

Rules, institutions, and behavior in controlling government spending

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I. Introduction

Over the past twenty years, political scientists and economists have turned increasingly-sophisticated attention to the empirics of “budgetary control,” and by that we mean the analysis of the effects of constitutional and/or statutory rules on spending and taxing choices in the American states.¹ Even lawyers are now analysts in the game.²

Post-1990 works (Crain and Miller 1990, Poterba 1994 and 1996, Alt et al. 1996, Lowery 1998, Alt et al. 2002) appear to find important consequences of rules on spending. These findings rival and conflict with the earlier and more conventional path of both economists and political scientists who investigated this topic and who found, variously, erratic, small, or no effects at all for rules that they examined (Nice 1983, Abney and Lauth 1985, Abrams and Dougan 1986, Alm and Evers 1991, Berch 1992). However, the post-1990 analysts used quite sophisticated tools of statistical analysis; they ordinarily employed larger frames of over-time, panel data; and they often altered the dependent variables of interest. The earlier generation, those who were skeptical about the size and nature of the impact of institutional constraints on governmental practices and outcomes, based their analyses on more limited data, ordinarily used simpler statistical tools, and were particularly interested in the impact of rules such as the item veto on constraining overall government spending.³

¹ In parts of sections I and II of this article, we draw on material that originally appeared in the concluding sections of Winters (1999, pp. 335-345).

² See Briffault 1996.

³ The post-1990 research focused on more difficult-to-get-at, but especially intriguing budget formulations such as how rules might increase the speed of budget adjustments and how rules might shape the mix of budget cuts, tax increases, and deficit spending (Poterba 1994 and 1996, Alt et al. 1996, Lowery 1998, Alt et al. 2002). Another possible focus, and an almost unexamined one, is the impact of rules on the *mix* of dampened spending. Very little evidence is available on the impact of how rules might shape the *nature or composition* of expenditure cuts or tax increases (except for Nice 1983). For example, in states with strong item-veto-empowered governors (to be defined shortly), there is little reason to believe that the post-cut executive-approved budget will accurately

At the outset, scholarly interest was in the impact of rules on dampening spending (Nice 1983, Abney and Lauth 1985, Abrams and Dougan 1986, Alm and Evers 1991, Berch 1992, Crain and Miller 1990). Rules such as biennial budgeting, constitutional balanced budget requirement and the item veto, it was hypothesized, ought to attenuate the size of the budget increment. The need to balance a biennial budget now for two years out and if the constitution mandates “balance” now and therefore lacking the ability to obligate future lawmakers via debt should constrain the present generation of legislators. Or, the item-veto-empowered executive, who represents the median voter, will have little interest in legislative logrolling and thus, she will strike from the budget egregious local-constituency-indulging spending.

The timing of these studies was not accidental: Just about all had a policy implication tone, more so with economists than political scientists.⁴ The issue at hand was how best to control spending, and while the ultimate policy focus might have been on Federal spending, the practical policy question was whether practices in the American states might gain some purchase on the larger, Federal issue. President Ronald Reagan helped popularize the issue by touting the public-thrift value of the item veto by invidiously comparing his presidential powers with that of his powers as Governor of California.⁵

What does make the American states so arresting for politico-economic analysis of the effects of rules is that 49 of the 50 states have varied configurations of budget-balancing devices with one

reflect the pre-cut legislative-submitted one. The imputation has always been that the “redistribution” pre- to post-item-veto is largely driven by geographic constituency considerations. There may be, and surely are, partisan and policy traits to the pre-veto vs. post-veto mix. Furthermore, as Dearden and Husted (1991) point out, if the line item veto is used to affect the composition of the budget rather than its size, then its effect may go unnoticed in the aggregate.

⁴ Crain and Miller are the focus of our attention here. As Crain’s web site notes, “during the Reagan Administration, Dr. Crain was Special Assistant to the Director at the U.S. Office of Management and Budget (1987-88).” Miller’s site notes that he “was the Director of the U.S. Office of Management and Budget from 1985 to 1988, and Chairman of the U.S. Federal Trade Commission from 1981 to 1985. During 1981, he was Administrator of the Office of Information and Regulatory Affairs at the U.S. Office of Management and Budget and Executive Director of the Presidential Task Force on Regulatory Relief.”

⁵ In fairness, we point out that Al Gore was an advocate for *biennial* Federal budgeting with its suggested salutary impact on size of the budget.

state as the “outlier” with virtually no “rules” constraining spending. Indeed, the most-often-encountered passage in this literature is that “. . . all states – *with the exception of Vermont* – have a constitutional or statutory requirement for a balanced budget.”⁶

For our purposes and for a number of reasons, the most intriguing post-1990 analysis is that of economists W. Mark Crain and James Miller III, who examined spending in three successive early 1980s biennia in the 50 states. Of the articles in this genre, it is the most accessible statistically and most simply argued. Secondly, Crain and Miller (hereafter, C&M) focus on the conventional variable of dampened spending. Third, they make broad claims. They examine seven common rules -- the presence of an “item-reduction veto; number of budget bills, budget bill format, non-appropriated funds in budget, super-majority for tax increase; constitutional balanced budget requirement; and separate legislative budget . . . “ (1034-5) -- and find astonishingly robust results. In their simpler models, all but the “number of budget bills” variable has some independent and significant impact on constraining spending. For political scientists, these results appear almost too perfect to be representative of established state political behavior.

The present manuscript has two purposes. First, we are interested in the simple question of rules effects on spending. We ask: Can the Crain and Miller results be replicated, and are the results robust with respect to the addition of a few simple controls or modest alterations in assumptions? Secondly, it may be that the 1979-1986 period that they studied was not at all representative of American state budgeting practices. Are their results extendable? Do constitutional and statutory rules continue to have impact past the budget-tortured early 1980s into the later decade boom times, then bust, then boom again as we course through the late-1980s and 1990s.

Our paper is set out as follows: Part II reviews the budget rules that C&M examine – with the added distinction of annual vs. biennial budgeting. We examine and set out the logic of the impact of each rule on dampening spending. In Part III, we reconstruct and endeavor to replicate

⁶ Anecdotal evidence about Vermont’s profligate fiscal habits is, of course, consistent with this literature. The Advisory Commission on Intergovernmental Relations finds that Vermont has the *least stringent* of all state balanced budget requirements with a score of “0.” It also, not surprisingly, ranks third among the states in state tax revenues collected as a percent of personal income. Counter-balancing, and the usually *not-cited anecdote*, is that its Connecticut River penurious twin state of New Hampshire has the *second lowest* “stringency score” with a “2” and ranks 50th among the states in tax collections. Much more than constitutional and statutory rules and bounds are at work here.

C&M's analysis on state spending for the 1979 to 1986 period. In Part IV, we extend and range C&M's analysis across the 1979-2000 time period. If budget rules operate as hypothesized, we should be able to construct a data set that reflects the rules dampening spending and that controls for time (time period binary variables), as well as regional effects (via a series of regional binaries). We conclude in Part V.

II. Controlling spending by budgeting rules:

Over the past century and a half the American states have compiled a fascinating record of experimentation in the rules and practices that shape their spending and taxing. Innovations that are now commonplace—for example, the "executive budget"—were, at their time of origin, self-consciously designed experiments. Others, like the item veto, originated in nineteenth-century American constitutions. The item veto, interestingly enough, had its origin in the constitution of the Confederate States of America.⁷ Others such as tax and expenditure limitations usually welled-up from below via the states' own initiative and referendum processes.

State governments vary dramatically in the variety and range of "controls" on general government spending. The constitutional and statutory "controls" that we investigate in this paper include all of those examined in Crain and Miller and in agreement with their predictions:

- item reduction veto devices should reduce spending;
- omnibus budget bills should enlarge spending;
- highly "specific" legislative budgeting practices should enlarge spending;
- the presence of non-appropriated, off-budget items engorges budgets;
- legislative super-majority for tax votes dampen spending;
- constitutional balanced budget requirement constrains spending;
- biennial vs. annual spending decisions constrains spending.

Many of these institutional devices themselves vary – the range and combinations of item and line-item-reduction veto devices and balanced budget rules are the best-known examples of such "micro-rules." And, as we will note, there is substantial variation across the states in these rules.

⁷ For those interested in historical minutiae, see the fascinating discussion on the origin of the item veto in U. S. House of Representatives (1986).

The Item Veto and the Item Reduction Veto: Of the budgeting characteristics among the states, the structure and practice of gubernatorial vetoes has most interested citizens and scholars. Forty-three states have some form of item veto.⁸ Forty-one allow an item veto on appropriations.⁹ Several scholars have studied the use of the item veto in the American states in expectation of establishing evidence of its efficacy (Abney and Lauth 1985; Alm and Evers 1991; Berch 1992; Fisher 1997b; Nice 1988). The conclusion of most state studies, however, is that the item veto has a negligible impact on total or aggregate spending in the states. States in which the governor is empowered to burrow into the budget and selectively cut it do not seem to have appreciably smaller budgets than states with less-empowered governors. Alm and Evers (1991), generally confirming other studies, did note a very small effect -- about 1 percent smaller than expected budget -- when the governor was of one party and the legislature of the other. However, much more supportive are Crain and Miller (1990) who noted that of the forty-three governors with item vetoes, ten of them have the power of the "item reduction veto," the power to "write in a lower spending level or veto the entire item" (1034). In their analysis of state spending, they discover significant impacts of the item reduction veto on the total size of state budgets (1041-1042).¹⁰

The finding that the governor's *general* item veto had little or no overall impact is most often explained as a simple causal process -- the item veto sets up a situation in which governors and legislatures engage in sophisticated games. If the legislature prefers a larger amount of spending, it will pad, or increase, the amount it desires to allot to an item in an effort to preserve it from an item reduction veto. Or another method of padding is to combine line items liked by the governor with line items that are not favored, which usually will mean that both items are preserved. Under the condition of divided partisan control of the government the stakes and sophistication of the games may well increase. Legislatures heighten their efforts to protect favored programs, and governors subject the budget to even greater scrutiny and broader excision, thereby reducing

⁸ States without the item veto are AL, IN, MD, NV, NH, NC, RI, and VT; see NASBO, 1999, pp. 29.

⁹ Utah and Virginia appear to distinguish between statutory and appropriations bills, see NASBO, 1999, pp. 29.

¹⁰ Nevertheless, there does not appear to be complete agreement on which states have governors with the power to "reduce" or "substitute" numbers and language in appropriations bills. I have appended to this paper five different sources with five variations on lists of empowered executive offices.

slightly the overall budget. Nevertheless, the ten or so states which empower governors with the capacity to write in new, smaller amounts may well demonstrate, on balance, smaller budgets.¹¹

Omnibus Versus Multiple Budget Bills: About one-half of the states adopt a single operating budget, and the remaining have varying practices (Crain and Miller 1990, 1025-1027). The conventional wisdom holds that as the number of budget bills handled by a legislature shrink to one omnibus bill, it should be more and more difficult to amass a successful coalition to oppose the bill.¹² In most years, the budget bill is among the very last bills considered by the legislative chambers, usually right before the start of the new fiscal year.¹³ This leads to strong pressures mobilized on each legislator to pass the budget and the pressures multiply in enforcing support of a single omnibus act. Furthermore, as an omnibus bill “engorges” it is more and more difficult for legislators to gain information so as to discern items of which they may oppose.¹⁴ From their point of view, legislators have before them a budget bill with many items of which they approve, even though there may be some items of which they strongly disapprove. An all-or-nothing omnibus budget bill strategy, then, coming to vote at adjournment time, should lead to budget enlargement as more and more items that could not possibly win approval on their own or as part of a divided, smaller, more numerous and earlier appropriations get inserted into the omnibus bill for this very reason and win approval as part of this larger budget act.

We would expect, then, that as the number of appropriations bills considered shrinks in a state legislature, with the limit approaching the single act, the budget gets larger.¹⁵ Crain and Miller

¹¹ Budget-reduction gamesmanship reached new heights (or depths) when Gov. Tommy Thompson of Wisconsin “vetoed words, including ‘shalt’ and ‘not,’ punctuation such as commas and periods, and ‘then cobbled together the surviving words into whole new sentences—and new law’” (Beyle 1994,44).

¹² The relevance to the Federal practice is clear here. More and more often in Congress, the budget is passed in fewer and fewer bills.

¹³ Practice varies among the states in the tardiness of the budget bill. Anecdotal observation suggests that the budget bill is the last to be passed for strategic reasons suggested above, but also for reasons of difficulty to coming to agreement which appears to be exacerbated in large states. Casual observation suggests that New York is the egregious outlier in these regards.

¹⁴ As Krutz (2001, 211) points out, 98% of Congressional omnibus bills get passed. He notes that variation does not occur in success or failure rates of omnibus bills, but rather in variations in the nature of the “beast.”

¹⁵ There probably is a limit in the opposing direction: As the number of separate spending bills considered by the legislature increases, the amount of time and energy and

(1990, 1042) in their examination of the fifty states over the 1979-1986 period found weak but predictable effects of omnibus bill characteristics and greater spending.

Specificity vs. “lumpiness” in legislative budgeting activities: There are many possible ways of formatting the budget document, and as the amount of legislative “detail” rises, the greater the ability of the legislature to write into the document specifics about desired outlays. There appear to be four broad styles of budgeting practices in the states. Some states exploit all four approaches – budgeting via “lump-sum” appropriations, through “organizational/departmental review,” or by examining “program/service level” spending, or writing the budget via “object classification.” This latter activity is defined by the National Association of Budget Officers as the “analysis of obligations and expenditures according to types of services, articles, or other items involved, e.g., personal services, supplies and materials and equipment, as distinguished from the purposes for which such obligations are incurred” (1987, 40). In the 1987 NASBO report (p. 13, column 3), twenty-two of the states employed the “object classification” practice which we interpret as endowing the legislature with broad powers to write into the budget precisely what members want.¹⁶ According to C&M, the greater the empowerment that is provided by such specificity, the larger the budget is expected to be.

Non-appropriated programs and “uncontrollable” spending: “Controllability” of spending has been a longstanding issue in American governments (e.g. Derthick 1975). State governments, of course, benefit from the “uncontrollable” in others’ budgets, e.g. the matching grant programs from the Federal government. But many states do not engage in regular budgeting for the entirety of their spending. States distribute themselves in an interesting fashion in this trait. According to the National Association of Budget Officers, some twenty-one states appropriate the entirety of their budgets in an annual or biennial budget bill. The remaining states have various distributions of what is defined as “...non-appropriated, non-Federal funds.” While we do not have a good fix on is the precise fraction of state government spending that is not up for annual review, we can measure the simple existence of the presence of such funds by a binary variable. The causal

coordination costs devoted to appropriations politics increases with associated political and personal costs.

¹⁶ An official of NASBO in conversation with one of the authors agreed that the “object classification” practice was the most “specific” of the legislative appraisals of the budget (personal communication).

direction should be straightforward – the existence of non-appropriated funds should enlarge government spending.

Legislative super-majority for tax increases: An unusual assortment of states require anywhere from 60% to 75% of the elected legislators to pass various assortments of tax increases.

California, Louisiana, Mississippi, and South Dakota appear to have longstanding requirements for 2/3rds vote required for tax increases. Delaware requires a 60% vote. For the last decade, Colorado, via its initiative-passed “Taxpayer’s Bill of Rights” (TABOR) requires a popular vote for tax increases. At the outset of the time frame of this analysis, seven states had some sort of super-majority regulation. By the 1990s, twelve had enacted such provisions. Super-majorities required for tax increase should dampen the growth of spending.¹⁷

Balanced Budget Rules: “All states except Vermont have either a statutory or constitutional requirement for a balanced budget (C&M 1029).” While eighteen states do not require that the final budget signed by the governor be balanced, all states, except for Vermont, have some sort of statutory or constitutional budget requirement for balance at either the stage of the gubernatorial budget, the legislative budget, or on final passage. The constitutions of twenty-four states require final legislative passage and gubernatorial approval of a balanced budget. In eight states the necessity for a final balanced budget is a weaker, statutory requirement (CSG 1992, 355-356). California, for example, constitutionally requires that the governor submit a balanced budget; it does not require that the final budget itself be balanced. Conversely, Colorado does not require gubernatorial submission of a balanced budget, but it does require that the budget passed by the legislature with final gubernatorial action be balanced. Many states require that the budget be balanced at all three stages: submission of governor's budget, submission of legislative budget, and final passage with gubernatorial approval. This process forces revelation of spending and taxing preferences of the governor and legislature, and mandates that their preferences ultimately be reconciled.

In assessing various rules, Poterba (1994, 1995) concluded that as the balanced budget rules increased in stringency, the likelihood of borrowing dropped and expenditure cuts or tax increases

¹⁷ See New (2002) for an excellent analysis of tax and expenditure limitations.

were more likely to be employed to regain balance. The alternative hypothesis—that these rules could and would be ignored or circumvented—is unsupported by the evidence.¹⁸

The statutory requirement for a legislative balanced budget would seem to be a toothless tiger – the budget bill could contain a rider waiving the statutory requirement. However, the constitutional requirement for such a budget may well have some clout, especially as it may be backed up by state court behavior.¹⁹ Thus, the constitutional requirement of “balance” should have a detectable impact on spending.

Annual Versus Biennial Appropriations: Historically, most states passed a budget that legislated spending for the two-year period that corresponded with the legislative session—the biennium. Over time, the number of states that budgeted biennially shrank from forty-four in 1940 to about ten or so in 1995 (ACIR 1995, 4-5; Kearns 1993,42). But that figure may increase because the debate over the wisdom of biennial versus annual budgeting continues to flare in the states. It is an object of reform interest at the federal level, too (Fisher 1997a). Many argue that legislative consideration and passage of a two-year statute appropriating funds leads to smaller budgets. The logic is that biennial budgets are more certain and fixed, whereas annual budgets are more flexible, and "flexible" in budgeting invariably is “upwards.” If agency officials know they can plan for serial, annual rounds of budgeting, they will organize their agency's operations in such a way so as to increase pressure on legislators to approve increased spending. Pressures two years out are harder to organize and legislators are apt to react conservatively in the absence of these pressures, thus leading to lowered levels of spending.

Biennial budgeting would probably enhance executive influence at the expense of the legislature, another dampening effect on spending (Fisher 1997a, 93-94). In the more uncertain situation of biennial budgeting, legislators and governors are more likely to act in risk-averse fashion. Not knowing what the inflation rate will be, or how personal income or consumption spending will change -- key determinants of the income and sales taxes -- will lead political leaders to take the safer, more conservative courses of constrained spending. Finally, there should be some savings

¹⁸ Alt and Lowry found that budget rules were more effective when a Republican administration was in office. In their words, "institutions matter, and party control matters" (1994, 823)

from smaller numbers of people involved and less effort required to produce one budget every two years versus one every year (Fisher 1997a; Kearns 1993). And, as predicted, there does appear to be some evidence that states with annual budgets spend more (Kearns 1993, 54).

III. Replicating the 1981-1985 Crain and Miller study

Dependent variable: The dependent variable of C&M's and our interest in Part III is the change in total general expenditure in the states across the three biennia from the 1979-80 to 1985-1986 deflated using the "state and local government consumption expenditures" price index.²⁰ The precise form of the dependent variable that was employed in C&M and used in Table 1 is not immediately obvious from their text. It is the *average* of the three deflated "biennium-to-biennium change in percent spending." Thus, the N in their tables, and in our Tables equals the 50 averages of 50 x 3-period changes in spending from biennium to biennium from the 1979-80 to 1981-82 and so on.²¹ The logic in place of C&M's argument is that over a period of time, states with constraining rules will demonstrate smaller average sums of changes in general expenditures that reflects long-running budgetary behavior – long-running being the 1979-1986 period.²²

¹⁹ One analyst concludes that the existence of an independently-elected state Supreme Court with its implicit threat of an independent actor enforcing rules is an important institutional trait constraining state spending (Bohn and Inman 1996).

²⁰ Excluded expenditures are public utilities, liquor stores and insurance trust. This is the commonly used measure of state outlays; see, for example, Alt and Lowry and Poterba. Total general government spending was obtained from the Census Bureau files on *State Government Finances* at <http://www.census.gov/govs/www/state.html>, and for earlier years, in print. The price index was obtained from the 2001 Economic Report of the President, table B-7. Real personal income data was obtained from the State Policy and Policy Data bank at <http://www.unl.edu/SPPQ/datasets.html>

²¹ There is substantial variability in the "average change in government spending." Changes from biennia to biennia in this period averaged 3.5% with the range of -3.0% to an average change of 12.5%. This latter figure and the next highest were recorded by Wyoming and Alaska, well known outliers highly dependent on severance taxes that both export their tax burdens, but also are highly volatile. States that experienced the greatest budget travail are Kentucky with average changes of -3.0% and Hawaii at -2.0% across the four biennia. On the regressions that we report we did drop Alaska and Wyoming (and Hawaii) to test for sensitivity to outlying cases, but little in the way of effects followed.

²² Their procedure was not obvious to us at first glance. They note, "[t]o capture the effects of longer-run budgetary behavior, we estimate the models using the average

Control variable: Crain and Miller employed a non-obvious control in their regressions, the change in spending from the 1979-80 to the 1981-82 biennia, defined as the “growth rate in spending in the initial period” (1039). We are unconvinced that this control variable is appropriate. While used as a control, it also constitutes one-third of the average values reflected in the dependent variable. In “Replication II” in Table 1, we use what we believe to be a more appropriate control, the spending change from the 1977-78 to 1979-80 biennia, the period before the “run” of the dependent variable. This represents the average change in the period prior to, but not part of, the era under examination in the dependent variable.

Independent variables (and imputed casual direction): The number of budget bills (-) is entered as the simple number of the maximum indicated of budget bills considered per annum, according to the data source.²³ The number, consistent with Crain and Miller coding, varies from 1 to 350.²⁴ Non-appropriated programs (+) is also coded as equaling “1” if a state has “non-appropriated, non-Federal funds.”²⁵ The existence of a legislative super-majority (-) is also denoted as a binary variable, where 1 = the existence of the super-majority requirement.²⁶ The constitutional requirement for a balanced budget (-) is entered as a binary variable = 1, in the presence of such a requirement.²⁷ Our measure of the item reduction veto (-) like Crain and Miller relies on the

biennial percentage change in spending over the three full cycles from 1979 through 1986.”

²³ As coded in NCSL, 1988, pp. 49-50. This coding appears to be closest to that of C&M. They note that the “average state” had about 30 budget bills (1026). The average for the states that we obtain is 27.5.

²⁴ We should note that the median state has 3 bills and the standard deviation is 65. In subsequent statistical analyses, we tried normalizing the variable via log transformations with no interesting results.

²⁵ As indicated in NASBO, 1987, Table C, p. 4, final column.

²⁶ The initial coding appears in ACIR, 1985-86 edition, Table 99, p. 164. Data for subsequent years was updated courtesy of W. Mark Crain and verified in NASBO, 1999 and 2002.

²⁷ There is disagreement in C&M on exactly what constitutes a “constitutional balanced budget requirement.” On p. 1029, “[T]wenty-five states have requirements for balanced state budgets.” At the cited ACIR source, a table with eight columns of data, the only data with 25 states coded with a constitutional restriction is for “state cannot carry over a deficit into next fiscal year” (see column (8). However, in C&M at 1042, “our data . . . is split into two groups: those states that have a constitutional balanced budget requirement (thirty-one states) and those that do not (nineteen states).” The source cited for that distinction, ACIR, M-146, p. 40, contains temporal data on state and federal taxes. The only distinction that I could discover that has the correct distribution of 31 and 19 states

ACIR (1985-86, 152) coding. Budget specificity (+) is coded as final appropriations bill that are “object classification” in format.²⁸

We also examine types of biennial budgeting. Appendix 1 displays the variety of definitions of “biennial budgeting.” According to the National Council of State Legislators, for this period, twenty-nine of the states met annually and budgeted annually (+). Such frequent meetings enhance the possibility of tweaking spending upwards. The remaining twenty-one putatively budgeted biennially (-), and we expect this to be associated with smaller rates of spending change. Eight of these states budgeted biennially and met biennially (-) which also should be reflected in reduced spending. Finally, for this period, three states had biennial budgets, biennial appropriations and without the possibility of review (-) and this should be associated with smaller spending changes.

Let’s first turn to a simple replication of C&M’s findings. In column 1 of Table 1, we reproduce the published results of “Model B” of their Table 1 (1040). Column (2) of Table 1 holds the results of our replication of C&M’s analysis. We have highlighted the significant coefficients in each regression in bold.

C&M argue that states with the item reduction veto and that have a super-majority required for tax increases,²⁹ have lower average percentage changes in expenditures, while states with specific and, therefore manipulable, budget formats and that have chunks of non-appropriated, and thus, non-reviewed, spending tend to have higher average such levels. And as column (1) of Table 1 indicates, their results appear to lend substantial statistical support for these findings. For

is that the “legislature must pass balanced budget” by constitutional fiat, see ACIR, 1992, M-180, Table 3, p. 6, 4th column, coded as “C”. In the end, by our calculations, the distinction is irrelevant; neither appears to have an impact on spending growth.

²⁸ There is ambiguity on how “budget specificity” was coded in C&M. As represented in the source, NASBO, 1987, Table I, column 3, records four possible “budget formats contained in . . . final appropriation bill.” These consist of formatting the budget document according to “object classification,” and/or by “organizational unit/department” by “lump sum,” and/or by “program/service level.” We coded all states where the “object classification” practice was observed as having “specific budget formats.” This coding appears to be consistent with the definition in the glossary (see pp. 39-41) as well as budget practice that the second author has observed in practice in NH and VT.

²⁹ While they denote a .10 significance level for this coefficient, the table also indicates a t-ratio of 1.10. It is not clear which is in error.

example, having the item reduction veto, *ceteris paribus*, is expected to lead to a 2.7% smaller change in spending, while having a legislature empowered to make highly specific budget changes leads to a 3.3% larger budget.

Table 1 here

Substantially different results were obtained in our replication. Let's examine, first, those items that appear to be consistent. We lack information on C&M's data such as means and range of variables, thus we cannot assess the chance that we may be measuring fundamentally different things,³⁰ but the coefficients on "growth rate of spending in initial period" are close at .354 with a similar standard error. Further the standard errors of estimates also appear similar. The R²s range in the same ballpark. Finally, the results for the dummy variable for "non-appropriated funds in budget" are also similar. The other coefficients are not at all like one another. C&M established significant results for the item reduction veto, budget bill format, and super-majority for increasing taxes. The replication could not establish that level of confidence and the item reduction veto in our analysis had an incorrect sign. Our results were even more dismal in Replication II, where we substituted the more appropriate "prior period" control for C&M's "within-period" control variable. The regression estimates deteriorated. The only conclusion that we hold with confidence from our data analysis is that states that do not undergo 100% review of their programs, i.e. those with "non-appropriated funds in budget" do, in fact, experience higher rates of spending growth, on average.³¹

C&M also argue that institutional rules are interdependent. Their most interesting result is represented in their Table 2 and reproduced here in columns (1) and (2) of Table 2. The fundamental argument is simple: among states without a constitutional balanced budget requirement, other budget rules such as the item reduction veto, budget format, tax super-majority requirements and numbers of budget bills all display sizable and correctly-signed coefficients.

³⁰ W. Mark Crain did share with us updated information on a number of budget rules. We could check on the item veto rule and it appears to be the same used here.

³¹ Note that the "non-appropriated funds" variable is also a binary variable. We would hold even greater confidence in this relationship had we data on the fraction of

But among those 31 states with already-existing balanced budget requirements, these rules appear inconsequential; only the existence of “uncontrollable” funds appears to have the expected positive impact. The general conclusion: a constitutional balanced budget rule is effective. Lacking such a rule, other rules such as the item-reduction veto, large numbers of budget bills, controllable spending, and generalized budget formats substitute. Thus, a fair global conclusion: Rules rule.

Table 2 here

Column (3) replicates C&M’s analysis that appears in Column (1) and Column (2) compares with (4). We point out that all four columns in this table employ what we believe to be an inappropriate control variable, the “growth rate of spending in the initial period.” [Table 3 employs the more appropriate prior period control variable.] For states with no constitutional balanced budget requirements (column (3), we find like C&M that more specific budget practices lead to higher spending, probably for reasons of increased legislative ability to write items into the budget. The existence of the super-majority rule appears to dampen spending. For the 19 states with a balanced budget requirement, we find that the other variables of uncontrollable budget items and number of budget bills predictably boost and dampen spending, respectively. Nevertheless, the bottom line from our point of view is that we are unable to adequately replicate C&M’s results. The impact of rules on spending remains for us an open question.

There are other inconsistencies, as well. The impact of the control variable, “the growth rate of spending in initial period” in column (2) row (f) of their results, if we understand C&M’s procedure correctly, appears puzzlingly low. This control variable, we believe, constitutes a third of the variation in the dependent variable. If so, the coefficient relative to what must be its unreported associated standard error -- to get a t-ratio equaling 1.07 -- appears small.

Table 3 compares the original results from C&M with results that were obtained using the “growth rate of spending in the prior period” as the control variable. Columns (1) and (2) simply reproduce those same columns from Table 2. Again, using what we believe to be a more

government direct spending that is not reviewed on a regular -- annual or biennial --

appropriate control variable, the results do not square. Lower R^2 values appear along with higher standard errors for the replication equation. And, again, only the binary variable denoting a super-majority required for increasing taxes appears to affect the average growth rate of spending in states with no constitutional requirements for a balanced budget. In those states with a balancing requirement, both the presence of non-appropriated programs and large numbers of budget bills affected spending in predictable fashion.

Table 3 here

By testing for the impact of budget rules under the opposing conditions of the presence or absence of constitutional balance requirements, we cannot, in the end, come to the same conclusions as C&M. There does appear to be some glimmer of effects at work when super-majorities are required, and with many disaggregated budget decision to be made, but the clearest impacts appear to be with non-appropriated funds. We conclude that we are unable to adequately replicate C&M's major findings. Our judgment is that the *simple* impact of rules on highly aggregate spending outcomes is suspect.

The impact of biennial budgeting on spending: Crain and Miller chose to average the spending over the biennium, in part to control for the biennial vs. annual distinction. However, these different temporal practices are traits of interest. We tried four formulations of the concept of "biennial budgeting": (a) a binary variable denoting all states which biennially budget (N=21); (b) a binary for states with biennial budgets and biennial legislative sessions (N=8); (c) states with biennial sessions and biennial *appropriations* (N=6); and (d) a binary for those states with biennial budgets, biennial appropriations, and without the possibility of intertemporal review (N=3). We inserted these variables serially and then together in an equation with those variables represented in Table 1, column (3). In the equation, of the four possible configurations, only distinctions (b) and (c) had the expected negative signs both when examined individually and collectively, although neither was significant.³²

basis.

³² Being a state that "budgets biennially and that meets biennially" is associated with 1% less spending ($t = .98$), while the binary associated with biennial budgets and larger-sum

Table 4 here

We conclude that the budgeting rule of “biennial budgeting” is a more powerful rhetorical issue than empirical one.

IV. Extending the Crain and Miller study from 1977-78 to 1999-00:

Over the past twenty years, reaching back to the period when C&M collected their data, there has been some constants and substantial change in the independent variables of interest. So far as we can determine, no state has adopted an “item reduction veto” device in the 1979-2000 period. However, several states have changed their super-majority requirements for tax increases and well as changed their annual/biennial session requirements. Thus, we extend the “averaging model” as set out by C&M to a design that has traits of a pooled cross-sectional design.

The basis of the dependent variable remains the same the change from biennia to biennia of the biennia average total general expenditure from the 1977-78 to 1999-2000 and deflated using the “state and local government consumption expenditures” price index. This yields from the 1977-78 to the 1999-2000 periods, eleven sets of observations per state. We add dummy variables for time periods for each of the biennia (except for the “77-78 to 79-80” time period which is the excluded category), and we include binary variables for seven regions: south, border, west, New England, atlantic, midwest, and plains. The omitted states are the mountain west states.

The independent variables remain generally defined as above. So far as we can determine, no states adopted an item veto reduction device, so that remains constant across the time period. W. Mark Crain kindly sent his current data set which indicates that the variable of legislative super majority required does indicate change; AZ, CO, DE, OK, OR, and WA all experienced inter-period changes which are incorporated in the data.

biennial appropriating is reflected in a 1.1% diminished spending increase ($t = 1.16$). When all four distinctions are lumped together in a regression, both have slightly greater and negative and still insignificant coefficients.

Table 5 here

Table 5 examines the impact of the characteristics of the budgeting process on changes in state spending after controlling for region, time period, and the lagged effects of change. The overwhelming message of the table is that, considered over time and with perfectly reasonable sets of controls, budgeting rules have no impact on spending decisions. Furthermore, when the control variables – time, region, lagged percent change in spending – are systematically deleted or combined pairwise, the impact of budgeting traits on spending remain virtually unchanged.

V. Conclusion:

We do not know what accounts for the differences between C&M’s results and our results. We endeavored to put into place a good faith replication of their interesting analysis and we were unable to match their results. We do believe, however, that if their results were sufficiently robust, we would have been able to generate results that would resemble theirs. Lacking such, we are forced to come away with a reinforced sense that the simple and direct tests for the impact of “rules on spending” are difficult, and we believe, ultimately, fruitless. There is no simple and direct path from rules to institutional behavior, thus the search for positive results is misplaced effort, without a great deal of intervening effort.³³

There is much in this literature that is maddening. There are puzzling conflicts among published sources on the distribution of budget rules in the states. Appendix A to this paper lists five different sources that code the item-reduction veto powers of governors with five different sets of states. This is not an issue of temporality and coding. Insofar as we have discovered, no states have adopted or jettisoned the item veto power. There just doesn’t seem to be the level of agreement among sources that one would expect.

³³ Schaap and Carter (199X) discover no indirect effects, either, of the item veto power. While the item-veto-empowered state executive ought to be better positioned to gain campaign contributions, win re-election, achieve higher offices, and so on, they do not discover such effects.

Secondly, there may be an institution-behavior conundrum at work here. While, for example, Alabama may have a phenomenal number of budget bills up for consideration on a regular basis, the simple number of “350” may not at all reflect real behavior within the institution. We do not know the size, composition, or nature of that “number.” Nor do we know the contextual effects at work in those several states, for example, that have 6 to 10 budget bills coming up for regular review. Six budget bills in one state may be a quite different “beast” as compared with six in another state.. We need better data on the operational, practical, behavioral meaning of these rules.

Third, one of the lessons of the more recent literature as reflected in articles by Alt and colleagues and Poterba and colleagues is the linkage of institutional conflicts, partisanship, and rules. When the governor is of one party and the legislature -- split or divided -- is of the other. Data on partisan control can be easily obtained, and it is the next item on the agenda for this project. But we also argue that the role of political ideology of actors is as important. Party is an imperfect proxy in the states for the philosophy of taxing and spending. Being conservative is not just wishing to spend less. It may be wishing to spend more on some items and less on other. But lacking data on the preferences of institutional actors, or the perceived preferences of such actors, we cannot easily generalize about when and under what conditions budget rules come into play. They will be exercised when it is in the partisan or philosophical interests of actors to do so.

In subsequent versions of this paper, we hope to expand on three additional points. First, how do the application of these rules interact with partisan compositions of governors and legislatures?

Second, can we identify those cases of states or state-in-particular-eras where rules ought to matter? For example, states with strong executive item veto powers of budget reduction where partisan control is split and philosophical gaps appear to exist between actors?

Third, can we then prop up and extend the results by confirmatory interviews with actual legislative and executive branch participants? Except for an article based on mailed-questionnaires (Abney and Lauth 1997), no one has investigated the *practicing* political behavior of elected and appointive officials operating in the context of varying institutional budgetary rules.

We believe that the particular “value-added” that political scientists can bring to the debate on the impact of rules on budgetary control is establishing the *actual politics* of budgetary control. Political scientists may be best able to “unpack” the behaviors of how existing constitutional bounds and statutory rules get translated into institutional practices and behavior with consequences on spending outcomes. The imposition of boundaries and rules operating in institutions that results in less or more or different kinds of spending implies conscious impacts on political behavior of officeholders. As a result, among a set of political actors, political scientists must look for evidence of “We didn’t spend (or spent more, or spent “here”) for reasons of rules!” However, in order to identify the likely set of individuals, we need to identify states where rules appear to be operating as intended, and, we need to position ourselves so that we can get direct information from the participants about what was done, why, and to what effect.

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Table 1
Crain and Miller Results and Replications

		(1)* Crain & Miller (w/ 79-81 ctrl)	(2) Replication I (with the 79-81 ctrl)	(3) Replication II (with 77-78- ctrl)
	Hypoth. direction			
a) Item reduction veto	(-)	-0.027** (2.04)	0.004 (0.51)	0.003 (0.27)
b) Specific budget bill format	(+)	0.033** (2.20)	0.004 (0.62)	0.0004 (0.05)
c) Non-appropriated funds In budget	(+)	0.012** (2.08)	0.010* (1.59)	0.020** (2.28)
d) Super-majority required for Increasing taxes	(-)	-0.010*(sic) (1.10)	-0.012 (1.30)	-0.0014 (0.12)
e) Number of budget bills	(-)	-0.0001 (0.34)	-0.00003 (0.53)	-0.00008 (1.11)
f) Constitutional balanced Budget requirement	(-)	-0.004 (0.70)	0.003 (0.42)	-0.004 (0.51)
g) Growth rate of spending in Initial period	(+)	0.354*** (7.38)	0.359*** (6.86)	----
h) Growth rate of spending in prior period	(+)	-----	----	0.148*** (2.48)
i) Constant		0.025*** (4.34)	0.032*** (4.85)	0.026*** (2.69)
Adjusted R ²		.59	.52	.11
S.E.E.		0.020	0.021	0.028
N=		50	50	50

One-tailed tests of significance.: *.10 **=.05; ***=.01, etc.

(t-tests in parentheses)

*From Crain and Miller (1990), p. 1040

Table 5
Pooled, cross-sectional test of budget traits

Variable		coefficient	std. error	t ratio
N of budget bills	(-)	-.000001	.00004	0.03
Budget Specificity	(+)	.001	.0047	0.21
Non-appropriated funds	(+)	.0014	.0049	0.27
Super majority for taxes	(-)	.002	.0072	0.34
Const. Bal. Budget requirement	(-)	-.001	.0057	0.18
Item veto reduction power	(-)	.005	.0063	0.75
Biennial budgeting	(-)	.002	.0048	0.42
year_81		-.043***	.0100	4.33
year_83		-.009	.0098	0.95
year_85		.053***	.0099	5.37
year_87		-.010	.0106	0.94
year_89		.038***	.0100	3.77
year_91		.052***	.0105	4.95
year_93		.009	.0108	0.83
year_95		-.008	.0102	0.78
year_97		-.015*	.0100	1.48
year_99		-.044***	.0099	4.40
south		.005	.0085	0.60
border		.004	.0104	0.38
west		-.005	.0091	0.59
newengland		.011	.0093	1.14
atlantic		-.0001	.0091	0.01
midwest		.004	.0094	0.41
plains		.002	.0088	0.25
lagged percent spending change		.207	.0435***	4.75
cons		.030	.0114***	2.58

Adjusted R²= .33
S.E.E. 0.05
N= 550

One-tailed tests of significance.: *.10 **=.05; ***=.01, etc.

Appendix A: Possible variations in “item veto reduction” codings

Crain & Miller ³⁴	Hs. Rules Comm. ³⁵	NCSL ³⁶	ACIR ³⁷	NASBO ³⁸
Alaska		Alabama (substitute) Alaska	Alabama (substitute) Alaska	
California	California	California	California	Arkansas California Colorado Georgia
	Hawaii			
Illinois	Illinois	Illinois	Illinois	Illinois
Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts
Missouri	Missouri	Missouri	Missouri	Missouri
Nebraska	Nebraska	Nebraska	Nebraska	
New Jersey	New Jersey	New Jersey	New Jersey	New Jersey New Mexico Ohio
Oregon		Oregon	Oregon	
Pennsylvania		Pennsylvania	Pennsylvania	Pennsylvania
Tennessee	Tennessee	Tennessee	Tennessee	
	West Virginia	Virginia		West Virginia
		Wisconsin (revision) Wyoming	Wisconsin (revision)	

³⁴ From information provided by W. Mark Crain, available from the author.

³⁵ Committee on Rules, U. S. House of Representatives, 99th Congress. *Item Veto: State Experience and Its Application to the Federal Situation*. Table 1, p. 48-49

³⁶ NCSL, 1988. Table VII-2, pp. 84-85, in column titled, “power to reduce ... or substitute....”

³⁷ ACIR, 1985-1986, Table 93, p. 152.

³⁸ NASBO. 1999. Table J, p. 29. Coded for “item veto of selected words,” and “item veto to change meaning of words.”

Appendix B: Possible Annual vs, Biennial Spending Distinctions

(1) States with annual legislative sessions and that budget annually (N=29):

Alabama	Delaware	Maryland	New Jersey	South Carolina
Alaska	Georgia	Mass.	New Mexico	South Dakota
Arizona	Idaho	Michigan	New York	Tennessee
California	Illinois	Mississippi	Oklahoma	Utah
Colorado	Kansas	Missouri	Pennsylvania	W. Virginia
Connecticut	Louisiana	Nebraska	Rhode Island	

(2) States that budget biennially, meet annually or biennially (N=21):

Arkansas	Iowa	Montana	North Dakota	Vermont
Florida	Kentucky	Nevada	Ohio	Virginia
Hawaii	Maine	New Hamp.	Oregon	Washington
Indiana	Minnesota	North Carolina	Texas	Wisconsin
				Wyoming

(3) States with annual legislative sessions but with biennial budget cycles (N=13):

Florida	Maine	Ohio	Washington
Hawaii	Minnesota	Vermont	Wisconsin
Indiana	New Hamp.	Virginia	Wyoming
Iowa			

(4) States with biennial legislative sessions, and that budget biennially (N=8):

Arkansas	Montana	North Carolina	Oregon
Kentucky	Nevada	North Dakota	Texas

(5) States with biennial budgets and biennial appropriations (N=6) :

North Carolina	Oregon	Washington
North Dakota	Texas	Wyoming

(6) Of those states in (5) above, those with biennial budgets, biennial appropriations, but without annual review (N=3):

North Dakota	Oregon	Texas
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(Source, ACIR, p. 128)

Table 2: Models Compared: Controlling for a Constitutional Balanced Budget Requirement

		(1) [#] Crain & Miller With no Const.Req.)	(2) [#] Crain & Miller (With Const.Req.)	(3) Replication I With no Const.Req.)	(4) Replication I (With Const.Req.)
	Hypoth. direction				
a) Item reduction veto	(-)	-0.062*** (3.86)	-0.002 (0.11)	0.005 (0.40)	.012 (1.25)
b) Specific budget bill format	(+)	0.075*** (4.26)	-0.003 (0.16)	0.023** (2.07)	-0.0011 (0.17)
c) Non-appropriated funds In budget	(+)	0.010* (1.49)	0.022*** (2.48)	0.01 (0.93)	0.01* (1.52)
d) Super-majority required for Increasing taxes	(-)	-0.031*** (2.71)	0.011 (0.76)	-0.039*** (2.39)	-0.012 (1.12)
e) Number of budget bills	(-)	-0.0007* (1.48)	-0.0003 (1.24)	0.00009 (1.15)	-0.0002*** (2.74)
f) Growth rate of spending in Initial period	(+)	0.453*** (8.79)	0.130 (1.07)	0.37*** (4.36)	0.41*** (5.65)
g) Growth rate of spending in <u>prior</u> period (1977-78)	(+)	----	----	----	----
h) Constant		0.025*** (4.08)	0.012* (1.55)	0.019* (1.50)	0.038*** (5.91)
Adjusted R ² :		.73	.41	.55	.62
S.E.E.:		0.018	0.016	0.022	0.017
N=		19	31	19	31

One-tailed tests of significance.: *.10 **=.05; ***=.01, etc (t tests in parentheses).

[#]From Crain and Miller (1990), p. 1043.

Table 3: Models Compared: Controlling for a Constitutional Balanced Budget Requirement with 1977-78 Controls

		(1) [#] Crain & Miller (With no Const.Req.)	(2) [#] Crain & Miller (With Const.Req.)	With prior ctrl Replication II (With no Const.Req.)	With prior ctrl Replication II (With Const.Req.)
	Hypoth. direction				
a) Item reduction veto	(-)	-0.062*** (3.86)	-0.002 (0.11)	-0.002 (0.17)	0.010 (0.72)
b) Specific budget bill format	(+)	0.075*** (4.26)	-0.003 (0.16)	0.014 (1.14)	-0.002 (0.23)
c) Non-appropriated funds In budget	(+)	0.010* (1.49)	0.022*** (2.48)	0.013 (0.92)	0.025*** (2.68)
d) Super-majority required for Increasing taxes	(-)	-0.031*** (2.71)	0.011 (0.76)	-0.035** (1.86)	0.003 (0.22)
e) Number of budget bills	(-)	-0.0007* (1.48)	-0.0003 (1.24)	-0.000004 (0.04)	-0.0002 (1.67)**
f) Growth rate of spending in <u>initial</u> period (1979-80)	(+)	0.453*** (8.79)	0.130 (1.07)	-----	-----
g) Growth rate of spending in <u>prior</u> period (1977-78)	(+)	—	—	0.28*** (3.41)	0.007 (0.09)
h) Constant		0.025*** (4.08)	0.012* (1.55)	0.027** (1.89)	0.024*** (2.45)
Adjusted R ² :		.73	.41	.41	.15
S.E.E.:		0.018	0.016	.025	.026
N=		19	31	19	31

One-tailed tests of significance.: *=.10 **=.05; ***=.01, etc. (t tests in parentheses) [#]From Crain and Miller (1990), p. 1043.

Table 4: Annual and biennial budgeting

		(1) Replication II (with 77-78- ctrl)	(2) Biennial budgets biennial sessions	(3) Biennial sessions biennial appropriations	(4) With all biennial budgeting variables
	Hypoth. direction				
a) Item reduction veto	(-)	0.003 (0.27)	0.002 (0.16)	0.003 (0.26)	0.0008 (0.07)
b) Specific budget bill format	(+)	0.0004 (0.05)	-0.001 (0.13)	0.0006 (0.08)	-0.001 (0.20)
c) Non-appropriated funds In budget	(+)	0.02** (2.28)	0.02** (2.21)	0.018** (2.18)	0.017** (1.96)
d) Super-majority required for Increasing taxes	(-)	-0.0014 (0.12)	-0.003 (0.23)	-0.004 (0.32)	-0.003 (0.30)
e) Number of budget bills	(-)	-0.00008 (1.11)	-0.00006 (0.75)	-0.00007 (1.07)	-0.00005 (0.76)
f) Constitutional balanced Budget requirement	(-)	-0.004 (0.51)	-0.005 (0.64)	-0.005 (0.64)	-0.004 (0.42)
i) Biennial budgets and biennial sessions (-)		----	-0.011 (0.98)	----	-0.012 (0.77)
j) Biennial sessions w/ biennial appropriations (-)		----	----	-0.014 (1.16)	-0.21 (1.16)
k) Biennial budget states (-)		----	----	----	.002 (0.14)
l) Biennial budgets, no review (-)		----	----	----	0.03 (0.97)
m) Growth rate of spending in prior period	(+)	0.148*** (2.48)	0.15*** (2.51)	0.15*** (2.52)	0.15*** (2.44)
n) Constant		0.026*** (2.69)	0.028*** (2.86)	0.028*** (2.91)	0.030*** (2.38)
N=50. t-test in parentheses.		Adjusted R ² =	.11	.11	.07
One-tailed tests of significance.: *.10 , etc.		S.E.E.=	0.028	.028	.029