TREASURY NOTES
July 2019

Rainy Day Fund

A Message From
Treasurer Torsella

Welcome to the Rainy Day Fund issue of Treasury Notes. Pennsylvania Treasury has published Treasury Notes in the past to speak to various challenges faced by the Commonwealth. I am pleased to reinstitute this practice.

The General Fund's outlook for Fiscal Year 2019-20 is anticipated to remain stable. However, any optimism concerning the financial stability of the Commonwealth's General Fund is tempered with the acknowledgment that it is difficult to predict future events. I applaud the Governor and the General Assembly for an appropriation to the Commonwealth's Budget Stabilization Fund. The opportunity remains for a great deal of work to be done to position the Commonwealth for long-term stability.

Pennsylvania's current $23 million reserve fund balance lags behind all other states, and would only last long enough to fund general government operations for seven hours. Even with the projected deposit of over $300 million, the fund would only cover around 3.5 days of General Fund spending. And while there is no standard rule that sets the annual amount a state should save for its rainy day fund (RDF), states should reserve above-average or non-recurring revenue growth for their Rainy Day Fund. One first step would be to maximize savings based on current spending priorities and to conduct a revenue volatility study to determine annual savings goals going forward. Other measures should include establishing a funding formula based on the study's findings and providing for an automatic transfer at the onset of the annual appropriations process. This should help improve our state's credit rating.

Summary

In terms of an overall RDF savings goal, experts and many states with evidence-based targets suggest that it should be at least ten percent of a state's General Fund budget. Nevertheless, states should examine their unique fiscal situations to set this target.

Pennsylvania lags behind most states in terms of the amount of savings it currently has. However, its law allows some flexibility to change this. Pennsylvania should rebuild its reserves to adequately weather future downturns. We should heed the advice given by financial professionals to families: make saving for a rainy day a priority and a planned part of our budget.

Background

Going into the Great Recession, Pennsylvania had nearly $750 million in its RDF. A series of transfers due to budgetary shortfalls led to the fund reaching a low of around $60,000 by 2011. Despite increasing tax revenues, there has not been significant process in building the fund to its pre-recession levels, let alone to a level that would be better-suited for the next economic downturn.

Why Reserves Matter

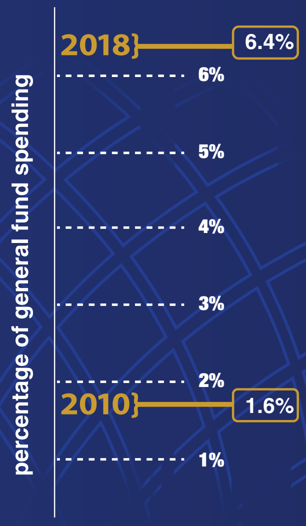
Without sufficient savings in a downturn, states often need to cut spending on programs the public relies on, such as healthcare and education, increase taxes to make up for lost revenue, or both. These types of policy measures will worsen an economic downturn. According to a May 2017 Pew Charitable Trusts study, credit rating agencies note a variety of factors that affect a state's long-term fiscal health including:

> *[…] ability to operate across the business cycle, trends in the state's economy, and its government's financial performance, management, debt load, long-term costs, and political structure. States deemed able to meet their debt obligations during periods of recession or fiscal stress, or able to adapt quickly to such conditions, are typically granted the highest ratings.*

National Trends

At the onset of the Great Recession, most states had insufficient savings to buffer its effects. In summer 2008, states had about $60 billion in reserves. By FY 2009, state budget gaps totaled $117 billion. States continued to face budget shortfalls for three or more years post-Recession.[1]

On the whole, states have been saving more since the Great Recession. As of 2019, all 50 states now have at least one type of RDF.[2] A few states have a Budget Stabilization Fund as well as one or more other RDFs that serve specialized purposes.[3] According to the National Association of State Budget Officers (NASBO), the median rainy day fund balance as a percentage of general fund spending went from 1.6 in 2010 to 6.4 percent in 2018.[4] Most states ended Fiscal Year 2018 with higher-than-anticipated revenues, which nationally led to an all-time high for state RDF deposits of $59.9 billion. In FY 2019, that level is expected to reach 7.3 percent of general fund spending.[5]



[1] "State Budget Update: November 2010," National Conference of State Legislatures, Dec 7, 2010 in "Building State Rainy Day Funds," Pew Charitable Trusts, July 2014, https://www.pewtrusts.org/-/media/assets/2014/07/sfh_rainy-day-fund-deposit-rules-report_artready_v9.pdf, 3.
[2] "The Fiscal Survey of States," National Association of State Budget Officers, Fall 2018, https://www.nasbo.org/reports-data/fiscal-survey-of-states, 66.
[3] "Rainy Day Funds and State Credit Ratings," Pew Charitable Trusts, May 2017, 13.
[4] "The Fiscal Survey of States," National Association of State Budget Officers, Fall 2018, vii. Note: NASBO refers to RDF balances as a percentage of General Fund expenditures, whereas Pew refers to them as a percentage of General Fund revenue.
[5] Ibid.

Best Practices for Saving in Rainy Day Funds

There is no standard rule for how much a state should save. According to Pew, states should take three factors into account when determining their optimal savings level: the fund's purpose or goal; the state's revenue volatility; and the amount of risk the state seeks to offset.[6]

While there is considerable variation in states' fiscal and economic characteristics, goals, and risk tolerance that influence how they set RDF policy, there are best practices that can guide states to determine the right set of RDF policies for their unique characteristics.

In the years following the Great Recession, several states studied their past revenue fluctuations in order to determine a more appropriate, evidence-based target balance for their reserves. Today, more states are basing their target savings level on a revenue volatility study. At least 20 states take this best practice a step further and not only use a volatility study to determine their ideal target balance, but also to determine specific annual deposit amounts. Studying past revenue fluctuations has helped states like Virginia, Minnesota, Montana, and Utah determine data-based savings targets and the mechanisms to reach them. Based on interviews with the three major credit rating agencies, Pew wrote that it is "essential" for states to conduct a formal study of their revenue volatility and to tie their RDF target balance to historical revenue fluctuations.[7] Furthermore, such a study should be repeated at regular intervals. In addition to revenue fluctuations, policymakers should take into account their state's economy, tax structure, and financial flexibility.[8] Nonetheless, states should consider setting aside at least ten percent, if not more, of their General Funds depending on the stability of their revenues.

Funding Source and Process

At least 26 states, however, rely solely on a budget surplus or surplus due to revenue forecasting error to fund their RDFs.[9] Some of these save the entire surplus and others, like Pennsylvania, save a portion of it.

The chart below displays the 26 states relying mainly on surplus revenue to deposit into their RDFs. States that rely on a surplus due to forecast error have asterisks next to them. Pew notes that forecast error can be particularly misleading if forecasts are far out of sync with fiscal realities, and it is therefore a less desirable method than basing deposits on budget surpluses.[10]

Table 1: State Rainy Day Funds that Rely on Surplus[11]

STATE	FUND	DEPOSIT RULE
California	Special Fund for Economic Uncertainties	Any surplus
Delaware	Budget Reserve Account	Surplus up to 5% cap on fund
Georgia	Revenue Shortfall Reserve	Any surplus
Iowa	Economic Emergency Fund	Any surplus
Kansas	Budget Stabilization Fund	10% of surplus
Kentucky	Budget Reserve Trust Fund Account	Lesser of (a) 50% of surplus or (b) amount needed for fund to reach 5% of general fund receipts for prior year
Maine	Budget Stabilization Fund	80% of surplus
Minnesota	Budget Reserve Account	Surplus sufficient to reach fund target, but not to exceed 33 percent of unrestricted fund balance as forecasted
Mississippi	Working Cash-Stabilization Reserve Fund	50% of surplus up to 10% of General Fund appropriations for the year
Montana	Budget Stabilization and Reserve Fund	50 % of year-end surplus in excess of $15M
Nebraska*	Cash Reserve Fund	Surplus of previous three months' actual receipts over estimated
Nevada	Account to Stabilize Operation of State Government	40% of surplus (after subtracting 7% of total)
New Hampshire	Revenue Stabilization Reserve Account	Any surplus

[6] "Why States Save," Pew Charitable Trusts, December 2015, https://www.pewtrusts.org/~/media/assets/2015/12/whystatessavereport.pdf, 1-2.
[7] "Rainy Day Funds and State Credit Ratings," Pew Charitable Trusts, May 2017, 7.
[8] Ibid, 13.
[9] "Building State Rainy Day Funds," Pew Charitable Trusts, July 2014, 7-8; Akshay Iyengar, Pew Charitable Trusts, email communication, May 21, 2019.
[10] Ibid, 8.
[11] "Any surplus" with no percentage specified usually means 100% of surplus is transferred to RDF; however, in some cases that is subject to appropriations or other limitations.

New Jersey*	Surplus Revenue Fund	50% of difference between actual and expected general fund revenue
New Mexico	General Fund Operating Reserve	Lesser of (a) total surplus or (b) difference between surplus and 8 percent cap on fund
New Mexico	General Fund Tax Stabilization Reserve	After surplus transfer to Operating Fund, lesser of (a) total remaining surplus or (b) difference between surplus and 8 percent cap on fund
New York	Tax Stabilization Reserve Fund	Surplus up to 0.2% of aggregate General Fund distributions for the year
North Dakota	Budget Stabilization Fund	Surplus in excess of $65 mil
Ohio	Budget Stabilization Fund	Surplus in excess of 1.5% of prior year's general fund revenue, up to 8.5% of total General Fund revenue for preceding fiscal year
Oklahoma*	Constitutional Reserve Fund	Difference between actual and expected general fund revenue
Oregon	Rainy Day Fund	Surplus up to 1% of General Fund appropriations for the biennium
Pennsylvania	Budget Stabilization Fund	25% of surplus
South Dakota	Budget Reserve Fund	Surplus up to 10% of General Fund appropriations for prior year
Utah*	Budget Reserve Account	25% of general fund surplus
Utah*	Education Budget Reserve Account	25% of education fund surplus
Vermont	General Fund Budget Stabilization Reserve	Surplus up to 5% of General Fund appropriations for prior year
Vermont	Rainy Day Reserve	Surplus up to 5% of General Fund appropriations for prior year
West Virginia	Revenue Shortfall Reserve Fund	50% of surplus, up to 13% of general revenue for the ending fiscal year
Wisconsin*	Budget Stabilization Fund	50% of year-end surplus

Sources: Pew Charitable Trusts, National Conference of State Legislatures, PA Treasury.[12]

Pennsylvania's RDF Balance Lags Nation

By law, the target balance of Pennsylvania's Budget Stabilization Fund is six percent of General Fund revenues.[13] In contrast to best practices, no explanation is provided in the statute for why this target balance was chosen. As previously discussed, the evidence from other states and research organizations suggest that six percent may be on the low side.

As illustrated in the chart above, Pennsylvania is among about a dozen states that dedicate a portion of budget surpluses to its RDF. The statute dictates that unless the General Assembly decides otherwise, any year in which the Secretary of the Budget certifies there is surplus revenue, at least 25 percent of the surplus is to be deposited in the Budget Stabilization Fund. The law does allow for smaller deposits once the target balance level is reached; if the Fund is already at six percent at the end of a given fiscal year in which there is a revenue surplus, only ten percent of the surplus must be deposited in the Fund. No money was deposited in the Fund from FY 2008 until FY 2018, when 50 percent of the state's revenue surplus, or $22 million, was deposited.

While the 2018 and 2019 RDF deposits were an important step in improving Pennsylvania's fiscal outlook, we still have a long way to go. To put our RDF in perspective, in 2019 the median state RDF balance is 7.3% of expenditures, whereas Pennsylvania's RDF is only 1%, even after our recently announced $317 million deposit. Using FY 2018 data (see map below), Pennsylvania was among the least prepared states in terms of reserves to weather an economic downturn. Pennsylvania's FY 2018 RDF balance was about $23 million, enough to fund the state for about a quarter of a day. The median at the end of FY 2018, after many states experienced a revenue windfall, was 23.2 days.[14]

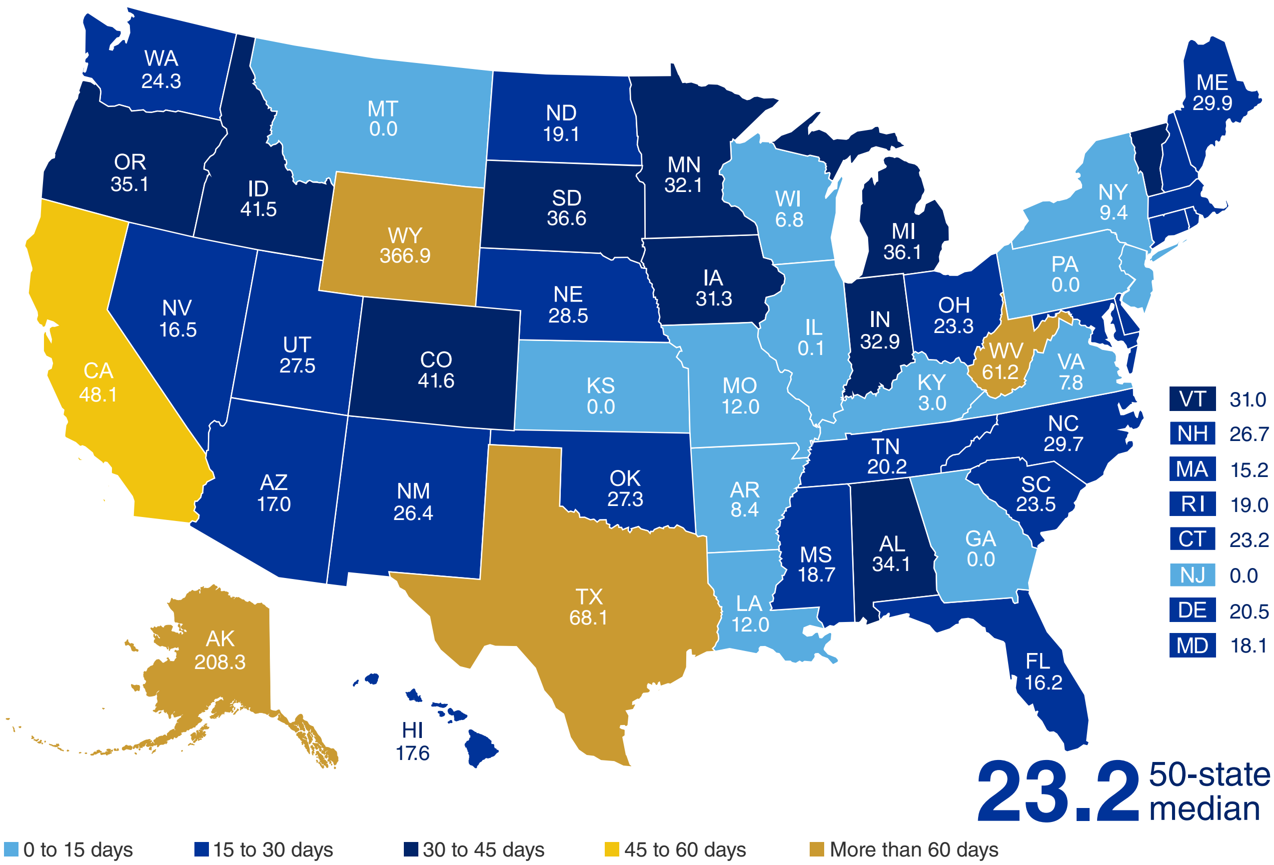
[12] Akshay Iyengar, Pew Charitable Trusts, email communications, May 21 and 23, 2019; "Rainy Day Fund Structures, Appendix B," "Rainy Day Fund Structures," National Conference of State Legislatures, November 2018, Appendix B, pp 8-22.

[13] 72 P.S. §§ 1701-A – 1703-A.

[14] Barb Rosewicz, Justin Theal, & Daniel Newman, "Budget Surpluses Are Helping Many States Boost Their Savings," Pew Charitable Trusts, March 11, 2019. https://www.pewtrusts.org/en/research-and-analysis/articles/2019/03/11/budget-surpluses-are-helping-many-states-boost-their-savings

Figure 1: Rainy Day Fund Highlights

Days Each State Could Run on Only Rainy Day Funds in FY 2018



Source: Pew analysis of data from the National Association of State Budget Officers

Recommendations

Pennsylvania should enact legislation that requires:

- Regular revenue volatility studies;
- A new, evidence-based savings target for the RDF derived from such volatility studies;
- A funding formula based on overall revenue volatility, clear rules setting aside a particularly volatile revenue source, such as legal settlements, or both; and
- Automatic transfers to the Rainy Day Fund at the onset of the annual budget appropriations process, rather than simply using excess funds at the end of the fiscal year.

More immediately, Pennsylvania should move to:

- Annually set aside as much non-recurring revenue as the budget process and funding priorities will permit in order to make meaningful strides toward reaching the target level; and
- Undergo an initial revenue volatility study to determine sources of revenue fluctuations and the ideal savings target level.