

Multiparty Government, Fiscal Institutions, and Government Spending

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Abstract: A well-established empirical result is that government spending tends to increase with the number of parties in government. A familiar explanation for this phenomenon highlights the fact that budget making has features of a “common resource problem” in which each party presses for more spending targeted at its constituents while the costs of spending are spread across the entire polity. We offer a qualification to this conventional wisdom. The nature of budgetary institutions is critical to the relationship between the number of parties and spending: some budgetary institutions can allow coalition partners to make credible commitments to restrain spending. As a result, we expect that government spending will tend to rise with the number of parties in government in permissive institutional environments, but that this effect will be dampened (or even disappear) under budgetary rules that facilitate binding commitments to restrain spending. An analysis of spending levels in fifteen OECD countries over a ten-year period provides strong support for our argument.

In most of the world's democracies, coalition government is the norm. In Europe alone, seventy-five percent of governments formed after WWII have been composed of multiple political parties. As scholars have increasingly recognized, such governments confront challenges that are muted, or even absent, for single-party governments. By and large, these challenges reflect the inevitable tension between the need to compromise on policy and the fact that coalition partners must compete separately at election time. Naturally, compromise is at the heart of politics and not particular to coalition government. Even within large, "catch-all" parties that can govern alone, compromises must be struck among factions and interests within the party. But bargains that are *internal* to a party are easier to maintain because these factions do not (at least in the short run) contend against each other at the ballot box (see also Aldrich 1995). Under multi-party government, in contrast, parties are accountable to their supporters at the next election, which can make sustaining compromise a non-trivial task (see Bawn and Rosenbluth 2006, Martin and Vanberg 2005, Strom, Mueller, Bergman 2008).

The past decade has witnessed a significant growth in the theoretical and empirical literature that considers how coalition governments address these tensions, and what the implications for policy outcomes are. Much of this literature has focused on the principal-agent problems that emerge because coalition parties must delegate drafting and implementation of legislative initiatives to ministers associated with particular parties, thus raising the possibility that ministers will undermine coalition compromises in order to serve the interests of their parties.¹ Scholars have demonstrated that parties attempt to counteract such ministerial drift by

¹ Note that the delegation problem within coalition governance represents a variation on standard principal-agent problems because there are multiple principals with competing interests (the coalition parties) jointly delegating to a single agent (the minister). For a theoretical treatment of this issue, see Martin and Vanberg (2010).

monitoring “hostile” ministers through cabinet-level institutions (Mueller and Strom 2000, Strom, Mueller, Bergman 2008), from within ministries (Thies 2001), and through the legislative process (Kim and Loewenberg 2005; Martin and Vanberg 2005, 2010).

Delegation to ministers is not the only tension that coalition governments must confront. A second strand of literature, focused on government spending, argues that governments will find it increasingly difficult to constrain spending as more parties participate in government. This leads to the expectation that budgets (and deficits) will tend to rise with the number of coalition parties – an expectation that appears to be borne out by the empirical evidence (e.g., see Roubini and Sachs 1989, Braeuninger 2005). In an analysis of spending patterns in seventeen OECD countries over roughly 30 years, Bawn and Rosenbluth (2006) find that the number of parties in government has a significant positive impact on the size of the public sector: Coalitions with more members tend to spend more.

In this paper, we build on this literature on budgets under coalition government. Most scholars who have investigated budget size under multiparty governments have done so in an “institutions-free” environment. That is, the procedures of the budget process have received relatively little attention. And yet, the institutional framework of the budget process may have significant implications for the dynamics of spending by coalitions. As we argue in more detail below, some institutional procedures can counteract the upward pressure on spending induced by an increasing number of parties. To make this argument, we draw on the closely related literature on the determinants of budget deficits (as opposed to total government spending). Although this literature has not addressed how budgetary institutions affect the fiscal politics of *coalition* governments, budget rules have been central to this literature, and scholars have established that

these institutions can significantly curtail deficit spending (e.g., see Galli and Padovano 2002; Hallerberg et al. 2009; von Hagen and Harden 1995;).

The primary contribution of our paper lies in applying these insights to the budget politics of coalitions, and in demonstrating the empirical relevance of budgetary institutions for understanding spending by multiparty governments. We argue that some budgetary institutions can blunt the incentives confronting parties to engage in spending under coalition governance. In short, we offer a qualification to traditional arguments concerning government spending by coalitions: in some institutional environments, government spending will tend to rise with the number of parties in government. But in other institutional contexts, this tendency will be muted (or may perhaps disappear completely). An analysis of spending levels in fifteen OECD countries over a ten-year period provides strong empirical support for our theoretical argument.

Government Spending and the Number of Parties

A strong regularity in the empirical literature on government spending is that – controlling for other obvious factors, such as economic conditions, government ideology, the extent of the welfare state, and the electoral system – spending increases as the *number of parties* in government increases. That is, coalition governments spend more than single-party governments, and this is increasingly the case as the number of parties in coalition grows. A number of scholars have offered theoretical explanations of this finding (Roubini and Sachs 1989, Braeuninger 2005, Bawn and Rosenbluth 2006).

Although there are obviously some differences across explanations, the core logic of the explanations is similar. Government spending constitutes, to some extent, a “commons” problem. Parties have spending priorities, at least some of which provide benefits that are

targeted at, or at least disproportionately appreciated by, a party's constituents. Because the costs of these policies are spread over the entire body of the polity, parties in government are expected to spend "too much" in the sense that they equate the marginal benefit of spending with the marginal cost borne by the parties' constituents (which understates the true, polity-wide cost of the policy). Under single-party government, this tendency to overspend is muted because factions that represent diverse interests *within* a party can recognize the tendency to overspend, and they can strike bargains to restrain spending that need not be defended immediately at the ballot box. Under coalition government, however, this is more difficult. Parties are separately accountable for the government's spending decisions at the next election, and they are likely to suffer electorally if their particular constituency is dissatisfied. As a result, the problem of "overspending" becomes more pronounced as the number of parties in government – each of which is attempting to serve its constituency – increases. Bawn and Rosenbluth summarize the intuition as follows (2006: 251):

A single party in government is accountable for all of its policy decisions... Participants in multiparty coalition governments, by contrast, are held primarily responsible for only a subset of policy decisions: those in the policy areas in which they have the biggest stake. This difference in electoral accountability, we argue, results in systematic differences in policy decisions... coalitions of many parties will strike less efficient bargains than those composed of fewer parties. The less efficient bargains imply a larger public sector, other things equal, as the number of parties in government increases.

Ironically, it may well be the case that the fiscal outcomes that result from this logic are regarded as undesirable by all coalition parties. That is, parties in coalition might prefer a *lower* overall level of spending. This, after all, is the reason why spending is expected to be lower under single-party government: The factions within one large party recognize the problem of "overspending" and are willing and able to strike a bargain to restrain outlays. The difficulty for

coalitions is that – all other things being equal – it is hard for them to make such a bargain enforceable given the incentives generated by electoral competition.

But, of course, all other things are not equal. Existing arguments regarding the connection between spending levels and the number of parties assume an “institutions-free” environment; that is, they do not take account of the procedural rules that govern the budget process. But as the literature on budget deficits has demonstrated, budget rules matter (see Hallerberg, Strauch, and von Hagen 2009). Specifically, deficits tend to be lower in budget-making environments in which “(c)entralization of the decision-making process reduces the size of the common pool resource problem” (Hallerberg et al. 2009:199).

Although the budget deficit literature does not concern itself with the distinction between single-party and coalition governments, or with the impact of the number of parties in government,² its findings readily suggest that the relationship between the number of government parties and spending may be more subtle than a straightforward positive relationship between the number of parties in government and the level of spending. According to traditional accounts (e.g., Bawn and Rosenbluth 2006, Braeuninger 2005), the central difficulty that coalition governments confront is an inability to make *binding* or *credible* commitments to restrain spending – even if all parties agree, in principle, that reigning in spending is desirable, they have electoral incentives to renege on such a bargain by pressing for spending favored by their constituencies. It is in this context that the literature on budgetary institutions is critical. As Hallerberg and colleagues argue persuasively, budgetary institutions vary significantly in the

² That is, the focus of the budget deficit literature is not on understanding how the number of government parties affects the size of deficits; rather the focus is on the impact of budgetary rules. Most scholarship in this area (including Hallerberg et al. 2009) does not consider the number of government parties at all but only the extent of legislative fragmentation.

extent to which they facilitate binding commitments to restrain spending by making it harder to renegotiate budgetary commitments and to increase spending (2009:62). Just as these rules can restrain the influence of individual ministers and members of parliament more generally (the focus of the Hallerberg et al's analysis), they also may allow coalition governments to make binding commitments to fiscal discipline.

For current purposes, assume that parties (often) find it in their interest to strike a bargain to restrain spending.³ We focus our analysis on budgetary rules that make it easier to enforce such a bargain. Specifically, we consider four institutional features of the legislative budget process.⁴ There are several reasons for focusing on the legislative process. Final budgetary decisions require legislative approval. Debate over the budget, and proposals for changing the budget, in the parliamentary arena are public, and provide an opportunity for parties to play to their constituents (Huber 1996:274, Martin and Vanberg 2008). As a result, successful enforcement of budgetary agreements requires the ability to defend a budget against attempts to renege on an agreement or to add spending items during parliamentary passage. As Hallerberg et al argue, "the easier it is for parliament to amend the government's budget, the more likely the C[ommon]P[ool]R[esource] problem is to creep into the budget process. Parliamentarians then have the possibility to insert their pet project into the government's proposal, which will increase

³ This assumption is innocuous in so far as it biases against finding empirical results: If parties do not wish to constrain spending, institutions that would allow them to enforce such an agreement are irrelevant, and spending is expected to be high.

⁴ There are, of course, additional features of the budget process that could be investigated. Hallerberg et al. (2009) provide detailed data on a number of budget procedures. We focus on the four legislative institutions that appear most central. The results reported below are robust to using the more inclusive measure of budgetary institutions provided by Hallerberg et al. Data on budgetary institutions come from Hallerberg et al. (2009:64).

spending” (2009:62). We focus on the four legislative rules that make it more difficult for parties to renege on an agreement to constrain spending during parliamentary passage:⁵

- 1) A budgetary rule that requires a parliamentary vote on the total size of the budget prior to the establishment of budgets for the individual ministries (in contrast to a rule that allows individual ministries to submit budgets and then aggregates them).
- 2) A budgetary rule that requires a single vote on the entire budget instead of separate votes on individual parts of the budget.
- 3) A budgetary rule that limits amendments that may be offered to budget legislation.
- 4) A budgetary rule that requires that amendments that increase spending be budget neutral, i.e., that such amendments simultaneously reduce spending by an equivalent amount in another area.

Each of these rules makes it easier for coalition parties to enforce a bargain to restrain spending in two senses: First, it provides a genuine hurdle to be overcome in renegeing on an agreement to curb spending. Second (and perhaps more importantly), it provides each party with “plausible deniability;” that is, the rules provide a *reason* for being unable to meet constituents’ demands that can be used as a shield in election campaigns. For example, a rule requiring an initial vote on the total budget size provides parties with a hard, *ex ante* constraint to point to in explaining why the particular budgets proposed by their ministries are not more expansive.

⁵ For purposes of the current paper, we ignore the possibility that budgetary institutions are endogenous, that is, that governments adopt particular institutions in order to make it easier or more difficult to engage in spending. While this is clearly an important issue that deserves closer attention (see, for example, Hallerberg et al. 2009), for current purposes, such potential endogeneity is unlikely to be a problem: After all, if institutions are endogenous, they are so precisely because they have the effects that we investigate in this paper; that is, governments choose restrictive or permissive rules because they believe that these rules will have effects for the ability to spend.

Similarly, procedural rules that restrict the right of parliament to amend budget legislation, or require that amendments be budget-neutral, create obstacles to increasing spending as parties cater to constituent demands during the legislative process. They also provide parties with a “scapegoat” for failing to produce results when they come under pressure from their support groups.

Consider the implications of these institutions for the relationship between the number of government parties and the level of spending. If these institutions make it possible for parties to enforce bargains to restrain spending, then they can counteract or at least mute the “commons logic” that drives the relationship between an increase in the number of parties and growth in spending. Assuming that parties have an incentive to strike bargains to restrain spending, such institutions can help to make such bargains “stick.” In short, the presence of budgetary institutions that can restrain the “commons logic” suggests that the relationship between the number of parties in government and spending is *conditional*:

Hypothesis: Spending will increase with the number of parties in government only when the budget process does not feature institutions that make bargains to restrain spending enforceable. Where such institutions are present, an increase in the number of parties in government does *not* lead to corresponding increases in spending.

Empirical Analysis

To test this expectation, we analyze overall spending patterns in fifteen European democracies between 1990 and 1998. Several considerations contribute to the selection of countries and timeframe. First, this sample is roughly comparable – particularly in the set of countries covered – to the sample analyzed by Bawn and Rosenbluth (2006), who offer the most detailed exposition of the relationship between the number of government parties and spending.

Unlike Bawn and Rosenbluth, who analyze spending between 1970 and 1998, we begin our analysis in 1990. This starting point is a function of the availability of systematic, cross-national data on the institutions that govern the budget process provided by Hallerberg et al. (2009).⁶ The end point of the analysis corresponds to the endpoint of the Bawn and Rosenbluth study. It also has the virtue of ending the period of observation prior to the introduction of the Euro (more broadly, Economic and Monetary Union, or EMU) on January 1, 1999, which is likely to have had differential effects on countries in our sample. Countries that joined EMU were required to commit, via the Stability and Growth Pact, to deficit/GDP ratios no greater than three percent in each year, and to balanced budgets across the economic cycle. While this Pact ultimately did not serve to restrain government spending or deficits in all cases, it did impose an additional constraint on the fiscal policy process for the initial eleven (and, eventually, sixteen) EMU countries.

The dependent variable for our analysis is government spending as a percentage of GDP, measured for each calendar year in each country and reported by the OECD. The main explanatory variables of interest, naturally, are i) the number of government parties, ii) an indicator of the institutional environment of the budget process, and iii) an interaction term of the first two measures. To measure the institutional context of budget making, we begin with the components of the fiscal institutions index created by Hallerberg et al. (2009). From this index, we extract the four components that correspond to the four budget rules identified above. Each

⁶ Hallerberg et. al. (2009) report data on budgetary institutions obtained from surveys conducted with finance ministry staff in 1991 and 2004. Because these institutions can and do change (including significant change in the mid-1990s for many of the countries in our study), we do not extend the analysis back from the first survey. The inclusion of 1990 allows us to use 1991 as the first year in the analysis because the estimation (see below) requires differencing of the variables.

individual component is measured on a four-point scale by Hallerberg et al., with higher values corresponding to more restrictive budget-making rules. We create an index that sums the scores across the four components and divides by 16. This generates a continuous index of institutional rules on the 0 (no restrictions) to 1 (most restrictive budgetary rules) interval.⁷

The number of government parties is measured as the average number of parties in government over the course of the calendar year, weighed by the proportion of the year that each government was in power.⁸ The final variable of primary interest is an interaction term between the number of parties and the institutions index. Recall that the central prediction of the argument is that the number of parties will have a positive effect on spending when the index is low (few institutional restrictions on budget-making) but that the effect of the number of parties disappears for high values of the index (considerable restrictions on the budget process.)

Naturally, there are a number of other factors that impact the size of budgets for which we control in our analysis. A first set of control variables concerns the economic context for government spending. Consistent with the literature, we expect that spending will increase as the number of individuals eligible for assistance from the government increases. As a result, we control for the level of unemployment as well as for the share of the population that is under fifteen or over sixty-four years of age (referred to in the literature as the “dependency ratio”). We also control for the level of development, using GDP per capita, to account for the fact that public sectors tend to be larger in wealthier economies (Adserá and Boix 2002, Wibbels 2006).

⁷ While we focus on the four components identified above for theoretical reasons, the results reported below are robust to using the full Hallerberg et al. fiscal institutions index.

⁸ Because the OECD reports government spending on an annual basis, it is exceedingly difficult to disaggregate spending by government for years in which changes in government occur; instead, like others working in this literature, we are forced to average values of the independent variables over the year in order to match them to spending data.

Moreover, we include a control for a country's level of trade openness. A large body of research finds a positive and significant relationship between economic openness and the size of the public sector. Most scholars explain this relationship in terms of an embedded liberalism dynamic, in which governments compensate the potential losers from trade openness via more generous social safety nets (Baker 2005, Ruggie 1982). This compensation generates public support for economic openness, which is welfare-enhancing at the national level. While some have questioned the robustness of the micro-logic behind this "compensation model" (see Hays et al 2005, Walter 2010) or suggested that it is deindustrialization rather than globalization that causes welfare state expansion (Iversen and Cusack 2000, Rehm 2009), it is important to account for the established empirical link between openness and the size of government. Therefore, our model includes a measure of imports plus exports as a proportion of GDP, which is the standard measure of trade openness.

In addition to the economic environment, we also control for several political factors. Research on welfare state development, expansion and retrenchment suggests that the ideological complexion of government may affect spending levels. In particular, social democratic (or, more generally, left-leaning) governments may spend more, on average, than their conservative counterparts (e.g., Braeuninger 2005; Huber and Stephens 2001). And, when faced with pressures (internal or external) to reduce public expenditures, left-leaning governments are less likely to retrench than their centrist or right-leaning counterparts (Allan and Scruggs 2004). To control for government ideology, we include a measure of government ideology derived from the Comparative Manifestos Project, which measures the ideology of government on a scale from

most liberal (-100) to most conservative (100), based on content-analysis of each party's election manifesto.⁹

Other recent scholarship suggests that the relationship between left parties and government spending is driven by institutions as well as by ideology. Iversen and Soskice (2006) posit that, because proportional representation electoral systems (which also tend to produce coalition governments) allow greater influence for less affluent groups in society, nations with such electoral systems will feature systematically higher levels of spending. Put differently, certain electoral institutions allow pro-public spending groups, including left-leaning parties and organized labor, greater access to the policymaking process (also see Garrett 1998, Swank 2002). We therefore include an indicator variable for proportional representation systems. Because some scholars have argued that legislative fragmentation itself, not just the number of parties in the governing coalition, can drive spending, we control for the effective number of parties in the legislature (e.g., Ricciuti 2004). Tables 1 and 2 provide summary statistics for the variables in the analysis.

Analysis

Before proceeding to the analysis, we must confront the thorny question of *timing*. Spending results from policies that governments adopt. For some policies, fiscal consequences are immediate (e.g., increasing unemployment benefits or pensions). For others, the full fiscal consequences may only be realized over time (e.g., a new educational program may take time to

⁹ This measure of ideology corresponds to the measure employed by Bawn and Rosenbluth (2006), thus making results most comparable. However, the CMP data is quite flexible, and it is possible to use only a subset of the 56 coded issue areas to arrive at more targeted preference estimates on fiscal policy (e.g., by only taking account of statements on taxes, the size of the welfare state, and the market economy). The results presented below are robust to such an alternative measure of ideology.

design and implement). In our context, this implies that we expect that there is a “long run” relationship between the number of parties in government and the level of government spending, but that this relationship is not realized “over night;” instead, some period of adjustment is likely. When a coalition with a larger number of parties takes office, it may adopt measures that please its constituents and raise spending in the short-term. But more than likely, it will also implement programs that require time to develop, and whose budgetary implications will only be felt in future years – not necessarily in the current or even next fiscal year (which is how fiscal data are typically organized). In other words, we would expect to observe both an immediate impact on the budget, but also a longer-run effect that may take some time – perhaps several years – to be realized as a policy is adjusted by a new coalition. Our empirical estimation technique must allow us to detect both *short-term* and *long-term* effects of the number of parties on government spending, conditional on the institutions of the budgetary process.

Fortunately, we do not have to look far for an appropriate technique. Error-Correction Models (ECM) have been widely used in time-series analysis to analyze the relationship between two variables (such as the number of parties in government and budget size) that are believed to exhibit a long-run “equilibrium” relationship. These models estimate both short and long-term effects as the relationship between two variables adjusts to its “equilibrium” following a change in one of the variables. For example, suppose that there is a long-run relationship between the number of parties in government and spending. An ECM allows us to estimate how the level of spending adjusts to its new “equilibrium” value following an increase in the number of parties through short-run and long-run effects.

Although they have traditionally been used with cointegrated data, de Boef and Keele (2008) have recently demonstrated that error-correction models are an appropriate estimation

technique for stationary data when a causal factor is believed to have both short-term and long-term effects on the dependent variable.¹⁰ Moreover, they demonstrate (2008:189) that for stationary data, the ECM is equivalent to the autoregressive distributed lag model (ADL) estimated by Bawn and Rosenbluth (2006), but often provides easier interpretation of key quantities of interest. We therefore estimate a general ECM model that allows us to detect short-term effects (captured by coefficient estimates for the first differences of the independent variables) and long-term effects (captured by coefficient estimates on the lagged independent variables). To control for heteroskedasticity, we estimate the model using OLS with panel-corrected standard errors (Beck and Katz 1995).

We begin the analysis by replicating the standard result on the connection between the number of parties in government and government spending. The first model in Table 3 – labeled “unconditional model” – presents estimates from an error correction model that includes the number of government parties, as well as the control variables outlined above. In other words, this model allows us to investigate the impact of the number of parties on spending ignoring potential effects of budgetary rules. The first column lists coefficient estimates; the second column lists panel-corrected standard errors. The key coefficients of interest are the estimates for the impact of the number of government parties. The number of parties has positive, significant effects on spending in the short-run (the coefficient listed under “short term effects”) as well as in the long-run (the coefficient listed under “long term effects”). As the number of parties in government increases, spending adjusts upward – a finding that is consistent with the standard result in the literature (see Bawn and Rosenbluth 2006, Braeuninger 2005).

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Most of the control variables also have the expected sign and are significant: Spending increases (in the short run) with increases in unemployment and the dependent population, and it decreases (in the long run) as governments become more conservative. Income per capita is associated with lower levels of spending in the short run, but with increased spending over the long term.¹¹ The former may stem from the immediate, automatic stabilizer effects of an economic downturn (so that a decline in income per capita is met with an increase in spending), while the latter likely reflects the established relationship between the level of development and the generosity of public spending. Consistent with arguments by Swank (2002) and Soskice and Iversen (2006), countries with proportional representation systems have larger public sectors than countries with majoritarian electoral institutions.

The central argument of this paper is that the unconditional model misses potentially important interactive effects between the number of government parties and the institutional rules under which budget decisions are made. If the parties that participate in coalition recognize the incentive to “overspend,” they may strike a bargain to restrain spending. Such bargains are more likely to be enforced in the presence of institutions that make it easier to adopt an agreement that reflects mutual restraint, and that make it difficult to renege on such an agreement post hoc. The budgetary rules index described above – which indicates the extent to which the budget process in the legislature promotes ex ante tying of hands (through an initial vote on the total budget, and a package vote on the entire budget) and imposes hurdles to subsequent increases in spending (through limits on amendments) – is intended to capture these institutional effects.

¹¹ This result is robust to using either the actual values or the natural logarithm of income per capita.

To model the potential for the institutional environment to counteract the tendency to increase spending as the number of parties in government grows, we estimate a conditional model, reported in the second half of Table 3. The key explanatory variables are the number of government parties, and an interaction between the number of government parties and the budgetary institutions index. Some care is required in the interpretation of the results, since the effect of the number of parties is now conditional on the value of the rules index, and given by the (appropriate) sum of the coefficients for these two variables. Thus, the immediate coefficient for the short and long term impact of the number of parties reports the impact for the number of parties when the budgetary institutions index takes a value of 0, that is, in the absence of the institutional constraints identified above.

The results are unambiguous. The first thing to notice is that – once we take account of the institutional environment – the number of government parties no longer has a statistically significant effect on spending in the short-term. This is not surprising. The short-term effects report the impact of the number of government parties in the immediate aftermath of a new government that has fewer or more parties than the preceding government. But of course public policy (and spending) is not changed overnight: New governments require some time to change policy, and it takes time for these changes to filter into public outlays.

The long-term effects of the number of parties in government on spending – conditional on the institutional environment – are evident in the long-term estimates reported in the bottom half of the table. To ease interpretation, Figure 1 graphs the estimated coefficient for the number of parties on government spending across the range of the budgetary institutions index, along with 95% confidence intervals. This graph is overlaid with a histogram of the budgetary

institutions index in order to display the actual range of the data.¹² The results are clear: The number of parties has a positive, significant effect on spending (in the long-term) when budgetary institutions are permissive (i.e., where the index is low). This effect declines in magnitude as the institutional constraints increase, and becomes statistically insignificant slightly above the median value of the budgetary rules index. At the upper level of the index – where budgetary institutions are most restrictive, and make it easier to maintain credible commitments to restrain spending – the effect on the number of parties vanishes: The estimated coefficient is close to 0, and statistically insignificant. In short, the data provide clear support for the contention that budgetary institutions matter, and that the effect of the number of government parties on spending is conditional. Spending rises with the number of parties in the absence of institutions that make commitments to restrain spending credible. But when institutions that make commitments to fiscal discipline credible are present, the number of parties has no discernible effect on spending.

The control variables continue to have the expected effects in the conditional model. As unemployment and the dependent share of the population increases, spending grows in the short run. The long-term effect of more conservative governments is to reduce spending. Finally, government spending is systematically higher in proportional representation systems.

Conclusion

Over the last few years, scholars have grown increasingly concerned with understanding the ways in which coalition governments deal with the inevitable tensions that emerge out of the

¹² This graph was generated using the STATA code provided by Bear Braumoeller, available at <http://polisci.osu.edu/faculty/braumoeller/custom/checklist.html> For a full discussion of interaction terms, see Braumoeller (2004).

need for parties with (at least on occasion) conflicting preferences to govern jointly. One important lesson of these efforts has been that the institutional context within which multiparty cabinets govern, including the structure of ministries (Thies 2001), institutions within the cabinet (Strom, Mueller, and Bergman 2008), and the legislative committee system (Martin and Vanberg 2005, 2010; Kim and Lowenberg 2005; Cox and Carroll 2010) is central to the ability of coalition parties to navigate the potential pitfalls of coalition government successfully.

In this paper, we extend this analysis to the realm of spending decisions. A well-established literature in comparative politics has demonstrated that – controlling for other relevant economic and political factors – government spending tends to increase as the number of parties in government grows. The common explanation offered for this phenomenon is that the pressures of electoral competition drive government parties to press for spending that favors their constituencies. Because the costs of increased spending are spread over the entire polity, parties will tend to “overspend” since their constituencies do not bear the full brunt of the costs of spending – a problem that grows more intense as the number of parties in government increases.

We have argued that while the logic of the conventional explanation is compelling, it neglects the potential for budgetary institutions to counteract the spending impulses of coalitions. To the extent that parties in government recognize the incentive structures they confront, they may find it in their interest to agree on mutual restraint in spending. If the institutions of the budgetary process make such bargains enforceable, increasing the number of parties in government will *not* lead to increased spending. In short, the relationship between the number of parties in government and spending is conditional, and dependent on the institutional context. The empirical evidence is clearly consistent with this expectation. To the extent that fiscal

discipline represents a growing concern of governments and citizens alike, our analysis thus offers added support for the importance of adopting appropriate institutional frameworks for budgetary decision-making.

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Table 1: Summary Statistics for # of Parties and Budgetary Institutions Index by Country, 1990-1998

Country	Avg. # of Govt Parties	Avg. Budgetary Rules Index
Austria	2	.25
Belgium	4.20	.17
Denmark	2.73	.50
Finland	4.27	.13
France	1.82	.86
Germany	2.02	.07
Greece	1.00	.08
Ireland	2.28	.58
Italy	3.55	.43
Luxembourg	2	.25
Netherlands	2.50	.64
Portugal	1	.08
Spain	1	.39
Sweden	2.00	.56
UK	1	.78

Table 2: Summary Statistics for All Variables, 1990-1998

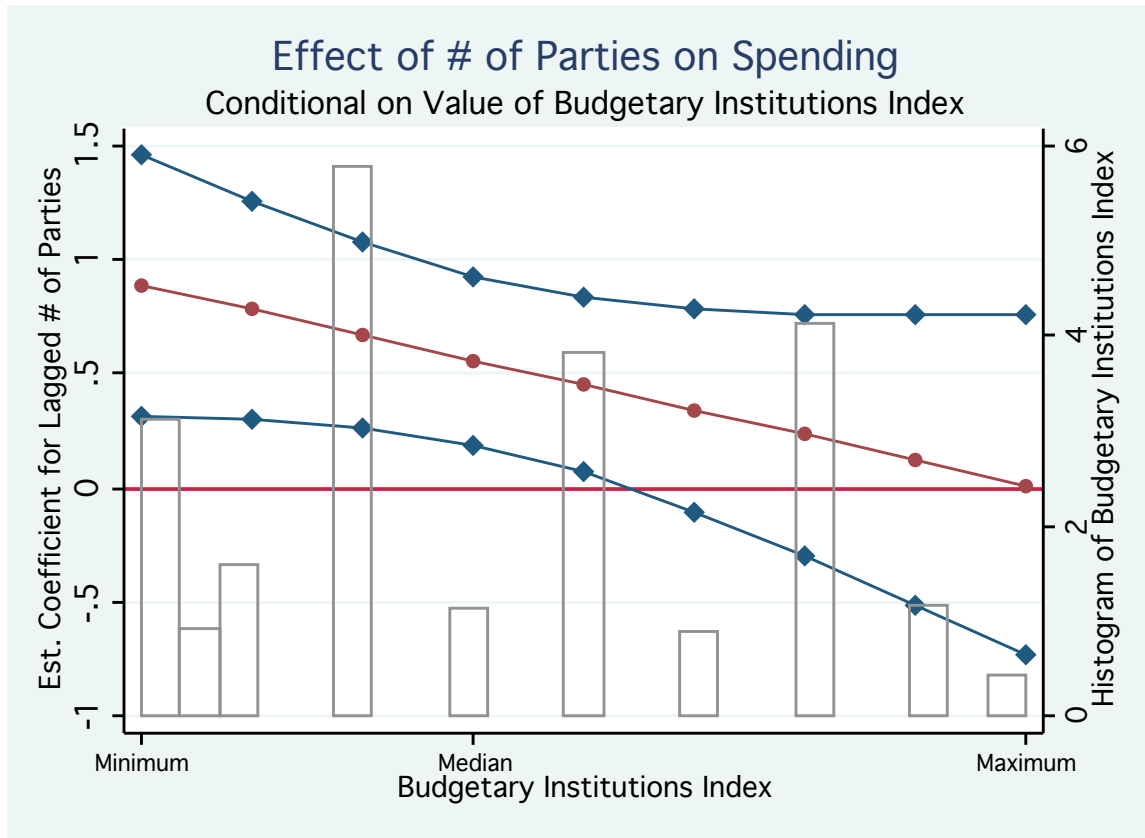
Variable	Mean	St. Dev.	Min	Max
Spending as % of GDP	49.94	7.35	34.5	70.9
Number of Govt Parties	2.23	1.22	1	5
Budgetary Institutions Index	0.40	0.28	0	1
Eff # of Parties	3.84	1.57	2.11	8.41
Govt Ideology	0.15	16.0	-33.2	30.5
PR System	0.87	0.34	0	1
GDP per capita	22.1	5.4	13.7	42.7
Unemployment	9.2	4.6	1.1	24.2
Trade Openness	79.6	49.2	31.8	241.3
Dependency Ratio	33.18	1.68	30.04	38.71
PR	.867	.34	0	1

Table 3: Effect of Number of Government Parties on Government Spending

	Variable	Unconditional Model		Conditional Model	
		Est. Coeff.	St. Error	Est. Coeff.	St. Error
Short Term Effects (First differences of variables)	# of Parties	0.45	0.23	-0.17	0.42
	# of Parties x Budgetary Institutions Index			1.44	0.99
	Budgetary Inst. Index			-2.95	2.16
	Eff # Parties	-0.69	0.38	-0.98	0.36
	Ideology	0.00	0.01	-0.00	0.01
	GDP per cap	-1.36	0.38	-1.18	0.39
	Unempl	0.47	0.11	0.53	0.10
	Dependency	1.15	0.69	1.46	0.71
	Trade Open	0.02	0.04	0.01	0.12
Long Term Effects (Lagged values of variables)	# of Parties	0.51	0.21	0.89	0.29
	# of Parties x Budgetary Institutions Index			-0.88	0.55
	Budgetary Inst. Index			3.38	1.44
	Eff # Parties	-0.13	0.12	-0.22	0.12
	Ideology	-0.03	0.01	-0.03	0.01
	GDP per cap	0.11	0.04	0.08	0.04
	Unempl	-0.11	0.02	-0.14	0.03
	Dependency	0.31	0.12	0.31	0.11
Trade Open	-0.02	0.01	-0.02	0.00	
	PR System	0.94	0.37	2.30	0.56
	Lagged Spending (Rate of error correction)	-0.14	0.03	-0.17	0.02
	Constant	-4.09	3.86	-4.07	3.61
	R ²	0.64		0.67	
	N	118		118	

Note: OLS estimates with panel-corrected standard errors. Dependent variable is the change in government spending as a percentage of GDP.

Figure 1: Conditional Effect of the Number of Parties on Government Spending
 (Figure displays the coefficient on the lagged number of government parties across the range of the Budgetary Institutions Index)



Data Appendix

Variable Name	Operationalization	Source
Spending as % of GDP	Includes all central, state, and local government spending plus social security spending/GDP	OECD Economic Outlook Database
Number of Govt Parties	Average number of parties in government over the year	
Budgetary Institutions Index	Sum of four rules components/16	Hallerberg et al. 2009
Eff # of Parties	Average number of parties in legislature over the year	
Govt Ideology	Sum of ideology of each party in government, weighted by participation in government	Comparative Manifestos Project
PR System	Indicator of Proportional Representation Electoral Rules	
GDP per capita	In 2000 US \$	OECD Aggregate National Accounts Database
Unemployment	As a percentage of total work-age population	OECD Economic Outlook Database
Trade Openness	(Imports + Exports)/GDP	OECD Economic Outlook Database
Dependency Ratio	Percentage of population over 65 and under 15	OECD Economic Outlook Database