No. 82 October 2010

MERCATUS ON POLICY

RATCHETING TAXES

By Russell S. Sobel and George R. Crowley

MERCATUS CENTER George Mason University

OBEL LAUREATE ECONOMIST Milton Freidman once quipped, "Nothing is so permanent as a temporary government program."¹ Indeed, once created, government programs remain long after the precipitating event has passed.² State programs created by federal grants like the American Recovery and Reinvestment Act (ARRA) are no exception. Even when the federal funding runs out, the programs remain—states simply fund them through increased state taxes. In fact, state and local taxes increase roughly 40 cents for every dollar in federal grant money received in prior years.³

THE PERMANENCE OF TEMPORARY GOVERNMENT PROGRAMS

SEVERAL THEORIES ATTEMPT to explain the apparent permanence of government programs. The most well-known theory is the so-called "ratchet effect:" temporary government programs enacted in response to a crisis become permanent and remain in effect long after the crisis has passed.⁴ According to the ratchet theory, spending programs create their own political constituencies that fight their discontinuations. In addition, spending programs encourage expansion in the directly unproductive lobbying industry that subsequently supports a higher level of government spending.⁵

The permanence of government programs has important implications for federal grants to states. One-time federal grants fund the start of these programs, but states fund the programs after the federal monies run out. For example, in 2010, the city of Morgantown, West Virginia, along with 39 other cities, started receiving federal funding that would cover hiring two new police officers for three years. Because these positions are permanent, however, the city will have to fund them using its own revenue after the grant expires. The recently passed ARRA has awarded some \$212 billion in additional grants to state governments.⁶ If the states continue the programs started with ARRA money after the federal funding runs out, state taxpayers will face large tax

If the states continue the programs started with ARRA money after the federal funding runs out, state taxpayers will face a large tax burden moving forward.

burdens moving forward. This was in fact a primary motivation for South Carolina Governor Mark Sanford's attempt to turn down federal stimulus grants to his state. Referring to when the temporary federal stimulus would run out in two years, he stated:

> "Who helps us then? Do we raise taxes ... or do we just summarily end programs ... [o]r are we to plan on yet another round of stimulus windfall from Washington in two years ... The easiest of all things would be to take and simply spend all of Washington's wellintended stimulus efforts—but in our case it would guarantee opportunities lost that I don't think our state can afford."⁷

So, do federal grants to states result in permanent future increases in state internal (or "own-source") taxes and revenue? We find that they do.

THEORY AND EMPIRICAL EVIDENCE

A STATE GOVERNMENT has many ways to respond to receiving federal grants. At the extremes, a state could expand spending by the entire amount of the grant, or alternatively, it could keep total spending levels the same and simply cut own-source taxes by the amount of the grant—essentially rebating the grant to citizens. Economic theory suggests that total government spending should only rise \$5 to \$10 per \$100 grant funding and that states should cut their own-source taxes by \$90 to \$95. However, numerous empirical studies have shown that states do not react as theory would predict. Instead, the current literature suggests that for every \$100 in federal grant funding received, a state increases its spending by approximately \$45 (and uses the other \$55 to offset taxes that it would have otherwise collected to finance spending in the grant period). This difference in levels of increased spending is known as the "flypaper effect."⁸

The debate over how much grant funding affects spending (and taxes) during the period the grant is received is outside of the scope of our research other than that it has clear implications for the maximum potential amount by which federal grants can permanently increase spending (and thus future own-source state taxes). A \$100 temporary grant that results in a state starting a new \$45 spending program, which then becomes permanent and financed by state taxes, will require \$45 per year in new state taxes.

To test the relative permanence of grant-funded programs, as well as the implications for future state own-source revenue, we examine data on federal aid to each of the 50 states for the years 1995–2008.⁹ Our models estimate the effects current and past federal grants have on current state revenues. This approach allows us to separate the immediate, or short-run, effect of the grant from the permanent, or long-run, effect. Table 1 summarizes our results.

The "Short-Run Impact of Federal Aid" refers to the change in current state revenue resulting from current federal grants. Similarly, the "Long-Run Impact of Federal Aid" refers to the change in current state revenue resulting from past federal aid.¹⁰ The short-run effect of federal aid allows states to reduce revenue by effectively "refunding" part of the federal grant to state taxpayers. Specifically, we find that a \$1 federal grant enables a state to reduce its total own-source revenue by \$0.73 and its total tax revenue by \$0.64.¹¹ Conversely, we find that past federal grants (representing the long-run impact of aid) require states to increase revenue. For every \$1 in federal aid received during the past five years, states must increase their total own-source revenue by \$0.42 and their total tax revenue by \$0.33.

TABLE 1: ESTIMATED EFFECT OF FEDERAL GRANTS ON STATE REVENUE

REVENUE SOURCE	SHORT-RUN IMPACT OF \$1 OF FEDERAL AID	LONG-RUN IMPACT OF \$1 OF FEDERAL AID
Total Own-Source Revenue	-0.7337	0.4162
Total Tax Revenue	-0.6377	0.3257

Source: Authors' calculations.

The interpretation here is clear and consistent with our proposed theory: federal grants to states allow states to reduce taxes and other sources of revenue in the short run, but create programs that the states must finance after the federal monies run out, which states do by increasing their ownsource revenue.

We have also examined this issue at the local-government level. Local governments receive funding from both state and federal sources. Using a sample of county governments in Pennsylvania, we find that county own-source revenue rises by between 23 and 46 cents in the future for every dollar in state and federal grants received today. While our estimates for the local governments are less robust and based only on a sample of county governments for one state, we believe that there is clearly evidence that what happens to the states also happens to localities that receive intergovernmental grants.

POLICY IMPLICATIONS

THE FACT THAT one-time federal grants lead to states and localities increasing own-source taxes and revenue in the future has important implications for policy, especially following the large, unprecedented increase in federal grants to state and local governments due to the ARRA. Our estimates suggest future state taxes will increase by between 33 and 42 cents for every dollar in federal grants received today. Mostly as a result of the ARRA, federal grants to state and local governments have risen from \$461 billion in 2008 to \$654 billion in 2010. Using our estimates, this \$200 billion increase will eventually result in roughly \$80 billion in future state and local own-source tax and revenue increases.

While the standard "ratchet theory" of government suggests that the recent expansion will make the federal government permanently larger in the long run, our results suggest that the current federal expansion will also lead to a permanent expansion in the size of state and local governments.

CONCLUSION

ONCE THEY CREATE programs, governments rarely terminate them. This permanence of "temporary" programs is itself an important issue, but the funding issues make it even more critical. Our study shows that states and localities fill the void in funding caused by the end of federal grants by increasing taxes and other sources of revenue. This means a program originally designed to yield benefits or stimulate a state's economy actually places a large, long-run burden on the state's taxpayers.

In light of the recent ARRA, which has increased federal assistance to state and local governments to unprecedented levels, this shifting of funding to state governments is espe-

cially alarming. Our estimates suggest future state tax burdens as high as 42 cents for every dollar of federal aid received by the state. State officials, such as South Carolina's Governor Mark Sanford, who attempted to turn down federal stimulus monies due to the future consequences of receiving current federal aid, are right to be concerned.

ENDNOTES

 The original Friedman quote appears in the book he coauthored with his wife Rose D. Friedman, *Tyranny of the Status Quo* (San Diego: Harourt Brace Jovanovich, 1984), 115. Variants of this quote have also been attributed to President Ronald Reagan and Utah Senator Wallace F. Bennett. Reagan had said, "We have long since discovered that nothing lasts longer than a temporary government program" (see *Ronald Reagan: The Great Communicator* (New York: HarperPerennial, 2001), 59). Bennett had said, "It is an age-old Washington axiom that there is nothing so permanent as a temporary government program," in a government committee review of federal grants to states (U.S. Senate Committee on Government Operations, *Periodic Congressional Review of Federal Grants-in-Aid* (Washington, DC: US GPO, 1964), 15).

While the standard "ratchet theory" of government suggests that the recent expansion will make the federal government permanently larger in the long run, our results suggest that the current federal expansion will also lead to a permanent expansion in the size of state and local governments.

- See Robert Higgs, Crisis and Leviathan: Critical Episodes in the Growth of American Government (Oxford: Oxford University Press, 1987), chapter 8, for a discussion of the many remaining 'institutional legacies' of the New Deal programs.
- See Russell Sobel and George Crowley, "Do Intergovernmental Grants Create Ratchets in State and Local Taxes? Testing the Friedman-Sanford Hypothesis" (working paper, Mercatus Center at George Mason University, August 2010). This Mercatus on Policy summarizes the main argument and findings from this report.
- 4. See Higgs, Crisis and Leviathan.

- See John Cullis and Philip Jones, Public Finance and Public Choice, 2nd ed. (New York: Oxford University Press, 1998), chapter 14; and Christopher J. Coyne, Russell S. Sobel, and John A. Dove, "The Non-Productive Entrepreneurial Process," *Review of Austrian Economics* (forthcoming).
- 6. Data on the amount of funding available from the ARRA come from Recovery.gov.
- 7. Mark Sanford, "Prudence on Stimulus in State's Best Interest," *Myrtle Beach Sun-News*, April 6, 2009.
- For an overview of the flypaper effect, see James R. Hines and Richard H. Thaler, "Anomalies: The Flypaper Effect," *Journal of Economic Perspectives* 9, no. 4 (1995): 217–226.
- 9. Specifically, our data come from annual issues of the *Federal Aid to States* report published by the U.S. Census Bureau.
- 10. Specifically, the long-run impact estimates are coefficient estimates on a variable defined as the sum of the previous five years' federal grants.
- 11. We define "own-source revenue" as total revenue less intergovernmental grants. Thus, total own-source revenue includes alternative revenue sources such as user fees in addition to total tax revenue.

The Mercatus Center at George Mason University is a research, education, and outreach organization that works with scholars, policy experts, and government officials to connect academic learning and realworld practice.

The mission of Mercatus is to promote sound interdisciplinary research and application in the humane sciences that integrates theory and practice to produce solutions that advance in a sustainable way a free, prosperous, and civil society.

Russell S. Sobel is a professor of economics and the current James Clark Coffman Chair in Entrepreneurial Studies at West Virginia University, where he formerly served as director of the Entrepeneurship Center. Dr. Sobel specializes in public economics with an emphasis on public choice, entrepreneurship, natural disasters and FEMA, economic policy, and free-market philosophy. He earned a BA from Francis Marion College and an MS and PhD from Florida State University.

George R. Crowley is a PhD candidate and Charles G. Koch Doctoral Fellow in economics at West Virginia University. His primary research interests include public economics and political economy, with an emphasis on government constraints. Mr. Crowley earned a BBA with a concentration in economics from Mercer University.

OCTOBER 2010