Institute of Public Policy

Truman Policy Research

Harry S Truman School of Public Affairs

February 2009

Fiscal Federalism and Tax Effort in the American States

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In the 25 years following the Second World War, state governments doubled the amount of inflation adjusted revenue that they collected in taxes. That represented a growth rate more than double that of the federal government (see Maxwell 1972). On average, the increase in state tax effort flattened out markedly by the 1980s, but there has been tremendous variation in the degree to which individual states have raised or lowered the tax burden on citizens over the last four decades. This study argues that federalism, and particularly the grant-in-aid system, influenced state budgetary decision-making and ultimately tax levels within recipient jurisdictions over the past 40 years.

Previous Literature on State Taxation

There has been considerable interest in the correlates of taxation in the American states among political scientists. This work has investigated the role of partisanship and generally concluded that Democrats claim a larger share of income for government revenue than do Republicans, particularly under conditions of unified government (Alt and Lowery 2000). Research also suggests that liberal state governments are more likely to adopt new taxes and maintain higher levels of tax effort (Berry and Berry 1992; Camobreco 1998). Finally, authors have offered an electoral explanation for taxation, arguing that political actors are less likely to raise taxes during an election year (Miksell 1978; Berry and Berry 1992).

Fiscal Federalism and State Tax Effort

Despite the relative breadth of the political explanations offered for state taxation decisions, studies of state-level tax effort have not sufficiently explored the potential impact of fiscal federalism.[1] This omission is surprising because grants from the federal government comprise a meaningful share of total state revenue and scholars have demonstrated that the strings attached to these monies have a significant impact on state budgetary decision making.

The causal mechanism for the impact of grants-in-aid on state tax effort relates to the much debated "flypaper effect," or the degree to which state money "sticks" to federal (see Hines and Thaler 1995 for a review). Most studies find evidence that grants increase state spending, but the stimulative effect is typically well below a 1 to 1 ratio, suggesting that some federal money is used to supplant, rather than supplement state money (See Gramlich and Galper 1973; Olmstead, Denzau, Roberts 1993).

The part of the flypaper debate that is relevant to this project is not whether or not some state money sticks to federal, but rather what states do with the portion of own source

[1] Alt and Lowery (2000) include a measure of federal grants in their model. However, because their dependent variable is total, rather than state generated revenue, the measure cannot reveal anything about the influence of grant monies on lawmakers' decisions regarding how much of a state's wealth to extract for government revenue.

revenue that they supplant with federal grants. Authors have approached the question from a variety of theoretical vantage points and, generally speaking, they agree that some portion of grant monies will be spent on the policies targeted by the grantor, while the remainder will be returned to jurisdictional citizens in the form of lower taxes. The amount of federal money that states are able to use to lower their own taxes appears to vary dramatically (between approximately 1% and 60%) depending on the restrictions imposed by Congress, the vigor with which they enforce those restrictions, and the predisposition of state governments receiving federal monies (Bradford and Oates 1971; Chubb 1985; Nicholson-Crotty 2004).

Analysis

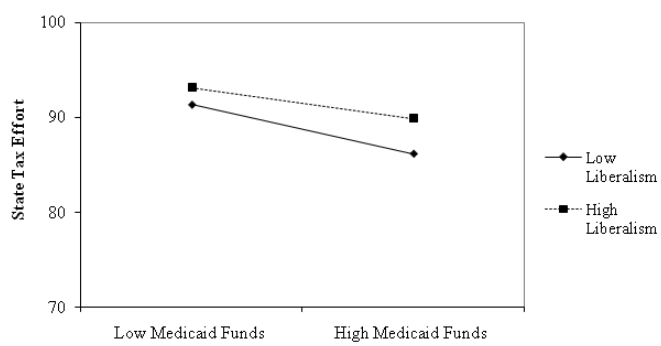
The purpose of this paper is to determine the degree to which grants-in-aid exert downward pressure on state tax effort, as well as the influence matching requirements, Congressional monitoring, and the policy preferences of the states on this relationship. Specifically, it examines the impact of federal funding for the Medicaid program on tax effort in the American states between 1971 and 1996.

Tax effort is a general measure of the tax burden faced by the citizens of a state. Created by the Advisory Council on Intergovernmental Relations and updated by various scholars, it is the ratio of a state's tax collection to its absolute tax capacity.[2] It represents the most accurate measure of the degree to which a state government is willing to claim state wealth as government revenue.

Medicaid funding is a natural place to look for the relationship between grants and tax effort for a variety of reasons.[3] The program has been in existence since 1965 and is the nation's largest public health insurance program, providing health and long-term care coverage to 52 million low-income people in 2004 (Kaiser 2004). It is also one of the largest domestic federal grant programs (Ku 2006), with expenditures totaling more than 205 billion dollars in 2007. Medicaid is a jointly funded program whereby states are required to match federal funds at a rate between 50 and 77% depending on the state. It is a program with relatively liberal redistributive goals and, as such, has engendered significant opposition among political conservatives. And finally, the controversial nature of the program and the tremendous sums of money being distributed to state governments has ensured significant congressional monitoring throughout Medicaid's existence.

Findings.[4] The results from this analysis suggest that Medicaid disbursements exert significant downward pressure on state taxes. In both liberal and conservative states, the impact of Medicaid funding on tax effort is negative (see Figure 1). In states like Ohio or Georgia that were consistently and significantly (1 standard deviation) more conservative that the average state, the effect was particularly large. Between 1971 and 1996 those states appear to have used 35% more Medicaid money to reduce taxes than did consistently liberal states such as Massachusetts or Oregon (data not shown).

Figure 1: The Impact of Medicaid Funding on Tax Effort in States with High and Low Levels of Ideological Liberalism



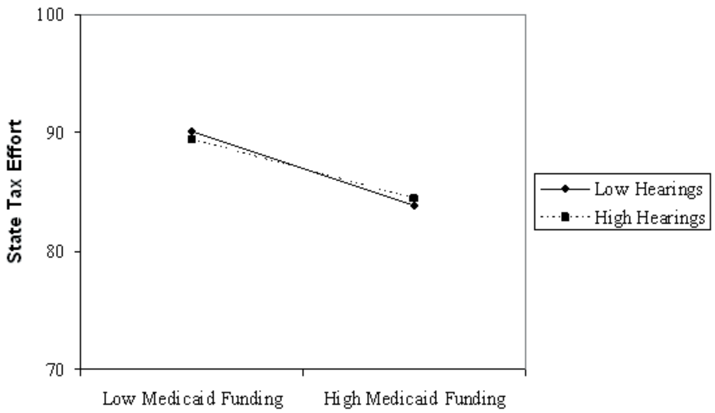
Exploring the impact of Congressional hearings reveals a similar pattern (see Figure 2). Regardless of the level of oversight, states that receive more Medicaid grant monies have lower tax effort. Interestingly, however, the findings also suggest that the number of Congressional hearings does not meaningfully moderate that relationship. Though the interaction is statistically significant, there appears to be no substantive difference in effect between years when Congress held one hearing and years when it held 20.

2 Capacity is measured as the amount of revenue that a state would collect if it taxed at a standard rate across 21 different types of taxes and abolished all breaks, exemptions, and loopholes. Those interested in a more complete description of capacity and Representative Tax System (RTS) approach used to measure it should see ACIR (1982) or Tannenwald (1999).

3 Authors have suggested that the relationship between grants and tax effort may be reciprocal. Therefore, the actual measure of Medicaid funding used in the models reported on here is purged of the influence of current and past tax effort in a state.

4 These findings are from a cross-sectional time series analysis of tax effort in all fifty states between 1971 and 1996. The model reports panels corrected standard errors and includes controls for a host of alternative influences on tax effort. These include unified control of state institutions, state wealth, fiscal centralization, taxing and spending limits, age and diversity of the population.

Figure 2: The Impact of Medicaid Funding on Tax Effort In Periods of High and Low Congressional Oversight



While interesting in their own right, these findings are perhaps less important from a policy perspective if the observed effect of grants is being driven primarily by cross-sectional variation. In other words, it is important to determine if the findings are due to different states spending grant funding differently or if, in fact, changes in funding in an individual state over time could cause it to adjust tax policies, all other things being equal.

Fixing the effects of cross-sectional variation by including a dummy variable in the model for each year allows the coefficients to be interpreted as the temporal impact of a change in Medicaid funding. The findings indicate that grant receipts do have a significant and negative effect on tax effort within a given state over time. Substantively, they suggest that after controlling for ideology and Congressional oversight, a state that receives a 15% increase in Medicaid funding reduced tax effort in the following year by 3%.

Of course, states do not typically experience such radical annual shifts, either positive or negative, in grant aid. They do, however, often receive smaller adjustments in the same direction year after year. Take, for example, Arkansas between the years 1987 and 1996, when the measure of purged Medicaid funds per capita increased every year, ultimately resulting in a 14% increase in inflation adjusted dollars. Thus, grants-in-aid could plausibly have a substantial effect on tax effort in those instances where the effect cumulates year after year, and all 50 states experienced at least one multi-year period of consistent increases or decreases in Medicaid funding per capita between 1971 and 1996.

Conclusion

The findings have potentially significant implications in the current era of devolution. The proponents of increased discretionary authority for state governments often claim that the federal government's attempt to produce more public goods through grants-in-aid have increased that production, and consequently taxes, to a level that exceeds the preferences of many citizens. The results herein suggest, however, that rather than pushing tax effort higher in the states, grants-in-aid may actually be a mechanism whereby state governments can lower the tax burden on citizens while still providing needed services.

These findings also suggest that citizens in high grant states are potentially enjoying policy benefits at the expense of those in states that receive less federal funding. This poses important questions about the unintentional (or perhaps intentional) geographic redistribution of wealth within the U.S. federal system.

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Suggested Citation

Nicholson-Crotty, Sean. (2009). “Fiscal Federalism and Tax Effort in the American States.” Report 04–2009. Retrieved [Month Day, Year], from University of Missouri Columbia, Institute of Public Policy Web site: http://www.truman.missouri.edu/ipp/

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