

STATE AND LOCAL BUDGETING IN THE COVID ERA

ISSUE PAPER

**JANUARY 2022** 

# New York: State of Debt

A Comparison with Other Major State Borrowers

> By MATT FABIAN and LISA WASHBURN Municipal Market Analytics, Inc.



This paper was published by the Volcker Alliance as part of its Truth and Integrity in Government Finance Initiative. The views expressed in this paper are those of the authors and do not necessarily reflect the position of the Volcker Alliance. Any errors or omissions are the responsibility of the authors.



# **TRUTH AND INTEGRITY IN GOVERNMENT FINANCE TEAM**

WILLIAM GLASGALL senior director, public finance

NOAH A. WINN-RITZENBERG DIRECTOR, RESEARCH AND IMPACT

> GRAHAM DOWD program fellow

© **2022 VOLCKER ALLIANCE INC.** Published January, 2022

The Volcker Alliance Inc. hereby grants a worldwide, royalty-free, non-sublicensable, non-exclusive license to download and distribute the Volcker Alliance paper titled *New York: State of Debt* (the "Paper") for non-commercial purposes only, provided that the Paper's copyright notice and this legend are included on all copies.

Don Besom, art director; Michele Arboit, copy editor.



# CONTENTS

EXECUTIVE SUMMARY	
INTRODUCTION	
METHODOLOGY	
OVERVIEW OF STATE BONDED AND NONBONDED DEBT	
NEW YORK COMPARED WITH OTHER STATES	
California	
Florida	
Michigan	
New Jersey	
RECOMMENDATIONS AND CONCLUSION	
APPENDIX A: New York Compared to Four Other States	23
APPENDIX B: Glossary	
Acknowledgments	
About the Alliance	

About the Authors	
About the Truth and Integrity in Government Finance Team	43
Board of Directors	
Staff of the Volcker Alliance	
Endnotes	

# **EXECUTIVE SUMMARY**

THE VOLCKER ALLIANCE

IN THE VOLCKER ALLIANCE'S EVALUATION of five budgetary categories for fiscal 2015 through 2019, New York was one of only four of the fifty states to receive a D average—the second-lowest grade possible—in Budget Maneuvers, one of five categories in which states are evaluated. The mark reflected the state's use of one-time measures to offset continuing expenditures and achieve nominal budget balance.<sup>1</sup> The state deployed this potentially unsustainable technique even as the longest national economic recovery in more than a century<sup>2</sup> buoyed tax revenues in the study period's final two years.<sup>3</sup> Another budget maneuver New York used frequently during the period was funding recurring expenditures with nonbonded debt.<sup>4</sup> In addition, its relatively uncommon practice of delivering many services through numerous independent public authorities that issue bonds helped make the state's debt structure more complex than that of most other states. In this study, we compare New York's system of borrowing with that of four other states—California, Florida, Michigan, and New Jersey—with each of those representing an archetype of traditional state debt practices. We present examples of practices by the other states that New York may want to adopt, and we advance a general set of reforms for the state to follow.

## INTRODUCTION

THE VOLCKER ALLIANCE

IN FISCAL 2015 THROUGH 2019, the five years covered by the Volcker Alliance in *Truth and Integrity in State Budgeting: Preparing for the Storm*, New York was one of only four states to receive a D average, the second-lowest grade possible, in the Budget Maneuvers category for its widespread use of one-time measures to balance its budgets.<sup>5</sup> The report noted repeated revenue and cost shifts between related entities, as well as funding of recurring expenditures with nonbonded debt, asset sales, or upfront revenues earned from financial transactions.<sup>6</sup> New York's debts at the end of the study period included tens of billions of dollars in unfunded liabilities for other postemployment benefits (OPEB) for public workers, principally health care, which the state funds on a pay-as-you go basis rather than building reserves—as it has with pensions—to offset these long-term obligations.<sup>7</sup>

The OPEB liability is just one element of New York's highly complex debt structure, which also features a decentralized system of accessing capital markets. Such decentralization facilitates continual skirting of state constitutional and statutory debt limits—including a waiver of such restrictions enacted by the legislature in 2020 and again in 2021 in response to the COVID-19 pandemic.<sup>8</sup> Maneuvering around debt limits permits a reliance on one-off budget solutions or excess leverage while reducing transparency for stakeholders inside and outside government. The maneuvering has persisted after major debt and authority reform initiatives and consolidation of most of New York's core borrowing programs into securities backed by personal income and sales taxes.<sup>9</sup>

In this study, we examine New York's current system of borrowing and compare it with those of four other states — California, Florida, Michigan, and New Jersey. Each state represents an archetype of traditional state debt practices and provides instruction for New York. For example, Florida accesses capital markets through a more diverse group of borrowers than New York but retains better control than the latter over each bond sale and aggregate issuance. In contrast, New York's relatively modest \$100 million unfunded pension liability at the end of fiscal 2021<sup>10</sup> contrasts with New Jersey's prolonged decision to maintain budgetary spending by underfunding pensions and amassing retirement debt without the type of restrictions it faces on selling bonds to the public. And while many of New York's borrowing practices may be an attempt to elude common voter approval requirements for general obligation debt, California proves that voters may be just as or even more willing than the state legislature to take on debt. We also find that among the five states, the total borrowings reflect differences

in the role that each takes in providing public infrastructure and services.

THE VOLCKER ALLIANCE

To better compare states' long-term budgetary exposure to debt, we have adopted an aggressive methodology that produces, in most cases, substantially larger bonded debt totals than reported by other sources, including states themselves. Large or frequent borrowing alone is not a problem for any state, particularly if borrowed funds are used to improve long-term economic resilience via investment in infrastructure and services and a reduction of social and economic inequality. But such a strategy—if not disclosed well enough to convey the full economic linkages between borrowers and those repaying the loans—may limit transparency about the total amount of debt incurred.

Because its debt system is ultimately more permeable than it appears and because each dollar of debt incurred should be properly disclosed and accounted, New York's debt practices pose incremental risk to both the state and its citizens. In a 2017 report, *Public Authorities by the Numbers*, the New York state comptroller's office reported: "State authorities' finances and operations are often closely intertwined with those of the State itself. This has resulted in heightened concerns, in part because authorities are not subject to certain requirements that apply to State agencies and are intended to provide oversight, accountability and transparency. In some cases, it is unclear how authorities decide how significant amounts of State funding will be allocated."<sup>11</sup>

# METHODOLOGY

THE VOLCKER ALLIANCE

TO EXAMINE WHETHER STATE BORROWING frameworks have led to different outcomes in transparency, accountability, or debt levels, we chose five states representing varying arche-types:

- New York makes extensive use of numerous state agencies for borrowing and relies heavily on dedicated tax structures and state enterprises. Because of this, state borrowing is not realistically limited by common metrics on debt and debt service.
- **California** has a highly centralized borrowing program and the highest amount of general obligation debt issued by any state.
- Florida borrows through various departments and agencies, but the state itself retains strong centralized control. The state relies on dedicated tax structures and related metrics to limit total issuance.
- **Michigan** issues debt through multiple entities, including the state itself and its transportation department. The state uses appropriation and lease-backed debt when issuing through other authorities and entities.
- **New Jersey** makes extensive use of a moderate number of state agencies for direct borrowing and what are effectively state obligations. It also carries a significant and troublesome nonbonded debt burden for pensions and OPEB.

Although no two states can be compared exactly, a primary objective of the analysis was to maximize an apples-to-apples view of state debt profiles. This frequently required the inclusion of obligations that are defined as self-supporting but that nonetheless increase the state's long-term current or contingent costs. To normalize findings, we measured the aggregate debt for each state against population, personal income, and gross state product. Our expanded definition of state debts includes

- issues for which the state has obligated itself to make payment, either in its own name or through any other entity (including municipalities) for capital or operating purposes. The obligation exists regardless of the security pledged for payment, including general obligation, legislative appropriation, dedicated tax, or another specified revenue stream;
- contingent obligations of the state to repay debt;
- implicit state support of a bond beyond regular budgetary support provided by the state to the entity or program;

The volcker alliance

- obligations of critical state-related entities that may generate insufficient revenues to meet debt service obligations;
- debts of state-related or state-controlled entities that are used to support the general fund budget via upstreaming of cash; and
- unfunded pension, OPEB, and state unemployment insurance trust fund liabilities.

# **OVERVIEW OF STATE BONDED AND NONBONDED DEBT**

THE VOLCKER ALLIANCE

FORTY-EIGHT STATES LIMIT ISSUANCE of general obligation debt in some way, according to a 2018 Pew Charitable Trusts study.<sup>12</sup> Limits are usually contained in state constitutions, but stand-alone or supplementary statutory restrictions are not uncommon. Thirty-three states require, at a minimum, voter or supermajority legislative approval for a specified borrowing program or bond issue. Most others require nominal or relative dollar debt caps with respect to either total principal or annual debt service. Many states require a mix of all these restrictions, and a handful do not allow any general obligation issuance at all.

Such constraints notwithstanding, nearly all states still find ways to borrow above—and despite—their debt limits, often by issuing different kinds of bonds than those restricted by law. These alternative debt structures vary considerably but can include bonds whose payment is subject to annual appropriation by the legislature rather than the state's full faith and credit. Legislative failure to appropriate funds does not trigger a legal event of default, however. This is because investors and credit rating agencies do not require the full faith and credit pledge; they assume that the state will eventually honor the promise to repay the bonds in full, regardless of future events. Debt alternatives also include revenue bonds, usually secured by and paid with receipts from specific state taxes or fees, such as sales or motor vehicle taxes or tolls. General obligation debt alternatives can be issued and paid by the state itself or through a state-level entity or department.

Nearly all states also borrow money outside capital markets, frequently in an effort to temporarily paper over a structural budgetary imbalance. For example, states can borrow from the US Treasury to shore up an insolvent unemployment insurance trust fund. They may also use cash from special funds to rebuild the general fund. In addition, failing to provide actuarially required pension or OPEB payments can be an expensive way to finance a shortfall, as it comes at the cost of the respective fund's assumed annual rate of return on its investments. In its series of *Truth and Integrity in State Budgeting* reports, the Volcker Alliance has cataloged multiple other ways states incur nonbonded debts to achieve budgetary balance (table 1).

Since the passage of the Debt Reform Act of 2000,<sup>13</sup> New York has made substantial progress in simplifying its core borrowing programs. The state now provides useful, regular disclosures on these programs via the Division of the Budget's *Annual Information Statement*, quarterly updates, and occasional supplemental reports.<sup>14</sup> Before 2000, the state relied heavily

#### TABLE I

BUDGET MANEUVERS INVOLVING DEBT
Borrowing for operations
Restructuring bonds for debt service relief, such as scoop and toss
Borrowing at higher coupon rate to increase bond proceeds
Using upfront proceeds from a financial contract
Using proceeds from the nonroutine sale of assets
Accelerating revenues from future years into current year
Deferring current year expenditures into future years
Temporarily shifting costs to other entities
Nonroutine upstreaming of funds from other state-controlled entities or funds
Using general fund or rainy day fund reserves
Deferring maintenance
Failing to make actuarially recommended annual pension or OPEB contribution

SOURCE Volcker Alliance.

on debt issued by a variety of public authorities and other entities, with payment backed by special appropriations, service contracts, or dedicated tax pledges. This system decentralized control of borrowing, limited transparency of the state's aggregate legal and economic debt exposure, and facilitated the use of debt for operations. In 1990, for instance, New York refinanced its rising and problematic use of seasonal and operational borrowing through the Local Government Assistance Corporation, which ultimately issued \$4.7 billion of revenue bonds backed by a quarter of the 4 percent state sales tax.<sup>15</sup>

The Debt Reform Act defined the term *state-supported debt* and restricted its use to capital investments; set maximum debt maturities of no longer than thirty years; and imposed other limits, including restricting outstanding state-supported debt to no more than 4 percent of state personal income and capping debt service costs at 5 percent of total fund receipts. As defined by law, state-supported debt in fiscal 2020 included general obligation bonds (about \$2 billion outstanding), personal income tax bonds (about \$37 billion), and sales tax revenue bonds (approximately \$12 billion).<sup>16</sup>

The Division of the Budget oversees the state's personal income tax and sales tax borrowings using three state authorities as conduit issuers — meaning they sell bonds that the state, rather than the authorities, are solely responsible for repaying. The three are the Dormitory Authority of the State of New York (DASNY), New York State Thruway Authority, and New

York State Urban Development Corporation, which was founded to help finance construction of low- and moderate-income housing.

Despite the Debt Reform Act, state policy has been adjusted regularly to avoid constitutional constraints on debt. For example, New York's use of general obligation bonds is also limited by the state constitution, which requires that voters in a general election approve of borrowing for a specific purpose.<sup>17</sup> As of 2021, the state would very likely have lower borrowing costs because of high investor demand for general obligation bonds relative to their supply, but it has not sought voter authorizations. In fact, New York's fiscal 2022 capital plan assumes that 98 percent of the \$10 billion of spending to be financed through bond sales will come from state authority bonds, with only \$200 million of the total generated by proceeds of general obligation debt sales.<sup>18</sup> These numbers reflect New York's regular use of borrowing vehicles that, by falling outside the Debt Reform Act's definition of state-supported debt, are not subject to the statute's limits.

Below, we highlight New York's excess borrowing through statutory and other changes. We also consider the state's use of nonbonded debt via employee compensation-related liabilities and past borrowings within the state budget itself.

While New York has sometimes appeared close to exhausting its state-supported borrowing capacity under the Debt Reform Act, it has repeatedly adjusted its statutes to ensure adequate coverage and investor demand. Similar alterations may occur in the future should caps again impinge on the state's ability to borrow. Adjustments in borrowing procedures have included the following:

- New personal income tax (PIT) and sales tax bonds. When the PIT structure was created in 2002, it committed 25 percent of personal income tax collections to pay debt service on bonds backed by the levy and released the balance to the general fund. As bondholders' portfolios became saturated with the PIT securities, the state could have subjected its borrowing program to voter approval of new general obligation debt or increased the volume of revenues allocated to the PIT bonds to improve their attractiveness to investors. Instead, it created a new security—debt backed by sales tax collections—to dodge the constraints of the first two options. New York began issuing bonds through this new program in 2013.
- Adding taxes to PIT bonds. In response to the 2017 federal Tax Cuts and Jobs Act's restriction on individual taxpayers' ability to deduct state and local taxes, New York attempted to let residents reduce their tax bills via a new charitable deduction provi-

sion. Because that structure would have reduced personal income tax collections, the state expanded the PIT bond structure's capture of income tax receipts to 50 percent from 25 percent to ensure adequate coverage for debt service. Although the charitable deduction provision did not survive a challenge by the Internal Revenue Service, <sup>19</sup> PIT bonds' deeper draw on the state income tax remained in place.

• Emergency waivers of statutory caps for COVID. Citing concerns for its solvency and program delivery amid the COVID-19 pandemic, New York in 2020 exempted its state-supported bond issuance from the Debt Reform Act's limits. The state did so again in 2021, even after mid-pandemic revenue and federal aid both exceeded expectations. This move highlighted the flexibility in state's definitions of an emergency and suggests that New York bondholders should assume that it will loosen statutory borrowing restrictions in the future if needed.

New York has also shown that the structure of bonds can help it avoid debt limits. For example, like most states, it regularly borrows through channels that carry fewer restrictions than those applied to general obligation debt—for instance, bond securities not subject to Debt Reform Act or constitutional limits. To discuss these, it is useful to consider definitions of the state's debt categories:

- **State-supported debt** refers directly to statutory debt limits and allowances created under the Debt Reform Act. State-supported debt outstanding cannot exceed 4 percent of annual personal income, as computed by the US Census Bureau of Economic Analysis, and debt service cannot exceed 5 percent of annual receipts by all state funds.
- **State-related debt** is a broader term that adds a relatively small amount of contingent debt and bonds backed by legislative appropriations that are paid directly by the state.
- **State-funded debt** is a term used by the state comptroller that adds materially large obligations that New York pays indirectly. This holds true "whether or not debt service is to be paid from a revenue stream transferred by the State to another party that is responsible for making such payments," according to the comptroller's office.<sup>20</sup> This category includes
  - ◊ \$8 billion of New York City Transitional Finance Authority (TFA) Building Aid Revenue Bonds, which are repaid solely with state aid to the city;
  - \$2 billion of State University of New York (SUNY) Dormitory Facilities Revenue Bonds, which are paid with dormitory revenues collected by all schools in the SUNY system. They replaced an older series of SUNY bonds that were also secured

by the university system itself, moving "payment of debt service ... outside the budget," according to the comptroller<sup>21</sup>; and

- ◊ \$2 billion of bonds issued by the Sales Tax Asset Receivable Corporation, which New York City created in 2003 to refinance debt of the Municipal Assistance Corporation for the City of New York. At the end of fiscal 2020, New York refinanced the last with more PIT bonds.
- Our definition of state debt adds obligations, These include

THE VOLCKER ALLIANCE

- ◊ \$34 billion of New York Metropolitan Transportation Authority (MTA) Transportation Revenue Bonds, which are the agency's principal borrowing vehicle and are paid with revenues from the New York City subway system. (We assume that the MTA is regarded as a too-big-to-fail state asset, indicating the likelihood of the state's continued revenue support for the authority); and
- ◊ \$5 billion of MTA Dedicated Tax Fund Bonds and \$1 billion of New York State Thruway Trust Fund Bonds. Both are similar in economic effect to the TFA building aid bonds included by the state comptroller.

While states face more than \$1 trillion in unfunded pension liabilities,<sup>22</sup> New York's burden is relatively minor because of past reform efforts and disciplined funding. The state's unfunded pension liability was just \$9 billion at the end of fiscal 2019, 93 percent less than New Jersey's.<sup>23</sup> But New York carried \$66.7 billion in unfunded OPEB obligations for state government and State University of New York employees as of fiscal 2020. As of October 13, 2021, New York owed another \$9.2 billion to the US Treasury to cover pandemic-era loans it took out to prop up its unemployment trust fund.<sup>24</sup>

In fact, New York has been a consistent user of nonbonded budget borrowing and was one of only four states to average a D, the second-lowest mark possible, in the Budget Maneuvers category in the Volcker Alliance's 2020 study of all fifty state budgets covering fiscal 2015–19. In the period, New York made repeated revenue and cost shifts between related entities and paid for recurring expenditures with debt, asset sales, or upfront revenues on financial transactions.

# **NEW YORK COMPARED WITH OTHER STATES**

THE MEDIAN VALUE of net tax-supported debt for US states is \$1,039 per capita, equivalent to 1.9 percent of personal income, according to Moody's Investors Service.<sup>25</sup> Of the states examined in this paper, the agency reports that three are above that median (California, New Jersey, New York) and two are below (Florida and Michigan). When our expanded definition of state debt is applied, each state's metrics rise to varying degrees; for example, Michigan's debt as a percentage of personal income more than doubles, to 2.9 percent, from the reported 1.2 percent.

In table 2, we compare New York's debt burdens to the other four states'. Looking strictly at bonded debts, those of New York and New Jersey tower over those of the others. In terms of indebtedness per capita, personal income, and gross state product, New York has about twice California's leverage, which suggests a difficult path to balanced budgets. Similarly, New Jersey may feel more pressure to raise taxes, cut spending, or continue relying on non-recurring budget solutions to achieve balance.

New York's credit profile benefits from its relatively limited exposure to unfunded pension liabilities, although OPEB remains a challenge. The Governmental Accounting Standards Board, which regulates state and municipal financial reporting, requires that any net liability for OPEB be recognized on governments' balance sheets in addition to that for pensions. Once pension and OPEB are added to the debt burden measures of the five states studied, the extent of New Jersey's leverage is clear.

Complete tables of each state's debts, cataloged by issuer, borrowing program, and security, are included in appendix A. Following are summaries of the four other states' debt structures and amounts borrowed.

# California

California is a highly centralized state borrower, with traditional, stand-alone general obligation bonds accounting for 80 percent of all state-paid debt. General obligation and direct appropriation debts, the latter issued through State Public Works Board and Golden State Tobacco Securitization Corporation financings, account for almost all the remainder. Under California's constitution, general obligation bonds must be approved by voters and are payable from all state revenues, subordinate only to funding for public K–12 schools and universities. While the state treasurer produces an annual debt affordability study, measuring California's

#### TABLE 2

COMPARING STATE DEBT					
	NEW YORK	CALIFORNIA	FLORIDA	MICHIGAN	NEW JERSEY
Demographic Data, Q4 2020		•	•	-	
Population (millions)	20.2	39.5	21.5	10.1	9.3
Total personal income (billions)	\$1,421.4	\$2,769.1	\$1,201.8	\$517.8	\$656.0
Gross state product (billions)	\$1,777.4	\$3,071.0	\$1,133.7	\$531.7	\$634.1
Bonded Debt Levels, Fiscal 2020				-	
General obligation state debt (billions)	\$2.1	\$74.4	\$8.8	\$1.4	\$1.6
Nongeneral obligation state debt (billions)	\$100.7	\$15.9	\$9.2	\$13.8	\$49.1
Total state bond debt (billions)*	\$102.9	\$90.4	\$18.0	\$15.1	\$50.7
Debt Metrics					
Debt per capita	\$5,094.2	\$2,285.7	\$834.4	\$1,500.7	\$5,460.3
Debt as percentage of personal income	7.2%	3.3%	1.5%	2.9%	7.7%
Debt as percentage of gross state product	5.8%	2.9%	1.6%	2.8%	8.0%
Other Debt**					
Unfunded pension & OPEB liabilities (billions)	\$74.7	\$189.9	\$15.5	\$33.8	\$166.0
Unemployment insurance trust fund loans (billions)	\$9.0	\$19.3	\$0.0	\$0.0	\$0.3
Total state debt (billions)	\$186.6	\$299.6	\$33.5	\$48.9	\$217.1
Adjusted Debt Metrics***					
Debt per capita	\$9,235.6	\$7,577.2	\$1,554.1	\$4,850.5	\$23,367.6
Debt as a percentage of personal income	13.1%	10.8%	2.8%	9.4%	33.1%
Debt as a percentage of gross state product	10.5%	9.8%	3.0%	9.2%	34.2%

\*Totals may not add up precisely due to rounding.

\*\* Pension and OPEB data as of fiscal 2019, adjusted by MMA to exclude local portion of state pension plans, for Florida, New Jersey, Michigan, and California. Unemployment trust fund loans as of November 9, 2021. Economic data as of fourth quarter 2020.

\*\*\* Including non-general obligation debt

SOURCE Bloomberg, Municipal Market Analytics, state financial reports, US Bureau of Economic Analysis.

indebtedness by various measures and against other large states, there are no quantitative limits on issuance of general obligation securities.

The state's major revenue bond issuers include its two public university systems, the California Department of Water Resources and the Housing Finance Authority, infrastructure banks, and large conduit issuer programs. None of these appear to be connected directly or indirectly with the general fund and thus are excluded from calculations of state debt.

California also is burdened by substantial unfunded pension and OPEB liabilities totaling

about \$190 billion as of fiscal 2020,<sup>26</sup> more than double the general obligation debt owed by the state at the end of fiscal 2019. As of November 9, 2021, California's unemployment insurance trust fund also had \$19.3 billion in federal loans outstanding – more than any other state.<sup>27</sup>

The Volcker Alliance gave California a top A average in Budget Maneuvers for fiscal 2015–19 for its negligible use of one-time measures to finance recurring spending. This is in sharp contrast to years before and after the Great Recession, when the state made heavy use of nondebt financing techniques to close budget gaps. California received a D average in the Legacy Costs category, however, a mark that reflects the unfunded liabilities and the state's failure to make actuarially recommended pension and OPEB contributions in 2018–19.

#### **LESSON FOR NEW YORK**

THE VOLCKER ALLIANCE

California presents a counterpoint to the traditional narrative of voter approval requirements being an onerous obstacle to a state's using a general obligation pledge as security on bonds. Almost all of California's outstanding bond debts have been approved by majority vote in a statewide election, and substantial additional authorizations (\$33 billion as of July 3I, 202I) remain unused and unissued. For the most part, California has chosen to rely on its premier security—the general obligation bond—to minimize borrowing costs and improve acceptance and trading liquidity in the secondary market.

#### Florida

Florida has a decentralized system of borrowing (with at least ten borrowing agencies and more than two dozen unique bond securities). But almost all state-paid debts are issued through and ultimately controlled by the state Division of Bond Finance, which the legislature created in 1969 to issue securities on behalf of local governments and agencies.<sup>28</sup>

While its constitution allows Florida to sell voter-approved debt paid solely via a general obligation pledge, the state has instead secured its borrowings with dedicated tax backing, with some issues supported by a general obligation promise. The state calls its obligations revenue bonds, but because the pledged taxes are essential state revenues that flow back to the general fund once debt service is paid, the securities are widely considered tantamount to traditional state debt.

Each security is limited by revenue-specific tests of adequacy versus debt service, and

Florida's overall borrowing is capped, by statute, at 7 percent of all state revenues. The bond finance division provides regular updates on state debt metrics.

Prone to hurricanes and floods, Florida also owns a property and casualty insurer and a reinsurer of last resort; both can raise funds via a statewide assessment on the totality of insurance policies. Because of that backstop, these insurers are included in the state's debt balance by the rating agencies and this study.

Florida's debt levels become somewhat less conservative when unfunded pension and OPEB liabilities are included. These totaled \$15.5 billion in fiscal 2019—almost equal to the amount of directly payable bonded debt issued by the state.

The Volcker Alliance awarded Florida a B average in Budget Maneuvers for fiscal 2015–19. While the state eschewed the use of debt to achieve budgetary balance, its mark reflected shifts of trust fund money into the general fund. While the state funded pensions adequately, its C average in Legacy Costs stemmed from a failure to make actuarially recommended OPEB contributions.

#### **LESSON FOR NEW YORK**

THE VOLCKER ALLIANCE

Florida has more state borrowing entities and more borrowing security types than New York. But Florida retains exceptional control over its debt portfolio by allocating related responsibility to a single agency run by an office reporting directly to the governor. The office helps improve borrowing costs by providing deep, detailed reporting to investors and other stakeholders, and it has a single point of contact and reference for the legislature and governor's office.

#### Michigan

Michigan's issuance of general obligation debt is limited by its constitution. It allows such debt to be used for a set amount of short-term borrowing for operating funds, for bond issues to fund loans to school districts, and for other purposes approved by voters. The state issues nongeneral obligation bonds in its own name, for roads secured by taxes restricted for transportation, and through the State Building Authority for constructing or acquiring buildings and facilities. Through lease payments and appropriations, the state also supports a portion of the debt issued by the Michigan Strategic Fund, which assists economic development and job creation efforts.

Unlike New Jersey, which uses state agencies to sidestep its constitutional limit on general obligation debt, Michigan's rules and oversight appear to have kept its aggregate borrowing comparatively lower over time. However, like New Jersey—albeit to a lesser degree—Michi-gan's other nonbonded debts significantly increase its leverage.

For fiscal 2015–19, the Volcker Alliance gave Michigan an A in the Budget Maneuvers category, although prior years had seen examples of revenue and cost shifting and funding of recurring expenditures with debt. Michigan received a B for its management of pension and OPEB funding costs.

#### **LESSON FOR NEW YORK**

THE VOLCKER ALLIANCE

Michigan's debt issuance is more concentrated than New York's. Borrowing done through other state entities or agencies is subject to more state-level oversight, which may contribute to Michigan's lower bonded debt metrics.

#### **New Jersey**

New Jersey's constitution limits its ability to incur general obligation debt by requiring voter approval when the outstanding amount exceeds 1 percent of appropriations. Because of this constraint, most state debt is issued under alternative borrowing entities and backed by a so-called subject to appropriation pledge, regardless of the payment source (such as general state revenues or dedicated revenues). The largest issuers of such debt are the state Transportation Trust Fund Authority and the Economic Development Authority, which together accounted for about 80 percent of New Jersey's bonded debt outstanding as of June 30, 2020. Several minor state obligations have been incurred through other issuers and a state moral obligation pledge to repay the debt.

The state also routinely leverages the strong financial position of the New Jersey Turnpike Authority by moving cash from the authority to the general fund to limit state borrowing or avoid spending cuts. The authority provided \$820 million to the state in fiscal 2017–21 and is scheduled to hand over an additional \$3.6 billion in fiscal 2022–28. It will then continue to convey \$525 million per year to the state until New Jersey Transit, the mass transportation agency, ceases its current practice of transferring funds from its capital budget to its operating budget to help hold down fares. While New Jersey's bonded debt is higher than that of many other states, it is far less than the unpaid long-term obligations the state has amassed by failing to make actuarially recommended contributions to its pension and OPEB systems and is arguably its most costly and least transparent debt. Decades of not making those annual contributions, plus forgone investment returns on the missed contributions, resulted in a liability of about \$166 billion as of the end of fiscal 2020.

The Volcker Alliance gave New Jersey a D average in Budget Maneuvers for fiscal 2015–19. The low grade was mostly due to the state's heavy use of revenue and cost shifts and funding recurring expenditures with debt, asset sales, and upfront payments on financings.

#### **LESSON FOR NEW YORK**

THE VOLCKER ALLIANCE

In contrast to New Jersey's historic practice, New York should continue to fund pensions regularly, which will help it avoid a costly source of borrowing and avert related downgrades. New York should also continue to shun New Jersey-style siphoning of revenues from a separate and self-supporting state enterprise to fund its budget.

# **RECOMMENDATIONS AND CONCLUSION**

UNDER NEW YORK STATE'S diverse debt structure, investors may have made artificial distinctions among state borrowers and overallocated their portfolios to bonds from New York issuers than their usual limits on risk might otherwise allow. This may pose challenges for New York in a fiscal or financial crisis. In such a crisis, investors might ignore distinctions among securities—as they did in the Detroit and Puerto Rico bankruptcies—and spark a selling wave just when the state would most need access to credit markets.

We thus recommend that New York State:

- Adopt a more inclusive view of which outstanding debt obligations are its direct responsibility.
- Establish a better system of administrative controls over this portfolio of debt.
- Stretch statutory debt limitations around a larger universe of obligations.
- Dramatically improve transparency in all categories of debt.
- To the extent it can, fold unfunded pension, OPEB, and unemployment insurance liabilities into existing debt limits and transparency mechanisms to improve management and oversight.
- Enumerate its aggregate future costs to repair and replace all critical public infrastructure assets.
- Undertake a full accounting of its physical assets, their current state of service and utility, and a range of cost estimates for repair, including any apparent deficiencies related to climate change.
- Improve control over all state borrowing, along the lines of Florida's structure. This may not be legally or politically viable in the medium term, but a centralized advisory entity that is actively involved in debt originations of all kinds within state government could at least enable data collection and dissemination. New York's budget division, which answers to the governor and already coordinates all borrowing via state-supported structures, is a likely candidate for this role—perhaps in partnership with the independently elected state comptroller, who already guides general obligation bond issuance and has broad oversight responsibilities for state debt.

We also recommend that public and private lenders to the state and its authorities consider many of New York's revenue bonds economically or politically consolidated with its general obligation, personal income tax, and sales tax securities. That would make all sub-

ject to the same exposure limitations on risk of a single borrower that may be contained in bondholders' investment policies.

Without such consideration of security consolidation, taxpayers, investors, and state officials will continue to lack a clear picture of the state's total debt. Improving transparency may help New York avoid its access to markets being impeded in any future financial crisis. Equally important, a distinct view of the cost to taxpayers of the state's diversified debt structure may help New York reduce its longtime reliance on unsustainable one-time revenue measures to achieve budgetary balance.



## CALIFORNIA

The volcker alliance

General description of state borrowing: Centralized borrowing, largely general obligation debt

Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
State of CA	General Obligation (GO) Bonds	Schools, water, conservation, sewer, air, correctional, disaster preparedness, higher education, housing, schools, rail, veterans housing, high-speed rail, stem cell research	GO	\$71.97
State of CA	Veterans GO Bonds	Senior lien on 1943 fund for approved veteran loans	Housing fund, backstopped by GO	\$0.78
Various	Cal-Mortgage Insurance Fund	Pursuant to the CA Health Facilities Construction Loan Insurance Law, Cal- Mortgage enhances loans to qualified borrowers with the state's full faith and credit pledge	GO	\$1.70
State of CA	State Public Works Board	Lease revenue financings for various state departments; largest are corrections and judicial council	State appropriation	\$8.48
Golden State Tobacco	State-enhanced and asset-backed tobacco bonds	Secured by state payments to be received under the tobacco Master Settlement Agreement (MSA)	Tobacco MSA revenues; state appropriation for a portion of the total	\$6.44
CA Health Facilities Finance Authority	No Place Like Home Bonds	Funding to aid homeless; bonds sold on behalf of the Department of Housing and Community Development	A portion of a 1% surcharge on personal incomes over \$1 million	\$0.99
CA Infrastructure and Economic Development Bank	Workers' compensation bonds	Sustains mandatory workers compensation	First lien on mandatory assessments on all insurance providers by CA Insurance Guaranty Association	\$0.02
Subtotal: Debt				\$90.37
Pension and OPEB D	lebt			
Unfunded pension I	iability			\$96.00
Unfunded OPEB liab	bility			\$93.90
Outstanding loans f	rom the Federal Uner	nployment Account		\$19.31
Debt including unfu	inded pension and OP	EB liabilities*		\$299.59
Demographic inform	nation			
Population (billions				0.04
Personal income (billions)				
Gross state product (billions)				\$3,071.02
Debt Metrics				
Debt per capita				\$7,577.19
Debt as a percentag	ge of personal income			10.82%
Debt as a percentag	ge of gross state produ	uct		9.76%

\*Totals may not add up precisely due to rounding.

#### FLORIDA

General description of state borrowing: Borrowing via government departments and agencies, but state retains strong centralized control

Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
State of FL	Department of Transportation (DOT) Right-of-Way (ROW) Acquisition and Bridge Construction Bonds	Acquisition of ROW for state roads and to finance state bridges	Pledge of motor fuel taxes subject to deduction of some fees and charges, plus state GO	\$1.99
State of FL	Board of Education Capital Outlay	Projects at school districts and FL College System institutions; classrooms, maintenance, parking lots	Pledge of motor vehicle license fees, plus state GO	\$0.08
State of FL	Board of Education Public Education Capital Outlay	For legislatively approved projects at K–12, universities, and vocational schools; classroom buildings, heating and cooling, major projects	Pledge of gross receipts taxes on telecommunications and utilities, plus state GO	\$6.72
State of FL	Board of Education Lottery Revenue Bonds	Constructing and renovating educational facilities for school districts, state colleges, and universities	Pledge of first lottery revenues deposited into the Education Enhancement Trust Fund	\$0.80
State of FL	DOT Financing Corporation	DOT projects	State appropriation of fuel tax receipts	\$0.15
State of FL	DOT Public-Private Partnerships	Public-private partnerships	State availability payments to concessionaires	\$3.41
State of FL	DOT Seaport Investment Program	Projects at FL's fifteen seaports	State appropriation of motor vehicle title fees into the state transportation trust fund	\$0.28
State of FL	DOT State Infrastructure Bank	Finances resources to be originated as loans to bank borrowers	Bonds are secured by repayment obligations on underlying loans; state DOT is a material borrower	\$0.01
State of FL	Department of Children and Families	Mental health treatment facilities	State agency rental payments; tantamount to state contractual payments	\$0.06
State of FL	Department of Management Services Correctional Finance Corporation	Financing for state prisons	State agency rental payments; tantamount to state contractual payments	\$0.29
State of FL	Department of Management Services Facilities Pool	State office buildings and similar improvements	State agency rental payments; tantamount to state contractual payments	\$0.16
State of FL	Inland Protection Financing Corporation	Acquisition and protection of land in FL Everglades and Keys	Annual state appropriation by the legislature from wholesale excise taxes on petroleum products to the corporation	\$0.02
State of FL	Board of Governors University Mandatory Fee Program	Bonding for health projects at FL State University, University of North FL	First lien on mandatory student health fee; the state considers this to be tax-supported debt	\$0.06
State of FL	Board of Governors University System Improvement Revenue Bonds	Bonding authority to provide sufficient funds for achieving its authorized purposes, consisting of the purchase of all or a portion of the state's tobacco receipts and the payment of or provision for financing costs	Capital improvement fee surcharge on students in the system	\$0.09



Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
State of FL	Department of Education FL College System Capital Improvement Bonds	Financing capital improvement at participating community colleges	Capital improvement fees collected by all participating community colleges; cross- collateralized	\$0.06
State of FL	Department of Environmental Protection FL Forever and Everglades Restoration Bonds	Acquisition and improvement of lands, water areas, and related interests for conservation, restoration, recreation, and water resource preservation	Gross lien of documentary stamp taxes on transfer of real property, stocks, bonds, security agreement; both programs have parity lien	\$0.73
State of FL	Various	Lee Moffitt Cancer Center, master lease, energy savings contracts, sports facility obligations	Miscellaneous	\$0.58
State of FL	Board of Administration Finance Corporation	Finances funds for the FL Hurricane Catastrophe fund, which provides reimbursements to residential property owners for a portion of catastrophic losses	Policyholder repayments, plus special emergency surcharges on all insurance policies statewide	\$1.65
Citizens Property Insurance Corporation	Citizens property insurace coastal and personal lines and commercial lines accounts	Finances property and casualty insurance policies for owners not otherwise able to obtain insurance	Policyholder repayments, plus special emergency surcharges on all insurance policies statewide	\$0.82
Subtotal: Debt				\$17.97
Pension and OPEB	Debt			
Unfunded pension	liability			\$7.70
Unfunded OPEB lia	ability			\$7.80
Outstanding loans	from the Federal Unemployment A	Account		\$0.00
Debt including unf	unded pension and OPEB liabilitie	9S*		\$33.47
Demographic Infor	mation			1
Population (billion	s)			0.02
Personal income (billions)				
Gross state produc	et (billions)			\$1,133.73
Debt Metrics				
Debt per capita				\$1,554.10
Debt as a percenta	ge of personal income			2.79%
Debt as a percenta	ge of gross state product			2.95%

\*Totals may not add up precisely due to rounding.

#### MICHIGAN

THE VOLCKER ALLIANCE

General description of state borrowing: Debt issuance conducted through a limited number of borrowing entities, including the state and its transportation department

Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
State of MI	General Obligation (GO) Bonds	Borrowing limited unless voter approved	GO	\$1.36
State of MI Department of Transportation	Department of Transportation	Issues bonds for highway purposes payable from constitutionally restricted taxes for transportation purposes, limited by the calculation of maximum annual debt service, which may not exceed 50% of the preceding fiscal year's receipts deposited in the State Trunkline Fund. Includes federal grant anticipation debt.	Sales and special taxes and federal grant revenues, where applicable	\$1.75
MI State Building Authority	Authority was created in leglislation to own, construct, maintain, and operate state buildings and facilities	Issues bonds to acquire or construct state facilities or for higher education institutions	State appropriation	\$2.91
MI Finance Authority	Authority is the product of an executive order that consolidated ten public finance authorities in 2010. Provides funding for loans to many types of governments and nonprofits in the state	Issues bonds for loans to local government units, school districts, nonprofit higher education, and health care facilities. Also acquires student loans and is the successor to the agency responsible for the the tobacco Master Settlement Agreement (MSA)-backed debt	Tobacco MSA revenues	\$6.98
MI Strategic Fund	Fund primarily provides businesses with financing sources	Issues bonds primarily for economic development purposes but also has some state lease- or appropriation-supported debt. Also a product of consolidating a few issuing entities	State appropriation- or lease-backed debt	\$2.10
Grand Rapids Building Authority	Authority finances and operates public buildings in the city	Not a state entity but has issued bonds secured by lease payments from the state	State appropriation/ lease-backed debt	\$0.02
MI Natural Resources Commission	Park improvement programs	Issues bonds in support of park programs payable from state park revenues	State appropriation and various state taxes and fees	\$0.00
Subtotal: Debt				\$15.12
Pension and OPE	EB Debt			
Unfunded pensi	on liability			\$21.79
Unfunded OPEB	liability			\$11.97
Outstanding loa	ns from the Federal Unemployment A	ccount		\$0.00
Debt including u	Infunded pension and OPEB liabilities	*		\$48.88
Demographic Inf	formation			
Population (billi	ons)			0.01
Personal income	e (billions)			\$517.81
Gross state proc	duct (billions)			\$531.73
Debt Metrics				
Debt per capita				\$4,850.55
Debt as a percei	ntage of personal income			9.44%
Debt as a percer	ntage of gross state product			9.19%

\*Totals may not add up precisely due to rounding.

#### **NEW JERSEY**

General description of state borrowing: Extensive use of a moderate number of state agencies for borrowing; significant nonbonded debt burden

Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
State of NJ	General Obligation (GO) Bonds	Borrowing limited unless voter approved. Purposes have included open space and farmland preservation, water supply protection, transportation, higher education, ports, and economic development	GO	\$1.60
NJ Transportation Trust Fund Authority	Authority is an independent agency of the state established to finance costs related to the state's transportation system	Bonding authority of \$12 billion was authorized over eight years for transportation purposes. Dedicated fuel tax revenue to the Transportation Trust Fund but no lien on such. Also issues bonds backed by federal grant revenues.	State appropriation of dedicated revenues and federal grant revenues, where applicable	\$17.57
Garden State Preservation Trust Fund	Fund was created in 1999 to support the constitutional amendment that dedicated a portion of the state sales tax for preservation purposes	Provides funding to the Department of Environmental Protection, the State Agriculture Development Committee, and the New Jersey Historic Trust for all or a portion of the cost of projects undertaken by those entities or by grant or loan recipients	State appropriation of dedicated revenues	\$0.56
NJ Building Authority	Authority was created in 1981 and established in the Department of Treasury	Bonding authority to acquire, construct, reconstruct, rehabilitate, or improve office buildings or related facilities necessary or convenient to the operation of any state agency	State appropriation of general revenues	\$0.II
Tobacco Settlement Financing Corporation	Asset-backed tobacco financing. Corporation is a blended component unit of the state that provides financing services to the state	Bonding authority to provide sufficient funds for achieving its authorized purposes, consisting of the purchase of all or a portion of the state's receipts received under the tobacco Master Settlement Agreement (MSA) and the payment of or provision for financing costs	Tobacco MSA revenues	\$2.93
NJ Economic Development Authority	Various programs authorized in legislation. State debt is backed largely by state appropriations. The largest debt program backed by the state is for school facilities construction, followed by pension obligation bonds issued in 1997	Issues debt on behalf of the state and private companies to promote and foster economic development	State appropriation of general revenues or dedicated taxes	\$14.84
NJ Health Care Facilities Financing Authority	Authority was created in 1972, mainly as a conduit issuer. In 2003, new legislation authorized the issuer to sell bonds for specific projects and programs	Issues debt on behalf of hospitals and other medical facilities secured by revenues of the facility; some state- supported obligations as well	State appropriation of general revenues	\$0.40
NJ Educational Facilities Financing Authority	Various programs authorized in legislation. State debt is backed largely by state appropriations. The state- backed debt is mainly issued for higher education purposes	Issues on behalf of the state and public and private colleges in the state. Most are secured by the borrower's revenues, but there is a portion supported via appropriation by the state.	State appropriation of general revenues	\$0.61
NJ Turnpike Authority	Component unit of the state that owns and operates New Jersey Turnpike and Garden State Parkway	Can issue debt for any corporate purpose	Toll or other project revenue	\$11.31



			Security Pledge	Debt Outstanding
Bond Issuer	Bond Program	Description	for Included Debt	(FY20, Billion)
NJ Sports and Exposition Authority	Authority was created in leglislation to own and operate entertainment facilities and convention centers	Can issue debt to finance certain projects	State appropriation of general revenues	\$0.15
South Jersey Port Corporation	Corporation was established in legislation in 1968	Issues debt for the construction and improvement of marine and port facilities in select south NJ counties; legislation provides that the state has a moral obligation to replenish the debt service reserve fund	Revenues from state port facilities and moral obligation	\$0.46
County issuers benefiting from NJ County College Enhancement Bond Program	State support for county college capital projects up to a maximum that is restored when principal is paid	Counties issue debt that is entitled to state debt service support	State appropriation of general revenues	\$0.18
Subtotal: Debt				\$50.72
Pension and OPEB	Debt			-
Unfunded pension	liability			\$92.52
Unfunded OPEB liability				
Outstanding loans from the Federal Unemployment Account				
Debt including unfunded pension and OPEB liabilities*				
Demographic Infor	mation			
Population (billion	ıs)			0.01
Personal income (billions)				
Gross state product (billions)				
Debt Metrics				
Debt per capita				\$23,367.55
Debt as a percenta	age of personal income			33.09%
				34.23%

\*Totals may not add up precisely due to rounding.



The volcker alliance

General description of state borrowing: Primarily issuance by state public authorities; bonds secured by specific revenue streams, including personal income and sales taxes

Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
State of NY	General Obligation (GO) Bonds	Per Article VII, Section II of the state constitution, borrowings are limited to specific purposes approved by voters	GO	\$2.21
Dormitory Authority of the State of New York (DASNY)	Sales Tax Revenue Bond Financing Program	Core state borrowing program	Pledged state sales tax revenues	\$9.51
DASNY	Personal Income Tax Revenue Bonds (PIT Bonds)	Core state borrowing program	Pledged state PIT revenues	\$23.39
DASNY	NYS Department of Health Facilities Program and NYS Mental Health Services Facilities Improvement Program	Financing for state Department of Mental Health and Office of Mental Hygiene	Annual appropriation by the state	\$0.20
DASNY	State University of NY (SUNY) Dormitory Facilities Revenue Bond Program	Financing for dormitory facilites across the SUNY system	Secured by dormitory facilities revenues	\$1.79
DASNY	SUNY Educational Facilities Program	Financing for educational facilities across the SUNY system	Annual appropriation by the state	\$0.50
DASNY	City University of NY (CUNY) Senior and Community College Facilities Program	Financing for educational facilities of the CUNY system	Annual appropriation: one-half city, one-half state	\$0.35
DASNY	Workers, Compensation Board	Funding for workers compensation claims and settlements	Special assessment on statewide policies	\$0.28
NYS Empire State Development Corporation (ESD)*	Sales Tax Revenue Bond Financing Program	Core state borrowing program	Pledged state sales tax revenues	\$2.04
ESD*	PIT Bonds	Core state borrowing program	Pledged state PIT revenues	\$12.06
NYS Thruway Authority	PIT Bonds	Core state borrowing program	Pledged state personal income tax revenues	\$0.55
NYS Thruway Authority	Highway and Bridge Trust Fund Bonds	Financing for highway and bridge improvements by the state Department of Transportation	Secured by payments from the state from the Dedicated Highway and Bridge Trust Fund	\$0.90
NYS Municipal Bond Bank	Special Program Bonds, Special Purpose Revenue Bonds (Prior Year's State Aid), Recovery Act Bonds	Financing for prior-year school aid claims and capital leases and mortgage loan commitments	State revenues provided directly or indirectly for the benefit of the local borrowers using the bank	\$0.10
New York City Transitional Finance Authority (TFA)	Building Aid Revenue Bonds	Financing for educational facilities for public K–12 schooling	State building aid assigned by New York City to the TFA	\$8.30



NEW YORK (co	ntinued)			
Bond Issuer	Bond Program	Description	Security Pledge for Included Debt	Debt Outstanding (FY20, Billions)
NYC Sales Tax Asset Receivable (STAR) Corporation Bonds	STAR Corporation Bonds	Refinanced Municipal Assistance Corporation bonds to reduce city and related state budget stress	Pledge of New York City's share of NYS Local Government Assistance Corporation revenues, ultimately funded by a portion of state sales taxes	\$1.63
Metropolitan Transporation Authority (MTA)	Dedicated Tax Fund Bonds	Authorization to finance transportation facilities run by the	Pledged dedicated tax funds, including petroleum business taxes, motor vehicle fees, fuel tax, and certain franchise taxes	\$4.86
MTA	MTA Transportation Revenue Bonds	MTA subject to specific limitations	Pledged transportation revenues from MTA operations and subsidies from state and local governmental entities	\$34.24
Subtotal: Debt				
Pension and OPEB	Debt			
Unfunded pension liability				
Unfunded OPEB liability				
Outstanding loans from the Federal Unemployment Account				
Debt including unfunded pension and OPEB liabilities**				
Demographic Info	rmation			
Population (billion	ıs)			0.02
Personal income (	(billions)			\$1,421.39
Gross state product (billions)				
Debt Metrics				_
Debt per capita				
Debt as a percentage of personal income				
Debt as a percent	age of gross state product			10.50%

\*Includes issuance by New York State Urban Development Corporation.

**\*\*** Totals may not add up precisely due to rounding.

# **APPENDIX B: GLOSSARY**

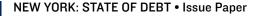
THESE DEFINITIONS ARE BASED ON research by the Volcker Alliance and Municipal Market Analytics; the *Handbook of International Financial Terms*, by Peter Moles and Nicholas Terry (Oxford: Oxford University Press, 1997); and other explanatory documents published by the California Debt and Investment Advisory Commission, the Governmental Accounting Standards Board, Investopedia, Fitch Ratings, the Municipal Securities Rulemaking Board, the National Association of Attorneys General, the National Association of State Retirement Administrators, TransparentNH (New Hampshire's disclosure website), the New York State Division of the Budget, the Urban Institute, and the US Census Bureau, Social Security Administration, and Treasury.

**Accrual budgeting** A method of measuring a state or local government's performance and status by acknowledging the impact of revenues when they are earned and expenditures when they are incurred, regardless of when the funds are received in or exit a state's account. This method, sometimes referred to as "modified accrual" under generally accepted accounting principles (GAAP), is a more accurate way to measure a state's economic status than cash accounting, in which revenues are counted when they are anticipated and expenditures when they are paid. GAAP-based budgeting is not commonly deployed by state and local governments—New York City is the only large government to use it—primarily because it is more complicated and labor intensive than the traditional cash- or fund-accounting methods.

**Actuarially determined contribution (ADC)** Sometimes used interchangeably with actuarially required contribution (ARC). Both refer to the amount that a retirement system's actuaries have determined will adequately fund promised pension or other postemployment benefits (OPEB) accruing to current employees in a given year, as well as the cost of amortizing unfunded liabilities from past years.

Actuarially required contribution (ARC) See entry for Actuarially determined contribution.

**All-funds budget** This overarching budget category includes the total of all funds used by a state, including general, special revenue, and capital accounts.



**Annual comprehensive financial report (ACFR)** Formerly known as comprehensive annual financial report (CAFR). A report meeting recommendations of the Governmental Accounting Standards Board that includes a state or local government's audited financial statements for the fiscal year, as well as other information.

**Asset sales** A way of generating revenue by transferring ownership of public assets, such as buildings or highways, to another party, generally a private entity. Governments regularly dispose of surplus items or land to bring in cash. But the sale of larger assets, typically in a one-time action, to fund continuing expenditures can present a challenge to fiscal sustainability.

**Balanced budget** A budget in which receipts are equal to or greater than outlays in a fiscal period. While forty-nine states require balanced budgets by statute or constitutional provisions, there is no single definition of the term. Vermont, the only state without a formal balanced budget requirement, follows the example of its peers.

**Bond** A debt security, usually with an original maturity of more than one year.

**Bond premium** Any excess over par (or face) value that is paid to purchase a municipal bond when it is issued. Governments may use the proceeds of bond premiums to reduce public indebtedness or to help cover budget deficits.

**Budget maneuvers** One-time fiscal tactics used to create or maintain a balanced budget. They may include transferring special funds, reserves, or windfalls from legal settlements into the general fund; bringing a future year's revenue into the current period; or pushing the cost of current expenditures into the future.

**Capital budget** Generally distinct from a state or municipal operating budget, this document may include spending on land, buildings, structures, and equipment, often financed by issuing municipal bonds or other borrowings. A capital budget may also include some maintenance costs.

**Capital spending** Expenditures on land, buildings, roads, bridges, and other infrastructure, as well as purchases of the equipment necessary for construction or maintenance.

**Cash accounting** A common practice for state and local government budgets, it allows expenditures to be recognized when payments have been made. Similarly, cash accounting allows revenues to be recognized when they are anticipated. Most state and local budgets use cash accounting. Under cash accounting, for example, a large contract to buy computer equipment in one year might not be recorded until the following year, when the bill for the acquisition is finally paid.

**Conduit** A state or local government agency, such as the Dormitory Authority of the State of New York, with the power to issue debt on behalf of governments, universities, or nonprofit organizations, as well as to raise funds for its own use.

**Debt service** Also known as debt service requirement, this is the total amount necessary to pay interest and principal on outstanding bonds.

**Deficit** According to generally accepted accounting principles, this reflects expenses outstripping revenues at the end of the year. It is not to be confused with a shortfall, which represents shortages in revenue that accumulate during the year and may be eliminated by spending cuts, tax or fee hikes, or one-time actions to avoid a year-end deficit.

**Expenditures** Funds that a government appropriates or budgets to provide public services.

**Fund accounting** A public sector accounting approach that separates cash in the state treasury into the general fund, used for most services, and any special funds, such as those for hurricane relief or debt service. The division of all government money into separate funds is primarily intended to improve transparency.

**Generally accepted accounting principles (GAAP)** Guidelines set forth by the Governmental Accounting Standards Board to guide preparation of annual reports for governments. The guidelines reflect professional auditing standards established by the American Institute of Certified Public Accountants. Governmental entities are not required by law to follow GAAP accounting, but credit rating agencies may consider any lack of GAAP methods in their assessments of credit quality.

**General fund** A state or local fund composed of revenues accruing from taxes, fees, interest earnings, and other sources that is usually used for the general operation of government. The fund may exclude capital expenditures. General fund receipts typically exclude federal grants; tuition at state colleges; or special-purpose levies, such as motor fuel taxes earmarked for highway maintenance.

**General obligation (GO) bond** A municipal security backed by a pledge of a government's full faith and credit and taxing power. The term typically refers to a bond issued by a state or local government that is payable from general funds, although the precise source of and priority of payment for GO bonds may vary from issuer to issuer, depending on applicable state or local law. Issuance typically requires voter approval. GO bonds issued by localities are often—and sometimes solely—payable from the issuer's real or personal property tax revenues, while GO securities issued by states are frequently payable from appropriations by the legislature.

**Governmental Accounting Standards Board (GASB)** The body that establishes accounting and financial reporting standards for US state and local governments that follow generally accepted accounting principles.

**Infrastructure maintenance liability** The amount a state will need to provide to keep roads, bridges, and buildings in good working order. Although states and municipalities show the value of accumulated depreciation of assets in their annual reports, budget documents, or documents published by controllers or independent government agencies, the scope and method of calculating the data can differ widely.

**Issuer** A state or local government, territory, political subdivision, governmental agency, or authority that borrows using municipal securities.

**Legacy costs** The present value of unfunded liabilities for future public employee pension and other (OPEB), including health care. Some experts include the estimated cost of deferred infrastructure maintenance liabilities. Not fully funding government services delivered in a particular year represents a shift of obligations from current residents, who have already received the services, to future generations.



**Medicaid** Health care program for low-income families and individuals jointly financed by the federal and state governments, although with varying percentages of support from the two.

**Modified accrual basis accounting** A method of accounting that recognizes revenues in the accounting period in which they become available and measurable.

**Moral obligation bond** A municipal bond that, in addition to its primary source of security, is backed by a nonbinding covenant. The covenant typically stipulates that any amount necessary to make up a deficiency in debt service will be included in the budget recommendation made to the governing body, which may then appropriate funds to make up the shortfall. However, the governing body is not legally obligated to make such an appropriation.

**Multiyear revenue and expenditure forecasts** Estimates of the amounts expected to be brought in or spent that extend beyond the current fiscal year or biennium. The Volcker Alliance recommends at least three full years of such forecasts to qualify for designation as a multiyear forecast.

**Municipal debt medians** Statistics published annually by credit rating agencies that facilitate comparisons of tax-supported bond debt issued by states and localities.

**Municipal bonds** Debt obligations used by states, cities, counties, and other government entities, primarily for capital expenses such as schools, highways, hospitals, and prisons. Proceeds of municipal bonds may also be used to cover revenue shortfalls or reduce pension underfunding. Interest on most municipal bonds is exempt from federal taxes and often from state taxes, although governments may also issue taxable debt.

**Municipal Securities Rulemaking Board (MSRB)** A self-regulatory organization created under the Securities Acts Amendments of 1975, the MSRB promulgates rules that protect investors in municipal bonds largely through oversight of US broker-dealers and banks. The board provides prices on municipal bond trades and issuers' financial disclosures on its EMMA website.

**Net pension liability** Defined by the GASB as the difference between the total pension liability (the present value of projected payments to employees based on their years of service) and the

assets (mostly investments reported at fair value) set aside in a trust and restricted to paying benefits to employees upon retirement, current retirees, and beneficiaries. The net liability is also known as the unfunded pension liability, although the latter's value may differ. For this report, the Volcker Alliance has used each state's proportionate share of any state retirement systems' aggregate net liability. This excludes net liabilities that are the direct responsibility of other governments, such as cities, school districts, and counties, that are covered by state pensions but do not receive state funds to pay for annual contributions.

**Net OPEB liability** Defined by the GASB as the portion of the present value of projected benefit payments that will be provided to current active and inactive employees and that is attributed to those employees' past periods of service (total OPEB liability), less the amount of the OPEB plan's fiduciary net position.

**Note** A short-term obligation of an issuer to repay a specified principal amount on a certain date, together with interest at a stated rate, typically payable from a defined source of anticipated revenues. Notes usually mature in a year or less, although notes of longer maturities are also issued.

**Obligor** A party having a financial obligation to pay all or part of the debt service on municipal securities. According to the MSRB, an obligor is often the issuer but may be a conduit borrower.

**One-time expenditures** Expenses that are nonrecurring and generally appear in only one budget.

**One-time revenues** Nonrecurring receipts, which should not be used to pay for ongoing expenditures such as pay raises or new programs.

**Other postemployment benefits (OPEB)** Future liabilities incurred by governmental entities for benefits other than pensions, principally health care, provided to retired workers.

**Pension** A retirement plan that may be described as defined benefit, defined contribution, or in some cases a combination of both. In a defined benefit plan, the pension benefit is set by a formula established through the plan. Benefits are structured as a lifetime annuity provid-ing regular payments that may be adjusted periodically for inflation. Benefits are funded by

employee and employer contributions and investment returns. The employer bears the investment risk; some states also offer constitutional protection of current or promised benefits. In a defined contribution plan, the employer's annual contribution is specified, and benefits are funded through a combination of employee and employer contributions and investment returns. The employee bears the investment risk. Many states have large pension funds that provide retirement benefits to state and local employees through discreet or blended programs. Blended programs sometimes lack the transparency to allow outside analysts to easily allocate assets and liabilities among participating governments.

**Personal income tax (PIT) bond** A type of revenue bond that is paid from all or a portion of collections of personal income taxes.

**Pension bond** A debt instrument whose proceeds are deposited into a pension fund and invested in long-term instruments in hopes of improving investment returns and plan funding. Pension bond issuers often use calculations of projected savings from the transaction to provide one or more short-term employer contribution holidays. This creates, in effect, a form of deficit financing for their operating funds.

**Premium** The amount by which the price paid for a security exceeds the security's par, or face value. When a municipal bond is sold at a premium at issuance, the government may use the proceeds of the premium to reduce debt or cover current expenditures.

**Public debt** Money owed by a government or an agency. This can take the form of municipal bonds to, for instance, pay for a new bridge or short-term notes or loans to smooth cash flow until expected tax receipts are collected.

**Rainy day fund** A fiscal reserve that governments can tap to balance the budget or respond to emergencies. Also known as budget stabilization fund or reserve fund.

**Recurring expenditures** Also known as continuous appropriations, these are expenses, such as legislative salaries, made annually under mandates set forth in statute or a state constitution. They continue without requiring further action, even if the actual amounts change.

**Revenue bond** A bond issued by a state, locality, or authority secured by a designated income stream, such as personal income or sales tax collections, tolls or other fees, or lease or rental revenue.

**Revenue volatility** Fluctuations in state revenues that recur in multiple years, often because of the nature of the tax system.

**Revenues** Funds that come mainly from tax collections, licensing fees, federal aid, fines, legal settlements, and returns on investment. In some cases, debt or upfront proceeds on financial transactions may be counted as revenue.

**Sales tax bond** A type of revenue bond that is paid from all or a portion of collections of state or local sales taxes.

**Scoop and toss** A method of gaining budgetary relief by using the proceeds of a new bond issue to pay off maturing bonds while shifting debt service expenses to future years.

**Special revenue funds** Funds constrained by statute or other restriction to a particular spending area, such as workers' compensation. These funds can be financed with tax dollars, grants from the federal government or other governmental entities, or gifts from individuals or private organizations.

**Surplus** Budgeted funds that remain at the end of the fiscal year or biennium. Surpluses typically occur when revenue collections are higher than anticipated or appropriations go unspent.

**Title XII advances** Also known as unemployment insurance trust fund loans, these are credits the US Department of Labor provides to state and territorial unemployment insurance trust funds under Title XII of the Social Security Act to support benefit payments and prevent insolvency. Advances totaled \$54.3 billion as of July 30, 2021.

**Tax expenditure reports** Disclosures of budget revenues forgone by states through use of tax exemptions, credits, and abatements. The contents of tax expenditure reports and value of forgone revenues may differ from reporting of tax credits, exemptions, and abatements



mandated by the Governmental Accounting Standards Board in ACFRs.

**Tobacco bonds** Four major US tobacco companies and a group of states and territories signed the Master Settlement Agreement in 1998 providing the plaintiffs with \$246 billion over the first twenty-five years to compensate them for costs associated with smoking-related diseases. Many state and local governments have securitized the tobacco payments to raise cash for current expenditures via issuing bonds repaid from proceeds of the settlement. In some cases, repayment of tobacco bonds may be supported by governments' own revenues if corporate payments are insufficient to cover all debt service costs.

**Transfers** The shifting of money from one fund to another, usually the general fund, often driven by executive order or legislative action. Transfers are considered one-time revenue when they are used to subsidize the general fund from special funds in a single fiscal year.

**Unemployment insurance trust funds** Programs run by US states, territories, and the District of Columbia, in partnership with the federal government under the Social Security Act, to provide benefits to covered workers who are involuntarily unemployed. The federal government pays the cost of administering the programs, levies taxes on employers, and provides some extended benefits in times of high unemployment. State taxes on employers to help support trust funds vary among jurisdictions. Under Title XII, state and territorial trust funds may borrow from the US government or other lenders to prevent program insolvency.

## ACKNOWLEDGMENTS

THIS REPORT WAS MADE POSSIBLE in part by a grant from the Peter G. Peterson Foundation. The statements made and views expressed are solely the responsibility of the authors. We acknowledge the considerable support provided by the late Paul A. Volcker, the Volcker Alliance's founding chairman, as well as the numerous academics, government officials, and public finance professionals who have guided the Alliance's research on state budgets for the last seven years. We also thank these colleagues and government officials who helped broaden our understanding of state debt practices.

Thomas DiNapoli, New York State Comptroller Thomas G. Doe, Founder and President, Municipal Market Analytics Maria Doulis, New York State Deputy Comptroller for Budget and Policy Analysis Nina Kambili, Program Assistant, The Volcker Alliance Gabriel Petek, California Legislative Analyst Pat Reale, New York State Assistant Comptroller for Debt Management Tim Schaefer, California Deputy Treasurer for Public Finance Nicholas Sourbis, Managing Director, Municipal Market Analytics J. Ben Watkins, Director, Florida Division of Bond Finance

## **ABOUT THE ALLIANCE**

THE VOLCKER ALLIANCE is a nonprofit founded by former Federal Reserve Board Chairman Paul A. Volcker dedicated to advancing his vision of an empowered public sector workforce. Our work supports current and aspiring public servants by strengthening public service education, championing public service values, and providing strategies to help them deliver better results. We build partnerships with government and universities, promote innovation in public service education, drive research on effective government, and inspire others with the story of Mr. Volcker's commitment to public service. Our mission is to empower the public sector workforce to solve the challenges facing our nation.

## **ABOUT THE AUTHORS**

## MATT FABIAN

#### PARTNER, MUNICIPAL MARKET ANALYTICS

Matt Fabian is a partner at Municipal Market Analytics, where he heads market and credit research and is the lead contributor to its weekly *Outlook* and biweekly *Default Trends* reports. Mr. Fabian was previously the lead US municipal research analyst for UBS Financial Services. Earlier in his career, he was an underwriting analyst at Financial Security Assurance and a municipal rating analyst with Moody's Investors Service. He has served as chairman of the Municipal Analysts Group of New York and as a member of the board of governors of the National Federation of Municipal Analysts.

Mr. Fabian has an undergraduate degree from Penn State University and a master of public administration from the Maxwell School of Citizenship and Public Affairs at Syracuse University.

#### LISA WASHBURN

#### MANAGING DIRECTOR AND CHIEF CREDIT OFFICER, MUNICIPAL MARKET ANALYTICS

Lisa Washburn is a managing director and the chief credit officer at Municipal Market Analytics, where she leads the consulting practice and credit surveillance business. She is a contributor to MMA's *Outlook* and *Default Trends* publications and assists in maintaining its Default and Impairment Database. Before joining MMA, Ms. Washburn spent twenty years with Moody's Investors Service, where she was a managing director in the public finance group and led several ratings teams. She is a member of the National Federation of Municipal Analysts and is currently cochair of its Industry Practices Committee and the organization's representative on the Governmental Accounting Standards Advisory Council. A graduate of Lehigh University, Ms. Washburn is a certified management accountant and holds a credential in fundamentals of sustainability accounting.

## ABOUT THE TRUTH AND INTEGRITY IN GOVERNMENT FINANCE TEAM

### WILLIAM GLASGALL

#### SENIOR DIRECTOR, PUBLIC FINANCE

William Glasgall is senior director, public finance at the Volcker Alliance, where he has supervised the publication of numerous working papers and studies, including the *Truth and Integrity in State Budgeting* reports. He is also the creator of the Special Briefing webcast series, co-produced with the University of Pennsylvania Institute for Urban Research, where he is a fellow and co-lead of the Initiative for State and Local Fiscal Stability. Mr. Glasgall serves on the editorial team advisory board for *Route Fifty* alongside other leading thinkers on state and local governance. Previously, he was managing editor for states and municipalities at Bloomberg News and senior editor at *BusinessWeek* magazine. He is also a member of the National Federation of Municipal Analysts and a governor of the Overseas Press Club Foundation. A Boston University graduate, he was a Knight-Bagehot Fellow in Economics and Business Journalism at Columbia University and a DAAD Fellow at the University of Bonn, Germany.

## NOAH A. WINN-RITZENBERG

#### DIRECTOR, RESEARCH AND IMPACT

Noah Winn-Ritzenberg joined the Volcker Alliance as it was being launched in 2013 and has played various roles in the organization's initial establishment and subsequent expansion. Responsible for establishing and managing the offices, systems, databases, and IT infrastructure of the Alliance, he also served in an advisory capacity on various strategic, operational, communications, and programmatic initiatives throughout its early years.

As director of research and impact, Mr. Winn-Ritzenberg leads the Volcker Alliance's efforts to empower public servants by driving research on effective government, providing innovative tools and resources to current and future public servants, and promoting the adoption of best practices at all levels of government. He manages the Alliance's Public Finance portfolio including the Truth and Integrity in Government Finance initiative and the Special Briefing series. He also provides leadership and guidance on key operational workstreams, strategic communications development, and efforts to maximize programmatic impact and mission alignment.

Mr. Winn-Ritzenberg received a bachelor of science in economics, a certificate in environmental studies, and a master of public affairs from the University of Wisconsin–Madison.

## **GRAHAM DOWD**

#### PROGRAM FELLOW

Graham Dowd joined the Volcker Alliance in July 2021 as a program fellow after interning at the Alliance. As an undergraduate, he worked as a program assistant at the US-Asia Institute in Washington, DC, where he became interested in cross-sector government activities. He also worked closely with the Center for Outreach, Volunteerism, and Education, mentoring students and teaching at an elementary school. He received his bachelor of arts from Colgate University, where he majored in history and minored in Asian studies.



## **BOARD OF DIRECTORS**

BILL BRADLEY CHAIRMAN

SHEILA BAIR CHARLES BOWSHER THOMAS M. DAVIS WILLIAM H. DONALDSON ANTHONY J. DOWD **TREASURER** T. ELOISE FOSTER ANTHONY FOXX SHIRLEY CLARKE FRANKLIN FRANCIS FUKUYAMA STEPHANIE MINER SARA MOGULESCU **PRESIDENT** NORMAN J. ORNSTEIN RICHARD RAVITCH WILLIAM RHODES THOMAS W. ROSS **SENIOR ADVISER** JAMES P. VOLCKER ANTONIO WEISS

This publication is the product of the Volcker Alliance. It is an important goal of the Alliance to produce reports that contain ideas, proposals, and recommendations for dealing with persistent governance problems in new ways based on independent research and analysis supporting constructive solutions. To stimulate this process and maintain project independence to make such conclusions and recommendations as they deem to be appropriate, these Alliance projects are commissioned to proceed without the requirement of approval of their conclusions and recommendations by the board of directors collectively or by individual members of the board of directors.



## STAFF OF THE VOLCKER ALLIANCE

SARA MOGULESCU PRESIDENT

MELISSA AUSTIN **EMILY S. BOLTON** ADAM CIAMPAGLIO **GRAHAM DOWD** EMILY EATON WILLIAM GLASGALL BRETT HUNT NAOMI MAJOR YESENIA MARTINEZ ANDREW MEKHAIL MAGGIE MELLO SARAH MORNINGRED PETER MORRISSEY ADAOBI OGUAGHA ANNA WALLMAN NOAH A. WINN-RITZENBERG



#### **ENDNOTES**

I. The Volcker Alliance, *Truth and Integrity in State Budgeting: Preparing for the Storm*, March 2020, 95, https://www.volckeralliance.org/sites/ default/files/attachments/Truth-and-Integrity-in-State-Budgeting-Preparing-for-the-Storm.pdf.

2. National Bureau of Economic Research, "US Business Cycle Expansions and Contractions," last updated July 2021, https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions.

3. State of New York, Office of the Comptroller, Comprehensive Annual Financial Report for Fiscal Year Ended March 31, 2019, 222, https://www.osc.state.ny.us/files/reports/finance/pdf/cafr-2019.pdf.

**4**. The Volcker Alliance, *Truth and Integrity in State Budgeting: Preparing for the Storm*, 94, https://www.volckeralliance.org/sites/default/files/attachments/Truth-and-Integrity-in-State-Budgeting-Preparing-for-the-Storm.pdf.

**5**. The Volcker Alliance, *Truth and Integrity in State Budgeting: Preparing for the Storm*, 94, https://www.volckeralliance.org/sites/default/files/attachments/Truth-and-Integrity-in-State-Budgeting-Preparing-for-the-Storm.pdf.

6. The Volcker Alliance, *Truth and Integrity in State Budgeting: Preparing for the Storm*, 93, https://www.volckeralliance.org/sites/default/files/attachments/Truth-and-Integrity-in-State-Budgeting-Preparing-for-the-Storm.pdf.

7. The Volcker Alliance, *Truth and Integrity in State Budgeting: Preparing for the Storm*, 93, https://www.volckeralliance.org/sites/default/files/attachments/Truth-and-Integrity-in-State-Budgeting-Preparing-for-the-Storm.pdf.

8. State of New York, Office of the Comptroller, *Fiscal Condition Report for Fiscal Year Ended March 31, 2021*, 28, https://www.osc.state.ny.us/files/reports/finance/pdf/2021-financial-condition-report.pdf.

**9**. State of New York, Office of the Comptroller, *Public Authorities by the Numbers*, January 2017, 10 https://www.osc.state.ny.us/files/reports/ special-topics/pdf/pub-auth-num-2017.pdf.

**10**. State of New York, Office of the Comptroller, New York State and Local Retirement System Comprehensive Annual Financial Report for Fiscal Year Ended March 31, 2021, 74, https://www.osc.state.ny.us/files/retirement/resources/pdf/comprehensive-annual-financial-report-2021. pdf.

II. State of New York, Office of the Comptroller, *Public Authorities by the Numbers*, January 2017, 1 https://www.osc.state.ny.us/files/reports/ specil-topics/pdf/pub-auth-num-2017.pdf.

**12**. The Pew Charitable Trusts, *Strategies for Managing State Debt: Affordability Studies Can Help States Decide How Much to Borrow*, April 2018, 40–45, https://www.pewtrusts.org/-/media/assets/2018/04/pew\_strategies\_managing\_state\_debt\_april\_2018.pdf.

13. State of New York, Division of the Budget, New York State Debt Reform Act of 2000, https://www.budget.ny.gov/investor/bond/ IntroDebtReformStatute.pdf.

14. State of New York, Division of the Budget, Annual Information Statement and Financial Disclosure, https://www.budget.ny.gov/investor/ais/ais-fdp.html.

**15**. State of New York , Division of the Budget, Annual Information Statement, June 8, 2021, 194, https://www.budget.ny.gov/pubs/archive/fy22/ais/2021-ais.pdf.

**16**. State of New York, Division of the Budget, Statement of Updated Annual Information for FY 2020, July 29, 2020, B–5, https://emma.msrb. org/RE1477054.pdf.

17. New York State Constitution, Article VII, Section 11, https://dos.ny.gov/system/files/documents/2021/09/constitution-january-2018-amd-rev-08-21.pdf.

18. State of New York, Division of the Budget, FY2022 Enacted Capital Program and Financing Plan, 32, https://www.budget.ny.gov/pubs/archive/fy22/en/fy22en-cp.pdf.

**19**. David McKay Wilson, "How the IRS Just Squashed Attempts by New York, New Jersey to Work around Tax-Deduction Limit," June 11, 2019, https://www.lohud.com/story/money/personal-finance/taxes/david-mckay-wilson/2019/06/11/salt-tax-cap-deductions-nixed/1426013001/.

**20**. State of New York, Office of the Comptroller, *Debt Impact Study: An Analysis of New York State's Debt Burden*, December 2017, 3, https://www.osc.state.ny.us/files/reports/special-topics/pdf/debt-impact-2017.pdf.

21. State of New York, Office of the Comptroller, Debt Impact Study: An Analysis of New York State's Debt Burden, December 2017, 4,



https://www.osc.state.ny.us/files/reports/special-topics/pdf/debt-impact-2017.pdf.

THE VOLCKER ALLIANCE

**22**. The Pew Charitable Trusts, *The State Pension Funding Gap: Plans Have Stabilized in Wake of Pandemic*, September 2021, 14–16, https://www.pewtrusts.org/-/media/assets/2021/09/the\_state\_pension\_funding\_gap.pdf.

23. The Pew Charitable Trusts, The State Pension Funding Gap: Plans Have Stabilized in Wake of Pandemic, 15, https://www.pewtrusts.org/-/media/assets/2021/09/the\_state\_pension\_funding\_gap.pdf.

**24**. US Treasury, "Title XII Advance Activities Schedule," as of Oct. 13, 2021, https://www.treasurydirect.gov/govt/reports/tfmp/tfmp\_advactivitiessched.htm.

25. Moody's Investors Service, Medians-State Debt Rose 2.5% in 2020, Spurred by Pandemic-Linked Borrowing, June 14, 2021, 7.

**26**. Standard and Poor's, US States Weigh Risk Reduction In Managing Pension and OPEB Liabilities, Sept. 20, 2021, https://www.spglobal.com/ratings/en/research/articles/210920-u-s-states-weigh-risk-reduction-in-managing-pension-and-opeb-liabilities-12095761.

**27**. US Department of Labor, Trust Fund Loans (outstanding loans from the Federal Unemployment Account as of Oct. 5, 2021), https://oui. doleta.gov/unemploy/budget.asp.

28. State of Florida, Division of Bond Finance, https://www.sbafla.com/bond/Home/About-the-Division-of-Bond-Finance.

## **The Volcker Alliance**

39 Broadway, Suite 1930 New York, NY 10006 (646) 343-0155

info@volckeralliance.org | volckeralliance.org

@VolckerAlliance

