Do State Budget Rules Affect Welfare Spending

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Occasional Paper Number 43

Assessing the New Federalism

An Urban Institute Program to Assess Changing Social Policies

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The Urban Institute
2100 M Street, N.W.
Washington, DC 20037
Phone: 202.833.7200
Fax: 202.429.0687
E-Mail: paffairs@ui.urban.org
http://www.urban.org

This report is part of the Urban Institute's *Assessing the New Federalism* project, a multiyear effort to monitor and assess the devolution of social programs from the federal to the state and local levels. Alan Weil is the project director. The project analyzes changes in income support, social services, and health programs. In collaboration with Child Trends, the project studies child and family well-being.

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About the Series

Assessing the New Federalism is a multiyear Urban Institute project designed to analyze the devolution of responsibility for social programs from the federal government to the states, focusing primarily on health care, income security, employment and training programs, and social services. Researchers monitor program changes and fiscal developments. In collaboration with Child Trends, the project studies changes in family well-being. The project aims to provide timely, nonpartisan information to inform public debate and to help state and local decisionmakers carry out their new responsibilities more effectively.

Key components of the project include a household survey, studies of policies in 13 states, and a database with information on all states and the District of Columbia, available at the Urban Institute's Web site (http://www.urban.org). This paper is one in a series of occasional papers analyzing information from these and other sources.

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Executive Summary

Constitutional and legislated state budget rules limiting deficits, total spending, and total or particular tax burdens have a long history. Their existence suggests a belief that unfettered legislators would borrow, tax, and spend more than desired by a majority of voters. Rules' details vary greatly among the states, with some easier to circumvent than others. The famous Proposition 13, enacted in California at the height of the tax revolt of the late 1970s in order to limit property tax burdens, has been largely offset by new fees and charges.

A literature review provides mixed evidence regarding the effect of rules on budget deficits or on total spending and tax burdens. There seems to be some effect on the borrowing costs facing states, indicating that investors believe rules to have a conservative influence. Analyses that consider budget rules the result of the ideology of a state's voters show that such rules have some effect on limiting state government's size.

This paper's analysis did not find strong evidence that rules limit the degree to which welfare spending responds to business cycles or have any effect on welfare spending per capita. There was weak evidence that in states with strict rules limiting budget deficits, welfare spending makes up a lower share of total spending than in other states, but this may not indicate a causal relationship. It may be that conservative states tend both to have stricter rules and to give welfare spending a low priority.

Do State Budget Rules Affect Welfare Spending?

Do Budget Constraints Work as Intended?

Voters do not fully trust their elected officials. They often express this mistrust by restricting policymakers' choices with constitutional or legislated rules that constrain budget decisions. Such rules are especially common in state and local government. It is not clear, however, that these rules should lead skeptical voters to sleep better. If effective, rigid rules may lead to distorted budget decisions. If ineffective, rules fail to provide the protection that voters desire. In many ways, attempts to regulate state behavior resemble government's attempts to regulate industry—reducing efficiency and resulting in unintended consequences.

All states have laws in place that limit how politicians make budget choices. All states (except Vermont) require a balanced budget, most have some form of tax or expenditure limit (TEL) and debt limit, and all earmark revenues to some extent. But a closer look at each type of rule or limit often reveals a great deal of variation across states—variation that could have important implications for the rule's effects.

Most of the literature on budget rules addresses their effects on budget aggregates, such as total spending, receipts, and deficits. This paper will review that literature briefly and attempt to determine the effect of budget rules on the composition of spending, especially the relative importance of welfare spending.

Do Budget Rules Affect Budget Aggregates?

Presumably, if budget rules are effective, voters benefit by not having to keep politicians under constant surveillance. The rules are promulgated on the presumption that unfettered politicians create fiscal policies undesirable to a majority of voters. Balanced-budget rules imply a fear that politicians would run deficits that are too large; tax and spending restrictions reflect the concern that lawmakers would create a government that is too large. Earmarked taxes are devices intended either to put the allocation of a portion of government resources on automatic pilot, or to relate tax burdens to the amount individuals benefit from a particular public good or service.

An enormous body of literature exists on whether there is an inherent bias favoring governments or government deficits that are larger than voters desire (Brennan and Buchanan 1977; Niskanen 1971), and there is an equally voluminous amount of literature on how voters' desires might be identified (Sen 1999). Academic analysis has not reached a consensus on such issues, but the political system clearly has. Through state constitutions, referenda, and legislation, the polity has decided to invoke such rules whether or not they are truly justified.

Budget rules may have a substantial cost. Often awkward, they may inhibit adjusting policies to changing economic conditions and voter tastes. Consequently, the system is probably out of equilibrium much of the time, leaving it doubtful that policy will move in the direction indicated by changing economic incentives. For example, there may be times when voters would be quite willing to accept a higher tax rate to fund a worthy cause, but are inhibited by a tax limitation. Conversely, there could be instances in which voters prefer a tax burden lower than the limit, but politicians feel a need to go to the limit in order to reduce the probability that the limit will be lowered in the future.

The above scenarios assume that budget rules have a significant effect on states' fiscal policy decisions. However, it may be a mistake to take the rules too seriously. They are not always binding or, often fraught with loopholes, are easily circumvented. Whether rules are intentionally or inadvertently written loosely is an interesting question. In either case, the rules can often be bent in cases where they would otherwise force highly unpopular policy changes.

The possibility of bending the rules makes it extremely difficult to conduct empirical research on their impact. In a state requiring a balanced budget, the budget will almost always be balanced—at least on paper. Tax and spending limitations will usually be satisfied. However, this "balance" may be accomplished through applying accounting "tricks", changing the timing of revenues and outlays, moving activities off budget, and increasing fees and charges for state-operated, business-type enterprises. State budgets tend to be opaque and often contain a proliferation of special funds that make it hard to "follow the money." The same tricks that fool the public can fool regression equations as well. Another confounding element is that conservative budget rules may tend to evolve in conservative states that do not need them in the first place (Poterba 1996). Further, state spending and tax policy may be affected by a rising threat that the populace will pass limitations, even though no limitations have yet been enacted (Skidmore and Alm 1994, as cited in Poterba 1996).

The empirical literature on the effect of limitations does not yield unanimous conclusions, but after reviewing this literature, Poterba (1996) concludes that limitations appear to be more effective in analyses that find them the endogenous results of tastes and economic conditions in particular states. Several studies take a clever, indirect route when documenting the effects of fiscal rules (Goldstein and Woglom 1992; Lowry and Alt 1995). They examine the impact of rules on the interest rates that must be paid by states. Essentially, the authors examine the market's judgment as to the efficacy of the rules, and thereby avoid being fooled by accounting tricks. These studies show that stricter rules do seem to lower the interest rates paid on borrowing and suggest that investors believe that rules work to make governments more responsible. Interestingly, Rogers and Rogers (2000) find an asymmetric effect of rules when they control for the degree of political competition in a state and for the party that controls the legislature. Revenue limits seem to have a greater effect on both spending and revenues than do spending limits.

There has been very little research as to the effects of budget rules on the composition of spending. However, a 1991 study by Joyce and Mullins examines both state and local TELs and includes an analysis of their effects on the relative responsibility for expenditures between state and local governments. Joyce and Mullins found that local-level TELs tended to increase the state share of all expenditure categories except highways, but this effect is muted in states that have both state and local TELs. In the case of state-level TELs, the authors found that with the exception of welfare spending, there was no shift of spending to the local level. They did, however, acknowledge that their analysis could be measuring existing trends in spending that are not associated with the presence of TELs, and that further research is needed.

The Evolution of Budget Rules

State budget rules have a very long history. Limitations on state borrowing have existed almost as long as state borrowing has existed.

Before 1800, capital markets and the banking system were not well developed and states were more likely to be creditors than debtors as they provided loans to the private sector. As the banking system developed in the early 19th century, it began to finance state budget deficits, but when the banking system suffered a severe collapse during the Panic of 1837 and could no longer make loans, states were motivated to consider amendments requiring a balanced budget. Rhode Island adopted the first such amendment in 1842. By 1900, 37 states had adopted limitations on deficit spending.

As limitations on debts bearing the full faith and credit of states became more common, so did the issuance of off-budget, nonguaranteed debt. By 1963, over half of state debts were in this form (Savage 1988).

Overall tax and spending limitations became especially popular during the tax revolt of the late 1970s and early 1980s. Most of the 27 states with such limits adopted them during that period. Because such rules often limit tax revenues or spending to inflation, population growth, or income growth within a state, they obviously were not practical until reliable statistical data became available.

The first loud shot in the tax revolt was, of course, Proposition 13—enacted in California in 1978. It limited property tax assessments to their 1975 level and severely limited their growth to 2 percent per year thereafter. It also required that two-thirds of a jurisdiction's voters approve any tax increase. The restrictions on property taxes provoked large increases in various fees and user charges, however. Within 10 years, per capita revenues and spending had exceeded their values prior to Proposition 13 (Galles and Sexton 1998).

The earmarking of taxes for specific spending purposes also has a very long history, but its popularity declined between the 1930s and the early 1980s. In 1954, about 51 percent of state tax revenues were earmarked. By the early 1980s, the ratio fell to 23 percent and has remained stable ever since. However, the importance of the practice varies greatly among the states. In 1993, Alabama earmarked 87 percent of collections, while Kentucky earmarked only 4 percent.

The composition of earmarking also changed in the 1980s and 1990s. Earmarking for educational and environmental purposes became more popular, while other types of earmarking became relatively less important.

Do Budget Rules Affect the Composition of Spending?

Spending over the Business Cycle

Balanced-Budget Rules

The most important problems resulting from balanced-budget rules occur when a state goes into recession. The details of the balanced-budget requirements are crucial to the level and composition of spending. Using studies by the National Association of State Budget Officers (NASBO 1999) and the National Conference of State Legislatures (Snell 1996), table 1 provides more detail on state balanced-budget rules. Specifically, balanced-budget rules dif-

Table 1 *Balanced-Budget Rules in the States*

Region and State	Governor Must Submit Balanced Budget	Legislature Must Pass Balanced Budget	Governor Must Sign Balanced Budget	Cannot Carry Over a Deficit
NEW ENGLAND				
Connecticut	S	C, S	C	—
Maine	C, S	C	C, S	X
Massachusetts	C, S	C, S	C, S	—
New Hampshire	S	—	—	X
Rhode Island	C	C	S	X
Vermont	—	—	—	—
MID-ATLANTIC				
Delaware	C, S	C, S	C, S	X
Maryland	C	C	C*	—
New Jersey	C	C	C	—
New York	C	—	*	—
Pennsylvania	C, S	—	C, S	—
GREAT LAKES				
Illinois	C, S	C	S	—
Indiana	—	—	—	X
Michigan	C, S	C	C, S	—
Ohio	C	C	C	X
Wisconsin	C	C	C, S	—
PLAINS				
Iowa	C, S	S	—	X
Kansas	S	C, S	—	X
Minnesota	C, S*	C, S*	C, S*	X
Missouri	C	—	C	X
Nebraska	C	S	—	X
North Dakota	C	C	C	X
South Dakota	C	C	C	X
SOUTHEAST				
Alabama	C, S	S	—	X
Arkansas	S	S	S	X
Florida	C, S	C, S	C, S	X
Georgia	C	C	C	X
Kentucky	C, S	C, S	C, S	X
Louisiana	C, S	C, S	C, S	X
Mississippi	S	S	—	X
North Carolina	C, S	S	—	X
South Carolina	C	C	C	X
Tennessee	C	C	C	X
Virginia	*	*	C*	X
West Virginia	—	C	C	X
SOUTHWEST				
Arizona	C, S	C, S	C, S	—
New Mexico	C	C	C	X
Oklahoma	S	C*	C*	X
Texas	—	C, S	C	—
ROCKY MOUNTAIN				
Colorado	C	C	C	X
Idaho	*	C*	—	X
Montana	S	C	—	X
Utah	S	C, S	*	X
Wyoming	C	C	—	X
FAR WEST				
Alaska	S	S	S	X
California	C	—	S	—
Hawaii	C, S	—	C, S	X
Nevada	S	C	C	X
Oregon	C	C	C	X
Washington	S	—	—	X
TOTAL (or average)	44	40	34	37

Sources: NASBO (1999) and NCSL (1996).
C = Constitutional; S = Statutory
**State Notes*:
Idaho: The governor is not required to submit a balanced budget. The constitution requires that the legislature pass a balanced budget. The governor, as the chief budget officer of the state, has always ensured that expenditures do not exceed revenues.
Maryland: The budget bill, when and as passed by both houses, shall be a law immediately without further action by the governor.
Minnesota: The state constitution limits the use of public debt. The construction of this limit implicitly requires the state to have a balanced operating budget.
New York: The governor is not technically required to sign a balanced budget, but the governor, legislative leaders, and the comptroller must certify the budget is in balance in order to meet borrowing requirements.
North Carolina: The governor is not technically required to sign a bill for the bill to become law. This includes a bill that requires an appropriation. During the session, any bill presented to the governor that is not returned within 10 days with the governor's signature shall become law in like manner. If the General Assembly has adjourned, the bill shall become a law within 30 days after adjournment.
Oklahoma: Legislature could pass and the governor could sign a budget where appropriations exceed cash and estimated revenues, but constitutional and statutory provisions reduce the appropriations so that the budget is balanced.
Utah: The governor may allow balanced budget to go into law without signature.
Virginia: Requirement applies only to budget execution. The governor is required to ensure that actual expenditures do not exceed actual revenues by the end of the appropriate period.

fer in the degree to which they restrict choices. If the requirement is only that the governor propose or that the legislature pass and the governor sign a balanced budget, then the effects of a recession are diminished because a recession is unlikely to be included in the official forecast used to prepare the budget. If a recession is already under way, it becomes more difficult to prepare a budget promising balance, and the rule may then have a more profound effect on policy. However, a rule stating that the actual outcome must be a balanced budget will generally be stricter than a rule merely stating that a balanced budget must be proposed.

If the actual outcome must be a balanced budget, a state may have to scramble to cut spending or raise taxes when hit by a recession. Then, determining which expenditures are covered by the rules is crucial. Under duress, politicians and other policymakers generally find it easier to cut capital as opposed to current expenditures, particularly when the rules cover both capital and operating budgets. Yet even when balanced-budget rules apply only to operating budgets, they may indirectly affect capital spending. For example, a balanced-budget rule may restrict maintenance spending on highways, resulting in more capital spending in the long run.

It is generally easier to cut discretionary (as opposed to entitlement) spending, and this may protect the poor to a considerable extent. On the other hand, the same weak economic growth that leads to a budget imbalance often causes entitlement programs for the poor to grow disproportionately. It would be natural for budget cutters to focus on the programs that contribute most to an incipient deficit.

Many are concerned that welfare spending will fall dramatically in the next recession, now that AFDC has been converted from an entitlement program (supported by a cost-sharing grant) to a block grant (in which marginal increases in spending have to be entirely financed by the states). Nevertheless, there are hints that the downward pressures on welfare spending during the next recession may not be as intense as many fear. Dye and McGuire (1999) show that the fall in state tax revenues during recessions is surprisingly small, probably because of tax rate and base increases. They also show that both welfare and nonwelfare spending tend to rise during recessions, regardless of federal grant support.[1]

Dye and McGuire do not analyze, however, whether budget rules make any difference to a state's response to a recession. By taking their estimates of the percentage increase (or decrease) in AFDC and public welfare expenditures divided by the percentage decrease (or increase) in the gross state product (GSP) during business cycles over the period 1977–78 to 1994–95, it is possible to examine whether public welfare and AFDC outlays responded differently in states that require balanced budgets, compared with states with less stringent budget rules. This measure of the response is known as "elasticity," and provides an indication of how much states allow public welfare and AFDC spending to rise during a recession. For the nation as a whole, the elasticity of AFDC spending with respect to income is about –1, indicating that states tend to increase AFDC spending during a recession by the same percentage as income falls.[2]

We expected balanced-budget rules to inhibit a state's ability to vary public welfare and AFDC in response to business cycles. However, when we attempted to explain the elasticities in the states using regressions containing a variety of economic, demographic, and political variables, as well as variables that reflected budget rules, no regression came close to being successful.[3] Therefore, we resorted to the more simple techniques described below.

Because elasticities varied significantly in those states experiencing only one recession over the time period (compared with those that had more than one recession), statistical tests were run—including, as well as excluding, such states. The average absolute elasticity for public welfare spending was somewhat greater in states without strict budget-balancing rules, suggesting that those states had somewhat more flexibility. However, the differences did not come close to passing the usual tests of statistical significance. A similar result occurred when only AFDC spending was examined excluding the states that experienced only one recession. However, including all states produced the perverse result that states with a strict budget-balancing rule have a higher absolute elasticity with respect to AFDC spending, but again the difference was not statistically significant. Based on this analysis, there is no evidence that balanced-budget rules limit states from adjusting spending on the poor in response to changes in business activity.

Tax and Expenditure Limitations

The effects of TELs should depend in large part on the exact form of the restriction. A spending limitation that restricts total spending to a percentage of some measure of income will obviously be more stringent during a recession (when income is falling) than a restriction that allows spending to rise with population and inflation. Similarly, a restriction that limits total revenue to a percentage of income will be more binding during a recession than one that restricts only a portion of state revenue, such as the property tax. For that reason, statistical tests on states that had any TEL and on states that had TELs specifically related to income were conducted separately.

Various approaches were used to analyze the effects of tax or expenditure limitations on the average elasticity of public welfare spending and AFDC spending. States with any type of tax or expenditure limitations were compared with states with no type of limitation, states with income-based TELs were compared with states with other types of TEL or no TEL, and states with income-based TELs were compared with states with no TEL whatsoever. None of the comparisons indicated statistically significant differences between states with and without TELs with regard to their flexibility in adjusting spending on public welfare and AFDC over the business cycle (table 2). Indeed, when states with income-based TELs were compared with all other states, the differences in the mean elasticities were the opposite of what would be expected for public welfare expenditures, both for all states and for only

Table 2 *Comparison of Mean Public Welfare and AFDC Spending Elasticities—There Is No Pattern or Difference among States with and without Budget Rules or Limits*

		Public Welfare		AFDC	
		States Excluded with Only One Recession Year	All Applicable States Included	States Excluded with Only One Recession Year	All Applicable States Included
Balanced-Budget Rule (Rule on Deficit Carryover)	Mean Elasticities of States with Rule	–2.86	–5.22	–0.20	***–1.44***
	Mean Elasticities of States without Rule	–8.02	–7.81	–0.83	***–0.93***
	T-Test Result: H_O: Means Are Equal H_A: Means Are Not Equal	Cannot Reject (p = 0.2071)	Cannot Reject (p = 0.4600)	Cannot Reject (p = 0.6031)	Cannot Reject (p = 0.8139)
Any TEL	Mean Elasticities of States with Any TEL	***–5.08***	–4.99	–0.32	–0.09
	Mean Elasticities of States without Any TEL	***–3.38***	–6.95	–0.43	–2.68
	T-Test Result: H_O: Means Are Equal H_A: Means Are Not Equal	Cannot Reject (p = 0.4353)	Cannot Reject (p = 0.5297)	Cannot Reject (p = 0.9119)	Cannot Reject (p = 0.1909)
Income-Based TEL[a]	Mean Elasticities of States with an Income-Based TEL	***–6.05***	***–6.01***	***–0.91***	–0.99
	Mean Elasticities of States without an Income-Based TEL (Includes Some with OTHER TELs)	***–3.25***	***–5.86***	***–0.06***	–1.48
	T-Test Result: H_O: Means Are Equal H_A: Means Are Not Equal	Cannot Reject (p = 0.3613)	Cannot Reject (p = 0.9635)	Cannot Reject (p = 0.4413)	Cannot Reject (p = 0.7706)
Income-Based TEL[b]	Mean Elasticities of States with an Income-Based TEL	***–6.05***	–6.01	***–0.91***	–0.99
	Mean Elasticities of States without Any TEL	***–3.38***	–6.95	***–0.43***	–2.68
	T-Test Result: H_O: Means Are Equal H_A: Means Are Not Equal	Cannot Reject (p = 0.3858)	Cannot Reject (p = 0.8054)	Cannot Reject (p = 0.6745)	Cannot Reject (p = 0.3838)

Source: Authors' calculations based on elasticity data from Dye and McGuire (1999).

Notes: All of the differences in means seen in this table have failed the tests of statistical significance.
P-values indicate the probability that there is no difference between the means. All decisions were made at the 95 percent confidence level.
Differences in means that went against what we would expect—that the presence of rules would restrict spending adjustment—are in ***bold italics***.

a. The first comparison is of states with an income-based TEL versus states without an income-based TEL. This second group includes states with some form of a TEL as well as states with no TEL at all.
b. This second comparison is of states with an income-based TEL versus those states with no TEL of any kind.

those states experiencing more than one recession. For AFDC, the difference went in the “wrong” direction when states experiencing more than one recession were examined. As in the analysis of balanced-budget rules, there is no indication that TELs limit states’ ability to vary AFDC and welfare spending in response to the business cycle. This may suggest that TELs are easily circumvented or that, in the case of effective TELs, states give high priority to sustaining the welfare population.

Effects on the Level of Welfare Spending and Its Share of State Budgets

Regressions were run to see if budget rules were associated with the total level of welfare spending per capita or its share of state budgets, the latter providing an indication of the priority given to welfare assistance in a state. The resulting hypothesis is that all else being equal, budget rules may push welfare spending to the back of the line. The results of the regression analysis of per capita welfare spending are shown in table 3 (see table 5 for definitions of variable names, and their sources). A stepwise technique that includes only significant independent variables suggested that per capita income and a state’s poverty rate were associated with higher public welfare spending per capita,

Table 3 *Impact of State Budget Rules on Public Welfare Spending per Capita*

	PWELPCAP (Public Welfare Expenditures per Capita)			
	TELANY Included	TELINC Included	Model Results Using the "Stepwise" Method	
Dependent Variable			Variables Included at the 0.1 Significance Level	Parameter Estimate
Intercept	–265.1008 –0.7750	–218.9399 –0.6400		
BALBUD	–6.0524 –0.0800	–32.9020 –0.4340	PINCPCAP	0.0367 4.5014
TELANY	–77.2906 –1.4770	—	POVERTY	15.9609 2.2611
TELINC	—	–68.5849 –1.2980	R^2	0.3203
PINCPCAP	0.0295 2.4290	0.0286 2.3550		
POVERTY	12.0286 1.3960	12.3373 1.4160		
TAXPCAP	0.1172 1.4750	0.0971 1.2310		
GOVPARTY	–34.4769 –0.5880	–38.3761 –0.6490		
LEGISUP	2.2087 0.0330	11.6725 0.1730		
LEGISLOW	27.3404 0.3880	22.6664 0.3170		
Adj. R^2	0.2720	0.2626		

Sources: See table 5 for variable names and sources.
Note: T-Statistics are listed below parameter estimate.

Table 4 *Impact of State Budget Rules on the Share of State Budgets Devoted to Public Welfare Spending*

	PUBWEL (Public Welfare Expenditures as a Percentage of Total General Expenditures)			
	TELANY Included	TELINC Included	Model Results Using the "Stepwise" Method	
Dependent Variable			Variables Included at the 0.1 Significance Level	Parameter Estimate
Intercept	12.0668 1.5460	13.1764 1.6690		
BALBUD	–1.8165 –1.0550	–2.3529 –1.3470	PINCPCAP	0.0006 2.6972
TELANY	–1.7576 –1.4720	—	TAXPCAP	–0.0077 –4.3813
TELINC	—	–1.1086 –0.9090	LEGISLOW	3.3115 2.7950
PINCPCAP	0.0009 3.3280	0.0009 3.1830	BALBUD	–2.7409 –1.7778
POVERTY	0.3040 1.5460	0.3009 1.4970	R^2	0.4784
TAXPCAP	–0.0078 –4.2880	–0.0082 –4.5180		
GOVPARTY	–0.3929 –0.2940	–0.4499 –0.3300		
LEGISUP	1.3665 0.8980	1.5357 0.9890		
LEGISLOW	1.3943 0.8670	1.3816 0.8380		
Adj. R^2	0.4446	0.4250		

Sources: See table 5 for variable names and sources.
Note: T-Statistics are listed below parameter estimates.

but neither balanced-budget rules nor tax limitations were significant. Note, however, that the equation explained slightly less than a third of the variance of the dependent variable.

A similar approach was taken to examine the percentage of state spending allocated to public welfare spending. The results of the regression analysis of public welfare spending as a percentage of total general expenditures are shown in table 4. The stepwise technique identified four variables that were significantly associated with the percentage of budgets allocated to public welfare. Personal income per capita and the percentage of Democrats in the lower house of the legislature were positively associated with the relative importance of public welfare spending, while the existence of a balanced-budget rule and tax collections per capita were negatively associated.

This was the only statistical test performed in which budget rules appeared to play any important role with regard to welfare spending. It may be, however, that the role is not causal, but only an indication that more conservative states are both more likely to spend a relatively low proportion of their budgets on welfare and more likely to have strict balanced-budget rules. The role

Table 5 *Model Variables and Sources*

Variable	Name in Model	Source
Dependent Variables		
Public welfare expenditures as percentage of total general expenditures	PUBWEL	Census (State Government Finances)
Public welfare expenditures per capita	PWELPCAP	Census (State Government Finances)
Independent Variables		
Balanced budget rule (prohibition of deficit carry-over) 1 = State has law 0 = State does not have law	BALBUD	NASBO and NCSL
Tax or Expenditure Limit, TEL (any type) 1 = State has TEL 0 = State does not have TEL	TELANY	NASBO
Tax or Expenditure Limit, TEL (based on a measure of income) 1 = State has income-based TEL 0 = State does not have income-based TEL	TELINC	NASBO
Personal income per capita	PINCPCAP	Census (Statistical Abstract)
Percentage of people under the federal poverty level	POVERTY	Census (Current Population Survey)
Tax revenue per capita	TAXPCAP	Census (State Government Tax Collections)
Party of governor 1 = Democrat 0 = Republican	GOVPARTY	Census (Statistical Abstract)
Majority party of upper house of legislature 1 = Democrat 0 = Republican	LEGISUP	Census (Statistical Abstract)
Majority party of lower house of legislature 1 = Democrat 0 = Republican	LEGISLOW	Census (Statistical Abstract)

Source: NCSL (1995).

of balanced-budget rules provides a barely significant—at the 10 percent level—contribution to explaining the dependent variable and may, combined with the percentage of the lower legislative house controlled by Democrats, indicate the ideology of the state.

It is more plausible that the regression results truly indicate a causal role for per capita income and tax collections per capita. The statistical associations suggest that richer states give higher priority to welfare spending but, at any standard of living, the importance of welfare is lowered when tax bills are higher. In other words, welfare is a luxury good, but its growth is curbed as the burden of paying for it rises.

The Effects of Earmarking

The existence of earmarking may create some bias against welfare-type programs, because such programs tend to benefit very little from the practice. Earmarking for social programs does exist, but it does not involve much money and finances only a small portion of total spending on welfare. While only 7 percent of spending on cash assistance in FY 1995 came from earmarked own-source revenues, 92 percent of spending on transportation was financed through earmarked funds (NASBO 1997). Although the amounts earmarked for social activities tend to be small, the practice is widespread. Twenty-seven states earmarked some amount of revenue for use on health, welfare, and human services (table 6).

Few budget analysts like earmarking. Where an earmarked tax finances 100 percent of the outlays on a particular good or service (e.g., highways), there is no reason to believe that the revenue yield of the tax equals the level of spending that would be chosen using benefit-cost analysis. Indeed, it is usually presumed that spending financed by earmarked taxes is too high, because special interest groups favored by the tax (e.g., the highway construction industry) will have spent much time and money lobbying for higher tax rates.

On the other hand, earmarking is not entirely bad. In an era when government is mistrusted and resistance to tax increases is widespread, earmarking a tax for a popular activity can reduce opposition to higher taxes. Earmarking can also be considered equitable when there is a connection between the burden imposed by the tax and the benefits received from the good or service that the tax finances. A gasoline tax used to finance highway construction is a classic example of a tax based on the benefit principle of taxation.

While all states levy gasoline taxes to finance highways, much state-level earmarking has nothing to do with benefit taxation. Thirty-nine states earmark a portion of sales or income taxes to finance particular activities (Perez and Snell 1995), perhaps to quell opposition to a particular tax increase or to allow politicians to make a symbolic gesture showing their support for a particular activity.

For these reasons, when an earmarked tax finances close to 100 percent of an activity, it probably increases spending above the level that would have occurred without earmarking. Nevertheless, this need not always be the case. Occasionally, extraneous events can surprisingly reduce the yield of an earmarked tax. For example, the OPEC-inspired gasoline price increases of the 1970s greatly reduced the yield of gas taxes that are usually levied on a unit basis, and probably starved highway funding for a number of years.

If, as is more typical, earmarking increases expenditures on a particular activity, the amount of the increase is likely to heavily depend on whether the earmarked tax finances close to 100 percent of the activity or only a small portion. If an activity is financed partially by an earmarked tax and partially by regular appropriations, it is quite possible that ups and downs in the tax revenues are largely offset by decreases and increases in the appropriations that provide the rest of the funding.

These propositions gain some support from Dye and McGuire (1992), whose study attempts to assess the impact of earmarking on state budgets. They ask: Does an increase in earmarked revenue of one dollar increase expenditures on the particular purpose of the earmarked funds by one dollar? Their results show that there is not much impact on expenditures from earmarking. They look at four categories of spending: total, education, highways, and aid to local government. An increase in earmarked revenue of one dollar has no effect on total spending or on education spending. Highway spending increases by $0.19 and local aid increases by $0.65. One can conclude from these results that state funds are largely fungible—that is, general funds are simply replaced by the new earmarked funds—but that there may be some positive effect where, as with highways, the earmarked tax finances a very large portion of total outlays.

This lack of effect on total expenditures suggests that where there is an effect on the activity favored by earmarking, the favored activity takes resources from other types of expenditure. It is also possible that activities financed by earmarked sources of revenues undergo less scrutiny than those financed by regular appropriations.

Because the effect of earmarking is generally very small, it is likely that any bias against welfare spending caused by earmarking is also likely to be very small. It is probably also true that the earmarking of funds for welfare-type spending is unlikely to increase such spending significantly.

Some Other Effects of Budget Rules

Budget rules have the potential to affect the composition of spending through indirect channels. Such effects are not investigated empirically in this paper, but might be worthy of future research.

Enforcement

If budget rules are so permissive that they do not constrain total spending (because they are either not binding or are very easy to circumvent), it seems unlikely that they have any effect on the composition of spending. If, however, it takes some effort to circumvent the rules, it is possibly easier for some types of spending to escape budget rules than others. For example, it is probably easier to move activities off budget and into independent agencies that sell a good or a service. Then the off-budget activity can be largely self-financing. Turnpike authorities and housing agencies, for example, can readily be placed off budget and given the authority to charge fees and borrow money.

Table 6 ***Earmarking State Revenue***

Region and State	Percentage of Tax Revenues Earmarked	State Dedicates Revenues for Spending On: Transportation	Local Government	Education	Health, Welfare, and Human Services	Environment
NEW ENGLAND						
Connecticut	10	X	X	—	—	X
Maine	12	X	X	—	—	—
Massachusetts	39	X	X	—	X	X
New Hampshire	14	X	X	—	—	—
Rhode Island	5	X	X	—	—	—
Vermont	13	X	—	—	X	X
MID-ATLANTIC						
Delaware	6	X	X	—	—	X
Maryland	17	X	—	—	—	X
New Jersey	39	X	X	X	X	X
New York	8	X	X	—	—	—
Pennsylvania	11	X	X	—	X	X
GREAT LAKES						
Illinois	32	X	X	X	X	X
Indiana	26	X	X	—	X	X
Michigan	39	X	X	X	X	—
Ohio	17	X	X	—	X	X
Wisconsin	9	X	X	—	—	X
PLAINS						
Iowa	22	X	X	—	—	—
Kansas	25	X	X	X	X	X
Minnesota	16	X	X	X	X	X
Missouri	27	X	X	X	—	—
Nebraska	21	X	X	X	—	X
North Dakota	22	X	X	X	—	—
South Dakota	47	X	X	X	—	—
SOUTHEAST						
Alabama	87	X	X	X	X	—
Arkansas	13	X	X	X	X	—
Florida	28	X	X	X	X	X
Georgia	6	X	—	—	—	—
Kentucky	4	X	X	—	X	—
Louisiana	15	X	X	X	—	—
Mississippi	26	X	X	X	X	—
North Carolina	19	X	X	X	X	—
South Carolina	17	X	X	X	X	—
Tennessee	60	X	X	X	—	X
Virginia	25	X	X	X	—	—
West Virginia	19	X	X	X	X	—
SOUTHWEST						
Arizona	30	X	X	X	X	X
New Mexico	40	X	X	X	X	—
Oklahoma	21	X	X	X	X	X
Texas	21	X	X	X	—	—
ROCKY MOUNTAIN						
Colorado	20	X	X	—	—	—
Idaho	21	X	X	X	X	X
Montana	64	X	X	X	X	—
Utah	55	X	—	X	—	—
Wyoming	17	X	X	—	—	—
FAR WEST						
Alaska	8	X	X	X	—	—
California	19	X	X	—	X	—
Hawaii	5	X	X	—	—	—
Nevada	57	X	X	X	X	X
Oregon	21	X	X	X	X	X
Washington	30	X	X	X	X	X
TOTAL (or average)	24	50	46	30	27	22

Source: NCSL (1995).

On the other hand, it is harder to imagine moving transfer payment programs like Medicaid or TANF off budget. In general, programs for the poor may be more severely constrained by rules than many other types of programs—with the possible exception of housing assistance.

Impact on EITCs

Analyzing whether the circumvention of budget rules has an important effect on the composition of spending would involve a state-by-state investigation of off-budget activities and an examination of whether spending on such activities tends to be higher when they have escaped the budget. This would not be an easy task due to the complexity of state budgets and the differences in budget concepts among the states. One interesting possibility is that expenditure and tax limitations push assistance for the poor from the spending to the tax side of the budget. Earned Income Tax Credits (EITCs) can be a substitute for welfare spending while reducing the apparent tax burden. However, state-level EITCs are relatively recent, and while there is some indication that they are likely to become more common, it is too early to say whether their spread is much influenced by budget rules (Rogers and Weil 2000).

Impact on the Effect of Grants

If balanced-budget rules or TELs really affect a state's ability to spend generally or during recessions, they will also affect its ability to take advantage of cost-sharing grants from the federal government. Budget rules may also explain a state's reaction to block grants, which may often appear irrational at first sight. For example, economists have puzzled over the so-called "flypaper effect." Lower-level governments seem to allocate a high portion of block grants to activities favored by the grants, even though the grant's structure provides no marginal incentive to do so. Rationalistic models, based on the presumption that policymakers attempt to satisfy the preferences of the all-powerful median voter, suggest that a state spending 10 percent of its total income would only spend about 10 percent of a block grant (seen simply as additional income), leaving the remainder for tax cuts. To the extent that total spending increased because of the grant, the portion dedicated to the favored activity would not be expected to significantly exceed the favored activity's share of the original budget.

However, if a state's total public spending is decreased to a level significantly below its unconstrained equilibrium level because of tax or balanced-budget limitations, the entire block grant will be spent on public goods and services. Ordinarily, the portion of the grant spent on the favored activity would not be expected to exceed its share of the original budget, but if the activity is considered a luxury by the state and is disproportionately depressed by budget rules—which may be a reason that the federal government chose to support it in the first place—a relatively high portion of a block grant may be spent on it.

Conclusions

Whether or not a state has strict budget rules seems to be largely unimportant to the way in which its welfare spending responds to the ups and downs of the business cycle. This could indicate either that such rules are ineffective because they can be so easily circumvented, or that welfare spending is of sufficient importance that legislatures offset any constraining influence that the rules might impose. We suspect that the ineffective nature of the rules is more important—a proposition that is impossible to prove, however, with the data cited in this paper.

There is also no statistical indication that budget rules play a role in determining welfare spending per capita. The only evidence that budget rules *are* important comes from regressions suggesting that states with strict balanced-budget rules spend a lower proportion of their budgets on public welfare. This is not likely a causal relationship. It is more probable that conservative states are more likely to spend less on welfare and to have strict balanced-budget rules.

Where taxes are earmarked for specific activities, one would expect spending to be most affected for those activities where earmarking provides for most of the budget. The effect is likely to be positive in such instances, because lobbyists for the activity will be strongly motivated to work for increases in the earmarked tax. In most states, highway expenditures are almost entirely financed by gasoline taxes and by federal grants that are also financed by gasoline taxes. Although earmarking often occurs for social welfare–type activities, it typically finances only a small portion of the activity. One would expect that regular appropriations actions are much more important than earmarking to the level of spending on such activities and, therefore, earmarking does not provide any advantage to welfare spending.

These conclusions gain support from an analysis by Dye and McGuire (1992) that indicates no impact from earmarking on total state spending, but some effects on spending for highways and assistance to localities. If some types of spending are enhanced while the total is unaffected, those activities not enhanced by earmarking—including welfare spending—must suffer.

Notes

1. It is interesting to note that in the new world of TANF block grants for welfare, more states are adopting Earned Income Tax Credits (EITC) as a substitute for traditional welfare payments. In some states (e.g., Colorado), payment of the EITC is contingent on the overall budget situation.

2. For state reactions to recessions, see Poterba 1994.

3. The dependent variables used in this analysis were public welfare and AFDC spending elasticities. The independent variables included were personal income per capita; state poverty rate; state tax collections per capita; party of the governor (Democrat = 1, Republican = 0); majority party of the upper legislative house (Democrat = 1, Republican = 0); majority party of the lower legislative house (Democrat = 1, Republican = 0); requirement to balance the actual budget (rule against deficit carryover = 1, no rule = 0); any kind of TEL (any TEL = 1, no TEL = 0); and states with a TEL based on a measure of income (income-based TEL = 1, no income-based TEL = 0). The dependent elasticity variables are from Dye and McGuire (1999). See table 5 for the source of the independent variables. See the next section ("Tax and Expenditure Limitations") for a discussion of the reasons for separating any TEL from TELs based on income.

References

Advisory Commission on Intergovernmental Relations. 1992. *Significant Features of Fiscal Federalism, 1992 Edition*, vol. 1. Washington, D.C.: Advisory Commission on Intergovernmental Relations.

Brennan, Goeffrey, and Buchanan, James M. 1977. “Towards a Tax Constitution for Leviathan.” *Journal of Public Economics* 8: 255–73.

Dye, Richard F., and Therese J. McGuire. 1992. “The Effect of Earmarked Revenues on the Level and Composition of Expenditures.” *Public Finance Quarterly* 20 (4): 543–56.

———. 1999. *State Fiscal Systems and Business Cycles: Implications for State Welfare Spending When the Next Recession Occurs*. Washington, D.C.: The Urban Institute. *Assessing the New Federalism* Discussion Paper No. 99-4.

Galles, Gary M., and Robert L. Sexton. 1998. “A Tale of Two Tax Jurisdictions: The Surprising Effects of California’s Proposition 13 and Massachusetts’ Proposition 2½.” *American Journal of Economics and Sociology* 57(2): 123–33.

Goldstein, Morris, and Geoffrey Woglom. 1992. “Market-Based Fiscal Discipline in Monetary Unions: Evidence from the U.S. Municipal Bond Market.” In *Establishing a Central Bank: Issues in Europe and Lessons from the United States*, edited by Matthew B. Canzoneri, Vittorio Grilli, and Paul R. Masson. Cambridge, U.K.: Cambridge University Press.

Joyce, Philip G., and Daniel R. Mullens. 1991. “The Changing Fiscal Structure of the State and Local Public Sector: The Impact of Tax and Expenditure Limitations.” *Public Administration Review* 51 (3): 240–53.

Lowry, Robert C., and James E. Alt. 1995. “A Visible Hand? Intertemporal Efficiency, Costly Information, and Market-Based Enforcement of Balanced Budget Laws.” Harvard University, Department of Government. Mimeographed.

National Association of State Budget Officers (NASBO). 1999. “Budget Processes in the States.” http://www.nasbo.org/pubs/bupro99.pdf. (Accessed November 22, 2000.)

National Conference of State Legislatures. 1996. “State Balanced Budget Requirements: Provisions and Practice.” http://www.ncs.org/programs/fiscal/balbud2a.htm. (Accessed December 1, 2000.)

Niskanen, William A., Jr. 1971. *Bureaucracy and Representative Government*. Chicago: Aldine-Atherton.

Pérez, Arturo, and Ronald Snell. 1995. *Earmarking State Taxes*, 3d ed. Washington, D.C.: National Conference of State Legislatures.

Poterba, James M. 1994. “State Responses to Fiscal Crises: The Effects of Budgetary Institutions and Politics.” *Journal of Political Economy* 102 (4): 799–821.

———. 1996. *Do Budget Rules Work?* NBER Working Paper No. 5550. Cambridge, Mass.: National Bureau of Economic Research.

Rogers, Diane Lim, and John H. Rogers. 2000. “Political Competition and State Government Size: Do Tighter Elections Produce Looser Budgets?” *Public Choice* 105 (1–2): 1–21.

Rogers, Diane Lim, and Alan Weil. 2000. "Welfare Reform and the Role of Tax Policy." *National Tax Journal* 53 (3): 385–402.

Savage, James D. 1988. *Balanced Budgets and American Politics.* Ithaca, N.Y.: Cornell University Press.

Sen, Amartyn. 1999. "The Possibility of Social Choice." *The American Economic Review* 89 (3): 349–78.

Skidmore, Mark, and James Alm. 1994. "Voting on Tax and Expenditure Limitations." Northern Illinois University, Department of Economics. Mimeographed.

Snell, Ronald K. 1996. "State Balanced Budget Requirements: Provisions and Practice." Denver, Colo.: National Conference of State Legislatures.

About the Authors

Rudolph G. Penner, an internationally known authority on government budgeting and public finance, holds the Arjay and Frances Miller Chair in Public Policy at the Urban Institute. He directed the U.S. Congressional Budget Office from 1983 to 1987 and has had a distinguished career as a senior government official at the Council of Economic Advisers and the U.S. Department of Housing and Urban Development. Dr. Penner has also served as chief economist at the Office of Management and Budget and has taught at several universities, including the University of Rochester and Princeton University.

Michael Weisner was a research assistant at the Urban Institute when this paper was written. He now works as a consultant in New York, helping nonprofit organizations best use the Internet.

The Urban Institute
2100 M Street, N.W.
Washington, D.C. 20037

Phone: 202.833.7200
Fax: 202.429.0687
E-Mail: paffairs@ui.urban.org
http://www.urban.org

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