Variations in the Separation of Powers and Budget Allocations

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Abstract

In separation of powers systems (presidential democracies), we assume that legislative and executive branches have to concur in order for policies to be enacted. When deciding on the nation's spending priorities, two factors determine the balance struck across budget categories – the ideological divergence between the president and the assembly and the formal powers ascribed to each branch. In many presidential regimes, especially in Latin America, it has been argued that legislators are marginalized in the policy-making process, the budget-making process in particular. This raises a fundamental question that has implications for the quality of representation: Do the preferences of democratically elected legislators get reflected in the distribution of public expenditures? In this study I explore how institutionally defined powers and inter-branch ideological divergence affect the median legislator's success at determining spending priorities. Looking at 15 Latin American democracies for the past 15 years, I find that the spending priorities of legislators can be reflected in budget outcomes when the median member and the president are ideologically non-congruent when the institutions that govern the budget-making process minimize the president's powers or generate incentives for an interbranch compromise.

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By definition a separation of powers system (presidential democracy) distributes authority across branches of government and then requires them to arrive at a policy decision. Policy is made *jointly* by branches of government who are *separately* accountable at election time. James Madison writes in Federalist 51 in support of this system of *checks and balances* as it prevents tyranny by ensuring that "ambition [is] made to counteract ambition" (Madison, 1788).

However, it has been argued that, in practice, legislators are often marginalized in the policy-making process to the point of serving as mere rubber-stamps for the presidency (Morgenstern, 2002). This apparent disjuncture between theory and practice raises a fundamental question that has implications for the quality of representation: can the preferences of democratically elected legislators get reflected in policy outcomes when they face a powerful unitary executive? The answer is a matter of importance for the quality of democratic representation. If, as empirical work suggests, the policy position of the median legislator closely resembles the position of the median citizen(Golder and Stramski, 2010; Powell, 2000), then policy outcomes that favor the preferences of the median legislator are more likely to correspond to the views of the median voter as well.

In essence, I analyze when do the preferences of the majority of legislators get reflected in the distribution of public expenditures. The construction of the budget is a salient and key area in which legislators and presidents have strong reasons for pushing for their most preferred level of spending on a number of items. Year after year presidents and legislators construct and approve the government's budgets[1], creating a perfect opportunity to study how well (or poorly) legislators fare when trying to shape spending patters during their time in office. Building on an institutional perspective that studies the effect of budgetary rules on spending (Alesina et al., 1999; Martin and Vanberg, 2013, 2014; Hallerberg and Marier, 2004; Hallerberg, Strauch and von Hagen, 2009), my main assertion is that vesting to much budget-making authority in the executive will limit

[1] There are a few exceptions of pluri-annual budgeting.

the legislature's impact on policy, whereas, vesting (at least some) authority in the legislature can provide the median legislator with influence over government expenditures. Of course, beyond the institutional design is the question of whether legislators and executives have countervailing ambitions (Moreno, Crisp and Shugart, 2003). Congruency or divergence of the policy views of the president and the median legislator might also affect the median legislator's success: when the president and the legislators have similar spending priorities, then the legislative median is more likely to succeed because both branches of government will work together towards a common goal. In contrast, when they have opposing goals, the success of the median legislator will ultimately depend on how much authority she is granted by the budget-making rules.

In what follows, I develop this argument by first discussing the way in which separation of powers and the ideological composition of the different actors - particularly the president and the legislative majority - *interact* with one another to potentially affect the median legislator's success at determining policy outcomes. I argue that the reason for this is the different ways in which institutional designs across presidential regimes allocate authority between the executive and legislative branches of government. The next two sections cover issues relating to data, variables, and the statistical results from the empirical analysis of 41 legislative terms in 15 Latin American democracies for the past 15 years.

Budget Institutions and Spending Priorities

Institutional designs – typically defined in constitutions, legal statutes, and cameral procedures – determine the process by which budget negotiations proceed. Budgets are long and complex, and a common characteristic of the budget process in Latin American democracies is that the executive branch formulates and introduces the budget to Congress. So the executive has the upper hand when it comes to expertise and information in designing the budget proposal. Other features in the budget process include means by which, if any, a proposed budget can be amended, whether a budget proposal approved by the legislature can be vetoed by the executive, if and how the legislature can override such a veto, and to what budget allocations does the country revert if no agreement is reached. How these provisions are combined determines when budget-making institutions are most likely to privilege legislators, when they are most likely to privilege the president, and when they make the eventual outcome the result of a more balanced case of interbranch give-and-take. Even in light of the variation in the budget-making process, the literature has considered that Latin American presidents make most spending decisions unilaterally. Cox and Morgenestern 2001 even consider that many Latin American presidents are "budget dictators" (p. 183).

Economists and political scientists have developed a line of inquiry assessing whether budget institutions can solve the "common pool resource" (CPR) problem: each politician (or party) follows his own spending priorities and, while pushing to see his priorities reflected in the budget, has weak incentives to limit other politicians from increasing spending in other areas. Their findings show that centralizing budgetary procedures leads to smaller government deficits (Alesina et al., 1999; Hallerberg, Strauch and von Hagen, 2009; Baldez and Carey, 2001) because it limits the expansionary pressures on government spending (Martin and Vanberg, 2013).

Although allocating greater authority to the executive may have a positive impact on the economy, it might prevent policy from reflecting the position of the legislative median and, in turn, the median citizen. Formal models models of interbranch interaction under a variety of institutional designs have deduced that allocating greater authority to the president could result in policy outcomes farther from the median legislator and relatively closer to the president (Colomer and Negretto, 2005; Crisp, Desposato and Kanthak, 2011). Additionally, any imbalance of power between the branches of government should be stronger when their ideology is not congruent. As the ideological non-congruence between median legislator and the president increases, the median will still be able to set her most preferred policy if the budgetary rules favor her by, for instance, allowing the introduction of amendments to the budget proposal (Martin and Vanberg, 2014). Conversely, under budgetary rules that limit the participation of the median legislator and empower the president – for instance, by giving him a veto over the approved budget that has to be overridden by a supermajority in the legislature –, the budget will reflect the president's spending priorities instead of the legislative median's goals.

The following two hypotheses summarize these expectations:

Hypothesis 1. *In the presence of* ***budget institutions*** *that increase the authority of the median legislator, the negative effect of a decrease in the* ***ideological congruence*** *between the president and the median legislator on the legislator's success is reduced.*

Hypothesis 2. *As the* ***ideological congruence*** *between the president and the median legislator diminishes (higher divergence), the median legislator's success will increase in the presence of* ***budget institutions*** *that provide greater the authority to the median legislator.*

Budget-Institutions in Latin America

In what follows I show how three features of the budgetary process are key to understand whether the median legislator has any influence on spending priorities. These features are relevant because they can empower the president in the budgetary process or generate incentives for the executive and legislative branches to reach a compromise over the budget. The three features follow.

Reversion Point. The policymaking process typically includes a rule to decide budget allocations in case of an interbranch stalement. If the legislature fails to make a decision by the end of the fiscal year, in some countries the previous budget comes into effect while in other democracies the president's proposal comes into force. In the first scenario, the *status quo* could be close to either the president or the median legislator. Suppose that the status quo is closer to the legislative median than the president's proposed budget; then the median can decide not to consider the president's proposal and keep the spending level specified by the last budget. In contrast, if the previous budget is close to the president's spending preferences (and a new budget could not be any closer), then the president does not have an incentive to provide the assembly with a budget proposal. In Argentina, for instance, presidents have failed to present a budget proposal several times because, under rampant inflation, following the previous year's budget is more beneficial to them than trying to approve a new one. The previous spending levels are going to be under-budget (due to inflation) so they can spend any surplus as they please (Rodríguez and Bonvecchi, 2004).

Legislative Amendment. If legislators can introduce amendments to the president's budget proposal, they can adopt government expenditures that more closely resemble their spending priorities. Research has shown that amendments allow the median legislator to move policy closer to her position (Martin and Vanberg, 2014; Lyne, 2008). Nevertheless, certain budget institutions do not allow legislators to modify the president's proposal, reserving any amendment can only be introduced by the executive branch.[2] Baldez and Carey (2001) argue that, in Chile, these restrictions on the legislators' ability to amend the president's budget proposal privileges the president's priorities and is one of the reasons why the government often operates with a fiscal surplus. It is worth pointing out that the executive branch can anticipate the preferences of the assembly while formulating the budget proposal, so under certain circumstances, the legislature could induce the

[2]Previous research Santiso (2005) has focused on whether legislators can increase the total level of spending specified in the budget or not. This is different to what I understand as amendments. I am interested in whether legislators can change the patterns of spending specified in the president's proposal.

executive to propose a budget that already reflects their spending preferences without having to resort to legislative amendments.

Executive Veto & Override. Most constitutional designs give presidents the right to veto legislative decisions, requiring a simple or super-majority in order to enact the vetoed policy. Exceptions are presidents in Costa Rica and Honduras who, otherwise entitled to a veto power, are not to allowed to exercise it when it comes to the budget. Some vetoes are more effective than others. When a super-majority is required, legislators will have a difficult time approving a legislative override (Shugart and Carey, 1992; Colomer and Negretto, 2005; Crisp, Desposato and Kanthak, 2011). This is often called a *strong veto*. In contrast, when a veto can be overriden by simple majority, the same majority that approved the budget the first time needs to come together again to overcome the presidential veto. This is often called a *weak veto*. Additionally, presidents can veto the whole budget bill or certain items of the budget bill. The *partial veto* is a powerful tool because forming a coalition to support a section of the bill -instead of the bill as a whole - might prove difficult and costly.[3]

In order to assess how budgetary rules combine to form a process that determine the extent to which the media legislator can shape spending patterns, I classify *budget institutions* based on the three features described earlier: (1) the *reversion point*, which can be the presidential initiative or the budget for the previous year; (2) the possibility of introducing *amendments* when the budget proposal is under consideration in the legislature; (3) whether the president has a *strong veto*, a *weak veto* or *no veto* at all. Instead of creating an index based on these characteristics, I consider their interaction and whether the approved budget will favor the president, the median legislator, or

[3]Time is also a key consideration: In order for the funds to be allocated, the veto should be rejected sooner rather than later.

a compromise between the two. Although theoretically there are eight budget-making institutional designs, I find that only six of them are being used in Latin American democracies (see Figure 1) . Two of these designs allocate authority in favor of the legislative median. Three of them give an advantage to the president over the legislature and, as a consequence, constrain the median legislators control over the budget. Finally, one of the budget designs generates incentives for the president and the legislative median to compromise with one another reach an agreement over the budget. Perhaps surprising, the plurality of countries in the region have legislative-dominated institutional designs, while designs privileging the executive are the least numerous.

Let me proceed to explain the intuition behind the interaction of the three institutional features - stalemate reversion, legislative amendment, and veto override - and the predicted budget outcome. First, the median legislator's spending preferences are privileged when the legislature can amend the president's budget proposal and the president has little power to veto their revisions.[5]. In these instances, the reversion point is irrelevant because the president cannot provoke a stalemate so that his budget proposal or the previous budget come into effect (see Institutional Combination #4 and #6). The median legislator can amend the executive's proposal and, if the president vetoes the budget passed by Congress, the veto will presumably be overridden by the majority that adopted it in the first place.

Second, I expect spending decisions to reflect interbranch bargaining when the legislature can amend the president's proposal, the president can meaningfully threaten to veto their changes, *but* the reversion point should the stalemate persist is not necessarily a budget that reflects the interest of only one branch (see Institutional Combination #5).[6]

[4]To build the table I relied on Payne et al. (2002), Santiso (2005), documents and reports that each of these governments publishes on the budget-making process, and legislative cameral procedures for lower chambers. Brazil, Ecuador, Venezuela are not included in the empirical analysis of this paper.

[5]Instances when a simple majority can override a veto are coded as no veto power for the president.The majority who approved the budget bill can also overrides the veto

[6]Under certain circumstances, particularly the position of the previous budget in the policy space, this set of

Figure 1: Budget Making Institutions in Latin America.[4]

Institutional Combination	Stalemate Reversion	Legislative Amendment	Veto Override	National Cases	Predicted Outcome
Institutional Combination #1	Executive's Proposed Budget	None or Limited	Strong Veto	Chile	**Executive's Preferences Privileged**
Institutional Combination #2			Weak or No Veto	Colombia	
Institutional Combination #3		Yes	Strong Veto	Bolivia	
Institutional Combination #4			Weak or No Veto	Brazil, Costa Rica, Ecuador, Nicaragua, Paraguay, Peru	**Median Legislator's Preferences Privileged**
Institutional Combination #5	Previous Year's Budget Extended		Strong Veto	Argentina, Dominican Republic, El Salvador, Guatemala, Mexico Panama, Uruguay	**Interbranch Bargaining Required**
Institutional Combination #6			Weak or No Veto	Honduras, Venezuela	**Median Legislator's Preferences Privileged**

Finally, executives are privileged when the legislature has limited powers to amend the budget proposed by the president and failing to act reverts to the use of the president's proposal. The president proposes her most preferred spending priorities, the legislature can adopt a basically unchanged proposal, and the president has no interest in vetoing her own unaltered proposal. If the legislature fails to adopt a basically unaltered proposal, it winds up with a completely unaltered proposal (see

institutions might favor the president a bit more than the legislative median, and vice-versa.

Institutional Combination #1 and Institutional Combination #2). Additionally, executives are also privileged when they can can provoke a stalemate, with a difficult to override veto, and the solution to that stalemate is reversion to the executive's proposed budget (Institutional Combination #3). Even when the legislature has the right to amend the president's proposed spending and revenue decisions as it sees fit, the president can resort to a strong veto (or veto threat) if he finds any changes unacceptable. A veto would put in place the president's original proposal and force the legislature to try to assemble a super-majority, increasing the size of the of the group needed for approval to reject the veto.

This simple classification scheme captures budget institutions in presidential systems and can be used for the countries in Latin America (see Figure 1). Moving from *executive-oriented* budgetary rules, to *interbranch compromise*, to *legislative-oriented* rules, *increases* the probability of success of the median legislator when it comes to budget outcomes. In contrast, *legislative-oriented* institutions will ensure that the spending priorities of median legislators get reflected in budget outcomes. Similarly, when the general preferences of the president and the median legislator are *highly* congruent, institutional designs will have a *weak* impact on the median's ability to implement shared spending goals. On the other hand, if their preferences diverge (congruence is *small*), I expect the median legislator to have the most success under *legislative-oriented* budget institutions and the least success under *executive-oriented* budget institutions.

The remainder of the article is outlined as follows. The next two sections cover issues related to data, measures, and also the statistical results from the empirical analysis. I conclude by discussing the implications of the findings for policymaking and representation in separation of powers systems.

Data & Measures: Preferences and Budget Allocations

To evaluate the theoretical argument, I analyze whether the legislative median was successful at determining government expenditures in 14 Latin American democracies: Argentina (1998-2009), Bolivia (1997-2010), Chile (1997-2010), Colombia (1998-2010), Costa Rica (1998-2010), Dominican Republic (1998-2010), El Salvador (1997-2006), Guatemala (1995-2008), Honduras (1997-2010), Mexico (1997-2006), Nicaragua (1996-2011), Panama (1999-2009), Paraguay (1998-2008), Peru (2001-2011), and Uruguay (2000-2010). In these countries, roughly 10% of the legislative medians wanted to increase spending on Defense, 36% of the legislative medians also preferred to increase spending on Housing, 42% of the legislative medians preferred to enlarge the budget allocation for Social Security, and about 50% of them wanted to allocate more funds to both Education and Health.

However, not all median legislators are successful at determining spending priorities over the course of their term. Measuring legislators' *success* is not straightforward. An ideal measure would have two characteristics. First, it would allow me to assess whether the legislative medians spending priorities are reflected in the public expenditures. Second, it should be consistent and reliable across countries, time, and spending categories. Given this, I create a measure that compares the legislative median's preferences on increasing or decreasing spending on five categories - Education, Health, Social Security, Housing, and Defense- to changes in government spending during the term of the median and the term of the previous legislature. The intuition behind is that the median legislator is successful when she is able to sway public spending in her preferred direction during the course of her legislative mandate. Hence, the outcome variable indicates *success* when the legislator notes she would like to increase (decrease) spending for a given category and spending increased (decreased) while she was in office. On the contrary, the outcome variable indicates *failure* when the legislator notes she would like to increase (decrease) spending for a given category and spending decreased (increased) while she was in office.

To construct this measure I draw upon elite surveys and data on government expenditures. First, I rely on a series of questions included in the Parliamentary Elites of Latin America (PELA) project, overseen by the ELITES observatory in Salamanca, Spain. The ELITES group has conducted over 4,000 surveys of members of congress in Latin America since 1994 – creating a stratified, representative sample of legislative preferences by political party in all Latin American countries over the course of almost 20 years. Starting on the second wave of surveys, they have asked legislators whether they preferred to increase or decrease spending in five different budget categories.[7]. For each spending category and legislative term, the preference of the median legislator is measured as the median response to the survey question. In other words, if at least 50% of legislators want to see an increase in spending, then I assume that the legislative median is among this group of representatives. On the contrary, if at least 50% of legislators want to see a decrease in spending, then the legislative median preferred to cut down spending as well.[8]

I collect amounts spent (as a percentage of GDP) by country-year for each of the five categories mentioned earlier in order to capture whether spending patterns reflect the median preferences of the legislature. The government expenditure data on Education, Health, Social Security, and Housing comes from the database by Huber, Mustillo and Stephens (2008) – which I extend from 2006 to 2010 using CEPAL's Social Indicators and Statistics Database–, and the data on Defense comes from SIPRI's Military Expenditure Database. [9] In order to evaluate whether spending increased

[7]Legislators could say they preferred spending *not to change*; although this option was not read by the individual conducting the survey, it was recorded.

[8]In the broad majority of the surveys, every respondent answered the five questions about spending on Education, Health, Social Security, Housing, and Defense. In the few cases in which some respondents do not answer the question, the missing data does not change the coding of the measure. In other words, if the median preference is to *increase* spending, even if all the missing data were to refer to *decrease* spending, the median response would still be to *increase* spending.

[9]The Social Policy in Latin America and the Caribbean Dataset by Huber, Mustillo and Stephens (2008) and SIPRI's Military Expenditure Database are available online. CEPAL's Database is also available online in HTML format.

or decreased during a legislator's mandate I calculate the difference between the mean spending during the legislative term t (in which the legislative median serves) and the preceding legislative term $t-1$. I consider that spending for a given expenditure category increased when this difference is positive and that it decreased when the difference is negative. The measure is designed to capture preferences with respect to direction of change (rather than preferences on specific amounts spent) because that is how the item introduced in the elite survey is designed as well.

Finally, I compare the legislative median's spending priorities to changes in government spending for each expenditure allocation. The median preference prevails if (1) at least 50% of legislators wanted to see an increase in spending in a given category and average spending ultimately increased in that category during their tenure in office; or (2) 50% or more of legislators wanted spending to stay the same or decrease, and the average money allocated to that category did not increase throughout the legislative term. Using this measure, I find a wide variation in the level of success of the legislative medians. The typical legislative median was successful at influencing the level of spending on Housing and Social Security in 36% legislative terms, on Education in 47% of the legislative terms, and on Health and Defense on roughly 60% of the legislative periods. There also appears to be considerable variation in the total level of success, ranging from some legislative periods in which the legislature failed at shaping public expenditures on all five categories (e.g. Bolivia, Guatemala), to others in which the median legislator was successful in swaying spending on all the categories (e.g. Mexico, Uruguay).

Given the argument I want to test, the two main explanatory variables I require are the *Budget Institutions* in place in Latin American democracies and the *Ideological Non-congruence* between the legislative median and the President. To do so, *Budget Institutions* (BI) are classified in three categories that reflect the extent to which the median legislator exerts control over the budget process. BI takes the value of 1 when the budgetary rules favor the median legislator more than the president. It takes the value of 0 when the rules generate incentives for the president and the legislative median to reach an agreement over the budget. Finally, BMI takes the value of -1 if the institutional arrangement favors the median legislator the least and the executive the most. The Budget Institutions are *legislative-centered* (taking the value of 1) in 35 % of the sample's observations. *Interbranch compromise*, is observed for 40 % of the country-legislative term observations. Finally, *executive-centered* budgetary rules (taking the value of -1) are present in 25 % of the observations.

For information on the *Ideological Non-congruence* between president and median legislator, I draw upon the ELITECA surveys as well. Since the survey asks legislators to place themselves and other important political figures (including the President) on a left-right continuum, I construct a measure capturing the *relative* congruence between legislators and the president. I use the measure suggested by Golder and Stramski (2010) to estimate the relative congruence between the median citizen and the government, and apply it to measure the congruence between the median legislator and the president. Formally,

$$\text{Relative Congruence} = 1 - \frac{\sum_{i=1}^{N} |L_i - ML|}{\sum_{i=1}^{N} |L_i - P|}$$

where L_i is the legislator's selfplacement on the Left-Right scale, ML corresponds to the placement of the median legislator, and P corresponds to the placement of the president, calculated as the median placement given by all the surveyed legislators.[10] This measure takes values between 0 and 1; empirically, it takes values between 0 and 0.7. Small values are indicative of ideological

[10]The scale for Left-Right placement goes from 1 (most left) to 10 (most right). Legislators' selfplacement and placement of their party is highly correlated. Also, the position for the median party and the median legislator for each legislative term has a high correlation (0.92). On average, legislators placed presidents well to the right on the ideological spectrum: the average Executive placement was 7.5. The president placed in our data were Presidents Morales of Bolivia (by legislators serving from 2006-2010) and Ortega of Nicaragua, with a median ideological placement of 2 (by legislators serving from 2007-2011). The right-most president in our data was President Calderón of El Salvador with a median ideological placement of 10 (by legislators serving in the 1997-2000 legislative term).

convergence between the president and the median legislator, whereas, larger values are indicative of ideological divergence between the two actors. Hence, I call it *Non-congrunce* for simplicity of the interpretation.

Before moving on to the control variables included in the analysis, I would like to point out that there are general concerns with using surveys to estimate the ideology of political actors. There are potential problems with differential item functioning (DIF) that might come up if the left-right scale is not perceived in the same way across countries. Measuring relative congruence might help partially mitigate this problem (Golder and Stramski, 2010). The advantage of using surveys of elites - in contrast of surveys of citizens- is that they are used to thinking of politics on the Left-Right dimension and they are politically informed. In fact, using the ELITES surveys, Saiegh (2009) shows that legislators are able to accurately pinpoint the (perceived) position of the political parties and the president.

The control variables include *Bicameralism* and *GDP growth* during the legislative term. As the outcome variable measures the success of the legislative median in a single chamber[11], an upper chamber can constrain the legislative median's ability to influence government expenditures. After all, the reconciliation mechanisms available in bicameral legislatures and the level of incongruence between chambers affect how representatives eventually decide to distribute scarce government resources (Shepsle et al., 2009; Kalandrakis, 2004; Ansolabehere, Snyder and Ting, 2003; Lee, 2004). Eight out of the fourteen countries under study - Argentina, Bolivia, Chile, Colombia, Dominican Republic, Mexico, Paraguay, and Uruguay - have bicameral legislatures and all of them – except for Mexico – require both chambers to sign-off the budget proposal. [12] As a result, the *Bicameralism* takes a value of one when the upper chamber is required to approve the budget, and a value of zero

[11]Unfortunately, upper chambers are not surveyed by the ELITES research group.

[12]In Mexico, only the lower chamber chamber is required to consider and approve the budget for government expenditures.

when the legislature is unicameral or the upper chamber does not exert influence over the budget. Finally, I also account for *GDP growth* because the median's success at reducing or increasing spending can be conditioned by whether the economy is growing or declining. To calculate this variable, I subtract the median GDP (in USD$) in any given legislative term from the median GDP (in USD$) in the term immediately preceding it.

Let me turn now to our empirical modeling strategy and results.

Statistical Analysis and Findings

The critical implication of my theoretical argument is that increasing the ideological incongruence between the legislative median and the president should only entail less success for the legislative median when budgetary institutions allocate the most authority to the executive branch. In contrast, budgetary institutions that increase opportunities for median legislators to push for their preferred level of spending or generate incentives for interbranch bargaining should reduce the effect of the ideological divergence between the president and the median representative.

To evaluate the hypothesis, I define a Binomial probability model of the number of median successes out of a total of five. As discussed, the outcome variable captures the legislative medians' *success* or *failure* at shaping patterns of expenditures for five categories – Education, Health, Housing, Social Security, and Defense–, thus, during each legislative term the median has five opportunities to reduce or rise budget allocations. The probability parameter of each binomial observation is a function of the *Budget Institutions* (BI), the *Ideological Non-congruence* between the president and the legislative median, and an interaction between these two explanatory variables. Including this interaction term provides a meaningful interpretation of interactive effects in a theoretically-informed manner (see Tsai and Gill, 2013; Brambor et al., 2006).

More formally, for each count of instances in which the median preference prevails, y_i,

$$\begin{aligned}
y_i &\sim \text{Binom}(p_i, 5) \\
p_i &= \Phi\Big(\beta_0 + \beta_1(\text{BI}_i) + \beta_2(\text{Ideological Non-congruence}_i) \\
&\qquad + \beta_3(\text{Ideological Non-congruence}_i)(\text{BI}_i) + \mathbf{X_i}\boldsymbol{\beta} + \boldsymbol{\epsilon_i}\Big)
\end{aligned}$$

where Φ denotes the standard normal cumulative distribution function, β_j and $\boldsymbol{\beta}$ are random coefficients, and $\mathbf{X}_i$ is a vector of controls. Additionally, I model the error $\boldsymbol{\epsilon_i}$ to account for the fact that the trials might not be independent from each other: the success on one spending category is not likely to be independent to the success on another spending category within the same within the same observation.

To obtain estimates of all relevant parameters, I implement a Bayesian MCMC estimation procedure. I specify vague prior distributions for all parameters, which, multiplied with the data likelihood, yield the full posterior distribution. Although the *Multivariate Grouped Probit Model* effectively increases the degrees of freedom (as there are five opportunity of being successful in every legislature-term), the 41 legislative terms in the analysis are far from the number of observations under which ML estimators are consistent. Bayesian inference, however, does not rely in asymptotic justifications and large sample sizes, providing more accurate estimates. [13]

[13] I programmed each model in `JAGS`, running it in three chains for 70,000 times and disposing of the first 20,000 iterations. I evaluated four non-convergence diagnostics –Geweke, Gelman-Rubin, Raftery-Lewis, and Heidelberger-Welch – using `superdiag` in `R` . I did not find evidence of nonconvergence in any of the Markov chains.

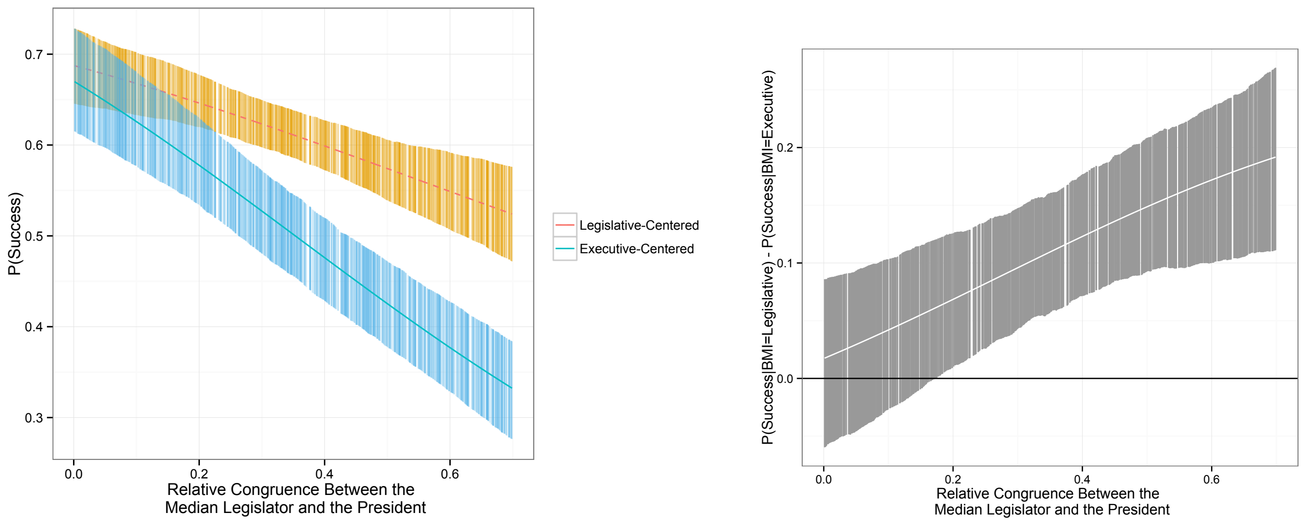
Table 1: Summary statistics for posterior distributions of coefficients in the two Probit models (median and 90% credible intervals). The outcome variable is the number of times the median preferences were implemented out of five trials (corresponding to budget categories) per legislative term.

	Multivariate Probit (90% CI)
Budget Institutions	-0.043
	(-0.54, 0.46)
Ideological Non-congruence	-0.992
	(-1.81, -0.12)
BI × Ideological Non-congruence	0.45
	(-0.65, 1.55)
Bicameralism	-0.490
	(-0.95, -0.03)
GDP Growth	-0.05
	(-0.103, 0.01)
Intercept	0.491
	(0.08, 0.90)
N	41
DIC	122.7

Table 11 presents the findings. I include the medians of the posterior probability distribution of the parameters of interest, along with their corresponding 90% credible intervals. Model 1 shows the results of the first-order interaction without the control variables, whereas, model 2 includes the two control variables. *Bicameralism*, as expected, has a negative and statistically significant impact on the median legislator's success; while *GDP Growth*'s effect on a legislator's success is negative - as expected - but not distinguishable from zero.

As expected the estimate for *Ideological Non-congruence* (INC) Nhas a negative effect on the legislative median's success when budget institutions foster interbrach bargaining (BI= 0); in other words, as the ideological divergence between the legislative median and the president increases (congruence is close to 1), the likelihood of success of the median legislator decreases. This neg-

Figure 2: Predicted Probability of Success for Model 2 (with control covariates). The left panel displays the predicted probability of success for *executive-centered* and for *legislative-centered* budget institutions as ideological congruence decreases.The right panel displays first differences for different levels of ideological congruence. 90% credible intervals are included.



ative effect declines when institutions provide greater authority to the legislative median (BI$= 1$) and it becomes stronger when institutions allocate greater authority to the president (BI $= -1$). The left panel of Figure 2 illustrates the predicted probability of success under *legislative-centered* and *executive-centered* institutions when ideological congruence changes as congruence takes higher values[14]. Although the probability of success of the median legislator decreases under the two budgetary rules when president and median become less congruent, the negative effect is weaker for *legislative-centered* than for *executive-centered* institutions. Moreover, the left panel presents the conditional first difference probability of success: moving from *executive* to *legislative* centered institutions increases the probability of success of the median legislator for higher values of ideological congruence (roughly over 0.2), while the effect is indistinguishable from zero for smaller values of congruence – when president and median have the same policy position (see Tsai and Gill, 2013,

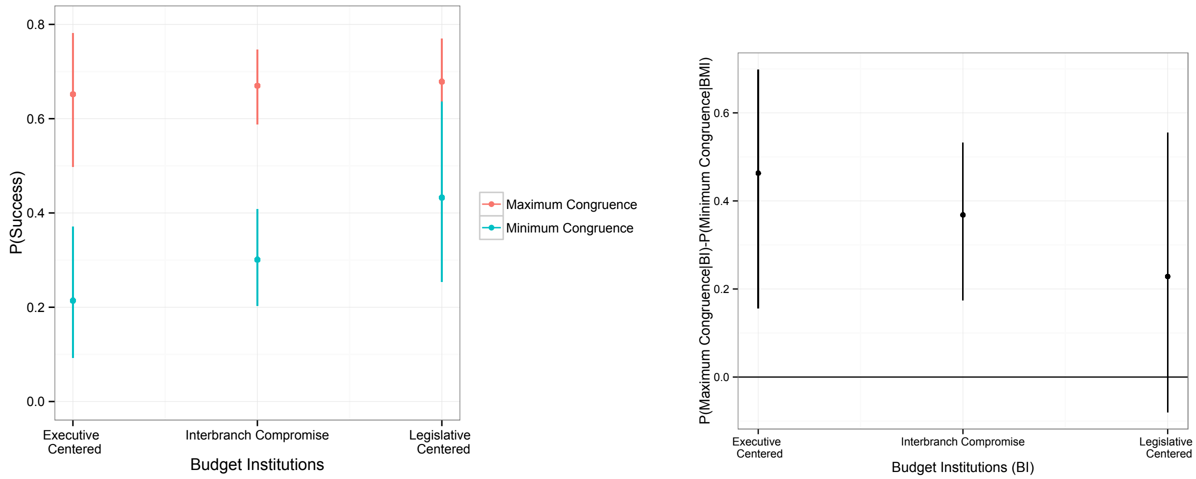
[14]The remaining variable are kept at their median value

on first differences for interactions). In other words, when the president and the median legislator have the same spending priorities, the effect of the institutions weakens: under legislative-centered institutions the median is successful because she can determine budget allocations, whereas, under executive-centered institutions she is successful because the president pursues the same spending patterns.

Similarly, Figure 3 presents the probability of success for two levels of congruence as budget institutions become more favorable towards the median legislator. The left panel shows that when non-congruence is at its minimum (INC=0), the level of the legislator's success is very similar for the three budget-making institutions. In contrast, we observe that when non-congruence is at its maximum (INC=0.7) the probability of success increases as the authority allocated to the median increases. Median legislators that do not share the views of the presidents are very likely to fail at modifying government expenditures when the budgetary rules allocate considerable authority to the president. This is supported by the figure on the right panel, which illustrates the first difference probability for increasing incongruence for each type of budget institutions. The first differences are positive which suggests that the probability of success for a legislator increases when we move congruence from its maximum(INC=0.7) to its minimum (INC=0). However, these results are significant, as illustrated by the 90% credible intervals around the estimates, for the those budget institutions that favor the executive or interbranch bargaining. Substantively, under executive-centered institutions, the probability of success increases as the president and the legislative median converge in their policy positions. In contrast, there is no evidence that the probability of success of the legislative median increases with ideological divergence under legislative-centered institutions.

The results presented in this section provide positive finding that support the expectations of the theoretical argument and hypotheses.

Figure 3: Predicted Probability of Success for Model 2 (with control covariates). The left panel displays the predicted probability of success for the three different budget institutions for maximum and minimum congruence values .The right panel displays first differences for different budget institutions. 90% credible intervals are included.



Conclusion

I find empirical support for the claims that institutional frameworks can affect how successful legislators are in translating their preferences into actual policies, in the face of potential divergence with the sitting president. I also find evidence that the way in which this divergence affects the likelihood of legislative success varies according to the rules which govern the interaction between the executive and legislative branches of government. These conclusions are supported by evidence from a wide variety of cases – 41 legislative terms spanning most of the late 1990's and 2000s, and coming from 15 different Latin American countries.

Although previous studies had found results that are consistent with the ones presented here, most were derived using data from a single case – usually letting partisan control vary within a fixed institutional design. In contrast, in this study, I have shown the effects of ideological divergence between presidents and assemblies, but also to see how these affect the policy-making strengths of legislatures under different institutional arrangements. As a result, this findings should add some external validity to claims that had remain speculative in previous, single-case studies.

Finally, this research would indicate that politicians' ability to enact electoral mandates is very much a function of the institutions which govern the policy-making process. Separation of powers systems are, by design, meant to make abrupt government action difficult – but budget-making institutions favoring the president in Chile, Colombia, and Bolivia, make it even more difficult for legislators to introduce their spending priorities in the budget. If policy position of the median legislator closely resembles the position of the median citizen, then in these countries expenditures may be far from what the citizens want – specially when president and median legislator have different views on policy.

References

Alesina, A., R. Hausmann, R. Hommes and E. Stein. 1999. "Budget Institutions and Budget Institutions and Fiscal Performance in Latin America." *Journal of Development Economics* 59(2):253:73.

Ansolabehere, S., J.M Snyder and M. M. Ting. 2003. "Bargaining in Bicameral Legislatures: When and Why Does Malapportionment Matter?" *America Political Science Review* 97(2):471–481.

Baldez, Lisa and John Carey. 2001. "Budget procedure and fiscal restraint in posttransition Chile." *Presidents, parliaments, and policy* pp. 105–148.

Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14:63–81.

Colomer, Josep M and Gabriel L Negretto. 2005. "Can presidentialism work like parliamentarism?" *Government and Opposition* 40(1):60–89.

Cox, GW and S Morgenstern. 2001. "Latin America's reactive assemblies and proactive presidents." *Comparative Politics* 33(2):171+.

Crisp, Brian F, Scott W Desposato and Kristin Kanthak. 2011. "Legislative Pivots, Presidential Powers, and Policy Stability." *Journal of Law, Economics, and Organization* 27(2):426–452.

Golder, Matt and Jacek Stramski. 2010. "Ideological Congruence and Electoral Institutions." *American Journal of Political Science* 54(1):90–106.

Hallerberg, M. and P. Marier. 2004. "Executive Authority, the PersonalVote, and Budget Discipline in Latin American and Caribbean Countries." *American Journal of Political Science* 48(3):571–87.

Hallerberg, M., R. Strauch and J. von Hagen. 2009. *Fiscal Governance in Europe*. Cambridge University Press.

Kalandrakis, Tasos. 2004. "Bicameral Winning Coalitions and Equilibrium Federal Legislatures." *Legislative Studies Quarterly* 29(1):49–79.

Lee, Frances E. 2004. "Bicameralism and Geographic Politics: Allocation Funds in the House and Senate." *Legislative Studies Quarterly* XXIX(2):185–213.

Lyne, Mona M. 2008. "Proffering pork: How party leaders build party reputations in Brazil." *American Journal of Political Science* 52(2):290–303.

Martin, Lanny W. and Georg Vanberg. 2013. "Multiparty Government, Fiscal Institutions, and Public Spending." *The Journal of Politics* 75(4):953–967.

Martin, Lanny W. and Georg Vanberg. 2014. "Parties and Policymaking in Multiparty Governments: The Legislative Median, Ministerial Autonomy, and the Coalition Compromise." *American Journal of Political Science* 00(0):xxx–xxx.

Moreno, Erika, Brian Crisp and Matthew Shugart. 2003. *Democratic Accountability in Latin America.* Oxford University Press chapter The Accountability Deficit in Latin America.

Morgenstern, Scott. 2002. *Legislative Politics in Latin America.* Cambridge University Press chapter Towards a Model of Latin American Legislatures.

Payne, J Mark. 2002. *Democracies in development: politics and reform in Latin America.* IADB.

Powell, Bingham G. 2000. *Elections as Instruments of Democracy.* Yale University Press.

Rodríguez, Jesús and Alejandro Bonvecchi. 2004. *El papel del poder legislativo en el proceso presupuestario: la experiencia argentina.* Vol. 32 UN.

Saiegh, Sebastian M. 2009. "Recovering a Basic Space from Elite Surveys: Evidence from Latin America." *Legislative Studies Quarterly* 34(1):117–145.

Santiso, Carlos. 2005. "Budget institutions and fiscal responsibility: parliaments and the political economy of the budget process." *Available at SSRN 657663* .

Shepsle, Kenneth A., Robert P. Van Houweling, Samuel J. Abrams and Peter C. Hanson. 2009. "The Senate Electoral Cycle and Bicameral Appropriations Politics." *American Journal of Political Science* 53(2):343–359.

Shugart, M.S. and J.M. Carey. 1992. *Presidents and Assemblies: Constitutional Design and Electoral Dynamics.* Cambridge University Press.

Tsai, Tsunghan and Jeff Gill. 2013. "Interactions in Generalized Linear Models: Theoretical Issues and and an Application to Personal Vote-Earning Attributes." *Social Science* 2:91–113.