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# Studying Volatility to Inform Rainy Day Fund Policy

Across the country, volatility in state revenue is growing more dramatic. These swings, whether up or down, can confound the best efforts of state officials and policymakers to forecast revenue and keep budgets in balance.<sup>1</sup> To help states better manage this uncertainty, The Pew Charitable Trusts recommends that policymakers periodically study their states' economic and revenue volatility. Such analyses would help them develop policies for rainy day funds that can smooth budgets throughout the business cycle and align with states' individual objectives and characteristics. These studies should include three important elements:

## 1. Understand the unique drivers of revenue volatility.

The characteristics of a state's economy and its tax policies contribute to volatility. A study can help identify the factors that drive revenue fluctuations, giving policymakers the ability to answer important questions:

- How much revenue volatility is the result of changes to state tax policy? Which taxes contribute most to volatility?
- How much volatility is the result of economic factors? Which factors contribute most to volatility?
- How much revenue volatility is caused by fluctuations in federal funds?
- How much is caused by unforeseeable one-time events, such as natural disasters?

**For example:** A Legislative Analyst's Office study in California concluded that major industries sensitive to the economic cycle, such as technology and housing, are one reason for the state's above-average revenue volatility.

## 2. Consider long-term trends in revenue volatility.

State budgets are most often debated in the context of the previous year's collections and spending, but this approach can fail to take into account underlying changes in the economy, particularly the areas that are subject to state taxation. By examining tax collections relative to longer term trends, policymakers can address major questions:

- What is the average rate of growth in the state's taxable economic base over a typical business cycle?
- How has the state's taxable economic base changed over time?
- Has revenue become more or less volatile over time? To what degree?
- Have particular revenue sources become more or less volatile over time? To what degree?

**For example:** The Minnesota state economist studies volatility in the areas of the economy that are subject to taxation in order to determine how much the state should save to weather future downturns.

### 3. Use evidence to inform policies on rainy day funds.

Once states uncover the economic and tax drivers of volatility and understand longer-term revenue trends, they can adjust savings policies to address the following questions:

- How does the size of the rainy day fund balance and the target amount compare with revenue losses during a typical recession?
- How could a deposit rule tied to revenue volatility be structured to address key sources of such fluctuations?
- Did the state make deposits to the fund during growth years? Were the largest deposits associated with the years of greatest revenue growth?
- Did the state withdraw money during recession years? If so, were withdrawals commensurate with the losses experienced during the downturn?

**For example:** Policymakers in Utah used their statutorily required revenue volatility study to evaluate the adequacy of their rainy day fund and ultimately adjusted the maximum allowable balance.

## Endnote

- 1 The Pew Charitable Trusts, "Managing Uncertainty: How State Budgeting Can Smooth Revenue Volatility" (February 2014), 1, <http://www.pewtrusts.org/en/research-and-analysis/reports/2014/02/04/managing-uncertainty>; The Pew Charitable Trusts and Nelson A. Rockefeller Institute of Government, "States' Revenue Estimating: Cracks in the Crystal Ball" (March 2011), 19, <http://www.pewtrusts.org/en/research-and-analysis/reports/2011/03/01/states-revenue-estimating>.

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## For further information, please visit:

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