

Chicago Fed Letter

Preventing the next state budget crisis: A conference summary

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On September 17, 2018, over 100 researchers, academics, policymakers, and business people gathered at the Federal Reserve Bank of Chicago to explore strategies and methods for improving state fiscal stability and performance while promoting budgetary transparency. The Chicago Fed cosponsored the program with the Volcker Alliance, the Pew Charitable Trusts, and the Lincoln Institute of Land Policy.

Robert Inman, Wharton School, University of Pennsylvania, provided the opening keynote based on joint work with Andrew Haughwout, Federal Reserve Bank of New York. Their work focuses on identifying the root cause of a future fiscal problem by measuring the condition of the stock of public wealth held by a government. Public wealth measures the cash and securities of a government (minus the long- and short-term debt) plus the value of capital stock plus pension assets (minus liabilities). Inman argued that a critical function of government is to maintain and build public wealth. When there is evidence that a government is drawing down its stock of public wealth, a fiscal crisis may be on the horizon even if financial reports suggest that the annual general fund budget is balanced.

Inman divided states into three types based on their public wealth performance. “Tax smoothers” use rainy day funds to smooth budgets over recessions and actively restore fund balances during recoveries. These states recognize the need to build buffers for downturns and to replenish them

Videos of the presentations are available online, <https://www.volckeralliance.org/news/preventing-next-state-budget-crisis>.

during upturns in the economy. States in this group include Arizona, California, Connecticut, Colorado, and Idaho. In contrast, “borrowers” draw down their stock of public wealth during downturns but tend not to restore balances during recoveries. States in

this group include Illinois, Kansas, Maryland, Massachusetts, Mississippi, and New Jersey. Finally, “savers” appear to systematically build reserves under virtually any economic climate. States in this category include Iowa, Montana, Nebraska, North Dakota, South Dakota, Texas, and Wyoming.

In this framework, most states have a net public wealth stock of between \$10,000 and \$20,000 per capita. However, there is considerable variation. Wyoming has the strongest position, at \$80,000 per capita, and Illinois the weakest, at -\$12,000 per capita.

Inman noted that the consequences of fiscal crisis often fall heaviest on future taxpayers, bondholders, and government workers. All state residents may be adversely affected by reductions in service provision. Ironically, he argued, current taxpayers may be potential winners, since they are receiving government services at prices that are subsidized by borrowing from the future.

Forecasting revenues and expenditures

On the first conference panel of the day, Jonathan Ball, Utah legislature, highlighted four measures Utah has used to improve forecasting. First is the use of consensus forecasting between the legislature and the governor's office, which, he argued, took the politics out of creating budget targets. Second is identifying the underlying baseline trend in revenues and separating them out from any one-time spikes. Third is to have some forecast of the long-term structural balance of the budget over a ten- to 15-year horizon. Fourth is to have a contingency plan in mind and to be aware of what tools might exist to help manage the budget over an unexpected downturn.

Dan White, Moody's Analytics, stressed that state budget flexibility has become more constrained as increasing shares of state expenditures are used to fund relatively inflexible Medicaid and interest payments. Recognizing this, White suggested that states use stress tests to better calibrate what

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level of reserve funds would be necessary to smooth spending over a downturn. The most recent Moody's study found that while states had improved their fiscal reserves, 17 states were still unprepared for a moderate recession.¹ White stressed that unprepared states not only suffer during the downturn, but also often exhibit a fiscal drag that slows

their growth during a recovery. Most recently, this has shown up in reductions in state government employment. Kim Rueben, Urban Institute, added that federal government actions can exacerbate state budget uncertainty. Certain actions can expand revenues (such as allowing the collection of online sales taxes), as well as increased personal income tax receipts (although possibly temporary) in the 2018 Tax Cuts and Jobs Act. Her biggest concern, she said, is that federal countercyclical aid may be in jeopardy in the future due to growth in the federal budget deficit.

Best state budget practices

Rebecca Hendrick, University of Illinois at Chicago, described strategies states use to respond to fiscal stress. The first response is to use fiscal buffers (such as budget reserves and underfunding capital) to support general fund expenditures. If this is insufficient, she said, states turn to finding new revenues or cutting expenses. Finally, they resort to riskier budget options, such as issuing pension obligation bonds.

State representative Seth Grove (Pennsylvania) focused on his efforts to require consensus revenue forecasting rather than relying on the governor's office to set targets. His proposal would require that the legislature and governor's office agree to a forecast and if this failed, an independent fiscal office would set the targets. He argued this would reduce the politics in setting revenue and budget goals.

Katherine Barrett and Richard Greene, Volcker Alliance, pointed out that it is important for officials to recognize that current conditions are unlikely to hold and a culture needs to develop that rewards policymakers for thinking ahead. States have tended to lack discipline and often repeat the same set of fiscal mistakes.

John Hicks, National Association of State Budget Officers, provided three lessons learned by states from the Great Recession. The first is while rainy day funds are very useful, there is often a tension as to when they should be tapped. Even when states have reserves, they will cut spending rather than using reserve balances. It would be useful to have a better guide as to when reserves should be used. The second is that federal funds were important in helping states during the last two recessions. During the Great Recession, the passage of the American Recovery and Reinvestment Act (2009)

pumped infrastructure money into the states and relieved Medicaid stress by increasing the federal share of Medicaid expenses for all states. In 2002–03, the federal government provided fiscal stabilization funds. The third lesson is the need for transparency. How easy is it to find budget data? Hicks noted that this is an area for improvement, given that 20 states do not publish final budgets.

Revenue volatility

Don Boyd, Lincoln Institute of Land Policy, identified three issues related to revenue volatility. First, state revenue structures have become more volatile, particularly as reliance on personal income tax revenues has increased. Second, state expenditure demands are either stable or rising, reducing expenditure flexibility in a downturn. Third, states have a greater desire to have cash balances than in the past. In response, states can try to reduce volatility through less economically sensitive tax structures, and/or try to hedge volatility using financial instruments, and/or try to build sufficient reserve funds to smooth behavior. Kil Huh, Pew Charitable Trusts, added that states reliant on extraction taxes also tend to face extreme volatility. He suggested that it is critical for states to diagnose the sources of volatility so they can identify an appropriate strategy for managing it. States have been narrowing their tax bases, he said, which has heightened volatility.

Leslie McGranahan, Federal Reserve Bank of Chicago, presented her research on the sources of increased volatility. She has identified a massive increase in the cyclicity of capital gains and investment income that has spilled over into personal income tax collections. Making this harder to deal with has been the reluctance of states to raise taxes when revenues decline. McGranahan noted that since 2011, some of the extreme procyclicality previously observed has declined but it still is an important factor.

Shayne Kavanagh, Government Finance Officers Association, suggested the states should invest in risk-based tools. For example, insurance-gap analysis can help identify what might be necessary to respond to a natural disaster. In addition, some governments, e.g., Colorado Springs, have used sophisticated techniques such as Monte Carlo analysis to estimate fiscal outcomes. These tools have become more readily available and can be helpful, Kavanagh said.

Juliette Tennert, University of Utah, discussed Utah's experience with rainy day funds. The state has two budgets, she explained. The education budget is funded largely by income tax receipts. The general fund budget is based on sales tax receipts. Revenues are examined for volatility trends every three years. On that basis, it was calculated that the sales-tax-supported general fund should carry a reserve balance of 9%, while the education fund (given the higher volatility of income tax receipts) needed a higher reserve of 11%.

Reflections on fiscal crises

Former New York lieutenant governor Richard Ravitch reflected on his experience of 50 years dealing with fiscal crises. Ravitch recounted that the seeds of the 1975 fiscal crisis in New York City were planted when New York State began reducing state support in 1965 but allowed the city to expand borrowing through greater reliance on tax and revenue anticipation notes. The borrowing reached such a level that in 1975 the major New York City banks announced they would not underwrite any more New York City bonds. The fiscal crisis led to several significant changes. These included the creation of a financial control board and the Municipal Assistance Corporation, which received sales tax revenue from the city to support the issuance of new bonds. In addition, the federal government stepped in with a temporary loan plan. However, the city had to adopt structural reforms to restore confidence. This included using GAAP (generally accepted accounting principles) accounting methods, which included using accrual for recognizing future liabilities. The city also had to budget for its pension funds. Ravitch noted that this more disciplined approach has allowed New York City to avoid another fiscal crisis. He noted that turning fiscal management over to a nonpolitical

technical expert creates political tensions, but it is often necessary. He also cautioned that fiscal problems can occur when governments are unable to anticipate technological and demographic changes. He argued that the federal government could play a role in creating a national response to these types of structural changes.

Stress tests for pensions and reserves

Don Boyd, Lincoln Institute of Land Policy, said that stress testing for pension fund balances is particularly important. Pension shortfalls tend to cause little short-term stress, but as they accumulate they expose states to greater imbalances. In particular, Boyd noted that in an effort to increase investment returns, pension funds have shifted their portfolios to stocks and other riskier asset classes. Given the sensitivity of these investments to economic cycles, funds may need to hold larger balances to protect against market downturns. Stress testing that accounts for investment volatility can identify what a sufficient balance should be, he said.

Greg Mennis, Pew Charitable Trusts, discussed his research finding that pension solvency risks are higher today. He identified four indicators to assess pension conditions. The first is the ratio of pension debt to GDP. Prior to 2008 this figure was 2%, but today it has risen to 9%. The second is the implied investment risk premium; currently this is at historical highs. The third is the pressure that pension funding is putting on state budgets, and thereby crowding out other public expenditures. The final indicator is demographics; pension payouts are spiking as the baby boomers retire. Mennis emphasized that there is considerable dispersion in state pension fund solvency. Wisconsin employs a shared-risk approach in which pensions partially reflect the investment performance of the fund. This has left the state with a funded ratio consistently above 90%. In contrast, New Jersey will face pension insolvency in 12 to 15 years simply if its investment return falls to 5%. Finally, Mennis suggested that uniform rules for making contributions and estimating investment returns would help with pension transparency.

Josh McGee, Laura and John Arnold Foundation, said that pensions place a high leverage on taxpayer resources. Despite the current recovery, pension funding policies have tended to simply maintain but not improve funding balances. McGee argued this would have a ratchet effect in the next economic downturn, causing funded levels to fall even further. In underfunded states, current contributions largely go to retiring debt rather than funding new benefits. He suggested that stress tests be implemented that consider even small declines in economic conditions, such as what occurs when a fund's aggregate return declines from 7.5% to 7%.

Chris Mier, Loop Capital, provided a market perspective on pension solvency. He argued there is a need to assess the ability of a state to pay its pension obligations and a need for information produced through these assessments to force policymakers' actions. He suggested that municipal bond analysts tend to look at pension-funded ratios, as well as the level of contribution relative to payroll, as markers of pension sustainability. In addition, asset volatility ratios can indicate market exposure of the fund to future downturns. He said that poor governance is often the biggest risk to pension funds.

Infrastructure

Jerry Zhao, University of Minnesota, focused on the budget gap that has opened up in many states for maintaining necessary infrastructure. A key problem is that even when states have capital budgets, they often do a poor job of measuring appropriate maintenance needs. He stressed that this is largely due to management failures, because technical measures to determine the needs (and costs) do exist.

Beverly Bunch, University of Illinois Springfield, provided examples from several states. In New York's capital budget, e.g., there is no accounting for deferred maintenance. Illinois provides information on the condition of facilities, but Bunch argued that the repair estimates often appear to be too low. Texas provides relatively complete information, she said. Bunch cautioned against the practice of raiding infrastructure funds to support gaps in states' general fund budgets. She noted that in two fiscal years, Kansas had swept \$110 million and \$500 million, respectively, from infrastructure to the general fund, while Illinois swept \$250 million. She suggested that this practice has led some states to construct so-called lockboxes, whereby money raised to support infrastructure can only be used for that purpose.

Mary Murphy, Pew Charitable Trusts, said that an important starting point is for states to develop comprehensive infrastructure asset inventories. Since this often is not a priority, deterioration in state assets often becomes an invisible liability. The states that have done a better job of assessing conditions are Utah, Minnesota, and Wyoming, according to Murphy.

Matt Fabian, Municipal Market Analytics, pointed out that a primary challenge for infrastructure management and funding is a lack of transparency and standardized accounting. He noted that even when the Government Accounting Standards Board (GASB) has issued rules to improve infrastructure accounting, few states or municipalities have adopted them. He argued that federal money that was used to fund the Build America Bonds program during the Great Recession should have been used to conduct a comprehensive infrastructure census.

Ronald Fisher, Michigan State University, discussed the challenge of raising revenues to support infrastructure. He noted that even if policymakers measure the infrastructure gap correctly, there are perception problems with voters that make it hard to fund improvements. Fisher said studies show that people tend to overestimate what they pay in taxes, making any increases to fund infrastructure very unpopular. People tend to underestimate what it costs to fix infrastructure, he said. For example, building an urban road can cost \$1 million per mile and when this cost is identified, voters balk at paying for it. This leads to inaction. Furthermore, there is a lack of clarity about the federal role in infrastructure; there is no platform, he said, to facilitate interaction between the federal government and subgovernments. Fisher noted that at one time, the now-disbanded Advisory Commission on Intergovernmental Relations had helped to create a forum for discussing the interaction between varying levels of government. Finally, Fisher said, there might be a role for rating agencies and the U.S. Securities and Exchange Commission to improve discipline by forcing debt-issuing governments to disclose potential infrastructure liabilities. In addition, he argued, land value capture might be worth considering in order to fund infrastructure. He noted that this has been tried in some cities where buildings that are located adjacent to valuable public infrastructure are partially responsible for providing funding.

Conclusion

The conference identified a set of tools and strategies that states can implement to improve fiscal stability and transparency. Given that most states are required to have balanced budgets annually, smoothing state budget performance over economic cycles helps ensure that the critical services provided by state governments can be maintained.

¹ The September 2018 study is available online, <https://www.economy.com/getlocal?q=a7a91c91-cad1-447d-a03f-cd48c8cdaa21&app=eccafile>.

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