TAX POLICY CENTER
URBAN INSTITUTE & BROOKINGS INSTITUTION

STATE REVENUE FORECASTS BEFORE COVID-19 AND DIRECTIONS FORWARD

Lucy Dadayan

April 2, 2020

The global pandemic caused by the novel coronavirus outbreak will dramatically affect state tax revenues over the next months and possibly years. This brief summarizes how state revenue forecasters viewed their state economies before the COVID-19 pandemic, as documented in governors' proposed fiscal year 2021 budgets. Although forecasters are now radically revising those projections, knowing the prior trajectories of personal income, corporate income, and sales tax collections is useful for planning purposes. This brief also identifies forecast inputs to watch in the coming months for signs of the magnitude and breadth of state budget turbulence.

State revenue forecasts are critical for helping policymakers decide how much revenue will be available as they discuss spending levels for public goods and services for the upcoming fiscal year. Like the 2008 financial crisis and the September 11th terrorist attack, the spread of COVID-19 and the potential pandemic-induced recession have upended forecasts for the coming fiscal year 2021 (starting on July 1, 2020, in 46 states) and the remainder of current fiscal year 2020.

Because of reduced economic activity, states will undoubtedly see declines in both income and sales tax revenues in the coming months. Predicting the magnitude of these losses is extremely difficult given the rapidly evolving situation. The current situation is unique as the US has not experienced service-sector disruptions because of federally mandated travel restrictions and state-mandated closures of certain entities such as schools, bars, restaurants, stadiums, gyms, and theaters.

In the near term, state income tax revenues are likely to decline in the last quarter of state fiscal year 2020 relative to one year earlier because of a delayed federal income tax filing deadline that led to state extensions as well. (April is usually the most important month of the year for state income tax collections. In a typical year, states collect between 13 to 15 percent of annual income tax revenues in April alone.)

Another area of concern is stock market declines and the consequent effects on estimated income tax payments. In March, the stock market experienced some of its worst drops in history. These declines will affect capital gains realizations, which in turn will affect quarterly estimated tax payments, especially in states such as California and New York, which acquire a large share of their tax revenue from high-income taxpayers. Some of these declines might be reversed if the stock market rebounds later in the year.

States that rely heavily on the oil and gas industry and the associated severance tax revenues (such as Alaska, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, West Virginia, and Wyoming) will see further fiscal challenges because of steep declines in world oil prices.

Finally, it is unclear how the "real economy" will respond to drastic interest rate cuts and other steps by the Federal Reserve as well as additional actions Congress will likely take to stimulate the economy.

The remainder of this brief details what state revenue estimators expected at the time governors prepared their fiscal 2021 budgets in late fall or updated those forecasts in early winter. Notably, forecasters already expected tax revenue to grow more slowly in fiscal years 2020 and 2021 than in 2019 for all three major sources of taxes, despite overall positive economic performance across the states.

Table 1 shows year-over-year growth in actual revenue collections for fiscal year 2019 and in forecasted revenue collections for fiscal years 2020 and 2021 for personal income, corporate income, and sales taxes. Table 1 also provides the timing of the forecast (month and year) for each state, which provides insight into the information states had when they prepared revenue forecasts; more-recent forecasts indicate that states were able to incorporate newer information about the economy and tax revenue performance in recent months, but these forecasts did not capture the impact of COVID-19 on state budgets.

TABLE 1

State Revenue Collections in Fiscal Year 2019 and Revenue Forecasts for FY 2020 and FY 2021

Year-over-year percent change

State	Forecast month / year	Personal Income Tax			Corporate Income Tax			Sales Tax		
		FY 2018–19 actual	FY 2019–20 forecast	FY 2020–21 forecast	FY 2018–19 actual	FY 2019–20 forecast	FY 2020–21 forecast	FY 2018–19 actual	FY 2019–20 forecast	FY 2020–21 forecast
Median		**5.8**	**2.4**	**3.3**	**19.8**	**(3.7)**	**0.0**	**5.1**	**4.6**	**3.2**
Total		**3.7**	**2.4**	**3.7**	**21.4**	**1.8**	**2.5**	**5.3**	**3.8**	**3.3**
Alaska	Dec-19	NA	NA	NA	(4.0)	17.6	(7.4)	NA	NA	NA
Arizona	Oct-19	10.2	(0.0)	4.2	37.8	1.9	1.7	6.5	6.3	4.3
Arkansas	May-19	5.1	(0.5)	2.8	39.5	(30.6)	(0.0)	2.0	4.4	3.0
California	Jan-20	5.9	2.7	1.2	10.3	10.8	4.6	6.2	0.2	3.9
Colorado	Dec-19	8.8	3.4	5.4	17.6	(8.0)	(5.7)	5.1	4.4	3.2
Connecticut	Jan-20	(10.5)	(2.8)	3.5	142.6	0.8	(1.8)	4.5	(1.1)	3.3
Delaware	Dec-19	7.0	5.4	4.9	64.8	6.6	(9.5)	NA	NA	NA
Florida	Jan-20	NA	NA	NA	30.1	(9.9)	0.4	5.2	3.2	3.2
Georgia	Jan-20	4.6	1.0	2.9	26.6	10.8	9.1	5.1	3.2	4.2
Hawaii	Jan-20	5.7	3.6	4.4	24.8	(4.1)	0.1	4.3	3.8	3.6
Idaho	Jan-20	(9.1)	7.4	5.1	18.6	(0.5)	4.0	7.2	6.5	5.1
Illinois	Feb-20	8.9	(4.8)	3.6	18.9	(2.6)	(0.0)	7.8	(1.8)	3.4
Indiana	Dec-19	4.1	2.4	3.1	43.6	(7.7)	(0.3)	3.3	3.7	3.1
Iowa	Dec-19	4.2	0.1	1.8	25.0	3.2	(3.8)	3.5	5.9	3.4
Kansas	Nov-19	11.3	4.1	4.0	11.0	4.5	2.2	0.7	2.6	2.3
Kentucky	Dec-19	(1.3)	2.8	2.6	1.8	(16.5)	(5.6)	9.2	6.5	1.1
Maine	Dec-19	6.6	5.3	2.8	36.1	(14.0)	(2.5)	5.6	6.6	4.5
Maryland	Dec-19	8.0	3.1	4.2	25.9	(2.1)	8.9	3.6	2.9	1.8
Massachusetts	Dec-19	5.3	1.9	2.0	19.8	(8.5)	4.7	5.3	5.3	2.5
Michigan	Jan-20	(0.6)	(0.6)	2.1	25.3	(5.8)	(1.3)	0.6	4.8	3.1
Minnesota	Feb-20	5.3	0.7	8.0	26.2	(4.3)	(4.0)	5.7	2.9	3.2
Mississippi	Nov-19	3.9	2.3	0.0	12.5	(1.9)	(10.8)	5.3	1.1	1.2
Missouri	Jan-20	(1.1)	2.4	1.6	14.0	(7.7)	1.4	1.8	4.0	3.4
Montana	Jun-19	10.1	(1.3)	3.8	11.6	(11.1)	0.8	NA	NA	NA
Nebraska	Oct-19	7.8	5.1	2.8	35.1	(4.4)	(11.1)	3.5	7.4	2.2
Nevada	May-19	NA	NA	NA	NA	NA	NA	8.1	6.1	3.4
New Hampshire	Feb-19	8.4	(8.4)	1.4	3.1	(1.3)	(2.0)	NA	NA	NA
New Jersey	Feb-20	5.8	5.6	5.9	74.0	(3.3)	(1.7)	3.3	4.7	3.5
New Mexico	Dec-19	10.1	(2.9)	2.3	15.2	(54.7)	(69.2)	12.3	10.0	1.5
New York	Feb-20	(6.6)	10.2	7.2	10.4	13.6	10.3	3.9	4.6	4.0
North Carolina	Mar-19	5.2	(2.1)	3.9	12.4	(17.3)	6.3	5.6	5.2	4.6
Ohio	Mar-19	5.9	3.0	3.2	(5.1)	NA	NA	4.2	2.8	0.9
Oklahoma	Feb-20	9.1	15.4	2.7	25.4	29.1	(20.2)	3.1	1.2	1.2
Oregon	Feb-20	10.9	(11.2)	11.4	13.2	(19.8)	(20.4)	NA	NA	NA
Pennsylvania	Nov-19	5.2	3.8	4.9	18.0	1.9	3.6	6.9	4.5	3.5
Rhode Island	Nov-19	3.6	3.4	3.7	12.1	(4.4)	3.6	6.5	5.9	4.0
South Carolina	Feb-20	7.2	4.8	4.4	31.7	(0.0)	(10.1)	5.0	7.3	4.5
South Dakota	Feb-20	NA	NA	NA	27.9	(16.7)	3.6	3.7	5.5	1.6
Tennessee	Jan-20	(17.1)	(34.0)	(44.0)	7.1	5.1	3.5	5.7	4.0	3.3
Texas	Oct-19	NA	NA	NA	NA	NA	NA	6.5	4.8	3.4
Utah	Nov-19	8.0	6.5	6.2	16.3	(16.3)	2.4	4.8	5.1	4.6
Vermont	Jan-20	5.2	2.1	1.7	39.3	(19.2)	(12.3)	3.7	7.0	3.0
Virginia	Nov-19	7.9	(0.8)	6.9	9.5	2.2	5.7	3.6	6.0	2.6
Washington	Nov-19	NA	NA	NA	NA	NA	NA	8.6	6.0	2.3
West Virginia	Jan-20	9.2	2.8	0.1	79.9	(30.8)	5.5	9.9	1.5	2.3
Wisconsin	Jan-20	6.1	(0.5)	3.2	49.7	11.7	0.7	4.5	4.1	1.3
Wyoming	Jan-20	NA	NA	NA	NA	NA	NA	8.0	5.1	1.5

Source: Individual state data compiled by the Urban Institute's State and Local Finance Initiative. See "Data Subscriptions," Urban Institute, accessed April 1, 2020, https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-tax-and-economic-review/data-subscriptions.

Notes: NA = not applicable. Data are missing for Alabama, Louisiana, and North Dakota.

STATE REVENUE FORECASTS FOR THE CURRENT FISCAL YEAR, 2020

Officials in 33 states are debating and negotiating budgets for fiscal year 2021. The remaining 17 states have already enacted a biennial budget, but some of them have recently proposed a revised fiscal year 2021 budget. All states will certainly downgrade revenue forecasts in the coming weeks to factor in the expected impact of COVID-19 as well as information about actual April income tax filings.

Based on forecasts conducted before the COVID-19 outbreak, the median personal income tax revenue forecast for fiscal year 2020 indicated 2.4 percent growth, down from the 5.8 percent actual growth observed in fiscal year 2019. The median corporate income tax revenue forecast for 2020 anticipated a 3.7 percent decline compared with a 19.8 percent actual increase observed in fiscal year 2019. Finally, the median sales tax revenue forecast for fiscal year 2020 showed 4.6 percent growth, slightly weaker than the 5.1 percent actual growth observed in fiscal year 2019. In addition to declines based on changes in current corporate and personal income taxes, we may see further declines as some companies adjust income tax filings for 2019 to reflect carried-back losses.

Personal Income Tax Revenue Forecasts for Fiscal Year 2020

The median state forecast for personal income tax indicated 2.4 percent growth for fiscal year 2020, which was substantially weaker than the actual median growth rate of 5.8 percent observed for fiscal year 2019. Twenty-two states forecasted weaker growth in fiscal year 2020 than in 2019. Further, 13 states projected year-over-year declines in personal income tax collections.

As discussed in State Tax and Economic Review quarterly reports, personal income tax revenues have fluctuated wildly since November 2016, largely because of federal policy changes and the late 2018 to early 2019 shutdown of the federal government. First, some taxpayers pushed income out of calendar year 2016 into calendar year 2017 in anticipation of federal tax cuts in 2017. Second, state personal income tax revenues were artificially boosted in fiscal year 2018: the passage of the Tax Cuts and Jobs Act (TCJA) in December 2017 led some high-income taxpayers to accelerate state income tax payments into calendar year 2017 to take advantage of the full deductibility of state and local taxes, which the TCJA capped at $10,000 beginning in 2018. Third, because of both the complexity of the TCJA and states' subsequent policy changes in response to the TCJA, many taxpayers delayed tax payments for tax year 2018, waiting to better understand the federal and state tax changes. Finally, tax filings were also likely delayed because of the federal government shutdown from December 22, 2018, to January 25, 2019. Therefore, personal income tax collections were again strong in fiscal year 2019 in part because of extension payments and larger-than-usual final payments received in April 2019.

States and policy analysts around the country were anticipating that the impact of the TCJA would be largely behind us and that growth in personal income tax revenues would revert to normal levels by 2020. But there were still large uncertainties. The most recent analysis from the Congressional Budget Office (CBO), released in late January 2020, estimated a 7.4 percent growth in capital gains in 2019 followed by a 1.9 percent decline in 2020.[1] California's Department of Finance estimated that tax revenues from capital gains in 2019 would reach $15.3 billion, the state's highest amount ever in nominal terms. However, capital gains realizations for California taxpayers are expected to decline 2.5 percent in 2020, which is close to the CBO's estimates (California Department of Finance 2020). New York's Division of the Budget, on the other hand, anticipated growth of 3.6 percent in capital gains realizations in 2020 (New York State Division of the Budget 2020). Massachusetts's Department of Revenue forecasted taxes from capital gains to decrease between 9.8 to 14.6 percent in fiscal year 2020 (Massachusetts Department of Revenue 2019). Most other states do not publish separate capital gains forecasts, but we suspect their projections varied greatly as well. Forecasting capital gains is hard because they are highly dependent not only on stock market performance but also on taxpayer behavior, leading to great volatility. Although the stock market performed well in the second half of 2019 and

the beginning of 2020, it has seen large swings since the end of February (mostly because of the COVID-19 pandemic), and continued swings are likely in the months ahead.

Corporate Income Tax Revenue Forecasts for Fiscal Year 2020

Corporate income tax revenues were forecasted to decrease 3.7 percent in the median state in fiscal year 2020, which is substantially weaker than the actual median growth rate of 19.8 percent in fiscal year 2019. State corporate income tax revenue is highly volatile, and last year was no exception. Revenue growth varied greatly across the states in 2019, with five states experiencing growth of 50 percent or more and two experiencing declines. For fiscal year 2020, 28 states forecasted declines compared with fiscal year 2019 and 14 states forecasted growth. Corporate income tax revenues have generally surged since the passage of the TCJA.

States were forecasting weaker or declining corporate income tax revenues for fiscal year 2020 partly because of weakness in corporate profits throughout 2019.[2] And because of the global economic shock caused by the COVID-19 pandemic and steep declines in oil prices, we are anticipating even weaker corporate revenues, especially in areas related to tourism, hospitality, and energy.

Sales Tax Revenue Forecasts for Fiscal Year 2020

States expected slightly weaker growth in sales tax revenue collections for fiscal year 2020 than for 2019. The median state forecast for sales tax growth for 2020 was 4.6 percent, down from 5.1 percent in fiscal year 2019. Twenty-five states were anticipating slower growth in sales tax revenue collections for fiscal year 2020 than for fiscal year 2019, while two states were forecasting declines. Growth in state sales tax revenues was stronger in fiscal year 2019 than in prior years, mostly in response to the US Supreme Court's decision in South Dakota v. Wayfair, Inc. in June 2018 and subsequent changes in state administrative tax rules. Although states were hoping for some boost in sales tax revenues, the actual impact was not observed quickly due to lengthy processes for full implementation of the new rules. The complexities of tax administration of online sales, retailer compliance with the new regulations, and consumer behavior all played a role as well. For example, it appears that some retailers voluntarily collected and remitted sales taxes on online purchases ahead of states' deadlines for compliance with the new rules, but some other retailers are still not complying.

Although some purchases this month have surged with the onset of the COVID-19 pandemic, some of the goods purchased (e.g., grocery store food) are often exempt from state sales tax. Thirty-two of 45 states fully exempt groceries from sales tax. Arkansas, Illinois, Missouri, Tennessee, Utah, and Virginia tax grocery store food but do so at a lower rate than the general state sales tax rate. Hawaii, Idaho, Kansas, and Oklahoma tax grocery store food at the same rate as the general state sales tax rate but provide credits and rebates to lower-income households. And Alabama, Mississippi, and South Dakota apply the full state sales tax rate to grocery store food. It is too early to tell what sales tax revenues will be, but in all likelihood states (whether they tax grocery store food or not) will see declines in the coming months, especially with many businesses and services closing for indefinite periods or having limited activities.

STATE REVENUE FORECASTS FOR THE UPCOMING FISCAL YEAR, 2021

Before the COVID-19 pandemic affected the US acutely, states were forecasting stronger growth for personal income tax revenue collections but slightly weaker growth for sales tax revenue collections in fiscal year 2021 compared to fiscal year 2020 forecasts. Further, states were forecasting that they would collect approximately the same amount in corporate income tax revenues (in the aggregate) in fiscal year 2021 as in fiscal year 2020.

The median personal income tax revenue forecast for fiscal year 2021 indicated 3.3 percent growth, which is nearly 1 percentage point stronger than the 2.4 percent projected growth for fiscal year 2020. The median forecasted growth in corporate income tax revenue collections was about the same for fiscal year 2021. Finally, the median sales tax revenue forecast for fiscal year 2021 indicated 3.2 percent growth, which is smaller than the 4.6 percent projected growth for fiscal year 2020. Of course, the growth rates for 2021 will depend in part on what fiscal year 2020 revenues look like.

Personal Income Tax Revenue Forecasts for Fiscal Year 2021

The median state forecast for personal income tax revenue collections calls for 3.3 percent growth for fiscal year 2021, which is larger than the 2.4 percent projected growth estimated for fiscal year 2020. All states but Tennessee were forecasting growth in personal income tax revenues in fiscal year 2021 compared with fiscal year 2020. In Tennessee, the personal income tax applies only to interest and dividend income from investments, which probably explains the divergence. Fifteen states were projecting weaker growth in fiscal year 2021 than in 2020, while 24 states were projecting stronger growth.

Forecasts across the states vary widely. Eight states (Colorado, Idaho, Minnesota, New Jersey, New York, Oregon, Utah, and Virginia) were forecasting growth of over 5 percent for fiscal year 2021. Strong growth in New Jersey was partly caused by Governor Murphy's proposed extension of the 10.75 percent marginal tax rate on income over $1 million, which state officials estimated would bring in an additional $0.5 billion in revenue in fiscal year 2021 (New Jersey Governor's Office 2020). Revenue forecasters in Oregon were puzzled by the stronger growth in withholding given the weaker growth in wages for the coming year. They presumed that an increase in retirement income was likely a contributing factor for stronger personal income tax withholding: in recent years, more taxpayers have been cashing in individual retirement accounts and collecting pension income, both of which are subject to state withholding (Oregon Department of Administrative Services 2020).

Officials in California were forecasting 1.2 percent growth in personal income tax revenues in fiscal year 2021. The weakness in projected growth was partly related to an assumption that proprietorship income will fall as business activity shifts to corporate form. Further, California's forecasters were projecting weaker stock market growth ahead and thus year-over-year declines in capital gains realizations (California Department of Finance 2020).

These projections are certainly going to be revised as we better understand the economic and fiscal ramifications of the COVID-19 pandemic. In part, the effects will depend on the severity and length of the health crisis in the US and around the globe and on the effectiveness of federal and state responses.

Corporate Income Tax Revenue Forecasts for Fiscal Year 2021

The median state forecast for corporate income tax revenue collections shows less than 0.1 percent growth for fiscal year 2021. Corporate income tax revenues were forecasted to decline in 21 states in fiscal year 2021 but to grow in another 21 states. Seven states (Mississippi, Nebraska, New Mexico, Oklahoma, Oregon, South Carolina, and Vermont) were forecasting double-digit declines in corporate tax revenue collections in fiscal year 2021. On the other hand, Georgia, Maryland, New York, North Carolina, Virginia, and West Virginia were projecting growth of over 5 percent in corporate income tax revenue collections. Reasons for stronger growth projections in these states varied. For example, officials in Maryland projected 8.9 percent growth in corporate income tax revenues in fiscal year 2021, mostly because of the ongoing effects of the TCJA's provisions (Maryland Board of Revenue Estimates 2019). Again these forecasts are likely to change drastically as we understand the fiscal ramifications of the current public health crisis.

Sales Tax Revenue Forecasts for Fiscal Year 2021

The median sales tax revenue forecast for fiscal year 2021 called for 3.2 percent growth, which is less than the 4.6 percent projected growth for fiscal year 2020. Before the COVID-19 outbreak, all states were forecasting growth in sales tax revenue collections in fiscal year 2021. Projected growth in sales tax revenue collections for fiscal year 2021 ranged from 0.9 percent in Ohio to 5.1 percent in Idaho.

Weak projected growth in sales tax collections in Ohio is attributable to various policy changes. The most notable policy change is related to the federal government's Internet Tax Freedom Act of 1998, which was enacted to prevent state and local governments from levying sales taxes on internet access. However, Ohio was one of seven states exempted from the act because it imposed a sales tax on internet access before the adoption of the federal legislation in 1998. This "grandfathered" ability to tax internet access is set to expire at the end of fiscal year 2020, which is estimated to reduce sales tax revenue collections by $187.5 million in fiscal year 2021. This helps explain Ohio's projections of weaker overall sales tax growth (Ohio Office of Budget and Management 2019).

The stronger growth in sales tax revenue forecast for Idaho was partly based on current and expected growth in the state's population and consequent greater overall economic activity (Idaho Division of Financial Management 2020).

CONCLUSION

Forecasting revenues with accuracy is inherently difficult, and forecasts are always subject to error. American economist Edgar Fiedler, who served in the cabinets of Presidents Richard Nixon and Gerald Ford, said, "If you have to forecast, forecast often."[3] Yet only a handful of states update their revenue forecasts regularly during the fiscal year, and some don't update their revenue forecasts at all. This is particularly problematic for states with biennial budgets.

But no matter how sophisticated forecasting models are, forecasting revenues accurately is particularly hard during a global pandemic and its resulting economic and political turbulence. State revenue forecasters are now facing extraordinary challenges because of uncertainties about the severity and length of the COVID-19 outbreak and its impact on the US economy and state budgets.

In their latest revenue projections, many state forecasters expressed concerns about elevated downside risks and the possibility of economic slowdown or downturn, but they had no idea of the challenges on the horizon. Before COVID-19 spread acutely to the US and around the globe, state forecasts generally called for growth in fiscal year 2021, but the forecasted acceleration was weak. Moreover, forecasted growth for both personal income tax and sales tax revenue was much slower than historical growth rates, which averaged around 7 percent between 1981 and 2007. As mentioned, these forecasts will certainly be revised downward because of the global pandemic.

States had raised various concerns with their forecasts, including the threat of instability in global markets, the nation's political climate, volatility in oil prices, political and economic risks associated with tariffs, the Federal Reserve Board's interest rate cuts in the second half of 2019, the changing consumption and spending habits of Americans, an aging workforce and long-term demographic changes, and anticipation of further tax policy changes at the federal level that often have direct impact on state budgets. All those concerns still hold true, but COVID-19 poses a much bigger threat to state budgets and to the overall economy.

The state fiscal picture quickly turned from positive to gloomy for the remainder of current fiscal year 2020, the forthcoming fiscal year 2021, and beyond as states are facing enormous fiscal challenges and uncertainties related to the global pandemic. It is unclear whether states will have to raise tax rates or face unexpected budget deficits if confronted with a weakening economy; lowered revenues; and increased spending caused by higher health care costs, unemployment costs, and the need for an expanded social safety net.

Looking forward, state economic and revenue performance will be significantly affected by three emerging factors. First and foremost, the global pandemic will significantly hurt state budgets and economies. Economic activity for many businesses and services has been abruptly curtailed, inevitable layoffs are on the horizon, and stock markets and oil prices are declining; all will undoubtedly translate into lower state tax revenue collections.

Second, the upcoming presidential election creates large uncertainties for the states. No matter the results of the presidential and congressional elections, more fiscal and economic policy changes at the federal level are likely coming, particularly in response to the COVID-19. Federal policy changes play a crucial role because "volatility can be compounded by federal policies that have unintended and hard to measure consequences at the state level" (Boyd and Dadayan 2014). For example, the passage of the TCJA led to large volatility in personal and corporate income tax revenues, making state forecasters' jobs even harder. Any action taken by the federal government in response to the COVID-19 pandemic will thus have a huge effect on all aspects of state and local finances.

Third, the Federal Reserve Board has cut interest rates five times since July 2019. The latest cuts were on March 3, 2020, and March 16, 2020, and they are the largest one-time cuts since 2008. These cuts are intended to mitigate the negative economic impact of the spread of COVID-19. Although interest rate cuts may work in the short term, these actions leave no room for further interest rate cuts in the event of recession, which at this point seems likely.

In short, states' reported revenue forecasts likely overestimate revenues due to not accounting for the impact of the COVID-19 pandemic. States should quickly revise revenue forecasts to factor this crisis in and remain vigilant to future changes in the global economy. Many states may be able to address revenue shortfalls with cash balances in the short term. But the longer-term fiscal outlook is worrisome.

NOTES

[1] See data that supplement the Congressional Budget Office's January 2020 report, *The Budget and Economic Outlook: 2020 to 2030* (CBO 2020). The specific data file is the January 2020 revenue projections file at "Budget and Economic Data," Congressional Budget Office, accessed April 1, 2020, https://www.cbo.gov/about/products/budget-economic-data.

[1] See Bureau of Economic Analysis, National Income and Product Accounts, Table 6.16D. Corporate Profits by Industry, https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#.

[1] See Edgar Fiedler, "The Three Rs of Economic Forecasting: Irrational, Irrelevant and Irreverent," June 1977.

REFERENCES

Donald J. Boyd and Lucy Dadayan. 2014. State Tax Revenue Forecasting Accuracy: Technical Report. Albany, NY, The Nelson A. Rockefeller Institute of Government.

CBO (Congressional Budget Office). 2020. The Budget and Economic Outlook: 2020 to 2030. Washington, DC: CBO.

California Department of Finance. 2020. Governor's Budget Summary 2020–21. Sacramento, CA: Governor of the State of California.

Idaho Division of Financial Management. 2020. General Fund Revenue Book, FY 2021 Executive Budget January 2020. Boise, ID: Executive Office of the Governor.

Maryland Board of Revenue Estimates. 2019. Estimated Maryland Revenues, Fiscal Years Ending June 30, 2020 and June 30, 2021. Annapolis: Maryland Board of Revenue Estimates.

Massachusetts Department of Revenue. 2019. Briefing Book FY2021 Consensus Revenue Estimate Hearing. Boston: Massachusetts Department of Revenue.

New Jersey Governor's Office. The Governor's FY 2021 Budget in Brief. Trenton: New Jersey Governor's Office.

New York State Division of the Budget. 2020. FY 2021 Economic and Revenue Outlook. Albany, NY: Governor of the State of New York.

Ohio Office of Budget and Management. 2019. Budget Recommendations, The State of Ohio Executive Budget, Fiscal Years 2020-2021. Columbus: Ohio Office of Budget and Management.

Oregon Department of Administrative Services. 2020. Oregon Economic and Revenue Forecast. Salem: Oregon Department of Administrative Services.

ACKNOWLEDGMENTS

This brief was supported by the Tax Policy Center and State and Local Finance Initiative's general support funders, who make it possible for the Urban-Brookings Tax Policy Center to advance its mission.

The views expressed are those of the author and should not be attributed the Urban-Brookings Tax Policy Center, the Urban Institute, the Brookings Institution, their trustees, or their funders. Funders do not determine research findings or the insights and recommendations of our experts. Further information on Urban's funding principles is available at http://www.urban.org/aboutus/our-funding/funding-principles; further information on Brookings' donor guidelines is available at http://www.brookings.edu/support-brookings/donor-guidelines.

Thanks to Richard Auxier, Tracy Gordon, Mark Mazur, and Kim Rueben for their thoughtful review of and feedback on the report.

The views expressed are those of the authors and should not be attributed to the Urban-Brookings Tax Policy Center, the Urban Institute, the Brookings Institution, their trustees, or their funders.

The Tax Policy Center is a joint venture of the Urban Institute and Brookings Institution. For more information, visit taxpolicycenter.org or email info@taxpolicycenter.org.

Copyright © 2020. Tax Policy Center. All rights reserved. Permission is granted for reproduction of this file, with attribution to the Urban-Brookings Tax Policy Center.