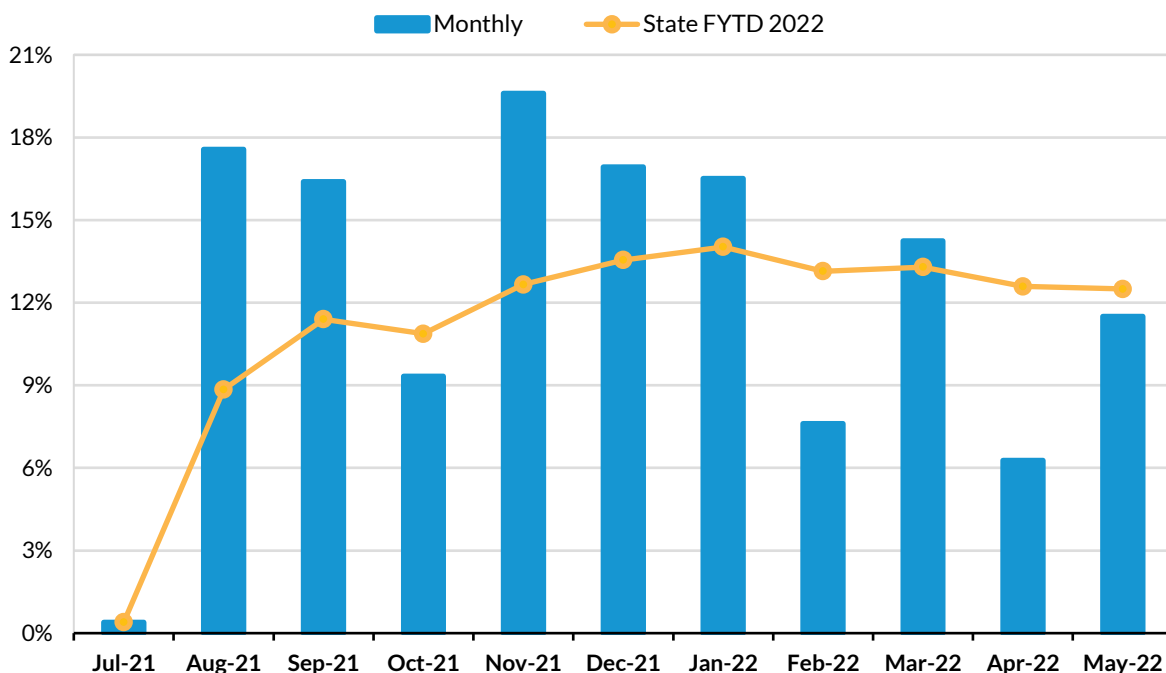
Withholding showed robust growth in most months. In late 2021, withholding was particularly strong in California, likely because of large year-end bonuses and withholding related to public offerings of California companies. For example, in November 2021, 14 California companies held initial public offerings, including Aurora, which had an initial valuation of \$14 billion.⁵

Year-to-date nominal growth in withholding for the 11 months of state fiscal year 2022 was 12.5 percent. States collected around \$387 billion in withholding revenues from July 2021 through May 2022. All states reported year-over-year growth in withholding tax revenues for the July 2021 through May 2022 period.

FIGURE 3

Withholding Is Strong, Fueled by Inflation

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



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

Notes: FYTD = fiscal year to date.

Despite solid growth in withholding, unemployment rates in the first quarter of 2022 were still higher than their prepandemic levels in about half of the states. The disconnect between withholding tax collections and higher unemployment rates is largely because of the disproportionate impact of the pandemic-induced recession on lower-income taxpayers.

Estimated Payments

Higher-income taxpayers (and self-employed taxpayers) generally make estimated tax payments (also known as declarations) on their income not subject to withholding. This income often comes from investments, such as capital gains realized in the stock market, or from self-employment or business income. Estimated payments normally represent less than a quarter of overall income tax revenues, but because of their volatility, they can have a large impact on the direction of overall collections. Estimated payments accounted for 27.3 percent of total personal income tax revenues in the first quarter of 2022.

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.

The filing deadline for federal individual income tax returns in 2020 was extended to July 15, and the deadline for 2021 was extended to May 17; most states delayed their filing deadlines as well.⁶ The federal government also extended the filing deadline for the first estimated tax payments for tax year 2020 that were due on April 15. Twenty-nine states followed the federal government and extended the filing deadline for the first estimated payments attributable to tax year 2020 from April 15 to July 15 (Loughead 2020).

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

Because of the unusual changes in income tax filing deadlines in 2020 and 2021, we present combined data for the April 2021 through January 2022 period, which largely corresponds to all four estimated payments for tax year 2021. Estimated payments declined earlier in the pandemic, largely because of the fluctuations in the performance of financial markets, loss of earnings for some self-employed individuals, and other changes in the economy related to the pandemic. Further, some taxpayers likely held off making estimated payments last year because of the uncertainty around the pandemic and what their earnings would end up being. Our data show that 26 states reported year-over-year declines in estimated payments for April 2020 through January 2021, with the median state seeing a 2.2 percent decline compared to a year earlier (Table A5).

In contrast, estimated payments showed robust year-over-year growth of 38.8 percent for April 2021 through January 2022, which largely included all four estimated payments for tax year 2021. Growth in the median state was substantially lower, at 23.5 percent (Table A5). The strong growth in estimated payments is in part caused by weakness in the previous year but also by the stock market's strong performance. In 2021, the S&P 500 stock index rose 33 percent, the fastest average annual growth rate in more than six decades. A strong stock market means larger capital gains realizations conditional on individuals trading and higher estimated income tax payments. Realizations could also have been higher because of individuals realizing capital gains during the year to ensure they were subject to existing tax rates given discussions about possible changes to federal tax policy. Given current declines in the stock market and a slowing in initial public offerings in the first half of 2022, we will possibly see substantial weakness if not declines in estimated payments in the current fiscal year.

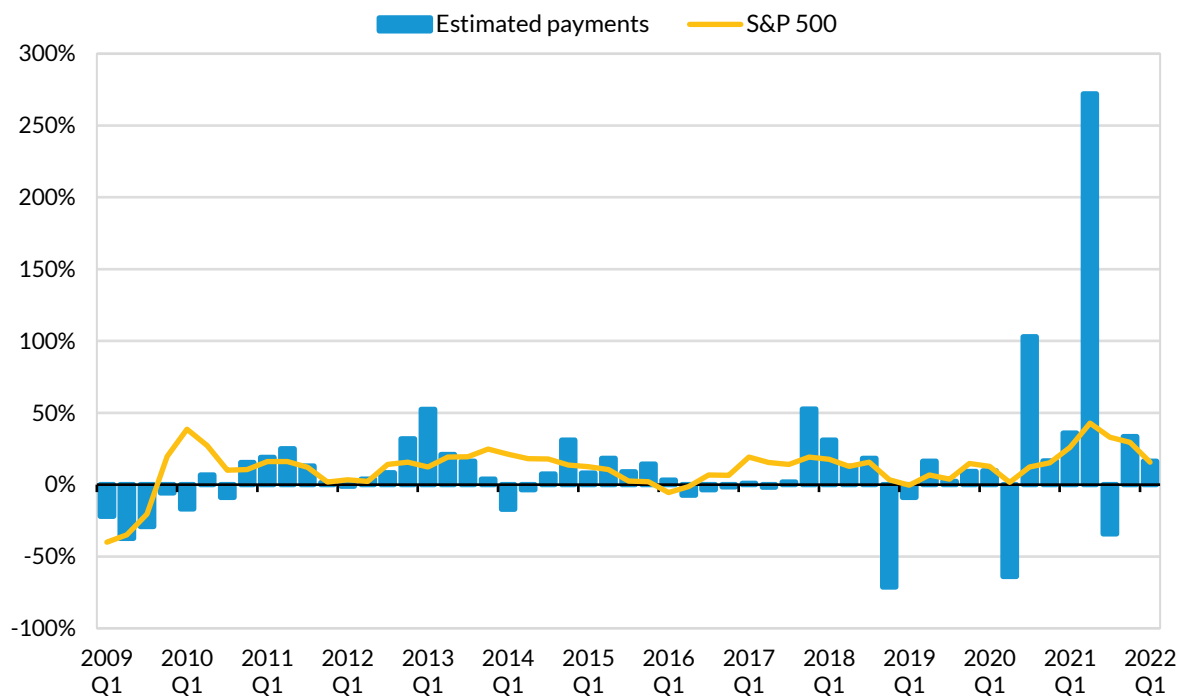
All states but Missouri reported growth in estimated payments during April 2021 through January 2022 period. The largest growth in dollar value was in California, where estimated payments increased by \$16.5 billion or 55.3 percent in the April 2021 through January 2022 period compared with the same period a year earlier. The second largest growth in dollar value was in New York, reporting growth of \$5.1 billion or 31.4 percent. Estimated payments in California and New York combined represented 58.6 percent of the total estimated payments filed from April 2021 through January 2022. Given their size, population composition, and tax rates, it isn't surprising that the largest shares of payments are from these two states, but the level of concentration is disproportionate, and much of the strong growth is largely attributable to the growth in California.

Figure 4 shows year-over-year percentage change by quarter in estimated payments and in the S&P 500 Index for the past 13 years. The longer-term trends indicate substantial volatility in estimated payments, which is partially caused by volatility in the stock market but also by actual and expected federal tax policy changes and taxpayer responses, which affect capital gains realizations and tax timing. For example, the substantial growth in estimated payments in the final quarter of 2017 and the first quarter of 2018, as well as the steep declines in estimated payments in the final quarter of 2018, were mostly attributable to the passage of the TCJA.

FIGURE 4

Large Volatility in Estimated Payments

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



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

The volatility in estimated tax payments was particularly exacerbated during the pandemic. Estimated payments saw steep year-over-year declines in the second quarter of 2020 and abrupt growth in the third quarter of 2020, largely caused by the deferral of the tax filing deadlines. Growth in estimated payments in the fourth quarter of 2020 and the first quarter of 2021 was more in line with the growth in the stock market. Estimated payments showed dramatic year-over-year growth of 272 percent in the second quarter of 2021, largely because of the lower baseline in 2020. Not surprisingly, estimated payments showed a 34.3 percent year-over-year decline in the third quarter of 2021, reflecting the stronger base in the third quarter of 2020 and the shift back to a more normal timing of estimated payments. Because the temporary changes in timing altered revenue patterns significantly, we strongly encourage relying on combined quarterly numbers and longer-term trends. Year-over-year growth in estimated payments was 16.3 percent in the first quarter of 2022, which was more in line with the year-over-year growth of 15.6 percent in the stock market.

Final Payments

Final tax payments normally represent a small share of total personal income tax revenues in the first, third, and fourth quarters of the tax year and a much larger share in the second quarter of the tax year because of the April 15 personal income tax filing deadline.⁷

Because of the changed filing deadline in 2020, a significant share of final payments was shifted from the second quarter of 2020 into the third quarter of 2020. Therefore, final payments represented only 17.9 percent of personal income tax revenues in the second quarter of 2020 (compared with 26.3 percent in 2019 and 27.2 percent in 2021) and 17.2 percent in the third quarter of 2020 (compared with 3.5 percent in 2019 and 4 percent in 2021). The shifting of final payments from the second quarter of 2020 to the third quarter of 2020 caused large variations in percentage changes. Final payments accounted for 6.5 percent of personal income tax revenues in the first quarter of 2022.

Table A6 shows year-over-year nominal growth rates in final payments for April 2021 through January 2022. Final payments on average declined by \$1.4 billion or 2.9 percent for April 2020 through January 2021 from a year earlier. In contrast, final payments increased by \$13.2 billion or 28.4 percent for April 2021 through January 2022 period compared with the same period a year earlier.

All states reported growth in final payments for April 2021 through January 2022 compared with a year earlier, with 33 states reporting double-digit percentage growth. California had the largest increase in final payments in dollar value (\$2.4 billion) from April 2021 through January 2022. Final payments in California represented around 18.6 percent of the national total.

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.

The ARPA, passed in March 2021, waived federal tax on up to \$10,200 of unemployment benefits received by each person in tax year 2020. Although states did not have to follow suit, about 25 states did so and provided income tax exemptions for unemployment benefits for tax year 2020. Some states extended the exemption to tax year 2021 as well. (Among the 41 states with a broad-based income tax, only 6 generally exclude unemployment benefits from taxable income: Alabama, California, Montana, New Jersey, Pennsylvania, and Virginia.) These exemptions led to higher income tax refunds in the second quarter of 2021, because some individuals had taxes withheld from unemployment payments that were refunded later.

Delays in processing of income tax returns in 2020 and the delayed income tax filing deadlines led to strong year-over-year growth in refunds in the third quarter of 2020, with states paying out \$5.6 billion more in tax refunds than in the same quarter in 2019. Subsequently, states paid out \$4.3 billion less in tax refunds in the third quarter of 2021 than in the third quarter of 2020. Refund payments were \$3.2 billion more in the first quarter of 2022 than in the first quarter of 2021. Overall, 31 states paid out more in refunds in the first quarter of 2022 than in the first quarter of 2021. California had the largest share of refund payouts (\$7 billion, or 24 percent of total refunds) followed by New York (\$2.7 billion, or 9.2 percent of total refunds) in the first quarter of 2022.

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 currently available for 24 states. We present data for the first quarter of 2022 to illustrate the variance between actual and forecasted personal income tax revenues. Because the pandemic has upended standard economic trends (such as rising inflation or lower labor participation rates), we expect to continue to see higher levels of variance in personal income tax revenue estimates. In addition, some states regularly update their monthly revenue forecasts, while other states prepare monthly revenue forecasts only once a year. Therefore, the variance between actual and forecast revenues also depends on the date of the forecast.

Actual personal income tax collections in the first quarter of 2022 were higher than in the first quarter of 2021 in 22 of 24 states for which we have detailed data. Personal income tax collections showed 20.9 percent year-over-year nominal growth in the first quarter of 2022 (Table 3); growth in the median states was 19.6 percent.

Actual personal income tax collections in the first quarter of 2022 were higher than forecasted in all 24 states, with an average underestimate of 10.4 percent and a median underestimate of 29.2 percent (Table 3).

Forecasted values always depend on the date the forecast is made, but this is especially true this year because of uncertainty related to the changing labor market, changing wage patterns triggered by the pandemic, and most notably, various federal and state policy changes. Even states that regularly update their monthly revenue forecasts faced difficulties forecasting revenues precisely.

State revenue forecasters continue to face considerable challenges and have a difficult job of projecting revenues on the heels of a historically volatile time and more uncertainty ahead. The current global geopolitical crises, continued uncertainties related to the ongoing pandemic, high inflation, and evolving federal monetary policy could all muddle the revenue outlook for the states.

TABLE 3

Actual versus Forecasted State Personal Income Tax Revenues

Dollar amounts in millions

State	2021 Q1 actual	2022 Q1 actual	2022 Q1 forecast	Percent change, 2022 Q1 vs 2021 Q1	Percentage variance, 2022 Q1 actual from forecast	Forecast date
Median				19.6%	29.2%	
Average	\$79,494	\$96,101	\$87,080	20.9%	10.4%	
Arizona	1,067	1,279	822	19.9	55.6	Jan-22
Arkansas	776	864	609	11.4	41.8	Dec-21
California	34,523	42,861	42,486	24.2	0.9	May-21
Colorado	2,103	2,528	2,438	20.2	3.7	Mar-22
Idaho	468	504	446	7.8	13.1	Jul-21
Indiana	1,510	1,727	1,502	14.4	15.0	Dec-21
Kansas	907	1,024	910	12.9	12.5	Jun-21
Maine	406	476	340	17.2	40.0	Dec-21
Massachusetts	4,635	5,625	4,500	21.4	25.0	Dec-21
Minnesota	3,000	3,944	3,432	31.5	14.9	Feb-22
Mississippi	329	438	278	33.0	57.5	Nov-20
Montana	394	551	334	39.9	65.1	Jun-21
Nebraska	637	668	470	4.9	42.1	Feb-22
New Mexico	170	630	375	269.6	67.8	Dec-21
New York	18,168	21,699	19,085	19.4	13.7	Dec-21
North Dakota	90	73	53	(18.2)	39.0	Aug-21
Ohio	1,964	2,130	1,540	8.4	38.3	Mar-19
Oklahoma	528	655	497	23.9	31.7	Feb-21
Pennsylvania	3,819	4,356	3,977	14.1	9.5	Jun-21
Rhode Island	359	438	346	22.1	26.4	Nov-21
South Carolina	876	1,143	819	30.4	39.6	Feb-22
Vermont	235	245	242	4.3	1.3	Jul-21
West Virginia	504	604	476	19.8	26.8	Jan-21
Wisconsin	2,026	1,638	1,102	(19.1)	48.6	Jan-22

Source: Individual state data, analysis by the author.

Corporate Income Taxes

State corporate income tax revenue is highly volatile because corporate profits and the timing of tax payments can vary and shift across quarters. Further, most states collect a small share of state revenues from corporate taxes and can therefore experience large fluctuations in percentage terms with little overall budgetary impact. Average quarterly year-over-year growth rates in state corporate income tax collections were 12.7 percent in nominal terms and 10.3 percent in real terms since 2010 (Table A1).

Year-over-year growth in state corporate income tax revenues was robust at 123.3 percent in the first quarter of 2022. However, growth in the median state was only 27.1 percent. The strong growth in corporate income tax revenues in the final quarter of 2021 and the first quarter of 2022 might be partially caused by corporations accelerating income so they can avoid paying potentially higher tax rates if the federal government increases the corporate income tax rate, as stated by President Biden.

All regions reported year-over-year growth in state corporate income tax revenue collections in the first quarter of 2021. The Far West region reported the strongest year-over-year growth in corporate income tax revenues at 324.4 percent, while the Southeast region reported the weakest growth at 28.8 percent. Thirty-eight states reported year-over-year growth in corporate income tax collections, while five states reported declines (Table A2). The strongest growth in dollar value was in California, where corporate income tax revenues increased by \$11.3 billion, or 328.9 percent, in the first quarter of 2022 compared with the same quarter in 2021. The strong growth in California's corporate income tax revenues is largely attributable to the introduction of an elective pass-through entity tax in 2021, which enables some taxpayers to reduce their federal taxable liability by paying taxes at the entity level rather than the individual owner level.⁸ Further, the strong growth in corporate income tax revenues is also attributable to (1) a temporary decrease in the use of certain tax credits and deductions and (2) a temporary increase in profits for businesses that benefited from high consumption demand arising from the pandemic.⁹

To assess the strength in corporate income tax revenues this year, we also examined combined payments for the second quarter of 2021 through the first quarter of 2022. Year-over-year growth in state corporate income tax revenues was 76.1 percent for the second quarter of 2021 through the first quarter of 2022 combined; growth in the median state was weaker, at 54.6 percent. All states but South Dakota reported year-over-year growth over that 12-month period (Table A3).

Before the pandemic, states were forecasting lower corporate income tax collections, mostly because of higher costs for business inputs and a weakened global economy (Dadayan 2020b). Moreover, data from the Bureau of Economic Analysis indicated substantial prepandemic weakness in business investment,¹⁰ which implied lower corporate income tax revenue collections. The current and immediate outlook for state corporate income tax revenues, however, improved substantially because of strong rebounding in corporate profits in 2021 and the first quarter of 2022. According to data from the Bureau of Economic Analysis, US corporate profits increased by nearly \$321 billion, or 12.6 percent, from first quarter of 2021 to the first quarter of 2022.¹¹ That growth in corporate profits is substantially higher than the 3.5 percent growth in real GDP for the same period.

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

General Sales Taxes

State general sales tax collections increased 18 percent in nominal terms and 10.5 percent in inflation-adjusted terms for the first quarter of 2022 compared with the same period in 2021. Sales tax collections saw sharp declines in the second quarter of 2020 primarily caused by the pandemic. Before the pandemic, sales tax collections had grown continuously since the first quarter of 2010 in nominal terms, and growth generally had been steady if unspectacular. Average quarterly year-over-year growth rates in state general sales tax collections were 5.1 percent in nominal terms and 3.1 percent in real terms since 2010 ([Table A1](#)).

Sales tax collections increased in all regions for the first quarter of 2022 compared with the same period in 2021. The Southwest region reported the largest average year-over-year growth at 24.2 percent, while the Great Lakes region reported the smallest average growth at 11.9 percent ([Table A2](#)).

Forty-four of 45 states with broad-based sales taxes reported year-over-year growth in sales tax collections for the first quarter of 2022. In eight states, year-over-year growth in sales tax revenues was 20 percent or above. Maryland had the strongest year-over-year growth in sales tax revenues at 68.3 percent, while Louisiana had the weakest growth at 7.8 percent. North Carolina was the only state to report year-over-year declines in state sales tax revenues in the first quarter of 2022.

State sales tax revenues were 21.7 percent higher in the second quarter of 2021 through the first quarter of 2022 combined, compared with the same period a year earlier ([Table A3](#)). All states reported year-over-year growth over that 12-month period, with 17 states reporting growth of over 20 percent.

The recovery in sales tax collections was relatively slow following the Great Recession. This was partially attributable to tax dollars being lost because online retail sellers were not collecting and remitting sales tax on some or all sales. However, growth in sales tax revenue collections strengthened in the recent past, largely because of sales tax base expansions in several states and because of states' efforts to capture tax revenues from a larger share of online sales following the US Supreme Court's decision in *South Dakota v. Wayfair*.

On June 21, 2018, the US Supreme Court ruled in favor of South Dakota in that case,¹² giving states the authority to require out-of-state sellers with at least a specified amount of sales within the state to collect sales taxes and transfer the revenues to state governments. Currently, all states with general sales taxes have enacted laws or regulations to require sales tax collections by remote sellers.

States have set different sales and volume thresholds for internet sales taxation ([Table A7](#)). Most states have also enacted laws or regulations requiring marketplace facilitators to collect sales taxes on behalf of their sellers. State implementation of online sales taxation does not address if and how local jurisdictions that operate independently and have independent taxing authority will collect sales taxes

from remote sellers. But some states, such as Alabama and Texas, have either passed legislation or continue to debate regulations for creating a “single local use tax rate” that remote sellers can use to calculate the local tax due instead of applying local sales tax rates for the specific jurisdiction in which a sale is made.

The pandemic has had a detrimental impact on some state sales tax revenue collections, particularly in states with high reliance on the tourism, entertainment, and hospitality industries. Federally mandated travel restrictions and state- or regionally mandated restrictions on a wide range of businesses and services, as well as individual and business actions taken to mitigate exposure to COVID-19, have led to less business activity and less consumer spending and therefore less sales tax revenue collections for states, particularly during the second quarter of 2020. Sales tax revenue increases in the most recent quarters reflect pent-up demand from consumers as well as growth in remote sales. Strong growth in general sales taxes (typically calculated as a percentage of spending as opposed to excise taxes, which are calculated on a per-unit basis) is also caused in part by price increases from high inflation. However, if high inflation persists, consumers may adjust their spending habits and either reduce their purchases or turn to cheaper products because of declines in real wages.

The Urban Institute conducted a survey of state government officials in spring 2021 to understand the impact of the pandemic on state general sales taxes and to evaluate likely changes in state policies and actions in response to the new economic and fiscal reality. During the pandemic, most states saw growth in the consumption of goods and declines in the consumption of services (which are largely not subject to sales tax). Many state leaders were concerned about the ongoing sales tax performance over the long run, especially once the pandemic is contained and if consumers shift back to spending more on services than on goods (Dadayan and Rueben 2021). Although some states have expanded their sales tax bases to include some services, many services are still not subject to state sales tax. And some states, such as Arizona and Missouri, have banned taxing services altogether.

Motor Fuel Taxes

Motor fuel tax revenues saw steep quarterly declines between the second quarter of 2020 and the first quarter of 2021, likely because of falling oil and gas prices in the first half of 2020 as well as because of decreased demand related to the pandemic and stay-at-home orders. This was followed by double-digit year-over-year growth in the second quarter of 2021, at 26.2 percent and largely reflected the lower base in 2020 ([Table A1](#)).

Motor fuel tax collections increased 10.2 percent in nominal terms and 3.1 percent in inflation-adjusted terms for the first quarter of 2022 compared with the same period in 2021. Motor fuel tax revenue collections increased in all regions for the first quarter of 2022 compared with the same period

in 2021, as oil and gas prices rose. The Rocky Mountain region reported the largest average growth at 12.9 percent; the New England region reported the smallest average growth at 7.6 percent. All states but Nebraska reported year-over-year growth in motor fuel sales tax collections for the first quarter of 2022; 18 states reported double-digit growth (Table A2).

State motor fuel sales tax revenues increased 12.6 percent in the second quarter of 2021 through the first quarter of 2022 combined compared with the same period a year earlier, with a median growth of 10.7 percent (Table A3). Forty-six states reported year-over-year growth over that 12-month period; four states (Louisiana, Nebraska, New Jersey, and New Hampshire) reported declines.

Motor fuel sales tax collections have fluctuated since the Great Recession. Average quarterly year-over-year growth rates in state motor fuel tax collections were 3.7 percent in nominal terms and 1.7 percent in real terms since 2010 (Table A1). Economic growth, changing fuel prices, general increases in fuel efficiency, and changing driving habits all affect gasoline consumption and motor fuel taxes.

Changes in state motor fuel tax rates also affect motor fuel sales tax collections. However, 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.¹³

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

Other Taxes

The US Census Bureau's quarterly data on state tax collections provide detailed information for some smaller revenue sources, including state property taxes, tobacco product excise taxes, alcoholic beverage excise taxes, and motor vehicle and operators' license taxes. In Table A8, we show year-over-year growth rates for four-quarter moving average inflation-adjusted revenue for the nation as a whole. In the first quarter of 2022, states collected \$68.2 billion from all the smaller tax sources, which constituted one-fifth of total state tax collections.

Compared with major tax sources, revenues from smaller state taxes have been growing at a slower pace since the Great Recession. The average quarterly year-over-year growth rate in state tax revenues from smaller sources was 2.2 percent in real terms since 2010.

The four-quarter moving average of inflation-adjusted revenues from smaller state tax sources showed a 14.5 percent increase for the first quarter of 2022 compared with the same quarter in 2021. State property taxes, which represent a small portion of overall state tax revenues, increased 0.5 percent. Tax revenues from tobacco product sales declined 5.0 percent, tax revenues from alcoholic beverage sales increased 10.4 percent, and revenues from motor vehicle and operators' licenses increased 0.5 percent. Finally, revenues from all other smaller tax sources increased 22.4 percent.

Preliminary Review of State Tax Revenues in the Second Quarter of 2022

The Urban Institute regularly collects monthly state tax revenue data for all states. Preliminary data from 44 states show continued but weakening year-over-year growth in overall state tax collections in the second quarter of 2022.

Growth was widespread across states and among the major sources of tax revenues. Overall state tax collections increased 15.3 percent in the second quarter of 2022 compared with the same period in 2021; growth in the median state was 16.9 percent ([Table A9](#)). Overall state tax revenues increased in all 44 states for which we have preliminary data, with 35 states reporting double-digit growth.

Personal income tax collections increased 15.2 percent in the second quarter of 2022 compared with the same period a year earlier; growth in the median state was 27.5 percent. Thirty-four states reported year-over-year growth in personal income tax revenues in the second quarter of 2022. As mentioned, the strength in personal income tax revenues is partially attributable to elevated inflation. Moreover, it appears that growth in withholding has moderated while growth in estimated payments has weakened substantially in the second quarter of 2022, indicating that upper-income taxpayers are reducing their tax payments in light of the volatile stock market.

State corporate income tax revenues increased 34.9 percent in the second quarter of 2022 compared with the same quarter in 2021; growth in the median state was weaker, at 24.9 percent. According to our preliminary data analysis, corporate income tax revenues increased in 36 states and declined in only one state. The strongest growth in dollar value was once again in California, where corporate income tax revenues increased by \$6 billion or 51.6 percent in the second quarter of 2022 compared with the same quarter in 2021. As mentioned, the strong growth in California's corporate income tax revenues is mostly attributable to California's newly introduced pass-through entity elective tax.¹⁴

Finally, state general sales tax collections increased 10.0 percent in the second quarter of 2022 compared with the same quarter in 2021; growth in the median state was 7.7 percent. Thirty-seven

states reported growth in sales tax collections. Strong growth in sales tax revenue collections is partly because of high inflation and a temporary boost in consumption of taxable goods.

Looking ahead at the coming months, state tax revenues will likely show continued but weakening growth in the short term. We expect continued recovery in sectors of the economy that were most negatively affected by the pandemic, including tourism, hospitality, and entertainment. Recovery in these sectors will boost consumption on services and therefore boost state tax revenues, although this boost will be less than the revenue increases related to consumption of goods because most states tax services less intensively than goods. Some of the economic drivers for robust revenue growth in 2021, such as the soaring stock market and the sharp increase in initial public offerings, have already weakened or reversed; this will slow down state tax revenue growth. Furthermore, several states enacted tax cuts during the current or prior fiscal year. Depending on the size and structure of these tax cuts, state revenues will decline and could leave some states with budget holes in the coming fiscal years as temporary fiscal funds are spent and depending on the strength of the economy. These tax cuts can also exacerbate the risk of structural deficits and force states to either reverse them or to cut funding for important services to balance budgets (Lazere 2022).

Factors Driving State Tax Revenues

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

Economic Indicators

Most state tax revenue sources are heavily influenced by the economy. In general, state tax revenues rise when the state economy grows, income taxes grow when resident incomes go up, sales taxes generate more revenue when consumers increase their purchases of taxable items, property taxes increase when house prices go up, and so on. However, the pandemic and policy responses have upended the standard revenue and economic trends.

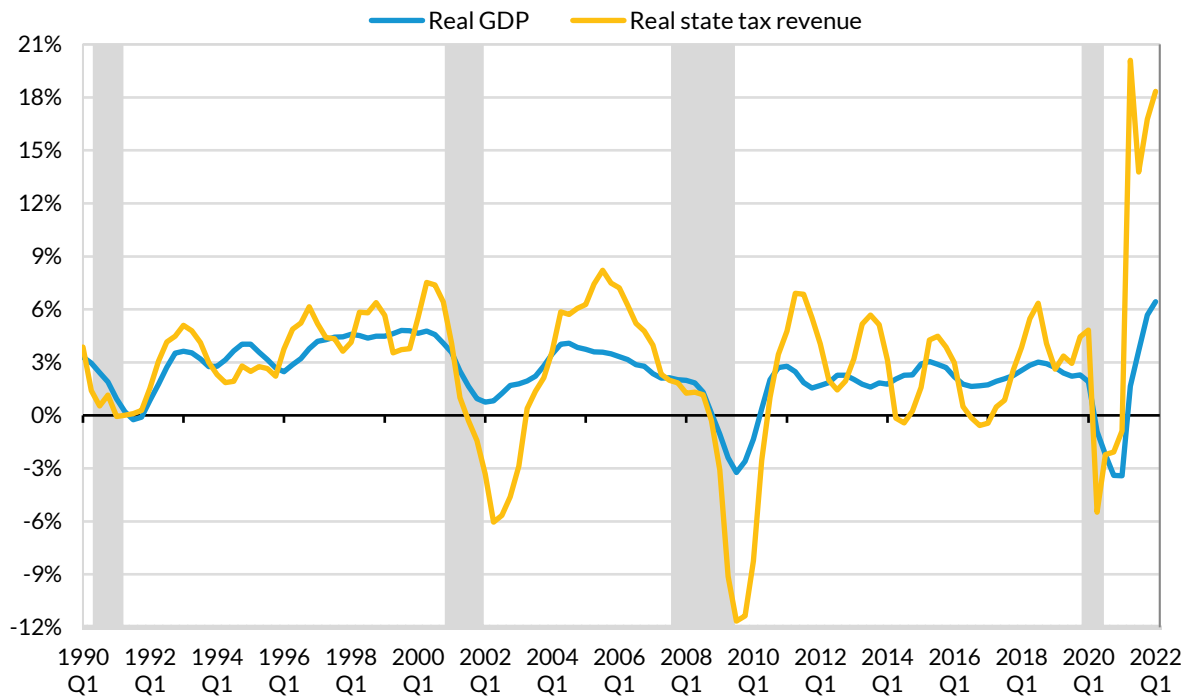
State Gross Domestic Product

When the economy booms, tax revenues tend to rise rapidly, and when the economy declines, revenues tend to decline, though these changes have different patterns and timings. [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](#), real GDP showed uninterrupted growth between the second quarter of 2010 and the second quarter of 2020. Real GDP growth weakened throughout 2019 and the first quarter of 2020 and declined in the second, third, and fourth quarters of 2020 as well as the first quarter of 2021, based on four-quarter moving averages. By this measure, real state tax revenues also declined in the second, third, and fourth quarters of 2020 and the first quarter of 2021. Real GDP as well as real state tax revenues resumed growth since the second quarter of 2021. However, there is a large gap between the growth rates: year-over-year growth for four-quarter moving average was 18.3 percent in real state tax revenues but only 6.4 percent in real GDP in the first quarter of 2022.

Even excluding the most recent volatility related to the pandemic and government actions, volatility in state tax revenue is not fully explained by changes in real GDP, a broad measure of the economy. State tax revenues became far more volatile in the past two decades, mostly because of changes in state tax rates and states' growing reliance on income taxes, some of which are progressive and dependent on volatile income sources such as stock options and capital gains. This was particularly

the case during the pandemic: the stock market soared despite the real-world turmoil and led to larger capital gains realizations and increases in nonwithholding income tax payments. The economic trends observed in the past two years indicate that the pandemic exacerbated the magnitude and scope of inequalities.

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



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

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

States vary substantially in correlations between growth rates in real GDP and real state tax revenues. Figure 6 shows for each state the four-quarter moving averages in real GDP and real state tax revenues for the first quarter of 2022 compared with the same quarter in 2021. By this measure, real state GDP as well as real state tax revenues increased in all 50 states. The year-over-year change in real state GDP ranged from 1.7 percent in Alaska to 10.2 percent for Nevada; the change in real state tax revenues ranged from 5.2 percent in Wisconsin to 81 percent in Alaska. The national average year-over-year growth in real state GDP was 6.4 percent, and the national average year-over-year growth in real state tax revenues was 18.3 percent, based on four-quarter moving averages.

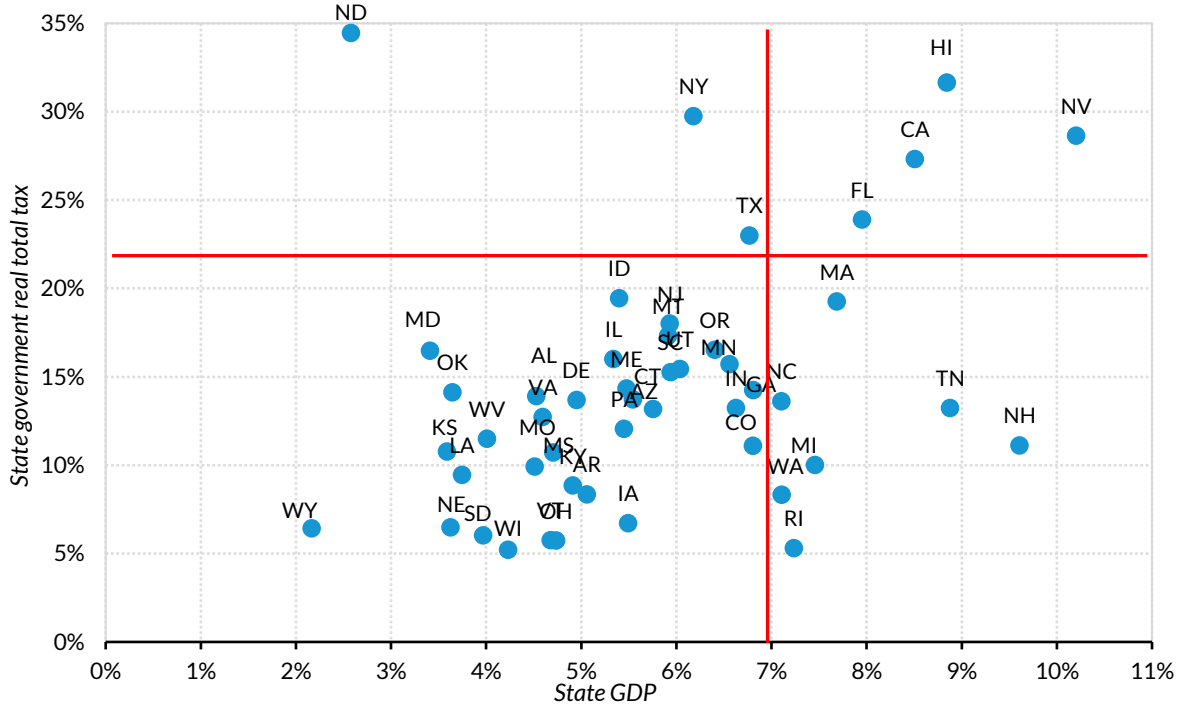
The steep drop in oil prices early in the pandemic led to steep declines in the economies and revenues of energy-dependent states such as Alaska and Wyoming, both of which have narrow tax structures and high dependence on severance tax revenues (Dadayan and Boyd 2016). Therefore, we

observed large swings in Alaska's and other energy-dependent states' revenue collections. The energy-dependent states will likely see robust growth in revenues in the coming months because of soaring oil prices caused by the current geopolitical crises.

FIGURE 6

Growth Disparity: State Tax Revenues versus State GDP

Year-over-year percentage change in real state taxes and real GDP, 2022 Q1 versus 2021 Q1



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

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

Red lines show US averages. Alaska and New Mexico are outliers and excluded from the figure.

State Unemployment and Employment

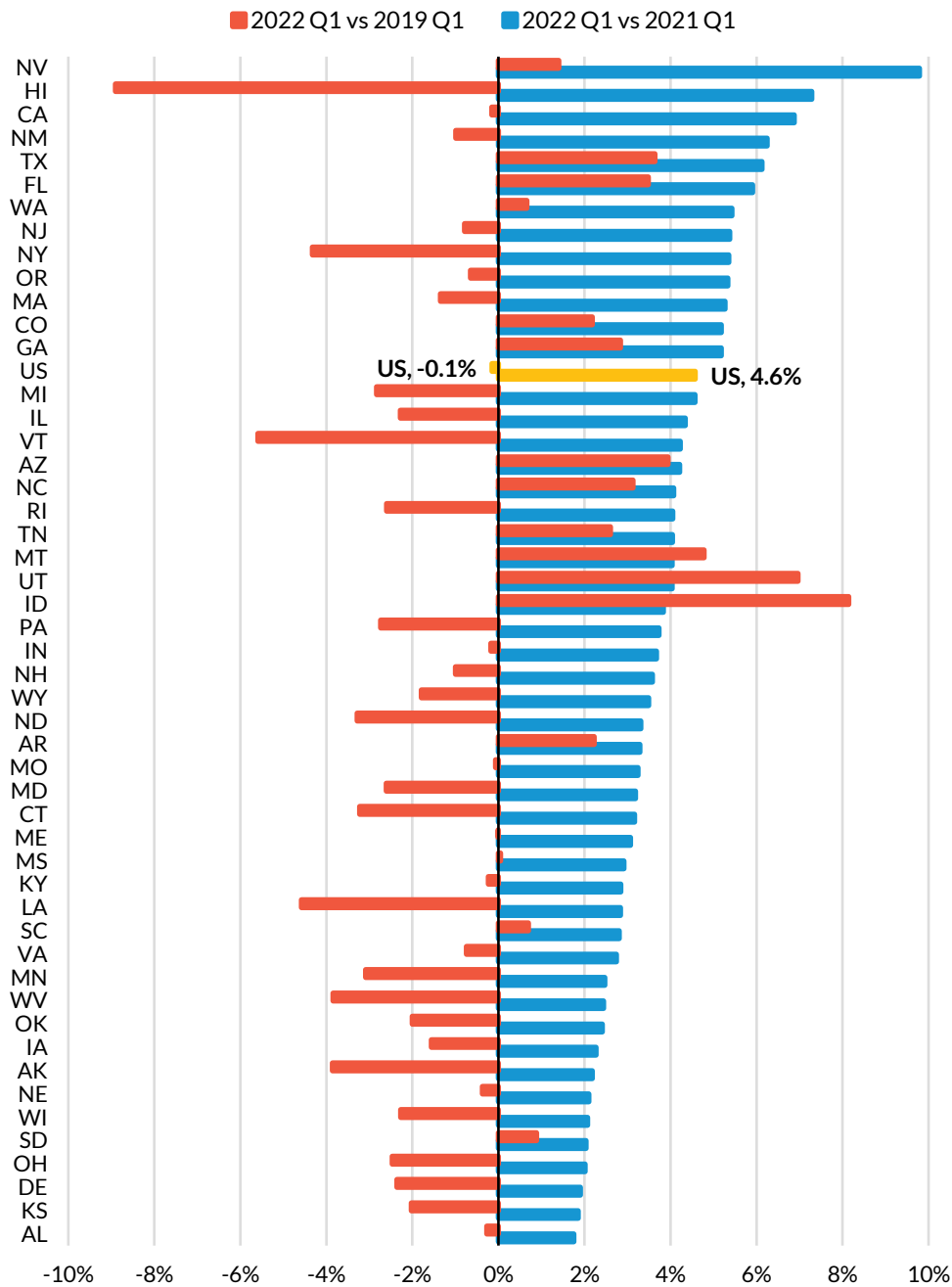
Before March 2020, the national unemployment rate had seen a nearly uninterrupted decline from its Great Recession peak. The unemployment rate was 3.6 percent in the fourth quarter of 2019, which was a 50-year low.¹⁵ The unemployment rate increased to 3.8 percent in the first quarter of 2020 and increased to 13 percent in the second quarter of 2020, caused by the immediate impact of the pandemic and was the highest level on record since 1948. However, although this increase in unemployment was sharp, it was temporary: the unemployment rate dropped to 8.8 percent in the third quarter of 2020 and has been continuously improving since then as state economies reopened and vaccines rolled out.

The unemployment rate for the nation averaged 3.8 percent in the first quarter of 2022. Unemployment rates ranged from 1.9 percent in Nebraska to 5.2 percent in New Mexico for the first quarter of 2022, although unemployment rates varied for different socioeconomic and demographic

groups in each state. According to the latest data, the national unemployment rate dropped to 3.6 percent in the second quarter of 2022.

FIGURE 7
Employment Rebounded Further in the First Quarter of 2022 but Is Still Down Compared with Prepandemic Levels

Year-over-year percentage change in employment, 2022 Q1 versus 2021 Q1 and 2019 Q1



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

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

Nationwide employment increased 4.6 percent in the first quarter of 2022 compared with the same quarter in 2021 but was still 0.1 percent below the employment levels observed in the first quarter of 2019 (Figure 7). Overall employment declined substantially during the first year of the pandemic; this decline was largely caused by the adverse impact of the pandemic on various sectors of the economy. Declines were particularly steep in states with a high reliance on the hospitality and tourism industries (such as Hawaii and Nevada) as well as in states that experienced high numbers of COVID-19 cases during the first phase of the pandemic (such as New York). Therefore, widespread employment growth observed in the first quarter of 2022 is partially attributable to the much lower baseline employment rate observed in the first quarter of 2021. All 50 states reported growth in employment in the first quarter of 2022 compared with the first quarter of 2021, but at the same time, 33 states reported declines in employment compared with the first quarter of 2019. Year-over-year growth in employment ranged from 1.8 percent in Alabama to 9.8 percent in Nevada for the first quarter of 2022.

Although the employment situation improved substantially in recent months, current employment numbers are still below prepandemic levels. As of June 2022, around 524,000 fewer people were employed than in February 2020. Early in the pandemic, states and localities cut public-sector jobs to address actual and anticipated budgetary challenges caused by the pandemic or in response to reduced demand. In the aftermath, some government sector workers (especially teachers) retired or did not return to the public sector. Even with federal aid and stronger budgets, many state and local governments have been unable to refill positions, and these early declines have not been fully reversed. As of June 2022, state and local governments employed around 656,000 fewer people than they did before the pandemic, despite many vacancies advertised. Among private-sector jobs, the share of workers employed also declined dramatically for the leisure and hospitality sector, which as of June 2022 employed around 1.3 million fewer people than before the pandemic. On the other hand, the job market thrived for the trade, transportation, and utilities sector, which as of June 2022 employed around 914,000 more people than before the pandemic.

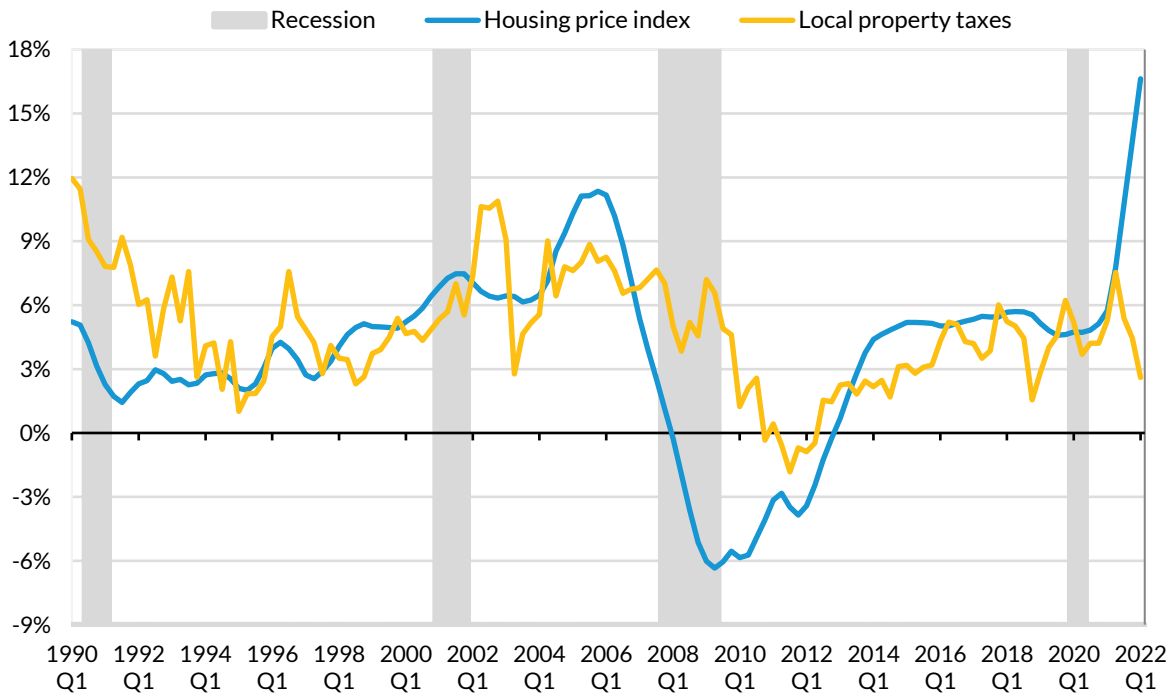
Housing Market

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. Housing markets have recently strengthened as demand for new housing outstripped supply in the early months of the pandemic.

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).

FIGURE 8
Strong Growth in Housing Prices; Growth in Local Property Taxes Ticked Downward

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



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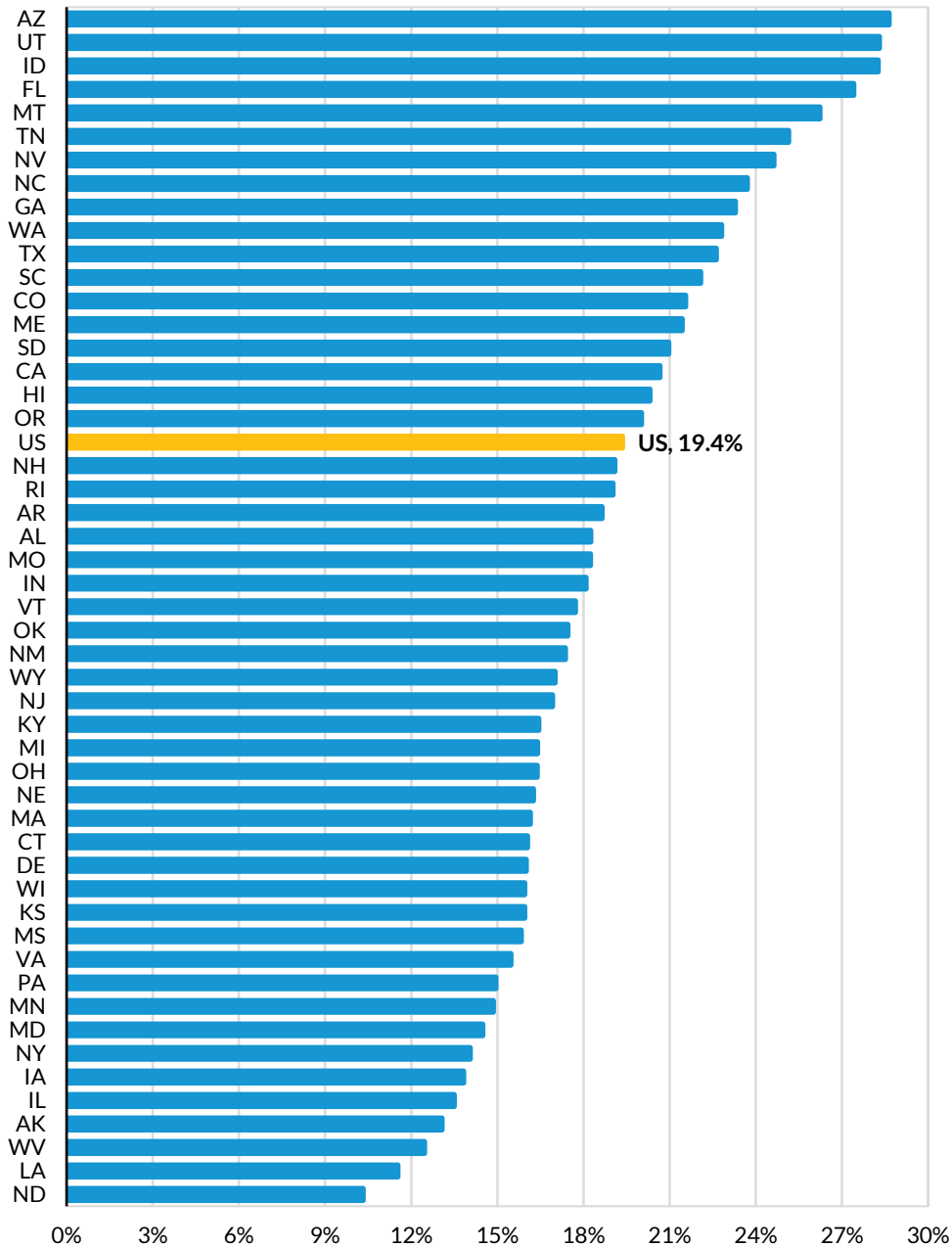
Sources: US Census Bureau (property taxes) and Federal Housing Finance Agency (house price indexes), analysis by the author.

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

House prices rebounded in 2013 and the trend has been generally upward since then. National average house prices showed strong growth during the pandemic and appreciated 16.6 percent for the first quarter of 2022 compared with one year earlier; year-over-year growth in local property taxes was 2.6 percent for the same period, based on four-quarter moving averages. Despite the strength in house prices, local government property tax revenues weakened substantially since the third quarter of 2021, mostly because of declines in commercial property tax revenues caused by the pandemic and the increase in remote work.

Figure 9 shows the nominal year-over-year percentage change in house price indexes in the first quarter of 2022 for all states. Statewide house price indexes increased in all states for the first quarter of 2022 compared with a year earlier, ranging from a 10.3 percent increase in North Dakota to a 28.6 percent increase in Arizona. Year-over-year growth was 19.4 percent for the nation.

FIGURE 9
All States Saw Double-Digit Growth in Housing Prices in the First Quarter of 2022
Year-over-year percentage change in house prices, 2022 Q1 versus 2021 Q1



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

The pandemic generally has not negatively affected residential real estate property values. However, the pandemic's longer-term effects on commercial real estate property values, and thus commercial property tax revenues, remains uncertain. Declines in the value of commercial properties (such as hotels, retails, and offices) appear to have already led to lower property tax assessments and revenues. Further, residential properties in high-cost or densely populated cities such as San Francisco or New York have also been negatively affected by the pandemic. For example, New York City's local property tax revenues were projected to decline by more than \$860 million in fiscal year 2022.¹⁶

Predicting the pandemic's long-term effects on real estate and commercial properties is difficult because it is still unclear whether current patterns of remote work and online shopping will remain even after other aspects of the economy revert to prepandemic trends.

Personal Consumption Expenditures

"Personal consumption expenditures" is a measure of national consumer spending. The measure shows the value of the goods and services purchased by American consumers and is correlated with the base for states' sales taxes. [Figure 10](#) displays the year-over-year percentage change in the four-quarter moving average of real personal consumption expenditures for services, durable goods, and nondurable goods as well as for aggregate state real sales tax collections. We also show trends in the consumption of energy goods and services.

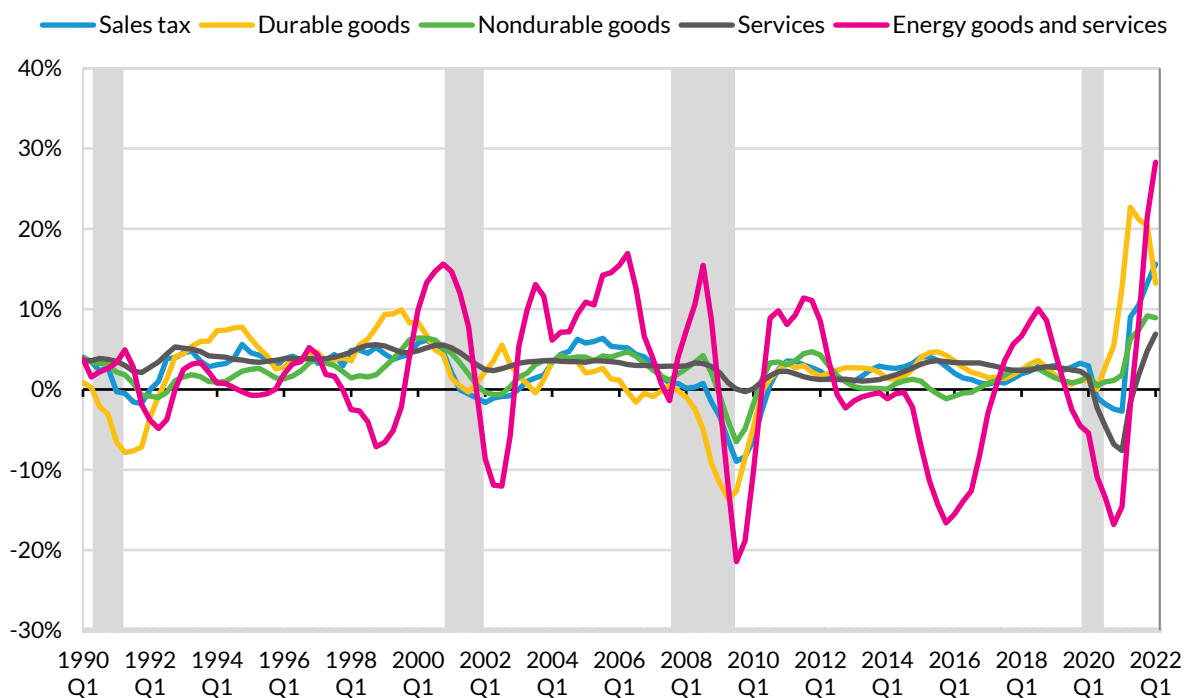
As shown in [Figure 10](#), before the pandemic, overall growth rates for both goods and services were already weaker than growth rates observed before the Great Recession. Growth rates in state sales tax revenues were also substantially weaker than the peaks observed before the Great Recession, although growth in sales tax revenues improved after the *Wayfair* decision as states started requiring remote sellers to collect and remit sales taxes. Year-over-year spending on services increased an average 6.9 percent in the first quarter of 2022, in part reflecting declines in service consumption earlier in the pandemic. Spending on both durable and nondurable goods increased consistently throughout the pandemic, although growth weakened in the first quarter of 2022. Year-over-year spending on durable and nondurable goods increased 13.2 and 8.9 percent, respectively, in the first quarter of 2022.

Before the pandemic, spending on services was resilient to economic downturns. However, spending on services declined in the second quarter of 2020, marking the first decline on record since 1948. Spending on services continued to decline for another year, primarily because of the decline in travel and attendance of in-person events caused by the pandemic. However, spending on services resumed growth in the second half of 2021 and is likely to continue increasing, absent new waves of the pandemic.

FIGURE 10

Spending on Durable Goods Weakened in the First Quarter of 2022

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



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Sources: US Census Bureau (sales taxes) and Bureau of Economic Analysis (NIPA table 2.3.5), analysis by the author.

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

Spending on gasoline and energy goods represents about one-fifth of total spending on nondurable goods. As shown in Figure 10, year-over-year real spending on energy goods and services declined for 19 consecutive quarters, from the third quarter of 2012 to the first quarter of 2017. The decline was particularly dramatic throughout 2015 and 2016, reflecting steep declines in oil and gas prices. Spending on energy goods and services increased between the second quarter of 2017 and the second quarter of 2019, largely bouncing back from previously depressed levels. However, consumption of energy goods and services showed year-over-year declines since then and through the first quarter of 2021, caused by the fall in oil and gas prices as well as reduced consumption during the pandemic. The decline in total spending in the energy sector led to declines in overall general sales tax revenues, which are based on prices as well as quantity consumed.

After eight consecutive quarters of declines, real spending on energy goods and services resumed growth in the third quarter of 2021; year-over-year growth was robust in the first quarter of 2022, at 28.3 percent. The growth in spending on energy goods and services is partly because it is in comparison to a lower base, but it is also because of the hike in gas and oil prices. As offices are gradually reopening and because gas and oil prices have seen steep increases, we will likely see continued rebounding in spending on energy goods and services in the coming months.

Tax Law Changes Affecting the First Quarter of 2022

Anticipated and actual federal policy changes had a substantial effect on state tax revenues in the past few years. But changes in state tax laws also affect state tax revenue trends. Several states enacted tax changes for fiscal year 2022, partly in response to surging state revenues and in response to residents' need for financial relief. We present analysis here based on the data and information retrieved from the National Association of State Budget Officers' Fall 2021 Fiscal Survey of the States. However, the analysis and forecasted effects are based on anticipated revenue gains or losses in response to states' legislated tax changes and do not include the effects of changing economic conditions. Actual revenue collections typically vary from expected tax revenues depending on the performance of underlying economic indicators, and estimates may not fully control for growing inflation.¹⁷

During the first quarter of 2022, enacted tax changes were forecasted to decrease revenues by \$0.8 billion compared with the same period in 2021 (though this reflects tax decreases in some states and increases in others).¹⁸ Overall, tax changes were expected to decrease personal income taxes by \$1.3 billion and increase corporate income taxes by \$176 million. Enacted tax changes were also expected to increase sales taxes by \$347 million. Further, some states enacted changes in other taxes and fees, which were expected to decrease state tax and fee revenues by approximately \$27 million (NASBO 2021). Below, we discuss some of the major enacted tax changes for fiscal year 2022.

The estimated impact of all the enacted tax changes is a projected net decrease of \$2.7 billion in state revenues in fiscal year 2022. In contrast, legislated tax actions in fiscal year 2021 were estimated to increase state revenues by \$5.2 billion. New York and Illinois enacted the most substantial tax increases, with estimated net gains forecasted at \$3.6 billion and \$1.3 billion, respectively, for fiscal year 2022. In contrast, California, North Carolina, and Wisconsin enacted the most substantial tax cuts, with estimated net losses of \$1.6 billion, \$1.3 billion, and \$1.0 billion, respectively. Not only do these increases and decreases reflect differences in anticipated revenue, but they can also have disparate impacts on different individuals within a state, based on the details of the changes.

For fiscal year 2022, 24 states enacted personal income tax decreases and 5 states enacted increases. The net impact of legislated tax changes is an estimated decrease of personal income tax revenues by \$4.7 billion in fiscal year 2022. The largest estimated increase was in New York, where officials temporarily expanded the top state personal income tax rate from 8.82 percent to 9.65 percent for income over \$1,077,550 but below \$5 million. Officials in New York also established two new brackets at rates of 10.30 percent for taxpayers with income over \$5 million but below \$25 million and 10.9 percent for taxpayers with income over 25 million. These tax rate changes went into effect on January 1, 2021, and will last through 2027.¹⁹ These tax rate increases are estimated to increase New York's personal income tax collections by \$2.8 billion in fiscal year 2022.

Officials in California, North Carolina, and Wisconsin enacted various laws estimated to decrease personal tax revenue collections in fiscal year 2022 by more than \$1 billion in each of these states. To mitigate the impact of the pandemic, officials in California enacted a bill to conform to the exclusion from gross income of Paycheck Protection Program covered loan amounts provided pursuant to the Coronavirus Aid, Relief, and Economic Security (CARES) Act.²⁰ California's bill is estimated to decrease California's personal income tax revenue collections by \$1.5 billion in fiscal year 2022. Officials in North Carolina enacted several tax law changes, including loan forgiveness under the Paycheck Protection Program, reducing personal income tax rates from 5.25 percent to 3.99 percent for six years, increasing the individual standard deduction and child deduction.²¹ These tax law changes are estimated to reduce North Carolina's personal income tax revenue collections by \$1.1 billion in fiscal year 2022. Lawmakers in Wisconsin reduced personal income tax rates by cutting the third income tax bracket rate from 6.27 percent to 5.3 percent for individuals with taxable income between \$24,250 and \$266,930.²² This tax rate reduction is estimated to decrease personal income tax collections by \$1 billion in fiscal year 2022.

Lawmakers in Arizona introduced a 4.5 percent cap on the top marginal income tax rate, which effectively wiped out the 3.5 percent income tax surcharges on high-income taxpayers under Proposition 208 that was adopted by Arizona voters in November 2020.²³ This income tax rate cap is estimated to reduce Arizona's personal income tax revenues collections by \$0.9 billion in fiscal 2022.

Officials in Ohio eliminated the top income tax bracket for taxpayers with income over \$221,300 and reduced the tax rate from 4.413 percent to 3.99 percent for individuals with taxable income over \$110,650. State legislators also slightly reduced income tax rates for the lower brackets.²⁴ These income tax rate cuts are estimated to reduce Ohio's personal income tax revenue collections by \$0.8 billion in fiscal year 2022. Several other states also enacted laws modifying their personal income tax structures, and those measures often have disparate impacts on different income and racial and ethnic groups (Auxier 2022). Cutting income tax rates often largely benefits the highest-income taxpayers, while tax cuts that include expanded refundable credits (like the earned income tax credit or child tax credit) benefit lower-income households and taxpayers with children.

Six states enacted corporate income tax increases, and 15 states enacted decreases. Legislated tax changes were estimated to increase aggregate corporate income tax revenues by \$0.8 billion in fiscal year 2022. The largest corporate income tax changes were in Illinois and New York. Lawmakers in Illinois introduced several changes pertaining to corporate income tax structure, including placing a \$100,000 annual cap on the net operating loss deduction for corporations for tax years 2021 through 2024 as well as aligning the treatment of foreign-source dividends to domestic-source dividends.²⁵ These changes are estimated to increase the state's corporate income tax collections by \$1 billion in fiscal year 2022. Officials in New York enacted several tax changes pertaining to corporations, including increasing the business income tax rate from 6.5 percent to 7.25 percent for certain corporations for

three years as well as extending the business capital base tax for certain corporations for another three years (it was initially set to phase out in 2021).²⁶ These changes are estimated to increase New York's corporate income tax revenues by \$0.9 billion in fiscal year 2022.

In California, Governor Gavin Newsom signed into law two major corporate income tax policies that have offsetting revenue impacts. First, California established a new elective pass-through entity tax that is estimated to increase corporate income tax revenues collections by \$1.3 billion in fiscal year 2022, though this revenue is largely a shift from from personal income tax to corporate income tax as personal income tax credits are provided to taxpayers to offset the elective taxes paid at the pass-through entity level. Second, California's conformity law regarding the tax treatment of forgiven Paycheck Protection Program loans is expected to decrease corporate tax revenues by \$1.5 billion in fiscal year 2022.²⁷ The net impact of these two tax changes pertaining to businesses is an estimated decrease of \$0.2 billion in California's corporate income tax revenues for fiscal year 2022.

Four states enacted sales tax increases, and 15 states enacted decreases. The net impact of these legislated tax changes is an estimated increase in sales tax revenues of \$1.3 billion in fiscal year 2022. The most significant legislative changes pertaining to sales tax revenues were in Florida and Colorado, where sales tax revenues were estimated to increase by \$0.9 billion and \$0.4 billion, respectively, in fiscal year 2022. In Florida, Governor DeSantis signed a law that imposes a sales and use tax collection obligation on certain remote sellers and marketplace providers.²⁸ Officials in Colorado expanded the sales and use tax base to impose taxes on digital goods as well as on amounts charged for accessing mainframe computers, photocopying, and packing and crating.²⁹

Four states enacted changes for motor fuel taxes, with an estimated net increase of \$88 million in fiscal year 2022. Three states enacted changes for cigarette taxes, with an estimated net increase of \$207 million in fiscal year 2022. Another three states enacted changes pertaining to gaming taxes, with an estimated overall increase of \$352 million in fiscal year 2022. Finally, two states enacted changes for alcohol taxes, with an estimated overall decrease of less than a \$1 million in fiscal year 2022. The estimated impact of each state's changes was not significant.

Twenty states enacted changes for some other taxes and fees, with an estimated overall decrease of \$0.8 billion in fiscal year 2022. These changes were estimated to increase state tax and fee revenues in 11 states but decrease revenues in 9 states. The most significant legislated changes were in Florida, where lawmakers revised the tax rates for the reemployment assistance, which is a federal-state partnership program and is funded through a reemployment tax paid by employers.³⁰ The net impact of the legislated changes is an estimated decrease of \$1.3 billion in Florida's state tax revenues for fiscal year 2022.

Conclusion

State tax revenues have seen large swings since the onset of the pandemic. But although the pandemic-induced recession was sharp, it lasted only two months, making it the shortest contraction on record.³¹

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

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

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

In brief, although the short-term outlook for state budgets remains positive, economic uncertainty paired with recent state actions, including new temporary or permanent tax cuts, could limit growth in the next few fiscal years and may require budget reversals.

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

Appendix: Additional Tables

TABLE A1

Quarterly State Government Tax Revenue by Major Tax

Year / quarter	Nominal Y-O-Y Percentage Change					Inflation rate	Real Y-O-Y Percentage Change				
	PIT	CIT	Sales	MFT	Total		PIT	CIT	Sales	MFT	Total
2010Q1 - 2022Q1 average growth	8.0	12.7	5.1	3.7	6.3	2.0	5.9	10.3	3.1	1.7	4.2
2022 Q1	18.9	123.3	18.0	10.2	21.7	6.8	11.3	109.0	10.5	3.1	13.9
2021 Q4	27.2	63.6	18.8	7.8	23.9	5.9	20.1	54.5	12.2	1.8	17.0
2021 Q3	(16.0)	(2.3)	12.5	7.6	(0.3)	4.6	(19.7)	(6.6)	7.5	2.9	(4.7)
2021 Q2	73.5	161.1	39.2	26.2	58.4	4.1	66.7	151.0	33.8	21.3	52.3
2021 Q1	18.0	31.1	3.1	(7.3)	9.5	2.1	15.5	28.4	1.0	(9.3)	7.2
2020 Q4	8.9	24.1	2.9	(7.6)	5.9	1.5	7.4	22.3	1.4	(9.0)	4.4
2020 Q3	42.7	63.6	2.9	(4.2)	18.9	1.3	40.8	61.5	1.6	(5.4)	17.3
2020 Q2	(32.1)	(44.3)	(13.2)	(17.9)	(24.5)	0.7	(32.6)	(44.7)	(13.8)	(18.5)	(25.1)
2020 Q1	5.0	(0.5)	3.8	5.2	4.0	1.7	3.2	(2.2)	2.1	3.4	2.3
2019 Q4	6.2	19.4	5.7	8.3	5.6	1.6	4.5	17.6	4.1	6.6	4.0
2019 Q3	4.3	11.8	7.1	6.0	5.5	1.7	2.6	9.9	5.4	4.3	3.8
2019 Q2	18.8	21.0	2.3	3.2	10.4	1.8	16.7	18.9	0.5	1.4	8.5
2019 Q1	(2.4)	40.5	5.6	1.8	2.7	2.0	(4.3)	37.8	3.5	(0.2)	0.6
2018 Q4	(9.2)	12.0	4.5	6.0	(0.1)	2.3	(11.3)	9.4	2.1	3.6	(2.4)
2018 Q3	7.9	26.4	6.3	8.8	8.4	2.5	5.2	23.3	3.7	6.2	5.7
2018 Q2	10.6	17.5	5.3	8.9	8.9	2.6	7.8	14.5	2.6	6.1	6.2
2018 Q1	15.3	(6.5)	5.0	10.9	8.9	2.2	12.9	(8.5)	2.8	8.6	6.6
2017 Q4	14.9	10.5	4.5	9.7	9.1	2.1	12.6	8.3	2.4	7.5	6.9
2017 Q3	4.6	6.5	3.1	2.0	3.9	1.9	2.6	4.5	1.2	0.0	2.0
2017 Q2	(0.0)	11.7	3.2	5.2	2.3	1.7	(1.7)	9.8	1.5	3.5	0.6
2017 Q1	8.9	(28.1)	2.3	0.9	3.3	2.0	6.7	(29.5)	0.3	(1.1)	1.2
2016 Q4	0.3	(3.4)	1.7	1.2	1.2	1.5	(1.1)	(4.8)	0.2	(0.3)	(0.3)
2016 Q3	2.4	(9.0)	2.7	1.4	1.3	0.9	1.5	(9.8)	1.8	0.5	0.3
2016 Q2	(2.8)	(9.7)	1.2	0.3	(1.7)	0.9	(3.6)	(10.5)	0.3	(0.6)	(2.5)
2016 Q1	1.7	(5.9)	1.9	2.9	1.4	0.8	0.9	(6.6)	1.1	2.1	0.7
2015 Q4	5.1	(9.5)	2.7	3.5	2.4	0.8	4.3	(10.2)	1.9	2.7	1.5
2015 Q3	6.5	0.3	3.5	5.0	4.1	0.9	5.5	(0.6)	2.6	4.1	3.2
2015 Q2	14.0	6.0	3.6	2.5	7.1	1.1	12.8	4.8	2.5	1.4	5.9
2015 Q1	6.9	3.3	5.8	4.3	5.5	1.1	5.8	2.2	4.6	3.1	4.3
2014 Q4	8.4	10.1	6.5	2.4	5.7	1.5	6.8	8.5	4.9	0.9	4.1
2014 Q3	4.4	7.4	6.6	0.6	4.3	2.0	2.4	5.3	4.5	(1.4)	2.2
2014 Q2	(6.7)	(0.3)	4.6	4.0	(1.0)	2.1	(8.6)	(2.4)	2.5	1.9	(3.0)
2014 Q1	(1.3)	7.9	3.0	2.8	0.5	1.8	(3.0)	6.0	1.2	1.0	(1.3)
2013 Q4	1.1	3.6	5.1	3.6	3.0	1.8	(0.7)	1.8	3.2	1.7	1.2
2013 Q3	4.9	1.8	5.5	2.8	5.3	1.7	3.1	0.2	3.7	1.1	3.5
2013 Q2	19.2	8.5	4.6	2.0	10.0	1.7	17.2	6.6	2.8	0.3	8.1
2013 Q1	18.2	9.6	3.9	(1.7)	8.9	1.9	16.0	7.6	2.0	(3.5)	6.9
2012 Q4	10.4	2.5	3.3	1.3	5.6	2.1	8.1	0.4	1.2	(0.8)	3.4
2012 Q3	4.7	8.6	2.3	2.2	3.1	1.8	2.9	6.7	0.5	0.4	1.3
2012 Q2	4.7	1.5	2.1	1.7	3.2	1.7	2.9	(0.2)	0.4	0.0	1.5
2012 Q1	4.0	4.2	4.6	1.3	3.7	2.0	2.0	2.2	2.6	(0.7)	1.7
2011 Q4	3.7	(6.5)	3.5	0.7	3.2	1.9	1.7	(8.2)	1.6	(1.2)	1.3
2011 Q3	9.7	2.5	3.7	(0.3)	6.2	2.3	7.2	0.1	1.3	(2.5)	3.7
2011 Q2	15.3	19.4	5.7	7.5	11.1	2.2	12.9	16.9	3.5	5.2	8.8
2011 Q1	12.1	4.4	6.3	13.4	10.0	1.9	10.0	2.4	4.4	11.2	7.9
2010 Q4	10.5	19.8	4.8	11.8	8.4	1.7	8.7	17.8	3.1	10.0	6.6
2010 Q3	4.8	(0.9)	4.5	10.6	5.4	1.5	3.3	(2.3)	3.0	9.0	3.9
2010 Q2	2.2	(19.4)	4.8	4.0	2.6	1.2	1.0	(20.3)	3.6	2.8	1.4
2010 Q1	2.4	0.8	0.6	(0.2)	2.9	0.5	1.9	0.2	0.0	(0.7)	2.4

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

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

TABLE A2

Quarterly State Government Tax Revenue, by State

Nominal percentage change, 2022 Q1 versus 2021 Q1

State / region	PIT	CIT	Sales	MFT	Total
US (median)	17.3	27.1	14.3	7.7	16.3
US (average)	18.9	123.3	18.0	10.2	21.7
New England	22.0	31.7	16.2	7.6	18.3
Connecticut	20.7	53.0	23.4	3.6	24.7
Maine	17.8	0.4	11.0	7.8	14.2
Massachusetts	24.8	14.1	13.7	8.9	18.2
New Hampshire	23.2	29.7	N/A	7.7	10.5
Rhode Island	8.5	27.1	11.3	8.5	2.3
Vermont	4.3	40.8	8.8	14.2	10.9
Mideast	16.7	29.2	20.8	12.1	16.6
Delaware	(12.4)	1.4	N/A	5.3	1.4
Maryland	22.4	80.1	68.3	25.4	28.3
New Jersey	11.6	10.1	14.9	11.7	16.1
New York	19.4	27.6	18.5	13.1	17.5
Pennsylvania	10.2	37.4	14.1	8.1	11.9
Great Lakes	11.4	103.0	11.9	8.3	13.4
Illinois	23.5	125.0	10.4	6.3	24.1
Indiana	16.6	135.4	13.8	5.7	16.5
Michigan	4.2	277.9	13.5	16.8	12.9
Ohio	8.4	NM	11.3	8.3	3.0
Wisconsin	(19.1)	26.2	10.6	6.0	(1.9)
Plains	19.2	74.6	14.7	10.3	17.7
Iowa	15.2	15.2	8.8	20.8	10.9
Kansas	12.5	28.8	18.0	7.4	11.4
Minnesota	31.5	116.1	15.7	5.5	27.8
Missouri	10.5	15.4	19.4	22.1	9.6
Nebraska	4.8	18.5	10.7	(6.8)	8.4
North Dakota	(10.8)	24.5	14.7	2.2	28.0
South Dakota	N/A	(30.3)	10.4	6.0	11.1
Southeast	22.1	28.8	17.1	12.2	17.6
Alabama	35.0	20.6	11.4	4.4	22.2
Arkansas	11.6	11.5	16.0	41.7	13.9
Florida	N/A	21.3	30.9	11.0	24.4
Georgia	25.8	33.8	15.5	6.0	20.2
Kentucky	17.3	30.1	14.3	5.7	12.1
Louisiana	4.2	435.8	7.8	4.9	9.3
Mississippi	5.2	(2.2)	12.0	3.5	8.9
North Carolina	30.7	(0.2)	(6.0)	16.8	14.2
South Carolina	30.4	105.4	15.3	13.0	23.1
Tennessee	(79.1)	21.7	13.4	4.5	12.4
Virginia	16.2	12.8	14.0	26.1	15.7
West Virginia	19.8	(25.3)	10.5	7.6	21.5
Southwest	41.3	175.0	24.2	7.7	29.9
Arizona	19.9	33.6	17.5	7.6	16.4
New Mexico	269.7	303.2	21.0	7.6	79.0
Oklahoma	19.4	538.8	15.0	9.0	28.4
Texas	N/A	N/A	27.0	7.5	28.6
Rocky Mountain	21.0	109.9	18.0	12.9	22.5
Colorado	20.2	13.5	20.6	17.7	20.7
Idaho	7.0	711.7	14.8	7.3	27.8
Montana	39.9	(10.1)	N/A	7.2	22.1
Utah	21.6	53.3	19.4	13.5	21.5
Wyoming	N/A	N/A	10.8	17.8	28.4

State / region	PIT	CIT	Sales	MFT	Total
Far West	20.2	324.4	19.4	8.7	32.4
Alaska	N/A	NM	N/A	21.4	235.7
California	21.8	328.9	21.6	10.0	37.5
Hawaii	23.8	NM	27.2	12.0	40.1
Nevada	N/A	N/A	19.8	7.6	13.9
Oregon	(5.1)	18.2	N/A	7.6	(2.2)
Washington	N/A	N/A	12.9	0.2	11.4

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

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

TABLE A3

State Government Tax Revenue Trends during the Pandemic

Nominal percentage change, April 2021-March 2022 versus April 2020-March 2021

State / region	PIT	CIT	Sales	MFT	Total
US (median)	15.8	54.6	18.6	10.7	19.6
US (average)	22.4	76.1	21.7	12.6	24.5
New England	19.5	40.6	23.3	10.6	21.3
Connecticut	14.7	38.4	18.0	8.9	19.2
Maine	15.9	55.3	25.2	8.9	20.2
Massachusetts	23.6	40.3	27.8	15.0	25.5
New Hampshire	(19.2)	45.1	N/A	(5.8)	17.1
Rhode Island	16.2	12.9	20.3	13.2	10.7
Vermont	3.3	103.3	13.7	12.1	11.0
Mideast	31.3	49.6	22.7	12.1	28.1
Delaware	21.0	68.1	N/A	12.8	19.6
Maryland	14.2	46.0	42.8	21.9	22.6
New Jersey	15.0	37.6	20.8	(6.1)	24.1
New York	44.9	60.9	21.0	10.9	36.5
Pennsylvania	11.5	47.3	19.2	12.2	17.9
Great Lakes	13.3	69.5	17.8	10.3	16.6
Illinois	16.2	87.2	19.3	11.4	22.1
Indiana	14.2	54.0	18.6	15.7	19.1
Michigan	13.3	86.5	19.3	6.2	15.7
Ohio	14.5	NM	15.7	8.5	11.2
Wisconsin	4.2	31.8	15.3	10.3	10.6
Plains	15.5	62.6	17.2	8.3	18.7
Iowa	7.5	13.9	15.9	5.3	12.3
Kansas	15.8	61.6	17.6	10.5	16.5
Minnesota	20.2	96.4	17.7	10.3	21.8
Missouri	16.5	20.5	21.5	13.5	16.5
Nebraska	6.3	57.0	12.3	(0.3)	12.0
North Dakota	(2.6)	58.9	15.3	4.7	41.5
South Dakota	N/A	(3.7)	14.0	8.7	11.7
Southeast	17.2	46.8	24.1	13.8	20.8
Alabama	25.3	77.1	15.4	8.9	19.9
Arkansas	10.9	51.7	16.4	18.5	14.0
Florida	N/A	39.7	35.7	16.6	30.4
Georgia	18.3	49.7	26.4	1.2	20.3
Kentucky	12.6	45.8	17.7	9.5	14.6
Louisiana	8.9	43.7	15.8	(5.9)	15.2
Mississippi	14.0	33.2	17.3	7.0	15.6
North Carolina	22.9	54.6	15.5	13.7	19.5
South Carolina	16.5	95.3	13.1	25.6	21.3
Tennessee	(48.6)	24.2	22.4	9.4	19.1
Virginia	15.8	57.4	19.0	39.9	18.6
West Virginia	9.8	52.0	13.3	7.9	17.4
Southwest	18.0	81.9	20.3	12.6	28.0
Arizona	19.4	87.3	20.4	13.0	19.6
New Mexico	34.6	78.7	14.5	13.4	49.5
Oklahoma	7.9	74.7	17.1	11.3	20.2
Texas	N/A	N/A	21.0	12.6	29.4
Rocky Mountain	15.5	84.8	20.0	12.3	19.8
Colorado	12.1	58.3	19.3	11.4	16.9
Idaho	17.7	192.6	21.9	6.7	25.7
Montana	31.6	48.9	N/A	13.7	23.4
Utah	15.9	85.2	22.2	18.0	21.4
Wyoming	N/A	N/A	8.7	6.1	12.2

State / region	PIT	CIT	Sales	MFT	Total
Far West	26.3	135.1	23.5	14.9	31.5
Alaska	N/A	284.1	N/A	4.0	91.2
California	26.7	139.6	23.8	16.7	34.0
Hawaii	30.3	352.5	33.0	22.4	38.5
Nevada	N/A	N/A	31.7	5.9	35.2
Oregon	20.4	40.0	N/A	11.9	22.4
Washington	N/A	N/A	18.6	8.9	14.1

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

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

TABLE A4

State Personal Income Tax Withholding

Year-over-year nominal percentage change

State / region	State fiscal year 2021				State fiscal year 2022		
	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1
US (median)	3.6	4.0	4.9	12.1	9.3	10.9	12.0
US (average)	5.0	6.2	6.5	15.4	11.4	15.4	12.9
New England	4.7	5.1	6.6	10.6	(1.4)	10.3	11.0
Connecticut	4.0	6.6	2.2	10.3	(30.9)	8.8	16.3
Maine	9.2	7.8	10.7	14.3	14.8	9.8	18.1
Massachusetts	4.5	4.3	9.4	10.2	9.3	10.5	7.0
Rhode Island	3.4	4.0	0.2	12.1	7.7	13.4	11.4
Vermont	7.3	1.5	1.1	10.8	11.9	15.8	22.5
Mideast	4.3	2.8	4.7	15.0	11.1	20.0	17.8
Delaware	4.8	(39.8)	34.5	16.2	9.3	113.0	(14.9)
Maryland	5.4	7.8	0.7	13.7	8.1	7.7	11.8
New Jersey	7.5	9.5	7.3	21.2	7.6	10.9	10.9
New York	3.0	2.8	4.9	14.2	14.8	26.3	24.1
Pennsylvania	4.5	(6.7)	1.8	12.8	5.1	18.7	10.6
Great Lakes	4.3	3.7	5.2	12.2	5.8	10.1	15.8
Illinois	6.0	6.1	4.3	11.2	5.8	10.1	30.0
Indiana	9.6	2.3	6.0	19.7	2.7	10.5	13.0
Michigan	5.0	2.9	6.8	5.5	3.5	10.7	9.3
Ohio	(0.8)	0.7	1.6	18.3	6.7	8.0	11.1
Wisconsin	(0.0)	4.0	8.5	10.2	12.4	11.5	0.2
Plains	(0.6)	3.4	3.2	11.5	11.0	8.5	13.2
Iowa	3.6	1.2	3.2	3.9	1.2	2.9	9.9
Kansas	3.2	4.4	2.8	12.9	11.1	9.7	14.6
Minnesota	(6.0)	4.5	1.9	13.6	16.5	7.5	13.4
Missouri	0.1	1.9	5.5	13.0	11.3	12.3	13.0
Nebraska	8.2	6.2	5.4	11.5	7.0	9.8	13.9
North Dakota	2.5	(4.9)	(11.6)	2.8	1.2	11.8	34.4
Southeast	4.2	3.9	6.0	9.8	8.2	13.2	10.1
Alabama	1.9	3.9	4.8	10.7	10.7	9.3	11.1
Arkansas	(4.4)	(4.1)	(3.5)	7.8	7.2	9.8	10.7
Georgia	11.2	6.5	9.5	9.4	4.1	15.5	10.6
Kentucky	5.6	5.3	1.4	11.8	5.2	10.1	13.3
Louisiana	(11.0)	0.2	1.0	8.6	12.0	12.4	8.0
Mississippi	0.2	4.7	3.1	2.1	18.7	7.5	11.2
North Carolina	8.9	5.0	8.5	13.2	7.4	15.7	8.4
South Carolina	4.6	3.3	10.0	9.9	10.6	18.7	12.0
Virginia	2.4	3.4	5.1	8.1	9.7	10.9	9.4
West Virginia	(5.4)	(0.0)	1.9	11.9	9.3	9.3	10.8
Southwest	3.4	5.5	4.8	12.2	8.3	13.3	12.5
Arizona	2.5	8.5	7.5	13.6	12.2	12.0	11.6
New Mexico	3.2	5.3	2.2	21.2	3.8	20.2	16.8
Oklahoma	4.8	1.0	1.8	6.1	4.5	12.0	12.1
Rocky Mountain	9.3	13.7	9.9	13.3	14.4	12.2	15.8
Colorado	14.1	15.4	7.5	11.2	11.0	12.2	16.4
Idaho	11.5	14.9	18.9	20.9	20.0	15.4	13.3
Montana	2.8	11.2	9.7	17.2	16.5	10.5	15.8
Utah	1.6	10.9	11.3	13.6	18.7	11.4	15.7
Far West	8.3	12.6	10.4	26.0	21.4	19.9	7.7
California	9.2	14.2	11.1	27.9	22.7	21.1	7.0
Hawaii	(1.2)	(5.1)	(1.6)	15.4	10.5	12.1	12.5
Oregon	3.3	3.1	6.4	13.4	12.6	10.2	12.5

Source: Individual state data, analysis by the author.

Notes: ND = no data. 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 A5

State Personal Income Tax: Estimated Payments or Declarations

Year-over-year nominal percentage change

State	Tax year 2019	Tax year 2020	Tax year 2021
	Apr 2019-Jan 2020 vs Apr 2018-Jan 2019	Apr 2020-Jan 2021 vs Apr 2019-Jan 2020	Apr 2021-Jan 2022 vs Apr 2020-Jan 2021
Median	13.9	(2.2)	23.5
Average	11.3	2.0	38.8
Alabama	14.4	(0.9)	24.1
Arizona	13.8	12.7	34.2
Arkansas	7.4	10.8	11.9
California	2.5	11.2	55.3
Colorado	19.4	(8.3)	25.1
Connecticut	(20.2)	(1.7)	33.3
Delaware	11.4	7.6	40.3
Georgia	5.3	(8.9)	36.7
Hawaii	40.1	(6.5)	60.7
Illinois	12.2	1.6	17.4
Indiana	11.7	(2.0)	14.5
Iowa	16.7	(4.0)	22.6
Kansas	18.4	(0.0)	19.7
Kentucky	5.5	(2.8)	17.9
Louisiana	24.1	(1.2)	4.7
Maine	12.4	15.2	15.4
Maryland	14.0	20.0	31.7
Massachusetts	3.4	(2.5)	76.4
Michigan	5.0	0.0	30.6
Minnesota	26.3	(4.6)	19.9
Mississippi	22.6	(7.4)	30.3
Missouri	152.3	147.7	(21.6)
Montana	15.2	5.8	29.7
Nebraska	14.2	1.9	17.4
New Jersey	5.9	(10.6)	20.1
New York	21.9	(3.8)	31.4
North Carolina	13.7	(0.9)	38.4
North Dakota	20.8	(5.9)	8.2
Ohio	8.6	(2.5)	22.9
Oklahoma	9.0	(25.4)	16.4
Oregon	26.4	(13.9)	35.9
Pennsylvania	11.2	(19.2)	46.6
Rhode Island	11.7	(8.9)	16.4
South Carolina	20.8	2.5	22.4
Vermont	15.5	(0.9)	26.2
Virginia	24.1	(6.5)	30.5
West Virginia	2.2	(6.1)	22.6
Wisconsin	14.4	(9.7)	14.7

Source: Individual state data, analysis by the author.

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

TABLE A6

State Personal Income Tax: Final Payments

Year-over-year nominal percentage change

State	Tax year 2019	Tax year 2020	Tax year 2021
	Apr 2019-Jan 2020 vs Apr 2018-Jan 2019	Apr 2020-Jan 2021 vs Apr 2019-Jan 2020	Apr 2021-Jan 2022 vs Apr 2020-Jan 2021
Median	33.0	(1.6)	25.4
Average	33.0	(2.9)	28.4
Alabama	36.3	(3.0)	35.4
Arizona	44.9	(4.1)	33.5
Arkansas	29.9	8.8	20.6
California	29.1	7.4	28.1
Colorado	20.4	6.2	29.2
Connecticut	(8.8)	(2.4)	11.4
Delaware	35.7	(6.0)	31.6
Georgia	50.4	(0.1)	36.7
Hawaii	23.5	6.5	45.1
Idaho	44.6	17.5	25.4
Illinois	48.6	(19.1)	34.7
Indiana	30.5	(1.2)	22.3
Iowa	62.8	(24.5)	29.8
Kansas	44.8	(18.2)	34.5
Kentucky	15.0	2.2	24.2
Louisiana	42.1	(6.5)	13.6
Maine	26.4	2.3	26.5
Maryland	41.2	(8.0)	25.3
Massachusetts	44.3	(1.3)	29.4
Michigan	39.9	(1.9)	36.2
Minnesota	26.2	(1.6)	33.3
Missouri	6.3	(68.1)	149.7
Montana	28.4	(59.4)	203.0
Nebraska	38.3	(0.9)	19.8
New Jersey	44.4	(7.6)	22.3
New Mexico	(21.5)	43.8	6.3
New York	33.0	1.7	27.8
North Carolina	34.7	(5.2)	34.8
North Dakota	21.4	(3.3)	4.3
Ohio	46.6	(8.7)	32.3
Oklahoma	23.0	(3.4)	9.5
Pennsylvania	31.2	(5.8)	21.1
Rhode Island	31.0	(1.4)	2.7
South Carolina	26.4	0.6	18.9
Utah	43.2	23.0	17.4
Vermont	23.0	6.9	0.7
Virginia	47.9	11.0	25.0
West Virginia	36.3	(4.0)	12.8
Wisconsin	27.6	(0.8)	9.8

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 A7

States with Economic Nexus and Marketplace Laws

Economic Nexus threshold levels and effective dates

State	Current threshold levels for economic nexus	Economic nexus effective date	Marketplace nexus effective date
Alabama	>\$250,000	10/1/2018	1/1/2019
Arizona	>\$100,000	10/1/2019	10/1/2019
Arkansas	>\$100,000 or over 200 transactions	7/1/2019	7/1/2019
California	>\$500,000	4/1/2019	10/1/2019
Colorado	>\$100,000	6/1/2019	10/1/2019
Connecticut	>\$100,000 and over 200 transactions	12/1/2018	12/1/2018
Florida	>\$100,000	7/1/2021	7/1/2021
Georgia	>\$100,000 or over 200 transactions	1/1/2019	4/1/2020
Hawaii	>\$100,000 or over 200 transactions	7/1/2018	1/1/2020
Idaho	>\$100,000	6/1/2019	6/1/2019
Illinois	>\$100,000 or over 200 transactions	10/1/2018	1/1/2020
Indiana	>\$100,000 or over 200 transactions	10/1/2018	7/1/2019
Iowa	>\$100,000	1/1/2019	1/1/2019
Kansas	>\$100,000	10/1/2019	10/1/2019
Kentucky	>\$100,000 or over 200 transactions	10/1/2018	7/1/2019
Louisiana	>\$100,000 or over 200 transactions	7/1/2020	7/1/2020
Maine	>\$100,000 or over 200 transactions	7/1/2018	10/1/2019
Maryland	>\$100,000 or over 200 transactions	10/1/2018	10/1/2019
Massachusetts	>\$100,000	10/1/2019	10/1/2019
Michigan	>\$100,000 or over 200 transactions	10/1/2018	1/1/2020
Minnesota	>\$100,000 or over 200 transactions	10/1/2018	10/1/2018
Mississippi	>\$250,000	9/1/2018	7/1/2020
Missouri	>\$100,000	1/1/2023	1/1/2023
Nebraska	>\$100,000 or over 200 transactions	1/1/2019	4/1/2019
Nevada	>\$100,000 or over 200 transactions	10/1/2018	10/1/2019
New Jersey	>\$100,000 or over 200 transactions	11/1/2018	11/1/2018
New Mexico	>\$100,000	7/1/2019	7/1/2019
New York	>\$500,000 and over 100 transactions	6/21/2018	6/1/2019
North Carolina	>\$100,000 or over 200 transactions	11/1/2018	2/1/2020
North Dakota	>\$100,000	10/1/2018	10/1/2019
Ohio	>\$100,000 or over 200 transactions	8/1/2019	8/1/2019
Oklahoma	>\$100,000	7/1/2018	7/1/2018
Pennsylvania	>\$100,000	7/1/2019	7/1/2019
Rhode Island	>\$100,000 or over 200 transactions	7/1/2019	7/1/2019
South Carolina	>\$100,000	11/1/2018	11/1/2018
South Dakota	>\$100,000 or over 200 transactions	11/1/2018	3/1/2019
Tennessee	>\$500,000	10/1/2019	10/1/2020
Texas	>\$500,000	10/1/2019	10/1/2019
Utah	>\$100,000 or over 200 transactions	1/1/2019	10/1/2019
Vermont	>\$100,000 or over 200 transactions	7/1/2018	6/1/2019
Virginia	>\$100,000 or over 200 transactions	7/1/2019	7/1/2019
Washington	>\$100,000	10/1/2018	10/1/2018
West Virginia	>\$100,000 or over 200 transactions	1/1/2019	7/1/2019
Wisconsin	>\$100,000	10/1/2018	10/1/2019
Wyoming	>\$100,000 or over 200 transactions	2/1/2019	7/1/2019

Source: Individual state information, compiled by the author.

Notes: Alaska, Delaware, Montana, New Hampshire, and Oregon do not have sales tax. State names are hyperlinked to their respective economic nexus guidelines.

TABLE A8

Quarterly State Government Tax Revenue for Nonmajor Tax Revenue Sources

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

Year / quarter	Property tax	Tobacco product sales tax	Alcoholic beverage sales tax	Motor vehicle & operators' license taxes	Other taxes	Total nonmajor taxes
2022 Q1 collections (\$ millions)	\$5,065	\$4,169	\$1,977	\$8,438	\$48,573	\$68,222
2022 Q1	0.5	(5.0)	10.4	0.5	22.4	14.5
2021 Q4	2.6	(4.3)	8.8	1.5	20.4	13.5
2021 Q3	4.7	(1.1)	8.0	5.6	15.4	11.3
2021 Q2	6.1	1.0	5.5	8.0	8.8	7.7
2021 Q1	2.3	(0.5)	(5.3)	(2.9)	(5.8)	(4.3)
2020 Q4	2.8	0.7	(5.1)	(2.5)	(6.2)	(4.3)
2020 Q3	2.6	(1.2)	(3.4)	(3.4)	(7.1)	(5.2)
2020 Q2	0.2	(2.5)	(2.3)	(3.1)	(5.0)	(4.0)
2020 Q1	1.2	(3.2)	2.7	1.9	1.3	1.0
2019 Q4	0.3	(4.1)	2.8	1.2	1.4	0.9
2019 Q3	(0.3)	(6.2)	0.2	1.3	3.4	1.8
2019 Q2	5.3	(7.7)	(1.3)	0.8	4.6	2.7
2019 Q1	6.4	(5.5)	(0.6)	4.3	5.2	3.9
2018 Q4	9.0	(5.3)	(1.5)	7.1	5.3	4.6
2018 Q3	8.1	0.8	(0.0)	4.4	5.2	4.7
2018 Q2	3.6	5.2	1.3	4.7	3.6	3.8
2018 Q1	1.0	4.6	1.1	1.1	2.6	2.4
2017 Q4	(0.7)	6.1	2.9	(0.3)	1.9	1.8
2017 Q3	(1.2)	3.6	3.0	3.7	0.5	1.1
2017 Q2	0.4	1.8	2.3	1.5	(0.4)	0.2
2017 Q1	3.0	1.2	1.1	2.3	(1.7)	(0.4)
2016 Q4	2.4	1.4	0.5	2.7	(1.6)	(0.4)
2016 Q3	4.9	1.2	0.8	1.1	(2.5)	(1.0)
2016 Q2	4.2	0.7	1.6	2.6	(1.7)	(0.4)
2016 Q1	5.0	1.8	2.6	2.3	(1.3)	0.1
2015 Q4	8.7	0.1	1.5	2.8	(1.0)	0.4
2015 Q3	6.1	(0.8)	1.3	1.6	(0.4)	0.4
2015 Q2	5.2	(2.2)	1.6	1.1	(0.7)	(0.1)
2015 Q1	4.3	(4.0)	(0.3)	1.2	(0.4)	(0.2)
2014 Q4	0.7	(4.7)	1.4	(0.7)	(1.9)	(1.7)
2014 Q3	3.1	(3.7)	1.3	0.6	(1.7)	(1.1)
2014 Q2	5.2	0.5	(0.1)	1.1	(0.4)	0.3
2014 Q1	5.1	1.8	1.3	0.9	0.4	1.0
2013 Q4	4.8	3.7	(0.7)	0.3	3.2	2.8
2013 Q3	3.2	3.6	(2.4)	(0.5)	3.6	2.8
2013 Q2	(0.3)	(1.0)	(1.9)	(0.9)	2.7	1.5
2013 Q1	(3.2)	(1.5)	(0.1)	0.3	2.5	1.3
2012 Q4	(4.8)	(2.5)	2.3	2.0	1.3	0.6
2012 Q3	(9.2)	(3.3)	3.5	3.1	2.2	1.0
2012 Q2	(10.5)	(2.2)	3.1	3.2	4.2	2.2
2012 Q1	(10.7)	(2.5)	0.7	2.1	7.6	4.0
2011 Q4	(11.0)	(1.8)	(0.5)	1.8	11.8	6.5
2011 Q3	(7.6)	(0.9)	0.5	0.3	12.8	7.3
2011 Q2	(3.8)	0.7	1.6	1.6	12.2	7.6
2011 Q1	2.5	2.8	3.2	3.3	10.1	7.4

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

TABLE A9

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

Nominal percentage change, 2022 Q2 versus 2021 Q2

State/region	PIT	CIT	Sales	Total
US (median)	27.5	24.9	7.7	16.9
US (average)	15.2	34.9	10.0	15.3
New England	27.5	29.5	0.7	17.9
Connecticut	33.6	36.2	5.4	22.2
Maine	38.3	43.5	5.0	21.1
Massachusetts	22.2	29.4	(3.0)	16.9
New Hampshire	87.6	13.5	N/A	6.3
Rhode Island	ND	ND	ND	ND
Vermont	51.7	21.5	2.5	13.0
Mideast	18.6	19.1	10.8	15.9
Delaware	(12.6)	64.5	N/A	1.0
Maryland	33.8	16.7	60.1	32.5
New Jersey	25.5	8.6	8.0	16.8
New York	10.7	23.3	9.7	11.4
Pennsylvania	39.0	28.0	2.3	20.7
Great Lakes	16.7	37.7	5.4	13.4
Illinois	19.0	52.2	4.2	20.4
Indiana	31.7	18.9	6.7	18.8
Michigan	14.7	NM	7.9	11.8
Ohio	16.9	N/A	3.8	8.4
Wisconsin	(7.5)	23.9	4.5	1.5
Plains	20.4	17.1	1.0	13.2
Iowa	45.0	0.1	2.7	17.5
Kansas	21.2	12.8	7.8	15.7
Minnesota	6.2	20.7	(8.1)	4.2
Missouri	35.4	18.4	7.6	23.2
Nebraska	24.3	21.7	2.4	16.8
North Dakota	50.8	64.0	9.9	35.3
South Dakota	N/A	N/A	9.6	10.0
Southeast	29.1	28.0	12.0	17.2
Alabama	32.5	25.2	4.3	15.9
Arkansas	19.1	28.4	(2.0)	9.4
Florida	N/A	12.3	17.7	11.0
Georgia	54.2	52.9	11.8	33.3
Kentucky	30.5	24.9	4.5	15.5
Louisiana	27.5	60.7	15.7	28.0
Mississippi	25.8	17.8	2.6	9.7
North Carolina	10.3	10.8	7.9	10.3
South Carolina	37.9	44.7	10.2	26.9
Tennessee	(96.0)	48.7	11.8	15.8
Virginia	ND	ND	ND	ND
West Virginia	29.4	28.0	3.2	25.9
Southwest	35.9	25.6	15.1	23.0
Arizona	42.0	18.4	12.8	28.3
New Mexico	ND	ND	ND	ND
Oklahoma	23.0	38.0	5.4	21.4
Texas	N/A	N/A	15.9	22.0
Rocky Mountain	36.9	37.5	11.8	32.6
Colorado	43.1	27.8	13.8	34.9
Idaho	(3.1)	142.1	8.7	16.7
Montana	75.3	(3.6)	N/A	66.3

Utah	39.2	18.3	10.5	29.9
Wyoming	N/A	N/A	ND	ND
Far West	(1.8)	52.4	10.5	9.7
Alaska	N/A	NM	N/A	219.5
California	(2.4)	51.6	10.9	8.7
Hawaii	20.8	NM	19.6	24.6
Nevada	N/A	N/A	ND	ND
Oregon	ND	ND	N/A	ND
Washington	N/A	N/A	6.8	7.0

Source: Individual state data, analysis by the author.

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

Notes

- ¹ 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 first quarter of 2022.
- ² The author made several adjustments for the first quarter of 2022 and to several previous quarters of tax revenue data reported by the US Census Bureau based on information and data received directly from the states and from the Census Bureau.
- ³ In this report, the author uses US Bureau of Economic Analysis regions as the basis of analysis.
- ⁴ See “Real Earnings Summary,” US Bureau of Labor Statistics, accessed July 20, 2022, <https://www.bls.gov/news.release/realer.nr0.htm>.
- ⁵ Justin Garosi and Brian Uhler, “Income Tax Withholding Tracker: November 1 – November 30,” California Legislative Analyst’s Office, November 30, 2021, <https://lao.ca.gov/LAOEconTax/Article/Detail/719>.
- ⁶ Thirty-seven of 41 states with a broad-based personal income tax extended their 2019 tax-year filing deadlines to July 15, 2020. Among the remaining four states, Idaho extended it to June 15, Hawaii to July 20, Iowa to July 31, and Virginia to June 1.
- ⁷ Income tax returns usually are due on April 15 in 35 of 41 states that have a broad-based personal income tax. The remaining six states have individual income tax return due dates later than April 15. Those states are Arkansas (May 15), Delaware (April 30), Hawaii (April 20), Iowa (April 30), Louisiana (May 15), and Virginia (May 1).
- ⁸ See “Finance Bulletin, February 2022,” California Department of Finance, accessed July 20, 2022, <https://dof.ca.gov/wp-content/uploads/Forecasting/Economics/Documents/Feb-22.pdf>.
- ⁹ Brian Uhler, Justin Garosi, Brian Weatherford, and Seth Kerstein, “2022-23 Fiscal Outlook Revenue Estimates,” California Legislative Analyst’s Office blog, November 17, 2021, <https://lao.ca.gov/LAOEconTax/Article/Detail/712>.
- ¹⁰ See “Section 5 – Saving and Investment, National Income and Product Accounts,” US Bureau of Economic Analysis, accessed July 20, 2022, <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>.
- ¹¹ See “Table 6.16D. Corporate Profits by Industry,” US Bureau of Economic Analysis, accessed July 20, 2022, <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=3&isuri=1&1921=survey&1903=239#>.
- ¹² See *South Dakota v. Wayfair*, Brief of *Amici Curiae* Law Professors and Economists in Support of Petitioner, No. 17-494, March 5, 2018, https://www.supremecourt.gov/DocketPDF/17/17-494/37603/20180305141434827_Brief%20of%20Amici%20Curiae%20Law%20Professors%20and%20Economists%20iso%20Petitioner.PDF.
- ¹³ See National Conference of State Legislatures, “Variable Rate Gas Taxes,” July 14, 2021, <https://www.ncsl.org/research/transportation/variable-rate-gas-taxes.aspx>.
- ¹⁴ See State of California Franchise Tax Board, “Pass-through entity (PTE) elective tax,” accessed July 20, 2022, <https://www.ftb.ca.gov/file/business/credits/pass-through-entity-elective-tax/index.html>.
- ¹⁵ See US Bureau of Labor Statistics, “Labor Force Statistics from the Current Population Survey,” accessed July 20, 2022, https://www.bls.gov/web/empsit/cpsee_e08.htm.

- ¹⁶ See Office of the New York State Comptroller, “DiNapoli: NYC Office Market Will Take Years to Recover From Pandemic,” October 7, 2021, <https://www.osc.state.ny.us/press/releases/2021/10/dinapoli-nyc-office-market-will-take-years-recover-pandemic>.
- ¹⁷ 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 July 20, 2022, <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-fiscal-pages-covid-edition>.
- ¹⁸ Author’s analysis of data from National Association of State Budget Officers (2020), table A-1.
- ¹⁹ See the New York State Senate, “Senate Majority Announces Highlights Of 2021-22 Budget,” April 6, 2021, <https://www.nysenate.gov/newsroom/press-releases/senate-majority-announces-highlights-2021-22-budget>.
- ²⁰ See Burke et al., “Bill Analysis,” State of California, Franchise Tax Board, April 15, 2021, <https://www.ftb.ca.gov/tax-pros/law/legislation/2021-2022/AB80-021721-041521.pdf>.
- ²¹ North Carolina General Assembly, Fiscal Research Division, “NCGA 2021 Legislative Session Budget and Fiscal Policy Highlights,” January 10, 2022, https://sites.ncleg.gov/frd/wp-content/uploads/sites/7/2022/01/NCGA_2021_Legislative_Session_Budget_and_Fiscal_Policy_Highlights_2022_01_20_Final.pdf.
- ²² See Wisconsin Department of Revenue, “Wisconsin Tax Bulletin. Number 214,” July 2021, <https://www.revenue.wi.gov/WisconsinTaxBulletin/214-07-21-WTB.pdf>.
- ²³ See Arizona Joint Legislative Budget Committee, “Finance Advisory Committee Briefing Materials,” October 28, 2021, <https://www.azjllbc.gov/meetings/facag102821.pdf>.
- ²⁴ See Ohio Department of Taxation, “Annual Tax Rates,” accessed July 20, 2022, <https://tax.ohio.gov/individual/resources/annual-tax-rates>.
- ²⁵ See Illinois General Assembly, Commission on Government Forecasting and Accountability, “State of Illinois Budget Summary for Fiscal Year 2022,” June 2021, <https://cgfa.ilga.gov/Upload/FY2022BudgetSummary.pdf>.
- ²⁶ New York State Senate, “Senate Majority Announces Highlights Of 2021-22 Budget.”
- ²⁷ See California’s Department of Finance, “2021-22 May Revision to the Governor’s Budget, May 2021, <https://www.ebudget.ca.gov/2021-22/pdf/Revised/BudgetSummary/FullBudgetSummary.pdf>.
- ²⁸ See Florida Department of Revenue, “Tax Information Publication, New Registration Requirement for Persons Making Remote Sales and for Marketplace Providers and Sellers,” May 14, 2021, https://floridarevenue.com/taxes/tips/Documents/TIP_21A01-03.pdf.
- ²⁹ See Colorado General Assembly, “An Act, House Bill 21-1312,” June 2021, https://leg.colorado.gov/sites/default/files/2021a_1312_signed.pdf.
- ³⁰ See Florida Department of Revenue, “Tax Information Publication, 2021 Reemployment Tax Legislative Changes,” April 27, 2021, https://floridarevenue.com/taxes/tips/Documents/TIP_2173B-01_Final.pdf.
- ³¹ See National Bureau of Economic Research, “Determination of the April 2020 Trough in US Economic Activity,” July 19, 2021, <https://www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021>.

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