

Political Determinants of Fiscal Discipline in Latin America, 1979-1998

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In the past ten years, two strands of research have converged. One strand, emerging from studies of the political economy of developing countries, seeks to understand how politics constrains the possibilities for needed economic reforms. The other strand emerged from the comparative study of political institutions—executives, legislatures, and parties, in particular—in newly democratic regimes. Guided by the assumption that institutions matter, this strand has dovetailed with the political economy research agenda by attempting to demonstrate an impact of institutions on economic performance.

We seek to make four contributions to these conjoined literatures. First, we argue that presidents' partisan powers have a direct and powerful effect on spending and only an indirect effect on deficits per se, which are influenced by spending and exogenous economic forces. Second, the institutions that govern the budgetary process do not have a clear impact on spending, but do affect whether spending results in an overall deficit or surplus. Third, we argue that various political institutions that have been thought to affect policymaking—party size and numbers, party discipline, policy distance, polarization—do not have separable impacts. Rather, they condition one another in a complex interaction that determines the president's chances of legislative success. Here we develop a summary indicator to model these interactions. Specifically, we show that Latin American presidents who wished to restrain spending in the 1980s and 1990s achieved this goal to the extent that they could depend on extensive, disciplined support in congress. However, these same institutions also helped other presidents accelerate spending if that was their goal. Presidents who lacked either extensive and loyal support or disciplined support found themselves less able to achieve either a reduction or an increase in spending. Fourth, we confirm the oft-reported tendency of governments to engage in fiscal deficit more during election years.

In order to test this set of hypotheses, we look at the impact of political support over two indicators of fiscal performance: budget deficits and government expenditures (Harrinvirta and Mattila 2001). We obtain our conclusions from the analysis of pooled time series data from Argentina, Brazil, Chile, Ecuador, Mexico, Uruguay and Venezuela in the past two decades. We verify the validity of the model by comparing key differences during the fiscal balancing process in our Latin American cases.

What Institutions Might Explain

In 1990, "Washington Consensus" policy prescriptions were drafted for Latin American and Caribbean countries in order to stabilize economies and promote global trade and increased financial flows in the region (Williamson 1993). These prescriptions called for fiscal discipline, liberalization of trade and investment regimes, deregulation of domestic markets, and privatization of public enterprises (Burki and Perry 2001). Yet not all governments were able to meet these goals, even when they wanted to do so. Consequently, scholars (as well as researchers at the World Bank and the Inter-American Development Bank) have become increasingly interested in the impact of political institutions on economic reform. Because the Washington Consensus emphasizes deficit spending as a key motor of inflation, explaining deficits has been a high priority for scholars. We would do well, however, to take one step back and explain spending levels instead, for both theoretical and practical reasons.

The theoretical reason is that a deficit, by definition, is the difference between revenues and expenditures. If we can explain levels of revenue and expenditure, we

should automatically have an explanation for deficits (Harrinvirta and Mattila 2001). Yet the determinants of revenues are probably quite different from the determinants of expenditures, and there are good reasons to believe that politics has more of an impact on the latter than on the former. Politicians care deeply about spending. It is the best evidence that they are doing their job, so they are always trying to increase spending on their favorite projects and claiming credit for doing so. They care less about revenues, especially in Latin America. Of course, in some countries tax cuts and balanced budgets can be potent issues, but they are short-lived and quickly forgotten. In countries that depend less on income taxes and where few citizens pay much income tax, as in most Latin American countries, tax cuts and budget balancing are less salient issues. We should expect, then, that political forces exert a more powerful influence on spending and a more indirect influence, through spending, on the budget balance.

The practical reason is that deficit and surplus data are rarely comparable across nations. There are several empirical and methodological problems with the measurement of the overall balance of the public sector. In spite of agreement of importance of budget unity and universality, "in practice the budget does not always reflect all the decisions and entries made for public expenditures and revenues" across all cases (Petrei 1998: 349). Since every government reports its economic balance to international financial organizations (IMF, IADB, and World Bank), there are no uniform criteria to determine which accounts are included in the central budget or what is the size of non-budgetary expenditures. In Argentina for instance, Social Security was accounted outside the overall fiscal balance until well into the nineties. Similarly, non-budgetary expenditures (such as discretionary spending for the Executive) could vary from 6% in Chile to 34% of the total budget in Brazil (Petrei 1998, Baldez and Carey 1999). In his comparative study of budgeting and control in Latin America and Industrialized economies, Petrei shows that some expenditures outside the approved budget can be counted as increased debt (1998). He suggests that, in order to correctly account for budget levels, we should also measure net changes in government debt for a given period.¹ In the analysis below we include interest payments and total debt service in our models to achieve a similar kind of correction.

Regarding the revenue structure in Latin America, it is relevant to consider that on average, governments during the nineties were likely to rely on direct taxes such as sales taxes, because any increase or upward adjustment in tax rates could prove to be politically and economically counterproductive for the government (IADB report 1997: 106). Instead, government officials are more likely to rely on non-tax revenues for financing public accounts, reflecting the importance of natural resource rents (oil in the case of Venezuela and Ecuador) and income from state-owned enterprises in total revenue (Argentina, Brazil, Chile and Mexico). The problem with windfall revenues (such as money from privatizations), however, is that they are not easily measurable, since sometimes funds are used to cancel foreign debt obligations (Mexico), reinvested in the social sector (Chile) or some portions remain unaccounted for (Argentina). In sum, the existing revenue structure exposes national budgets to unexpected or transitory external shocks (IADB report 1997). Because of all these problems, the available data literally do not add up. One would expect that data on expenditures and revenues would "explain" deficits perfectly. But in fact, if deficits are regressed on revenues and expenditures in our sample, only 50 percent of the variance is explained. Although government expenditure levels are not free from

¹ Another related problem with measuring deficits is accounting for the difference between *planned and executed* budgets, which in some cases can be directly connected with the inflation rate. There is large variation in this respect, with Chile being the most predictable country and Brazil showing skyrocketing differences between the planned and executed figures (270% avg.) (Petrei 1998).

measurement flaws either, they offer a more straightforward and appropriate way to study fiscal balance cross-nationally.

Which Institutions Affect Economic Performance?

The principal political characteristics that are believed to affect fiscal discipline are budget institutions, the electoral budget cycle, party institutionalization, the number and size of parties, party discipline, and policy distance or ideological polarization. We will summarize the rationales supporting each of these hypotheses and then propose interactions among them.

Budget Institutions

One relevant variable for explaining fiscal balance has to do with budgetary institutions, that is, legal institutions that impose limits on government spending, restrain debt capacities at the subnational state (Petrei 1998, Stein et. al 1998, Alesina et. al. 1999, Samuels 2000), or impose veto gates in the political process (Baldez and Carey 1999). Budgetary institutions are best defined by Stein et.al. as “the set of rules, procedures and practices according to which budgets are drafted, approved and implemented” (1998: 17).² The basic idea in this literature is well explained by Alesina et.al., who argue that there are “hierarchical” budget procedures that impose legal constraints on the size of deficits and adopt vertical procedures for decision making (1999: 6). Contrary to “collegial” or horizontal budget institutions, these procedures are believed to have a stronger impact on controlling the size of the fiscal deficit and providing more accountable instances for budget execution.³

There are two variants of this school of thought. Some authors consider all kinds of centralization of power in the executive, at the expense of congress, to have deficit-reducing qualities. Alesina et al., who claim to measure the concept by summing ten different variables, fall into this category. With minor differences in conceptualization, Samuels (2000) and Stein et.al. (1998) combine indicators such as the agenda-setting power of the president, the amendment power, the recession point situation (what happens if no budget is approved), the prerogatives for additional spending once the budget has been approved, and the power of the president to modify (or veto) budget allocations. An alternative view is more discriminating. It holds that that there are certain *aspects* of the budgetary prerogatives (especially those related to the interaction between the executive and the legislature such as the item veto, or the ability to set expenditure ceilings) that might have a stronger impact than others for explaining fiscal outcomes. Samuels (2000) has partially challenged the conventional view that Latin American presidents who enjoy high constitutional prerogatives become *budget dictators*, and proposes testing the impact of different components of existing budget institutions on fiscal performance.

Perhaps a more relevant question that needs testing is whether strong budgetary institutions are more effective *given* increased levels of congressional support or whether

² Following previous work developed by IADB (Stein et.al. 1998, Alesina et.al. 1999) and Samuels (2000), we use their proposed Index of Budgetary Institutions. We have applied the ten criteria for evaluating budgetary procedures to propose, approve and control the execution of the budget. The scale proposes a difference between “hierarchical” (100) and “collegial” (0) procedures. The former imply “ex ante constraints on the size of deficits, adopt top bottom voting procedures and are transparent” (Alesina et.al. 1999), whereas “collegial” procedures have the opposite characteristics. We want to test the author’s claim that “hierarchical” procedures are instrumental to controlling the size of the deficit, thus we expect to find a direct relationship with the dependent variable.

³ However, Cox and Morgenstern (n.d.) have warned against granting unilateral or imperial powers to the executive to avoid the risk of confrontation with the legislature that can bring economic policy reversals in the long run (see also Grindle 1992).

they *replace and compensate* for the lack of congressional support. Our evidence suggests that systems that are unable to provide a president with strong congressional support are also unable to establish such budgetary institutions. However, where such institutions exist, they appear to favor balanced budgets above and beyond what would be possible by relying on partisan powers alone.

The Electoral Budget Cycle

Most of the existing approaches to the politics of budget balancing in Latin America view fiscal deficits as one aspect of general fiscal performance, which includes the size of the public sector, the size of the public debt, and other fiscal fluctuations determined by the business cycle (Kingstone 2000, Stein et.al. 1998, Alesina et.al. 1999). We will control for these economic factors, but we are more interested in the impact of the political cycle on fiscal outcomes. It has been argued that Latin American governments suffer from electoral budget cycles (IADB report 1997: 100), in which deficits tend to grow before elections, forcing costly adjustments in the following year. The logic is that around election time, legislators have *fewer incentives* to cooperate with fiscal discipline and they prefer to avoid government taxes that might hurt their constituencies while increasing government spending in favor of potential voters (Ames 1987, Altman 2001). Presidents also have little incentives to push for fiscal discipline, especially if after election time, a higher budget deficit might be somebody else's problem (IADB report 1997: 120).

There is also at least one international determinant of budget balances that the literature does not address properly. This is the impact of policy prescriptions derived from the so-called "Washington consensus" in 1990, which included international recommendations to control government spending, fiscal reform, control budget deficits, promote economic growth and privatize government-owned enterprises (IADB report 1997). While it is difficult to test the separate effects and the scope of each one of these measures (some countries for instance, fail to report privatization revenues in their current accounts), we claim that Washington consensus policies and international pressures during the nineties helped promote better fiscal balances.

Number of Parties

"Number of parties" is an umbrella concept for several closely related party or party-system characteristics: the fragmentation of the party system (which can be measured in a great many ways), the size of the largest (usually the president's) party or the largest *n* parties, and the index of effective opposition (Altman and Pérez Liñán 2002). Conventional wisdom argues that the lower the number of parties (i.e., the larger the government's majority in Congress), the lower the transaction costs of redistributing and allocating fiscal resources for the president. The hypothesis comes from an extensive literature claiming that party fragmentation in the legislature tends to be inversely associated with the size of the president's party (Jones 1995, Mainwaring 1993, Mainwaring and Scully 1995, Mainwaring and Shugart 1997, Linz and Valenzuela 1994). Thus, a president with a smaller party contingent or facing many legislative parties would have to compromise and distribute patronage and pork among the opposition in order to gather a legislative majority willing to pass her budget proposal (Amorim-Neto 1998:105, Mainwaring 1999).

This could happen for three reasons: 1) fragmentation poses a collective action dilemma for economic reformers, making it difficult to reach consensus on desirable levels of fiscal balance (Haggard and Kaufmann 1995, Mainwaring 1999); 2) fragmentation disperses the potential benefits of reform among a wide variety of players, each having their own structure of incentives for cooperation and party discipline (Mainwaring 1999, Baldez and Carey 1999); and 3) fragmentation raises the cost of political cooperation and patronage distribution, causing a direct impact on the levels of fiscal expenditure

(Mainwaring 1999, Jones 1998, Harrinvirta and Mattila 2001). Concretely, presidents gather legislative support for passing their proposed budgets through resource allocation and redistribution of revenues, as when they push for economic reforms in the short run by negotiating payoffs and compensations with undisciplined party members (Samuels 2000, Petrei 1998: 15). Regardless of the reason, therefore, a lower number of parties is expected to contribute to a lower fiscal deficits (Haggard and Kaufmann 1995, Mainwaring 1999, Kingstone 2000, Stein et. al. 1998, Petrei 1998).

Party Discipline

Arguments have been made to the effect that institutionalized party systems can promote economic stabilization and fiscal balance in the long run (Haggard and Kaufman 1995). Yet, preliminary evidence shown by an analysis of 19 Latin American and Caribbean countries (Kingstone 2000) does not support such claims. Take for example the Venezuelan “institutionalized” party system, having a larger average deficit than the three (out of four) typical “inchoate” cases in Latin America: Brazil, Ecuador and Peru. Even if we considered the case of Venezuela before the dramatic erosion of its party system in 1988, it still shows a higher average deficit (-8.5%) than the “inchoate” Venezuela after the 1997 election (2.6%). Conversely, the case of party dominant Mexico yields an average deficit nearly four times as high (-4.32%) as that of inchoate Ecuador (-1.15%). These exceptions lead us to omit institutionalization *per se* as a cause of fiscal discipline.

However, one aspect of institutionalization—party discipline—has been proposed as a factor contributing to a president’s legislative success: the proportion his or her bills that win approval in congress (unless the president anticipates defeat and does not submit the more controversial ones). Mainwaring and Shugart (1997), for example, reason that even a large party is not very useful to a president unless it possesses fairly high discipline. The more undisciplined parties are, the less it matters how large or small the president’s party or any other parties supposedly are, because legislative success requires bargaining with individual legislators. Mainwaring and Shugart therefore interact the president’s share of congress with the discipline that can be expected from those members to produce an indicator of the “partisan powers” of the president. We reproduce this interaction, but believe the relationship is still more complex, as we will argue below.

Ideological Polarization

Other scholars have argued that it becomes more difficult to build consensus around the president’s budget proposal when the president faces a polarized congress or when the president’s policy position is significantly different from that of the mean legislator (Samuels 2000, Amorim-Neto 1998). Although we agree with this hypothesis in general, we believe that polarization affects spending and deficits only indirectly, by shrinking the president’s congressional base or making it less reliable. Ideological polarization is therefore another variable that is included in the complex interaction we propose. The index of polarization is a measure of the dispersion of the vote away from the center. Polarization reaches its maximum value (100) “when half of the vote goes to the right and half to the left; if all of the vote went to just one extreme, polarization would be zero (0) because the relative center would be at the extreme as well and there would be no dispersion” (Coppedge 1998).

Partisan Powers: A Complex Interaction ⁴

The complex interaction used in this paper is very close to a concept developed in literature on the connection between party systems and governability: partisan powers

⁴ Most of this section was taken almost verbatim from Coppedge (2001).

(Lijphart 1984, Shugart and Carey 1992, Mainwaring 1993, Linz and Valenzuela 1994, Jones 1995, Mainwaring and Shugart 1997, Lijphart 1999). The term refers to the partisan powers of the president, as opposed to the president's constitutional powers, such as the veto, appointment powers, and dissolution powers. Mainwaring and Shugart (1997), for example, argued that presidents with weak constitutional powers can compensate with strong partisan powers (as in Mexico before 1997), and presidents with weak partisan powers can compensate with strong constitutional powers (as in Brazil after 1986). Although this literature defined the concept as an aspect of presidential power, it works equally well, if not better, as a characteristic of the party system: the capacity of the party system to ensure passage of the president's legislative agenda.

There is general agreement on two components of partisan powers: the size of the president's party or coalition, on the one hand, and party discipline, on the other. These two characteristics combine to define what we call a reliable majority—the percentage of congressional seats that the president can count on to vote in favor of his typical bills. This figure should also be in line with the president's legislative success rate: the proportion his or her bills that win approval in congress (unless the president anticipates defeat and does not submit the more controversial ones).

Mainwaring and Shugart (1997, 421-434) measure partisan powers as

$$\text{SIZE} * (1 - (.11 * \text{Noes}))$$

where SIZE is the percentage of congressional seats controlled by the president's party and Noes is the number of "No"s listed for a country in their table describing electoral and party rules that they believe to affect party discipline. The table permits up to three "No"s, so party discipline is estimated to range from .67 to 1.00. Our indicator of partisan powers shares this assumption of an interaction between party discipline and the size of the president's party or coalition, but differs in four ways.

First, because we are not persuaded that party discipline is powerfully associated with electoral or party rules, we base our estimates of party discipline on actual data from a few countries and extrapolations to others informed by conventional wisdom and anecdotal evidence. The basic source is a paper by Scott Morgenstern (1999) that provides Rice unity scores for major parties in Argentina, Brazil, Chile, and Uruguay.⁵ Fortunately, this small sample covers a wide range, from Chile, with highly disciplined parties, to Brazil, which has parties with very poor discipline (Mainwaring 1999). These Rice scores range from 100 percent (PRSD in Chile, 1989-91) down to 45.1 percent (National Party in Uruguay, 1990-94—which was unusually low for Uruguay). Our estimates of party discipline are 1 for Mexico and Venezuela; .9 for Argentina and Uruguay; .816 for Chile (the average across parties); and .6 (which is little better than chance) for Ecuador and Brazil.

Second, we take into account a baseline success rate. A great deal of legislation typically passes by consensus in most countries most of the time. However, this "floor" of success can be assumed to vary from country to country and year to year. We assume that the floor rises and falls along with the degree of polarization in the party system. Polarized party systems have a low floor, allowing few bills to pass easily; party systems with low polarization have high floors, enabling a high rate of legislative success in spite of institutional impediments. We therefore estimate the floor as $(1 - IP/100)^2$. IP is

⁵The Rice index is $|\#yes - \#no| / (\#yes + \#no)$, "yes" and "no" referring to legislators' votes. This index is not ideal, as it ignores abstentions and absences, but it probably provides a good rank ordering, which in the narrow .6 to 1.0 range used here cannot be far off.

Coppedge's index of polarization, based on his classification of parties (Coppedge 1997). IP measures the dispersion of the vote away from the center and toward the extremes; it ranges from 0 (no polarization) to 100 (complete polarization) (Coppedge 1998, 556-558). In this sample, the lowest floor was .129 (only 12.9 percent of legislation assumed to pass easily) in Ecuador in 1990, while the highest floor was .781 in Colombia in 1990 (before the constituent assembly election).

Third, we model the possibility that the president will lose the support of his or her party, for a large and disciplined party is of no help if it is at odds with the president. We make sparing use of this possibility, preferring to factor in routine defections as discipline problems whenever possible. For this reason, this variable (LOSS) is set to zero for most observations. However, it equals .1 for Venezuela in 1993; .2 for Ecuador; .25 for Uruguay (due to fractionalism); and .4 for Venezuela in 1988.

Fourth, we combine all of these variables into a nonlinear function that models a sharp disjunction between controlling a little more than 50 percent of the seats in the lower chamber and controlling a little less than 50 percent of the seats. This makes good theoretical and intuitive sense, as the difference (for the chance of passing legislation) between 45 and 55 percent of the seats is much greater than the difference between 25 and 35 percent, or 65 and 75 percent. If this were not so, no one would care about party discipline. The tighter party discipline is, the more difference it makes whether the president's party is above or below that 50 percent threshold. Therefore, the partisan powers variable is modeled with an S-curve that is very steep around the crucial 50 percent threshold when discipline is tight, but nearly flat when discipline is loose. The formula and an intuitive derivation can be found in the appendix.

This rather complex indicator agrees well with the Mainwaring and Shugart index at the extremes. In fact, the overall correlation between the two is .83.⁶ However, in the Mainwaring-Shugart 25 to 50 range, where the bulk of the cases lie, there is little relation between their index and ours. We believe that an indicator that makes appropriate use of a greater variety of relevant information should measure partisan powers better, but only actual use of these indicators will tell whether one is superior to the other.

Partisan powers, however, should not be assumed to have a direct relationship with a specific policy outcome, such as the spending level or the size of the deficit. Partisan powers can help a president achieve her aims, but do not determine what her aims are. Partisan powers help reduce spending only if the president wants to reduce spending; if the president wants to spend more, strong partisan powers should help her do that, too. This thinking echoes the old notions of will and capacity: a policy succeeds only if the government wills it to happen and has the institutional capacity to implement it. Our hypothesis therefore requires yet another interaction, between partisan powers and the president's left-right ideological position. The president's position is measured with a trichotomy here: +50 (center-right) for those who wanted to restrain spending, -50 (center-left) for those who wanted to increase spending, and zero (center) for those who were comfortable with the status quo or lacked a clear position on the issue.⁷ This trichotomy is

⁶Mainwaring and Shugart provide only averages for periods containing several elections in most cases, but they also provide sufficient information to reproduce their index for individual elections. The correlation reported in the text is based on individual elections rather than averages

⁷The basic data for this classification came from Amorim Neto's classification of presidents (Amorim Neto 1998), which assumed that Coppedge's classification of each president's party (Coppedge 1997) was also a fair classification of the president. We have modified this variable for a few observations, however, because presidents and their parties do not necessarily take the same stance on every issue, and because we wanted to ensure that classifications were not based on post-hoc evaluations. That is, we wanted to avoid assuming

multiplied by the partisan powers variable to produce our prediction of the impact of institutions on spending.

The Sample

Our model for measuring fiscal performance looks at seven Latin American presidential democracies: Argentina 1984-1998, Brazil 1986-1998, Chile 1990-1998, Ecuador 1979-1998, Mexico 1983-1998, Venezuela 1983-1998, and Uruguay 1985-1998.⁸ For the units of analysis, we select one budget outcome in a given country for a given year, for a total of 111 cases. One advantage from this case selection is that we include significant variations in fiscal performance and perceived levels of political support. Brazil and Ecuador are two countries characterized with having the most fragmented party and electoral systems in Latin America, and although the Brazilian government implemented several programs for fiscal discipline, Brazil still shows an average deficit level (-8.03%) nearly seven times larger than that of Ecuador's (-1.15%). Another interesting paradox is that, Mexican, Argentinean and Chilean presidents have all earned reputation for getting their original budget proposals almost entirely approved by the legislatures thanks to reliable sources of political support. Yet as the average fiscal balances show, these three countries have significantly different fiscal performance with fiscal surpluses in Chile, moderate deficits in Argentina and high average deficits in Mexico. Finally, Uruguay and Venezuela reflect a similar moderate fiscal performance despite showing different levels of partisan support in the legislature. Another advantage of analyzing a smaller but representative sample of cases in Latin America is that we can survey the country-specific literature in order to make qualitative inferences about relevant patterns of budget politics in each case.

[Figures 1 and 2 about here]

As explained in the next section, a key contribution of this paper is to model fiscal balance as the outcome of a two-stage process, where political support for the president has a significant impact on government expenditures, which in turn affects overall fiscal performance.

A Model of Spending

Table 1 gives summary statistics for the variables of interest and their expected impacts. The first dependent variable is central government expenditures as a percentage of GDP. The explanatory variables of interest are those representing political institutions: "Will*Capacity," budgetary institutions, and the proportion of the presidential term that has elapsed. The first two institutions should reduce spending and favor surpluses, while the passage of the presidential term should have the opposite effect.

In addition, there are two economic controls and one social control. Interest payments as a percentage of GDP are expected to increase spending and deficits, as they consumed a high proportion of expenditures after the debt crisis hit in 1982 in most Latin

that a president who was *unable* to lower the deficit did not *want* to lower the deficit. This led us to reclassify the following presidents in the years indicated: Carlos Menem in Argentina from center-right to center in 1989-1990; Osvaldo Hurtado and Rodrigo Borja in Ecuador from center-left to center in 1982-83 and 1990-1; Fernando Collor de Melo from center to center-right in 1990-93; and Rafael Caldera in Venezuela from center to center-right in 1996-97. These changes, as feared, actually worsen the performance of this variable a bit, but we feel that they are necessary for valid measurement.

⁸ Although Mexico was not clearly democratic until the 2000 presidential election, it offers a useful example of fiscal performance in a hegemonic party system.

American countries. GDP, lagged one year, is included as a control because it could be associated either positively or negatively with fiscal performance. A positive relationship could mean that governments tend to overspend after flush years and overcontract after lean years; a negative relationship could mean that spending does not change quite as dramatically as the economy itself. If the economy is growing, spending may increase in absolute terms, but if spending does not increase as fast as the economy, it shrinks as a percentage of GDP. Conversely, if the economy contracts but spending does not fall, or falls less dramatically, then spending increases as a percentage of GDP. Whichever tendency proves to be the case, it is wise to control for it in order to get a more trustworthy estimate of the impact of the political variables that are our primary concern. The percentage of the population over the age of 65 should also be associated with higher spending and deficits because it is associated with outlays for social security and other welfare programs. It is appropriate to include debt service and welfare payments as controls in a model of political determinants because both are considered non-discretionary budget items and therefore relatively immune from political considerations.

Table 2 reports the regression estimates for the spending model. In model 1, there are no surprises from the control variables, aside from the suggestion that spending changes tend not to keep pace with changes in the total value of production. For our purposes, the first interesting finding is that the will*capacity interaction has the significant negative coefficient that we expected. Presidents who want to cut spending and have strong partisan powers were able to do it, while those who wished to spend more could do so when their partisan powers were strong. Presidents with weak partisan powers find themselves at the mercy of other forces. Models 2-5 in Table 2 vindicate the use of this interaction by showing that various additive models using its component variables, either alone or in combination, do not explain spending quite as well. The President's policy position has an appropriate and significant impact in Model 3, but not when other components of Will*Capacity are controlled for (Models 4 and 5). Partisan Powers (President's seat share * Discipline) is consistently significant, but in the wrong direction, falsely implying that the stronger the president's partisan powers, the higher the spending (Models 2, 4, and 5). Only the Will*Capacity interaction both has the correct sign and is strongly significant. Furthermore, Model 1 overall has the highest Chi-square statistic of these five and explains a bit more of the variance. It is therefore the best model of spending.

[Table 2 about here]

However, neither of the other institutional variables seems to matter for spending. One surprise in Model 1 is the positive and significant coefficient for budgetary institutions. Our expectation was that the more the legislative budgetary process concentrated power in the hands of the executive, the lower spending would be. But this estimate suggests that power-concentrating institutions are associated with *higher* spending, contrary to the findings of Alesina et al. (1999). If this finding is to be believed, one possible interpretation is that the existence of such institutions encourages politicians to spend more, trusting that at some later stage of the process overall spending will be reined in (i.e. high wire artists take more risks when they work with a net). Another possible interpretation could be that budgetary authority has come to be centralized in the executive to the greatest degree where spending is most out of control, and yet this solution does not work well. For example, most of the relevant literature argues that budget institutions are set in place to control fiscal volatility by isolating the budget process from political pressures (Alesina et. al. 1999, Baldez and Carey 1999). If so, our finding

would mean that centralization of budgetary authority is a desperate, but ultimately ineffective, attempt to control spending.⁹

Nevertheless, we prefer not to develop these arguments in greater depth at this point because we are not confident of the empirical relationship. The relationship is significant in only one of the five models in Table 2. It may be an artifact of poor measurement. The broad measure constructed by Alesina et al. violated some fundamental principles of index construction (1999). A more selective indicator including only those institutions that refer to Congressional budget controls (which we use in the next table), is an improvement but still falls short of conventional standards of internal reliability. It is also quite possible that our finding is spurious. The indicator is for the most part static for each country rather than based on year-by-year ratings. It is therefore easily confounded with any other static country characteristics that might be positively associated with spending, such as degrees of social inequality or longstanding bureaucratic inefficiency. We cannot rule out the possibility that our statistical fixes for the problems of time-series/panel data failed to prevent such a spurious finding. The only way to know for sure is to test a comparable model with a different, preferably larger, sample.

A second surprise is the non-significance of the electoral calendar (the proportion of the time elapsed in the president's term: 1 for presidential election years, .25 for the first of 4 years, and so on). The electoral budget cycle has been confirmed repeatedly in other studies, so it is truly surprising not to find it confirmed here that governments tend to spend more at the end of the presidential term. It may well be, however, that governments do spend more at the end, but because their partisan powers have eroded. Once partisan powers are held constant, there is no support for any additional impact of the calendar on spending patterns. It is also possible that the electoral calendar matters for surpluses and deficits but not for spending. To this question we now turn.

A Model of Fiscal Balances

The second dependent variable is the overall balance (deficit or surplus) of the non-financial public sector, both expressed as a percentage of GDP. The outcomes are reported as the conventional deficits in a given country in a given year.¹⁰ Positive values of the fiscal balance variable represent budget surpluses, whereas negative values represent budget deficits. The same three institutions are tested as explanatory factors in this model: the Will*Capacity interaction, budget institutions, and the electoral calendar. Expenditures, which were explained in the previous section, become an explanatory variable here. Total debt service as a percentage of GDP is included as a separate independent variable because it is not necessarily counted as an expenditure in each country's accounting system. We also include a dummy variable for the 1990s, capture the impact of the Washington Consensus, a pervasive set of pro-market policy norms that spread through the region in the 1990s; and country dummies, to control for fixed effects associated with the cases.

⁹ This interpretation is less plausible because there is a significant but small *positive* relationship between strong budget institutions and strong partisan powers ($r=.258$), that is to say that budget institutions tend to be found in systems where presidents already enjoy reliable partisan powers, not in systems where the politics is more chaotic.

¹⁰ It would be optimal to control for monetary policies of governments and the impact of external debt on the size of budget, by using *primary deficits* (Petrei 1998). Primary deficits are conventional deficits minus the interest payments on (domestic and foreign) debt. Despite several efforts at calculating our own index, we have failed to obtain a reliable measure of primary deficits for all country cases.

Models 6 and 7 in Table 3 report the estimates. All the economic and control variables perform as expected. Expenditures, obviously, have a negative impact: the more governments spend, the smaller their surpluses or the larger their deficits. The same tendency, not surprisingly of a similar magnitude, is observed for total debt service. Also, surpluses tended to be larger, or deficits smaller, during the Washington Consensus years. This is quite a large effect, enough to turn a perfectly balanced budget into a surplus worth more than 2 percent of GDP, or to erase a deficit of the same size.

But the variables of interest to us are the political institutions. They are especially interesting because these results are complementary to those found for spending. The Will*Capacity interaction helped account for spending levels, but has no significant impact on the overall budget balance; budget institutions and the electoral calendar had no impact on spending, but do significantly affect the budget balance. As many other scholars have reported, there is clearly an electoral budget cycle. Fiscal deficits tend to be most pronounced at the end of presidential terms, that is, during election years, and less pronounced at the beginning of the term. This is also a large effect—enough to nullify the positive impact of the Washington Consensus, if not larger. Budget institutions, however, have a positive impact, as theorized (and opposite to the unreliable estimates for spending). This is true even for the familiar variable of Alesina et al. (Model 6); but the effect is larger and more convincing for the more coherent “Congressional budget institutions” variable (Model 7).

We interpret this complementarity as an indication that different institutions matter for different stages of the budgetary process. The non-significance of the Will*Capacity interaction in Models 6 and 7 does *not* mean that the policy orientation of the president and the strength of her congressional support have no impact of surpluses and deficits; instead, it means that this interaction has an indirect effect. Will and capacity are an important determinant of spending, which is in turn the clearest determinant of the overall fiscal balance.

Budget institutions step in at a different stage. The oversight and discipline that they are supposed to provide do not appear to prevent governments from increasing spending; but they do seem to give executives some tools to help prevent high spending from leading automatically to huge deficits. The variable used in Model 7, for example (which we consider the more valid indicator, even if it is less familiar), includes items concerning congressional oversight of borrowing and constitutional constraints on deficit spending. Executives who are less constrained by congress may be better able to counter high spending with higher revenue, whether it flows from privatization, issuance of bonds, new taxes, improved tax collection, or other sources. Of course, it is possible that presidents’ ability to raise revenue is not a direct consequence of the creation of these budgetary rules. The adoption of such budget rules themselves may be a consequence of strong partisan powers, as weak presidents are less likely to win passage of such institutional reforms. And in fact, there is a strong positive correlation between partisan powers and the strength of budget institutions. But it is also plausible that there is some more direct impact.

The complementary finding suggests a more nuanced interpretation of the impact of the electoral calendar. Recall that this timing variable had no significant impact on spending; but recall also that there could be election-year surges in spending that are better explained by a weakening of will and capacity to control spending. The models in Table 2 do not rule out the possibility of an election cycle in spending; rather, they offer an explanation for such cycles if they exist. Table 3, however, suggests that the important impact of election years is not that they encourage higher spending, but that they discourage higher revenues. We know that politicians frequently make election-year

promises not to raise taxes. It only makes sense to suppose that incumbent politicians are more reluctant actually to increase taxes in an election year, as it would give their challengers a potent and credible accusation. This is prudent electoral politics, but the fiscal consequence is bigger budget deficits. Deficits can of course happen for purely economic reasons—natural disasters, falling commodity prices, rising international interest rates. What we argue is that, economic conditions being equal, deficits happen because presidents tend to lose their ability to control spending at the same time that they cannot afford, politically, to raise revenues.

Brief Case Histories

A review of events in our seven cases should help make the above arguments more plain. The accounts that follow are accompanied by Figures 3 and 4, which compare the actual spending and fiscal balance time series for each country with the values predicted by Model 1 and Model 6. Our models nicely predict large and small variations in the levels of government spending as well as overall fiscal performance. There are, however, several outliers in these estimates, which are identified and illustrated by the case histories.

It is hard to imagine two more opposite cases of party system configuration than hegemonic Mexico and fragmented Brazil. Yet, Figure 3 shows that these two share high levels of government spending (Brazil 1989, 1990, 1993 and Mexico 1987) as well as deep fiscal deficits at the end of the eighties (Figure 4). High government spending in Brazil is explained by the fact that presidents Sarney, Collor, and eventually Cardoso had to use large portions of federal resources to purchase political support from legislators and state governors (Kingstone 1999: 158, Mainwaring 1999). Sharp measures to impose government cutbacks by decree such as those used by Collor in 1991, were not likely to endure due to the feeble or nonexistent nature of political support (Kingstone 1999: 168). Facing a fierce political opposition in Congress, “a kinder, gentler Collor who cooperated more and had more credibility” came into place in 1992 (1999: 174). He instructed ministers “to open up coffers for public spending in exchange for votes”, but this return to clientelistic politics brought back higher government spending and larger deficits (175). Conversely, president Cardoso was able to keep his commitment to reduced spending and fiscal balance by leading a majoritarian coalition in Congress.¹¹ While he was not exempt from the obstacles of a fragmented system, Cardoso was able to negotiate instead of impose fiscal austerity. Our model finds better than expected fiscal performances in Brazil after 1991, most probably because it does not account for windfall revenues such as those coming from the privatization program launched by Collor in that year (see Figure 4).

Mexican presidents also pledged their efforts to achieve fiscal discipline, but they enjoyed a solid (large and disciplined) base of legislative support to do it: fiscal expenditures were slashed by half between 1987 and 1994.¹² Although Mexican presidents have limited formal budget powers vis-à-vis legislators, in practice they have been *budget dictators*, with the chamber approving the proposed budget “usually without amendments and never with amendments unacceptable to Hacienda [the finance ministry]” (Weldon 2001). The main source of variation in our series comes from interest payments on debt, which reached its highest level in 1987 (see Figure 3). Carlos Salinas de Gortari, first as De la Madrid’s secretary of Programming and Budget (SPP) in 1986, and then as president since 1988, crafted an impressive package for debt reduction that included the privatization of state-

¹¹ After the 1994 elections, Cardoso was able to form a center right alliance with the PFL, PMDB, PPB and PSDB, holding together 67% of seats in the lower Chamber and 21 of 27 gubernatorial posts (Kingstone 1999).

¹² According to Molinar, these enormous partisan powers are ensured when three conditions are met: unified government, party discipline and recognition of president as leader of the party (Molinar 1991, Weldon n.d.).

run enterprises to pay off debt obligations and the promise of joining a North America Free Trade Agreement by 1994.¹³ As interest payments were reduced, so was the government spending, which in turn had a positive impact on overall fiscal performance (see Figure 4).¹⁴ Again, some of the fiscal surplus underestimated by our model (i.e. 1992) is likely to have come from privatization revenues.

The case of Argentina illustrates the contrast between a president who adopted a party-alienating strategy to impose economic reforms unilaterally (Alfonsín), versus one who carefully negotiated the support of his political party (Menem). Neither president had much commitment to economic reforms when they assumed office, but before long exogenous conditions forced both to adopt some kind of stabilization package. Without solid congressional support, President Alfonsín's mild attempts at following IMF guidelines were soon abandoned (Manzetti 1993: 59-60). Figure 3 illustrates Alfonsín's erratic fiscal policy, with larger-than-expected expenditures in first half of his term, and lower-than-expected expenditures in the second half (see Figure 3). The swinging economic performance and skyrocketing inflation rates rapidly eroded public credibility and UCR support, forcing him to terminate his presidential term six months in advance (Manzetti 1993). After winning the 1989 general elections on a Peronist campaign, President Menem made an enormous policy reversal to advocate fiscal discipline and lower inflation.¹⁵ Menem quickly realized that successful crafting of budget proposals would require a "party-accommodating" approach to include economic demands from Partido Justicialista legislators and local governors (Jones 1998, Corrales 2000).¹⁶ Most of his budgets were smoothly approved by Congress and endorsed by local PJ governors, in a timely manner and with only minor modifications that were successfully (line-item) vetoed by Menem (Jones 1998). Our models accurately predict improved fiscal performance in Argentina upon Menem's arrival (see Figures 3 and 4).¹⁷ It is nevertheless paradoxical that the price of gathering of political support for adjustment was the distribution of pork and patronage among political partners, thus increasing government expenditures after 1990 (Figure 3). Our model finds lower-than-expected budget surpluses for Argentina in the nineties, perhaps because we need to develop a more accurate way to account for the cost of patronage and pork distribution to provinces (Figure 4).

Much like the Mexican PRI, in Venezuela the traditional Acción Democrática party (AD) depended on state resources during much of the eighties. Abundant oil revenues helped finance this statist arrangement, but international pressures to pay debt obligations during the nineties posed important obstacles for political survival. Upon assuming office, President Pérez tried to adopt controversial economic reforms by neglecting his own party and giving key economic posts to non-Adecos. Having few options to pursue a political career outside the party, AD legislators staged a revolt against the Pérez government, which included ministerial impeachments and concluded with the impeachment and ouster

¹³ The liberalization of sectors included telecommunications, port and airport management, some railways and airports and sales of minority stakes in petrochemical plants (IADB report 1997: 26).

¹⁴ The dramatic drop in government spending levels during the Salinas administration was not even affected by the official sponsored program for social spending, PRONASOL.

¹⁵ His reform package included a radical plan to cut government spending, vast privatizations of state enterprises, an internal moratorium on domestic debt, the freezing of banking deposits, and finally a Law of Convertibility that pegged the peso to the dollar.

¹⁶ Instead of legislating by decree, Menem sought agreements from Congress through the "you suggest, I might veto" strategy. His Minister of Economy Domingo Cavallo played a crucial negotiating role with Congress (Jones 1998).

¹⁷ The data shown in the graphs is not as coherent with the description made in the literature, probably due to differences in accounting methods in data sources. If we were to use IADB data (instead of World Bank's), the time series for budget balances in Argentina would show a sharper recovery after 1990: 1984: -12.6, 1985: -6.1, 1986: -4.7, 1987: -7.3, 1988: -7.9, 1989: -8.0, 1990: -4.9, 1991: -1.8, 1992: 0.2.

of Pérez himself in 1993 (Corrales 2000). His successor, President Rafael Caldera, also failed to form a reliable and stable alliance of parties in Congress, and his sources of support disappeared after the withdrawal of the leftist MAS party in 1995. Our model accurately predicts CAP's brief attempt to impose fiscal restraint in 1989 without lasting success (see Figure 3). Variations in international oil prices (not modeled) can explain unexpected surpluses in 1985 and 1991 followed by sharp declines the next year. Similarly, the selling of a 49 percent stake in the telephone company and the privatization of several financial institutions (which were taken over during the financial crisis of the eighties) helped counteract the effect of a second fall in oil prices after 1994, producing a sharp but short budget surplus in Venezuela until 1997 (Figure 4) (IADB report 1997: 26).

Chilean presidents were able to keep moderate and constant levels of government spending without the need for using their relatively high budget constitutional powers (Carey y Baldez 1996, Siavelis 2001). However, the unusually large and disciplined *Concertación* coalition, which kept partisan powers strong, requires some further explanation. Cooperation between the president and Congress in setting expenditure levels is a game of future expectations: since Chilean presidents have not enjoyed a solid single-party majority in Congress since 1989, it is in their interest to submit only acceptable budget proposals in order to preserve the unity of the government coalition (Siavelis 2001).¹⁸ The rewards to stable fiscal performance came in the 1993 elections, when the *Concertación* alliance obtained the presidency again as well as the majority of seats in the lower Chamber. This victory reinforced the wisdom of the first new democratic government's path. This level of institutional cooperation and fiscal discipline has been clearly reflected in consistent budget surpluses between 1989 and 1998.

Uruguay does not present much variation throughout time either. A slow but increasing level of government spending peaked in 1994. This outlier is likely to be explained by Central Bank losses on non-performing loans purchased from private banks and government transfers to the social security system. According to the U.S. Department of State, government transfers to social security before the 1996 reform were believed to finance an annual social security deficit equivalent to more than 6% of GDP. This increased spending produced in turn a higher-than-expected budget deficit in the same year (see Figures 3 and 4). On an additional note, it is relevant to note that the political cycle is especially strong in Uruguay, with higher deficits in electoral years and improved fiscal performance between elections.

Ecuador shows relatively low levels of government spending given its highly fragmented party system. While the 1979 Constitution empowered presidents with strong prerogatives for submitting economic legislation they have been unable to surmount the recalcitrant opposition in Congress (Grindle 1992).¹⁹ Institutional reforms had little or no success in preventing presidents and legislators from exchanging votes for pork and patronage. In 1994 a law to cut provincial budget allocations for deputies and confiscate use of discretionary funds by the executive was approved through a national plebiscite. Nevertheless, provincial allocations and discretionary funds were restored under vague budget categories such as "Allocations," "Global Expenses," and "Transfers" (Araujo 1998: 145). MC's and presidents have incentives to boost selective spending that is visible to

¹⁸ Legislators are constrained by constitutional provisions that prevent them from proposing alternative plans for spending unless they are previously funded. Nor they can move or reallocate spending from established budget categories (Baldez and Carey 1996: 33).

¹⁹ While presidents used and abused their line-item vetoes, the ability to legislate by decree, and the power to submit controversial legislation to plebiscite, the assembly has usually responded with profound amendments to proposals, policy reversals, or threats to censure cabinet ministers or the president himself.

their constituencies (Araujo 1998: 163).²⁰ Variation in government spending levels is well explained by the model (see Figure 3). Our second model also does a decent job of predicting expected change in deficit levels, with the exception of events caused by exogenous factors: a sharp fall in oil revenues after 1985 and a larger negative trend initiated in 1991 with the fall of international oil prices but aggravated in 1995 with the additional cost of the war against Peru in January of that year.

Conclusions

Our basic conclusion is that political institutions matter for fiscal performance. Getting good estimates of how and how much they matter is tricky, due to unreliable data, exogenous economic shocks, and the lack of comparability across cases; but when the budget process is modeled with appropriate precautions, the impact can be clearly seen. Two of the effects we have estimated seem to be confirmations of what others have found. The first is that governments tend to run up deficits in election years. The second is that various institutions designed to prevent deficit spending are in fact associated with deficit reduction.

A third finding, however, puts these effects in a different light. By modeling spending and deficits separately, we were able to rule out a connection between either these budget institutions or the electoral cycle and spending. If these institutions were associated with the overall fiscal balance but not with spending, the exact causal mechanism through which they have their impact is unclear. It does not seem to be the case that governments spend more in election years, or that budget institutions discourage politicians from spending more; and yet, these institutions somehow affect whether spending moves the ledger sheet into the black or the red. Ongoing research would have to consider the impact of government revenues to characterize the budget process more adequately.

Fourth and finally, we show that spending *can* be partly explained by the complex interaction of other political institutions: the size of the president's party, its degree of discipline, its loyalty to the president, levels of ideological polarization, and the ideological position of the president. All of these have been theorized to affect spending, but none of them has as large or as certain an impact as all of them combined in a theoretically appropriate way. We hope that this way of measuring the expected impact of these institutions will be tested by other scholars using other cases.

²⁰ Araujo and Wray (1998) report that in the period between 1991 and 1997, typical political expenditures included: *cantonizaciones* (county creations), *pensiones vitalicias* (lifetime stipends given to national heroes) and debt and credit relief. Only the creation of new counties has represented a significant increase in government spending. Between 1974 and 1998, the total number of counties increased 80%, from 124 to 224. The problem with counties is that they have little extractive capacity in the way of taxes, and little capacity to engage in foreign domestic credit, so their creation represents net increased central spending.

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The partisan powers indicator (PP) is based on a cumulative probability distribution function interacting with party discipline within the bounds of a floor (determined by the level of polarization) and a ceiling (set by the chance of a fallout between the governing party and the president). The formula is

$$PP = floor + disc(1 - floor - loss)[1 - e^{(-e^{10disc-2})(size^{10disc})}]$$

FLOOR establishes the lower limit on the president's legislative success rate. It is operationalized as $(1 - .01 * polarization)^2$. This term is squared because passage of the president's bills requires agreement between two sides. It can be thought of as the probability that the governing parties will support a bill times the probability that the opposition parties will support that bill. Each probability alone is assumed to be inversely proportional to polarization.

The second term, $DISC(1 - FLOOR - LOSS)$, establishes the range of possible success above that floor, and therefore sets the upper limit on legislative success. DISC is the party discipline estimate. LOSS is an estimated probability of a falling out between the governing party and the president.

The term in brackets defines the parameters of the S-curve that links the floor to the ceiling. It is based on a cumulative probability distribution function that models increasing legislative success as the size of the governing party (SIZE) increases. How steeply the rate of success increases for each increase in party size depends on party discipline. If discipline is very loose, increasing the size of the party has little impact. If discipline is very tight, increases in party size make little difference before the party approaches 50 percent, where legislative success suddenly increases sharply, approaching 1; and then further increases in party size have little additional impact.

The SIZE variable in this sample refers to the president's party alone except for Chile, where we have used Arturo Valenzuela's data on coalition composition instead (Valenzuela 1994, 197-99). As long-lasting coalitions have been more typical of Chile than its neighbors, this exception probably improves the validity of the partisan powers index for predicting economic outcomes.

Figure 5 illustrates the predicted partisan powers of the president as a function of the size of his party (or coalition) and the degree of party discipline prevailing within it.

²¹ This appendix is taken from Coppedge 2001.

Appendix B: Estimation Assumptions

One of the problems involved in working with spending and deficit data cross-nationally is achieving comparability. The state consistently plays a larger role in some economies than in others, so spending levels are likely to be affected by omitted variables. Also, in the relatively short time period that we consider, fiscal performance is likely to vary more in some countries than others, also for reasons that we cannot model directly. For example, large budgets vary more in size than small budgets do, simply because of their size. However, we can correct for both problems indirectly. To control for unspecified determinants of the overall level, we include country dummies, which adjust the intercept to fit each country's average level. To standardize the variability of spending and fiscal balances, we run weighted regression. For the spending models, the weight is expenditures as a percentage of GDP. For the fiscal balance models, the weight is the fiscal balance squared. For the spending models, inclusion of the country dummies eliminates most of the heteroskedasticity, but we use weighted regression to be cautious (it lowers the significance of our variable of interest a bit, but does not affect the substantive interpretation). For the balances models, the country dummies help less and the weight makes a more decisive difference. It should be noted that some kind of correction is essential with these data. For example, it would seem obvious that last year's GDP would have an impact on this year's spending; yet this effect is hidden in the cross-national variance unless one includes country dummies in the model.

The use of cross-country pooled time series data carries the potential for three additional methodological problems. First, there might be panel heteroskedasticity in the data, i.e. "the error processes may differ from country to country" (Harrinvirta and Mattila 2001: 509, Beck and Katz 1995; Beck 2001). Secondly, the error terms might be contemporaneously correlated, i.e. "errors in one country at a specific time point might be correlated with errors in another country at the same time point" (Harrinvirta and Mattila 2001: 509, Beck and Katz 1995). Finally, there is a danger of serial autocorrelation within countries, as there is in any time series. To correct for these errors we estimated panel corrected standard errors with STATA's XTPCSE command, with the "hetonly" option. This option implements the rather generous assumption that there is autocorrelation only across panels, not serially within panels or contemporaneously in the whole sample. The weighted regression helps with this, and the hetonly option adds an additional correction for omitted fixed (not variable, like GDP) determinants. The use of weighted regression precludes an assumption of serial or contemporaneous autocorrelation in STATA. Serial autocorrelation might seem to be a *de rigeur* assumption with economic time-series, but in fact there is so much variation in the dependent variables in this relatively short time period (see figures 1 and 2) that the past is not a strong predictor of the present, especially in cases like Brazil and Mexico. This is a situation in which no solution is perfect, so we have chosen to fix the most important problem, which is correlated errors across, rather than within, panels. (One indication of this is that the standard deviations of most of the variables are larger across panels than within panels.) And for the deficit model, we model a period effect ("nineties") that picks up the most obvious contemporaneous forces. At any rate, none of our estimates is substantially altered in sign or significance by any of the XTPCSE options. They are virtually the same whether the regression is weighted or not and whether either contemporaneous or panel-specific autocorrelation is assumed.

Table 1: Sources and Summary Statistics for Variables							
Variable	Source	Mean	Std. Dev.	Min	Max	Predicted impact on	
						Spending	Balance
Fiscal balance (% of GDP)	WORLD BANK - WDI2000	-2.02	4.27	-16.10	5.10	NA	NA
Expenditures (% of GDP)	WORLD BANK - WDI2000	20.66	6.69	9.42	37.25	NA	-
Gross Domestic Product (\$billion)	WORLD BANK - WDI2000	129.00	141.00	4.72	546.00	+/-	NA
Interest payments (% of GDP)	WORLD BANK - WDI2000	4.43	5.16	0.44	27.00	+	-
Total Debt Service (%GDP)	WORLD BANK - WDI2000	6.9	2.67	1.76	15.49	+	-
Budget Institutions	Alesina et. al. 1999	63.06	6.44	54.49	71.82	-	+
Congressional Budget Institutions	Alesina et. al. 1999 revised (Questions 3, 5, 6, 7, & 10 only)	30.43	6.73	21.00	41.66	-	+
PPOLICY	Coppedge 1997 (modified)	25.54	35.56	50	-50	NA	NA
Partisan Powers	Coppedge 2001	0.60	0.30	0.13	1.00	NA	NA
Index of Polarization	Coppedge 1998	40.34	15.48	6.09	64.13	NA	NA
Will*Capacity	PPOLICY*Partisan Powers (see appendix)	16.21	25.97	-50.00	50.00	-	+
Presidential term elapsed	original coding by Andrés Mejía Acosta	0.60	0.29	0.17	1.00	+	-
Washington Consensus (1990's dummy)	IADB report 1997	0.63	0.48	0	1	-	+
Percentage of population over 65	WORLD BANK - WDI2000	6.21	2.98	3.38	12.50	+	-

Table 2: Determinants of Spending

	Model 1 coeff. (S.E.)	Model 2 coeff. (S.E.)	Model 3 coeff. (S.E.)	Model 4 coeff. (S.E.)	Model 5 coeff. (S.E.)
Will*Capacity	-.045*** (.011)				
Partisan Powers		5.1* (2.0)		6.0* (2.5)	7.9* (2.9)
President's Policy Position (PPOLICY)			-.016* (.007)	-.002 (.008)	-.001 (.008)
Seat Share of President's Party					-.034 (.029)
Budget Institutions	.21* (.10)	.03 (.11)	.18 (.10)	.07 (.11)	.072 (.11)
Time remaining in term	1.2 (0.7)	1.0 (0.7)	1.29 (.68)	1.04 (.68)	.98 (.68)
Interest payments as % of GDP	.71*** (.06)	.82*** (.08)	.70*** (.07)	.73*** (.08)	.76*** (.07)
% of population over 65	4.7*** (0.6)	5.1*** (0.7)	4.3*** (0.6)	5.5*** (0.7)	5.5*** (.72)
GDP _{t-1} (\$billions)	-.017*** (.004)	-.009 (.005)	-.016** (.005)	-.015* (.005)	-.017** (.005)
Argentina	-25.6***	-30.5***	-24.6***	-31.8***	-31.9***
Brazil	6.3*	1.3	5.9*	5.3*	5.4*
Chile	-9.6***	-12.5***	-9.8***	-13.9***	-13.9***
Ecuador	-5.0***	-4.5***	-5.3***	-4.2***	-4.2***
Mexico	.048	-4.5*	-1.1	3.5*	-3.3*
Uruguay	-27.2***	-29.4***	-24.5***	-32.2***	-32.2***
intercept	-13.6* (6.8)	-7.8 (6.8)	-9.7 (6.0)	-11.2 (6.6)	-11.3 (6.2)
N	90	91	91	89	89
R ²	.938	.927	.932	.936	.937
Π ²	1332	1152	1210	1267	1314

All standard errors are heteroskedastic panel-corrected assuming no serial or contemporaneous autocorrelation, and weighted by expenditures as a percentage of GDP. Standard errors are omitted for country dummies to reduce clutter.

***p<.0005, **p<.001, *p<.05

Table 3: Determinants of Fiscal Balance

	Model 6 coeff. (S.E.)	Model 7 coeff. (S.E.)
Will*Capacity	-.056 (.042)	-.047 (.038)
Budget Institutions	.32* (.11)	
Congressional Budget Institutions		1.1*** (0.3)
Proportion of presi- dential term elapsed	-2.8* (1.1)	-3.3** (1.0)
Expenditures as % of GDP	-.60*** (.07)	-.54*** (.06)
Washington Consensus (1990s dummy)	2.8* (0.8)	2.3* (0.7)
Total debt service as % of GDP	-.63* (.23)	-.73** (.23)
Argentina	-2.0	12.1*
Brazil	-2.7	10.0*
Chile	4.5	1.3
Ecuador	3.3	13.6*
Mexico	-.94	8.7*
Uruguay	6.3*	7.8***
intercept	-6.3* (7.4)	-25.0* (10.8)
N	93	93
R ²	.845	.871
Π ²	741	728

Standard errors are heteroskedastic panel-corrected assuming no serial or contemporaneous autocorrelation, and weighted by fiscal balance as a percentage of GDP, squared. Standard errors are omitted for country dummies to reduce clutter.

***p<.0005, **p<.001, *p<.05

Figure 1: Government Expenditures (as percentage of GDP)

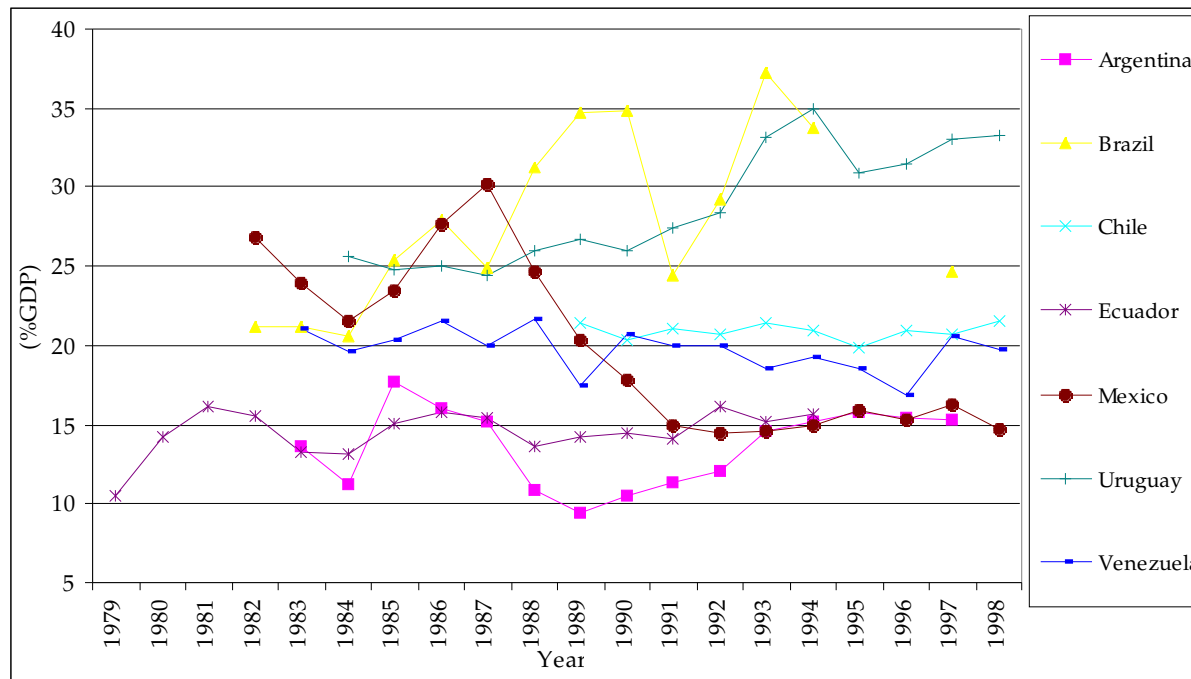


Figure 2: Fiscal Balance (as percentage of GDP)

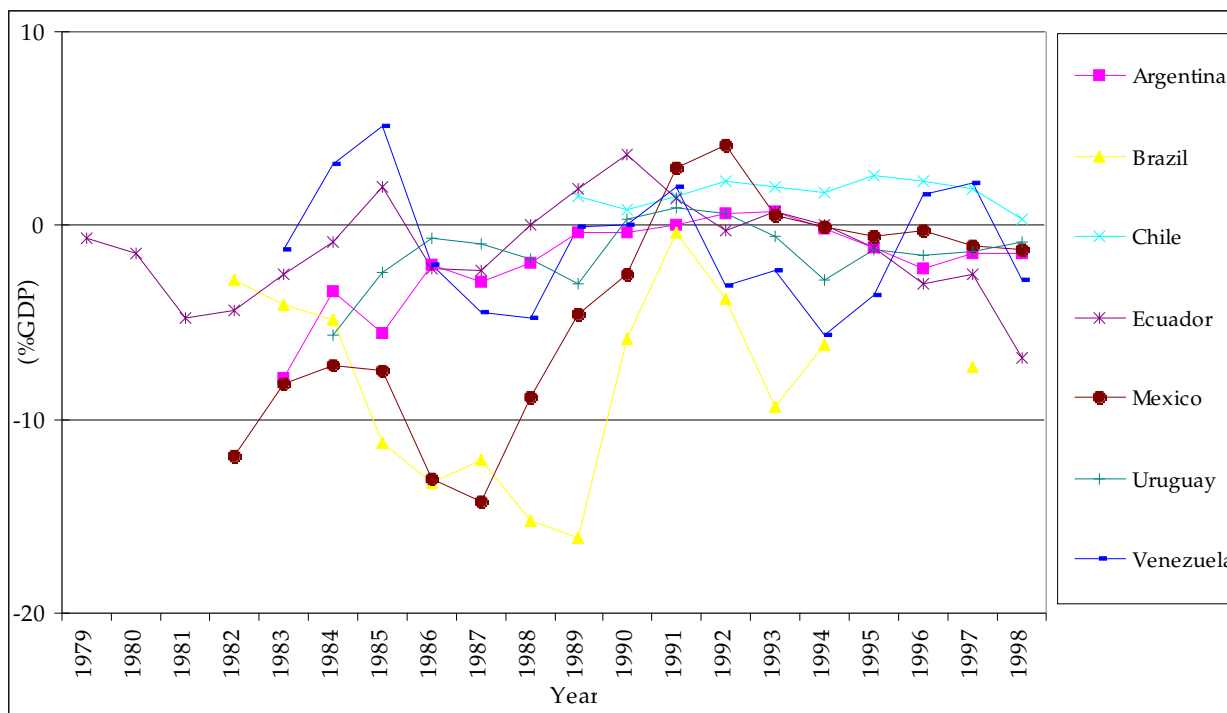


Figure 3: Fit of Spending Model by Country and Year
(Black lines are actual spending. Blue lines with circles are more predictions)

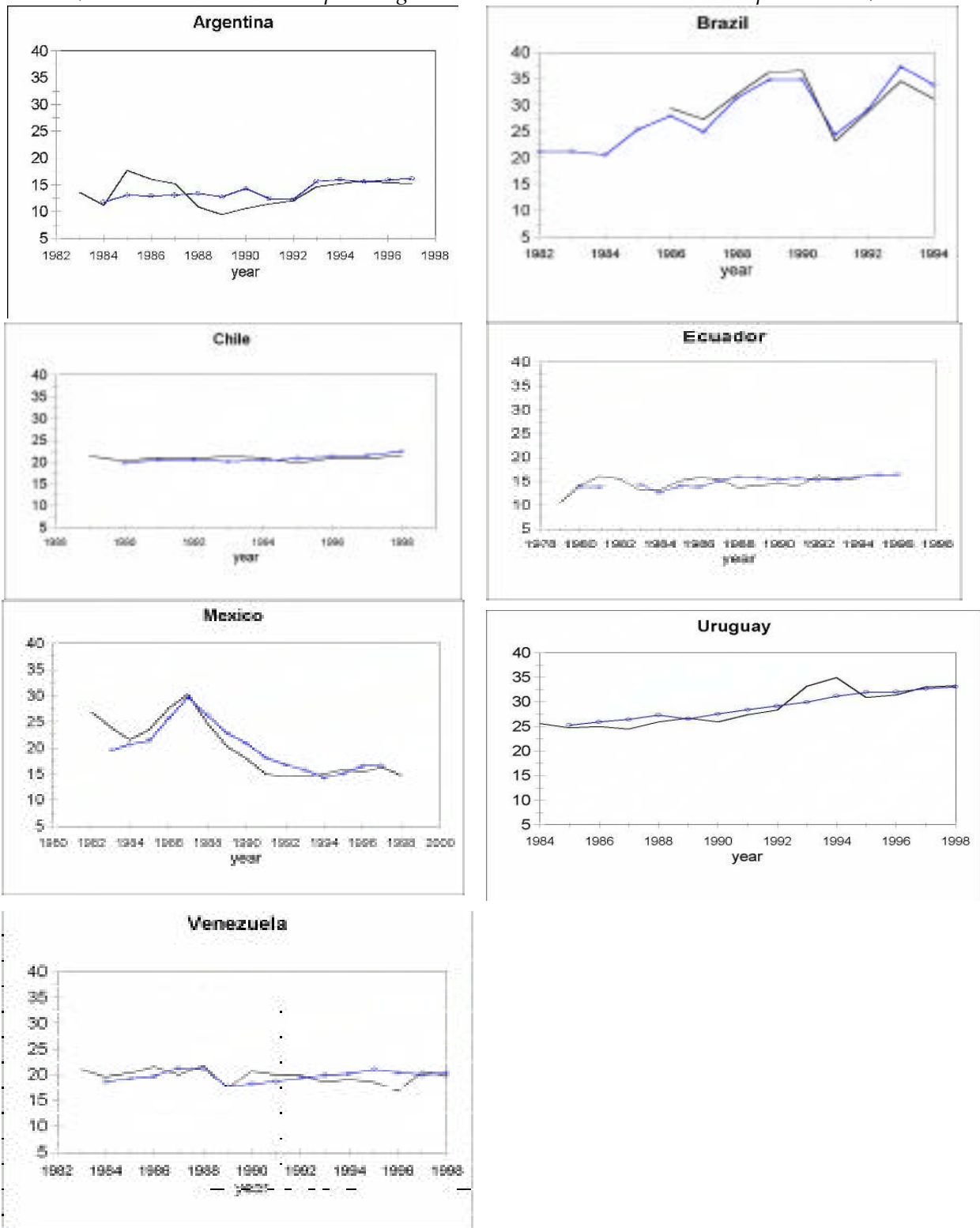


Figure 4: Fit of Fiscal Balance Model by Country and Year
(Black lines are a actual spending. Blue lines with circles are morel predictions)

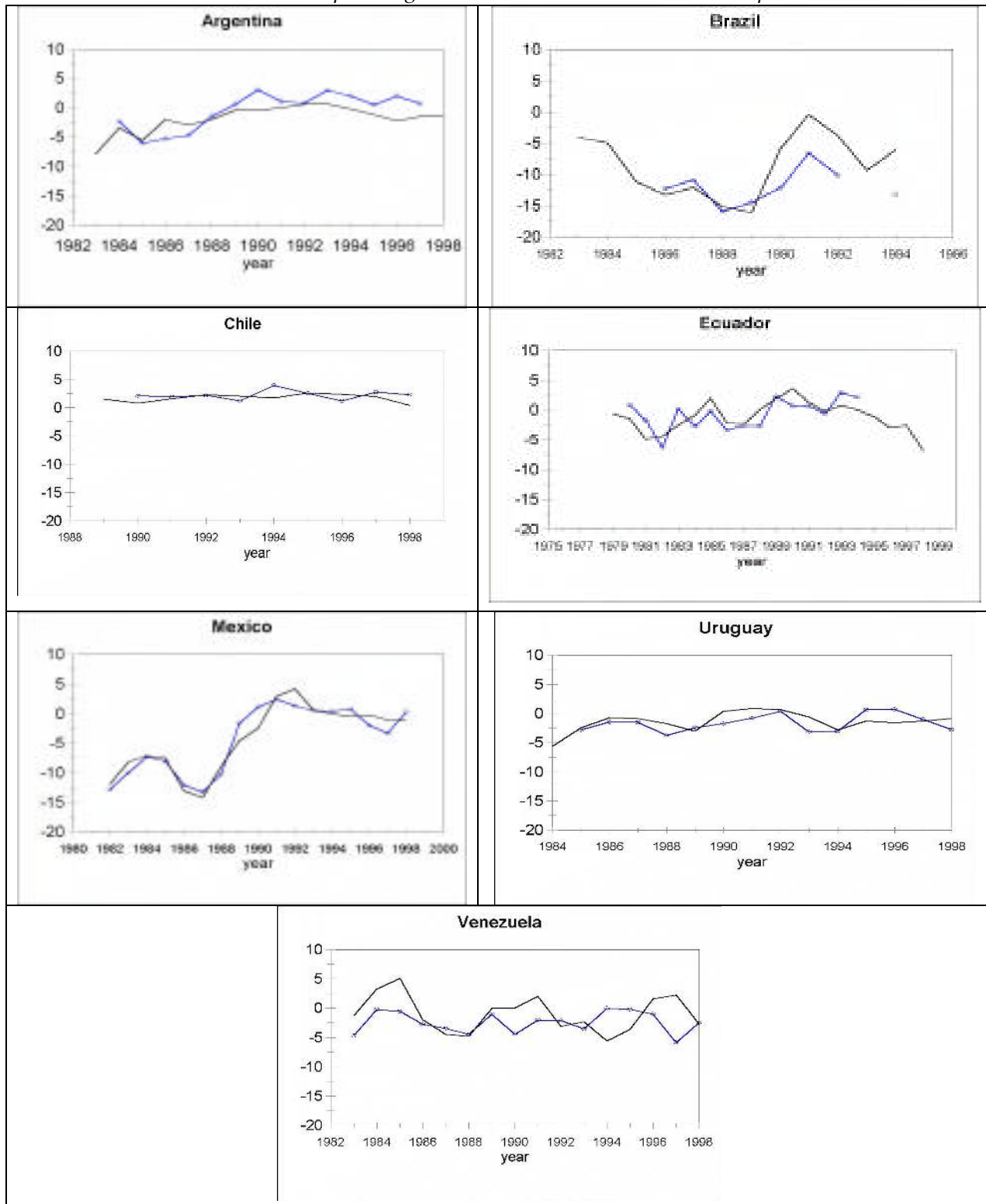


Figure 5

