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Agenda Control in Presidential Systems
Measurement Alternatives to
Capture Latent Variables

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Alternatives to Capture Latent Variables*

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Abstract

This paper presents alternative modeling strategies to capture latent variables such as agenda control. The methodological approach offers competing models for theory testing among institutional, partisan and procedural variables grounded on the typical analysis of inter-branch interaction in presidential systems. The focus is on lawmaking in two Central American countries which share key values of the independent variables (particularly, moderate multiparty systems) while substantially diverge on their patterns of inter-branch relations. The substantive contribution of this working paper is that agenda control is better explained by the informational advantages available to majority political actors than by authoritative constitutional rules empowering the Executive. Second, the pressures of the political timing sourcing from the electoral cycle are a key factor for explaining strategic behavior of actors in lawmaking. Finally, it appears that partisan characteristics – specifically cohesion and discipline –explain the interactions between the Executive and the legislature regarding the incentives to exert agenda control of the former.

Keywords

Agenda control, Executive dominance, presidential systems, institutional analysis

> "If the institutionalists are correct, much or all of political behavior and collective decision-making is an artifact of the procedures used to make decisions, (...) as institutional analysis focuses on showing how preferences and decisions are artifacts of institutions" (Immergut, 1996: 327)

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I. INTRODUCTION

The main concern of this paper is how to measure agenda control in presidential systems. Agenda control is defined by the ability of political actors to protect their legislative initiatives from amendments on the floor (Cox, 2002), employing the rules governing the decision-making process. In this view, agenda control reflects the existence of embedded comparative advantages for some political actors as compared to others. The relevant question is to identify under which conditions these actors are able to employ those comparative advantages and for which policies these are employed.

Whether this coalition of privileged actors, with the capability to exert overloaded influence on the policy output, employs public decisions for patronage, corruption and pork-barreling is a question intricate to the analysis of democratic government. In fact, the fear for these negative practices has particularly existed for presidential systems, since strongly empowered political actors may systematically employ them as the ordinary rule.

While this preoccupation is essential to Comparative Politics, the provided evidence has suffered from sample bias[1] and a systematic scrutiny of comparative breadth is lacking. My contribution here aims at examining how alternative measures of agenda control may capture a more subtle phenomenon than Executive dominance through veto or decree power. To this end, I analyze lawmaking in two presidential countries with similar macro-political characteristics and largely diverging institutional performance, particularly concerning their respective degrees of democratic consolidation.

This work agrees with the account that while "a generation of work has shown that institutions affect various political outcomes, (…) less is known about *how* and *when* institutions affect policy outcomes" (Haggard and McCubbins, 2001: 1, italics in original) and offers some advance in this direction. The analysis of lawmaking is particularly suitable for this enterprise since it allows both to examine in detail the strategic interaction between the two branches of government and to track the processing of each bill depending on the policy characteristics or when it is proposed. Overall, this type of analysis thus includes the detail of micro political behavior, since the unit of analysis is each bill, and the leverage of middle-range comparisons between measures of institutional performance for several cases.

The paper unfolds as follows: the next Section describes the cases and the data available to carry out the analysis. In Section III, I offer several competing models to explain three dependent variables which unpack agenda control into observable measures. The Section ends with a linear structural model (canonical correlations), which tests the relationship between the sets of dependent and independent variables. The final section of the work summarizes the findings connecting those to theoretical reflection.

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[1] In particular, Brazil and Argentina have typically been used as examples of strong Executives focusing on exceptional governments with exceptionally high figures of both veto and decree use. From a more general perspective, it does not hold, however, that such decision-making tools are the common rule in all presidential systems. The critical fact is that neither theoretically – since presidential systems are highly heterogeneous – nor empirically, the negative perspective above finds support. In fact, recent analysis conclude that we still do not know which specific link of the critical arguments against presidential systems is the wrong one (see Przeworski, Cheibub and Saiegh, 2004).

II. THE CASES AND DATA AVAILABLE

The cases are two Central American cases, Guatemala and Panama, which share some relevant general characteristics of their political systems, specifically regarding their party systems, and in turn diverge on their respective democratic performance. In particular, both cases are moderate multiparty systems (with enlp=3.5) in the legislative subsystem (although much more fragmented in the electoral realm). In turn, Guatemala is a well-known case of fragile and inchoate democracy while Panama displays a better regime performance despite their respective transitions to democracy date from the same decade. The curious fact is that there has been no freezing of the electoral offer in Guatemala while there has been such in Panama, while all expectations could have made predict the opposite pattern in the beginning of the 1990's decade. The context where governments are formed also varies interestingly across the cases: in Panama there is a systematic larger uncertainty regarding which parties will be depositary of the majority of seats, since post-electoral coalitions are usually formed, not particularly along the logic of ideological proximity. Instead, in Guatemala there is no resort to coalition-building (until the past 2005 elections) and governments are formed under conditions of relative or absolute majority of seats in Congress of the winning (Executive) party. Since the electoral cycles are concurrent in both cases, this fact is important for the prospective Executive-Legislative relations; the winning Executive logically attempts to build a supportive majority coalition in Congress in the Panama case (where alternative coalitions against the Executive party may be formed), and to force party unity in the Guatemalan case (where fragmentation may resource from the Executive's own party). In sum, unified governments exist in both cases in the period under study although coalition in Congress was necessary in Panama unlike in Guatemala.

Turning to the description of the data, these were made available by a Research Project which collected lawmaking data for all Latin American countries (see full quotation in references). For the two cases under analysis, Guatemala and Panama, information about all approved legislation in a given legislative term was collected[2]. The data collection followed the scheme of the legislative proceedings of each Parliament, which indeed share most characteristics (see Appendix 1). The data is original and basic information about the data available is gathered in Table below.

Table 1: Basic descriptors of the legislative performance in the two cases under study

Descriptors	GUATEMALA	PANAMA
Legislative term under study	1996-1999 (4 years-term)	1995-1999 (5 years-term)
Total bills approved (Total sample)	435	335
Number of bills enacted by Executive branch (and %)	228 (52%)	257 (77%)
Number of bills enacted by Legislative branch (and %)	173 (40%)	68 (20%)
Percentage of bills enacted by majority party in Congress (of the % in row above)	69%	41.2%

Although the dataset just described is the main source for this paper, I also use secondary sources of data that complete the set of independent variables used as detailed in Section II.2. The universe – and unit of analysis - is the approved bills in the legislative term under study. The raw information for each bill is who proposes, which procedures are used in the treatment of the bill and the timing of the approval (days in each procedural stage). Below,

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2 Information about the proposed but not enacted legislation was scarce and does not allow for systematic analysis.

I describe the dependent and independent variables in specific sections, elaborating on the hypotheses for the latter.

II.1 The dependent variables

The dependent variable, agenda control, is a latent variable. As such, it cannot be directly measured and it demands conceptual elaboration to settle properly the nature and limits of the phenomenon under study. Cox (2002) provides a useful distinction between agenda-setting and agenda control, as follows: whereas the ability to put bills on the floor/keep them off the floor is agenda-setting power, the ability to protect them from amendments on the floor is agenda control. These concepts, although narrowly interrelated at the conceptual layer, demand different data and modeling strategies. Most often, agenda-setting studies will employ formal modeling and, especially for the U.S. Congress, mass media and public opinion data are employed as independent variables. In turn, studying agenda control focuses, by definition, on the decision-making process **once** the bill is on the floor. In the available data, each bill is already on the floor – i.e. we lack information on pre-floor stages (such as how the mass media trigger public attention on a policy issue which is hence incorporated in the agenda) – and every bill was approved. Given the latter constraint, our hypothesis may only refer to the strategic interaction between political actors such as the selection of advantageous procedures or the strategic choice of timing to limit amendments on the floor.

I use three proxies to capture agenda control; all three proxies capture partial aspects of the latent variable, being the first one a plain quantitative criterion capturing the volume of bills enacted by the Executive or otherwise. This criterion contributes with limited but useful information, given that a firm belief about presidential systems is that the Executive has far more institutional tools to propose legislation (not only as ordinary laws, but also in the form of decrees and emergency legislation). This quantitative criterion addresses whether there is a systematic and significant difference in the way the bill is procedurally treated when the Executive enacts it.

The second proxy is more qualitatively informed and refers to the use of emergency procedures to get legislation passed. The argument here is that the use of special procedures occurs when the political actor enacting the bill expects conflict on the floor and aims at avoiding it by appealing to the urgent status of the bill or to the extraordinary character of the session – typically the two most common special procedures in the cases under analysis. Employing a special procedure thus reduces the time available to opposition parties to alter the first offer of the proposer, so these special procedures may indeed serve to protect the bill against amendments on the floor, thus fitting the definition of agenda control.

A third and last proxy available in the data is a continuous variable of the total time of approval[3]. Since "*when* something happens, as well as in *what order* and with *what rhythm*, can be even more important in determining the outcome than whether something happens or what happens"(Schmitter and Santiso, 1998: 69), the timing may be considered a tool susceptible of strategic use in the benefit of certain actors/coalitions. Cheibub Feigueredo and Limongi (2000) and Binder and Maltzman (2002) have shown, for different cases, that time is a key element in politics explaining strategic behavior. Delaying or speeding up political processes may not be random, but instead revealing how skilled actors (such as powerful Executives or cohesive parties in Congress with scarce majorities) find opportunities to control the agenda.

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[3] The variable is measured in days and is calculated attending to the time each bill spent in Congress (i.e. excludes the time the Executive takes on endorsing the bill with a final signature which is constitutionally settled unless veto occurs).

II.2. The independent variables

I consider four types of independent variables, depending upon each set of theory that serves for explaining agenda control[4]: procedural rules, institutional (electoral and partisan variables), and the policy characteristics of the bill.

Within the procedural variables, I consider the type of committee which assesses the bill as a potential source of procedurally granted advantages. This variable varies per bill while the institutional variables vary across country, given that the data available cover a single legislative term, so no variation exists within each country for the latter. The hypothesis for the procedural variable is that the institutional design of the committee system starkly influences the distribution of power among legislators, since it is a legislative body. Particularly, the size and shape of the committee system may affect which committee receives the bill. When overlapped jurisdictions exist, i.e. there are many alternative committees recipient of a bill, an arbitrary space is available to majority political actors (who seat on the Directive Board of Congress and assign each bill to committee) since these will strategically chose the committee where they have a majority on their own without the need to coalesce or bargain with other parties. The coding of this variable allows to know which type of issues make a difference for the incentives of political actors, but knowing exactly which size of the committee is the preferred one in each system would require further work (since a common coding of committees was applied for the two countries in order to make the comparative work possible).

Regarding the institutional variables, I expect that Executives find incentives to control the agenda when the legislative scenario is more fragmented and more polarized (Mainwaring and Scully, 1995; Mainwaring and Shugart, 1997). My claim in this work is to show that while the presence of positive and significant effects of the characteristics of the legislative scenario on the strategic behavior of political actors holds, this relationship is mediated by institutional factors such as the degree of Executive independence and Executive authority (constitutional design variables)[5]. While spurious relationships are usually difficult to detect, the comparison of competing models as carried out in this work is expected to allow for an assessment of what variables cause changes in the significance and size of the coefficients for other *types* of variables. It is in fact on this way that the possibility to include independent variables which vary at different levels of aggregation may make sense.

The last hypothesis regarding the institutional variables is that a more stringent electoral system, with a large biasing effect in favor of big parties in the context of centripetal competition (few enep's competing), is expected to incentive agenda control, since political actors are more uncertain about their own survivability in the political system.

Regarding the policy characteristics of the bill, I account for three possible aspects: first, whether the bill was assessed by an 'economic issues' committee, as a proxy for whether the bill involves spending or not. Second, the scope of the bill as defined in Di Palma (1976), which captures whether the bill targets national vs. sectional and micro-sectional constituent interests. Third, whether the bill explicitly refers to law reform or law creation ex novo, which I call innovation. The hypothesis is that Executives and majority parties are motivated to exert agenda control particularly when the bill involves spending, targets sectional or micro-sectional interests and this will particularly tend to occur when the bill is a law reform. The underlying idea is that political conflict on the floor will tend to appear more intensely when the bill entails localized benefits to social groups, as a way to enhance the

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[4] See Appendix 2 for a detailed description of the independent variables, specifically their coding and level of aggregation.

[5] See Appendix 2 for a detailed description of how these variables were built.

chance of the governments' party to remain in office, and hence strategic behavior to avoid significant changes on the floor occur (agenda control).

Before modeling the data, I first explore the possible problematic relationships between the independent variables and the distributional characteristics of the dependent ones.

III.1. EXPLORING THE DATA

The main objective of this data exploration is to identify the distributional characteristics of the dependent variables and the existing covariate relationships between the independent variables. As described above, two dependent variables are dummy (origin of enactment and dummy for emergency procedures) and the third one is continuous (total time of approval). I display below two types of explorations with regard to these variables: first, a check on the distributions, paying attention to the number of missing cases. Second, a factor analysis including the three dependent variables (for the pooled dataset). This factor analysis will serve to identify in detail the common underlying correlational structure among the three dependent variables. Whether their common share is large or not – and the loadings of their common variance – matters for ensuring to what extent (1) the dependent variables have been appropriately chosen as partial measures of the same latent variable, and (2) a linear structural model will make sense later on.

Table 2: Exploring the data

Exploring the DVs	Guatemala	Panama	Pooled data
Distributional characteristics			
DV1: Dorigin	N=413 Missing=22 Binomially distributed	N= 331 Missing=4 Binomially distributed	N= 744 Missing=26 Binomially distributed
DV2: Durgence	N=431 Missing=4 Binomially distributed	N= 333 Missing=2 Binomially distributed	N=764 Missing=6 Binomially distributed
DV3: Timing	N=269 Missing=166 Not normally distributed	N=328 Missing=7 Not normally distributed	N=597 Missing=173 Not normally distributed
Factor Analysis for the three DVs			
	One factor Variance= 40.4% Loadings: Dorigin=.66 Durgence= -.74 Timing= .49	Two factors: Variance Factor 1: 40% Loadings: Dorigin= .86 Timing= -.67 Variance Factor 2: 36.5% Durgence= .92	Two factors: Variance Factor 1: 37% Loadings: Durgence= -.70 Timing= .80 Variance Factor 2: 35% Dorigin: .90
Notes: See Appendix 2, Graphical exploration of data (P-P Plots for distributional tests), for the variable timing, by country and pooled. Factor analysis using Principal Components, eigenvalues over one using the correlation matrix. Unrotated solution given since only one factor was extracted for Guatemala. Rotated solution given (varimax method) for Panama and the pooled analysis.			

Concerning the distributional characteristics of the dependent variables, the relevant bit of information is that while we may safely assume binomial distributions for the two dichotomous variables, the continuous variable demands a linear transformation before we may comfortably assume a normal distribution at the modeling stage.

From the results of the factor analysis, there are two relevant bits of information. First, regarding the results for the pooled dataset, a strong common variance between the two time-related dependent variables is displayed, i.e. total time of approval and use of emergency procedures, while the variable capturing the asymmetry in the volume of enactment per origin constitutes another factor. This result hints that our latent construct is better captured by the two time-related dependent variables while the third one may represent another side of agenda control when the two countries are considered altogether.

Second, taking into account the results for each country, there is a revealing difference: while it seems that for Guatemala we may safely interpret the three variables as pertinent proxies for a same phenomenon (or latent variable), this appears more doubtful for Panama, where two factors are displayed. In fact, the two factors for this latter case weight very similarly so – being orthogonal – we may safely assert that origin and timing are independent to the use of emergency procedures on their underlying structural correlation. These two results with descriptive reach will be reassessed in the final model.

The second check in the exploration of the data pays attention to the independent variables. Table 3 reports the size and significance of the bivariate correlations between the IVs.

Table 3: Correlations between independent variables

Dimension	Independent variable	Correlated with
Procedural	Recocomi	Scope of bill: moderate and positive (R=.183) Majority party dummy: moderate and negative (R= -.20)
Policy characteristics	Innovation	Electoral cycle: moderate-low and negative (R= -.10) Dummy budget committee-all others: moderate and negative (R= -.24) Weakly and significant at the 20% level of confidence with all institutional variables (party system and electoral system variables)
	Scope	Categorical variable for committee system (recocomi): moderate and positive (R=.18)
	Budget committee-others	Innovation: moderate and negative (R= -.24) Majority party dummy: moderate and positive (R= .16) Effective number of parties, polarization and executive authority: moderate and negative (R= -22)
Institutional variables	Electoral cycle:	Effective number of electoral parties: moderate and positive (R= .12) Polarization: moderate and positive (R= .12) Size of majority party in Congress: moderate and negative (R= -.12)
	Effective number of parties	Majority party dummy: moderate and positive (R= .12) Electoral cycle (R= .12) Budget committee versus other committees (R= -.22) Perfect collinearity with variables of party system and electoral system
Note: Only reported correlations significant at the 0.05 level (two-tailed), Pearson coefficients between parentheses.		

As expected, the correlations between the independent variables vary between moderate and low size, but for the institutional variables, which display perfect collinearity between the variables for the party and electoral system. Overall, the most independent variables among these IVs are the exogenous variable electoral cycle and the committee system variables.

III.2. ANALYZING THE DATA

The fact that two of the dependent variables in this work are dummy variables by construction demands the use of non-linear models. The results below, for the quantitative criterion capturing Executive dominance of the agenda, display one clear pattern: we can assert causal arrows between this proxy for agenda control and the characteristics of the legislative scenario, but the explanatory capacity and the goodness of fit of the model substantially improve when other variables are included. The effect of either the legislative fragmentation or ideological polarization in Congress[6] is positive, but the size of the effect is weak, although highly significant individually, and the overall goodness of fit of the model is rather poor.

Table 4: Logit models for DV1: Executive versus other actors enacting the bill

Explanatory variables	Model Only legislative scenario variables	Model Only policy related variables	Model Only exogenous variables	Best fitting model
Constant	-.37*	1.02**	2.93**	-.85**
Polarization	.025**	-	-	.03**
Innovation of bill	-	.79**	-	.77**
Scope of bill	-	-.51**	-	-.63**
Bill is budget bill	-	1.15**	-	1.55**
Age of party system	-	-	-.14**	-
Electoral cycle	-	-	.14*	.15*
Goodness of fit Sample size Likelihood ratio (χ^2) Pseudo-R^2 Loglikelihood Significance (p-value) Correctly classified	1075 59.06 .044 -635.80 .000 73%	1009 94.4 .07 -564.26 .000 69%	1072 62.3 .047 -631.46 .000 69%	1008 183.42 .15 -519.39 .000 77%
Model Specification: Link function logit; cases weighted by frequencies of variable country; coefficients of estimates reported (instead of odd ratios). ** Indicates significant at the 0.01 level of confidence; * Indicates significant at the 0.05 level of confidence. Probit link function displays same goodness of fit and estimates.				

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[6] I deliberately make them equivalent here, by referring to "either one or the other", because the variables are highly collinear, and thus only one at a time may be included in the equation. In Table , column one, I have just displayed the coefficient for polarization. If we run the same equation with the variable effective number of legislative parties (enpleg) the goodness of fit of the model remains exactly the same and the coefficient for this independent variable is .82**, only changing the size of the constant but not the sign. This pattern goes as well for the best fitting model, if we substitute polarization by enpelec, the coefficient is 1.14** for enpelec; the constant again increases in size but does not change sign nor does the goodness of fit of the model change.

Importantly, the policy characteristics of the bill seem to be the most central explanatory variables for predicting Executive dominance of the agenda. In particular, the Executive is more likely to have enacted a bill when it involves the creation of new policy, if the bill is sectional or micro-sectional, elections are closer, the bill involves spending and, with a small effect, there is a higher degree of polarization in the floor.

Looking with more detail to the odd ratios of the best fitting model, we find that the larger odds correspond to the budget implications of the bill (ecocomi= 4.7) and the innovation of bill (2.15). Whereas the latter effect may be a byproduct of the coding of the variable, given that within the category "creation of new legislation" (value one in variable innovation) I included the International Treaties, whose authority corresponds exclusively to the Executive, the former is a clear indication that agenda control is associated to incentives of patronage or appropriation of resources. A possible explanation is that when elections are closer, Executives who predict being out-of-office may free ride on the resources available to them in order to either bring resources to their own pockets or ensure the loyalty of targeted social groups to favor the success of the party. In both countries under study, there is forbidden reelection of the Executive for the immediate period[7]. Including interactive variables that may capture the relationship between constitutional rules and the characteristics of the legislative scenario would improve our understanding of how agenda control is performed. However, testing this idea would require a larger dataset including the variation regarding Executive re-election and the policy jurisdictions constitutionally granted to the Executive which is unavailable so far.

Further unpacking the marginal effects of the explanatory variables, including the country effect as an independent variable to check for the differences between the two countries, we obtain the following picture:

Table 5: Range of variation and marginal effects of the independent variables explaining DV1

Independent variables	Min⟶ Max	Marginal Effects
Innovation	.14	.13
Scope	-.24	-.12
Budget bills or not	.30	.34
Polarization	.29	.007
Electoral cycle	.072	.02

The model predicts very well the value one of the dependent variable (with a probability= .70 given all the independent variables present). This finding is consistent with the modeling objective for this variable, given that it is Executive dominance as a proxy of agenda control we are interested in, whereas all other actors with legislative initiative were clustered altogether in value zero (i.e. specificity is lost for this group of political actors). From the range of variation and the marginal effects, we can underscore two main pieces of information concerning the effect of the electoral cycle: it has a very small effect for explaining Executive dominance of the agenda although the coefficient is a robust estimator (the range of variation is very small too). A possible explanation, revising the original hypothesis for this variable, is that political timing is a contextual variable that contributes to pressure political actors, but not to strictly define their incentives.

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[7] See art. 184 of the Guatemalan Constitution and art.173 of the Panama Constitution.

Finally, with regard to the joint effects of pairs of explanatory variables on the Executive dominance of the agenda, we obtain strong results for the effects of polarization and all policy related variables, as follows:

Table 6. Predicted probabilities of Executive enacting the bill given joint effect of polarization and policy characteristics

Joint effects of Polarization and…	Low (Guatemala)	High (Panama)
Budget bills	.41	.79
No budget bills	.75	.94
Scope of bill national	.64	.88
Scope of bill sectional	.51	.81
Scope of bill microsectional	.37	.72
First year of electoral cycle	.51	.81
Second year of electoral cycle	.54	.83
Third year of electoral cycle	.57	.85
Fourth year of electoral cycle	.60	.86

The results above indicate that higher values of ideological polarization are positively associated to the characteristics of the bill and the time of enactment. Given this evidence, I include the corresponding interactive effects and run a final logit model for the first dependent variable. The newly introduced interactive terms display significance and increase the overall goodness of fit of the model (LL= -512.4, χ^2= 197, Pseudo-R^2=.16) but for the interaction between polarization and electoral cycle – logically, since polarization does not vary within a single legislative term.

The second dependent variable, the use of emergency procedures, is better modeled when including endogenous variables to the decision-making process than when strictly attending to the characteristics of the legislative scenario. Table 7 reports the results in detail.

Table 7. Logit models for DV2: Use of emergency procedures to pass legislation

Explanatory variables	Model Only legislative scenario variables	Model Only exogenous variables	Best fitting model
Constant	-1.87**	-1.27	-9.45**
Polarization	.007	-	.041**
Age of party system	-	-.04	-
Electoral cycle	-	1.6	2.31**
Dummy majority party in Congress-other (recopar)	-	-	3.1*
Scope of bill	-	-	.91**
Time of committee to emit a dictum	-	-	-.03**
Interactive scope of bill*electoral cycle	-	-	-.33**
Interactive recopar*electoral cycle	-	-	-1.23*
Efficiency of committees[8]	-	-	.005**
Goodness of fit Sample size Likelihood ratio (χ²) Pseudo-R² Loglikelihood Significance (p-value) Correctly classified	1097 3.2 .003 -513.29 .07 82%	1095 7.65 .007 -509.15 .02 82%	913 104.04 .13 -332.26 .000 85%
Model Specification: Link function logit; cases weighted by frequencies of variable country; coefficients of estimates reported (instead of odd ratios); significance test at the .95 confidence level. ** Indicates significant at the 0.01 level of confidence; * Indicates significant at the 0.05 level of confidence.			

The incentives of political actors to use the procedural design as a tool for agenda control (particularly, emergency procedures) depend on the informational advantages[9] that political actors possess, plus, strongly, on the time pressure imposed by the electoral cycle. These informational advantages are offered to political actors via the committee system. The results suggest that actors are able to anticipate which committee will receive the bill for dictum and know how efficient each type of committee is. The negative and significant effects of the estimated efficiency of committees, plus the interactive effect of the characteristics of the policy (particularly, the scope of bill) and the electoral cycle, indicate that political actors use emergency procedures when they predict that committees are going to delay the dictum on

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[8] This variable is an interactive term between the time each committee takes in emitting a dictum and the variable classifying the committees in broad policy areas (recocomi). The underlying idea captures efficiency in the decisional dimension: the less time a bill passes in committee, the quicker a bill is finally approved. In fact, for the two countries under analysis, on average each bill was half the time in committee of the total time of approval (45 days in committee out of the 92 days total time of approval).

[9] Informational advantages may derive from political experience, priviledged positions of the actors in the decision-making affecting the assignment of bills to committees or the distribution of policy jurisdictions among the committees.

the legislative initiative, and this particularly tends to happen when the bill is micro-sectional (i.e. on our hypothesis: involves pork-barreling benefits) and when elections are closer.

The interesting result with regard to which political actors use emergency procedures as a tool for agenda control is that it is the majority party in Congress[10], since the use of an emergency procedure requires a majority vote in Congress to be adopted[11]. This fact, and having unified governments in both cases, may allow us to elaborate on the joint incentives to control the agenda in a context of cohesive parties: while the Executive may access exogenous mechanisms to perform agenda control (exclusive areas of policy proposal), the majority party in Congress may access better those procedures, such as emergency procedures, which pertain to the endogenous design of the legislature.

Despite the interest of these findings, the model is rather weak for predicting the use of emergency procedures, and in fact predicts much better the use of ordinary procedures to pass legislation (predicted probability for this event given all explanatory variables is .92). This fact is a byproduct of the skewed distribution of the dependent variable (with 83% of the cases falling in value zero – ordinary procedure). For this reason, I run separate models for each country's data, as an attempt to identify whether skeweness is related to a country-specific pattern. The results below provide better information about the dynamics for each country:

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[10] The dummy variable majority party here includes both the bills enacted by the party with the largest number of seats in Congress and the Executive bills, since in both countries and for the legislative terms under study, there were unified governments. This behavioral assumption is standard for the analysis of lawmaking in parliamentary systems and rather heterodox for presidential settings. In this work, I adopt the assumption for that there is unified government in both cases.

[11] Both for Panama and Guatemala, a supermajority voting in the floor is required if the bill is to be claimed of "national urgency" (two-thirds majority of the present). There is, however, a more discretionary procedure to label a bill "urgent" without having to appeal to "national urgency", in which cases it is the President of the House who decides to include the bill as urgent in the order-of-the-day.

Table 8. Logit models for DV2: Use of emergency procedures, for each country under analysis

Explanatory variables	GUATEMALA	PANAMA
Constant	-1.2	-58.64
Dummy majority party-other parties	-	2.13**
Scope of bill		0.25**
Electoral cycle	.08	3.64**
Time of committee to emit a dictum		-.15**
Seat of majority party in committees	.23	-
Interactive seats of majority party in committees by electoral cycle	-.95*	-
Interactive dummy majority party or other parties and electoral cycle	-	-3.6**
Interactive scope of bill and electoral cycle	-	-.3**
Goodness of fit Sample size Likelihood ratio (χ^2) Pseudo-R² Loglikelihood Significance (p-value) Correctly classified Akaike Information Criteria (AIC)*n Bayesian Information Criteria (BIC)'	402 36.6 .14 -111.9 .000 90% 231.8 -18.6	320 45.7 .15 -133.04 .000 83% 280.08 -11.07
Model Specification: Link function logit; standardized coefficients of estimates reported; significance test at the .95 confidence level. ** Indicates significant at the 0.01 level of confidence; * Indicates significant at the 0.05 level of confidence.		

The country-specific models display supportive evidence of the theoretical explanations provided above for the pooled data results. Specifically, the effect of the majority party enacting the bill appears very significant and with a strong effect for explaining the use of emergency procedures in Panama, where there was a weaker majority party than in the Guatemalan case in the legislative term under study. This pattern hints that political actors use agenda control to face adverse political situations: when the House is highly fragmented (as in Panama), even if there is unified government, the majority party needs to use emergency procedures to avoid expected conflict on the floor. In turn, under conditions of a solid majority in the House (as in Guatemala), the majority party has a higher certainty that its political agenda has an assured majority support on the floor, thus employs to a lesser extent emergency procedures to circumvent the ordinary treatment of bills. The Panama case illustrates, therefore, how political factors (such as limited majorities), endogenous factors (such as the estimated efficiency of committees) and contextual ones (electoral cycle and pork-barreling policy-style) interact to explain agenda control by the majority party. In turn, Guatemala illustrates another type of strategic behavior via the management of the procedural resources at hand to the majority party, who enjoys a

systematic majority of seats in the committee system by having an enlarged size of the committees[12].

Finally, these models allow us to make a good claim on the debate between theoretical versus statistical goodness of fit measures: while the model for Panama is more illuminating to the theoretical aims of this paper, the model for Guatemala is best fitting in statistical terms (BIC is lower, adjusting for the different sample sizes of the countries[13]). In addition, the model for Guatemala is more parsimonious to the extent that it includes fewer variables for a better fitting model. This fact indicates that the skweness of the distribution is still weighting heavily in explaining the event under analysis.

The last dependent variable, the total time of approval for each bill, demands tobit models, due to the intrinsic left-censoring of time (it cannot be negative). Again, the distributional characteristics of the dependent variable made us consider some linear transformations that would allow the models to work out properly. I first solved the large number of missing values in this variable by imputing the median as the value for those[14] and, second, logged the variable to linearize the distribution[15]. With this transformed variable, we obtained several competing models as follows:

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[12] The idea is that the proportional rules of assignment of deputies to committees may be disabled in practice if the size of the committee system is large, since minor parties will not count on the sufficient number of human resources to fill the posts in all committees unless each deputy of these parties assumes a large workload. For a good theoretical review of the issues of committee specialization see Krehbiel, 1991 and Krehbiel, Shepsle and Weingast, 1987.

[13] These two informational theoretical criteria are used when models are not nested or do not use the same samples, as in this case. Both are similarly calculated using the reduction in the loglikelihood. The ones reported here are weighted by the sample size of each country.

[14] When the mean is a biased estimator for particularly skewed distributions as in this case (with a mean of 92 and a standard deviation of 126, ranging from 0 to 1328 days, skweness=5.39, for the pooled data), the median appears to be a more unbiased and therefore reliable measure of the distributional properties (Me= 61, for the pooled data). Given that the problem of missing cases for this variable is created by the Guatemalan sample, I have imputed the medians of each country's samples to the corresponding cases (median for the Guatemalan sample, total time=43 days; Median for Panama, total time=70 days).

[15] Since log is not defined for zero, I added one to the variable in order to make possible the calculation. This is not expected to be distorting at all since a day difference will not really modify any interpretation of the total time of approval.

Table 9. Tobit model for DV3: Total time of legislative approval, competing models

Explanatory variables	Mixed endogenous and exogenous variables	Exogenous variables	Endogenous variables
Constant	4.43**	3.21***	3.7***
Electoral cycle	.16*	.35***	-
Innovation of bill	-.11**	-.12**	-
Efficiency of committee	-.002***	-	.003***
Time of committee to emit a dictum	.015***	-	.016***
Recoded committee types	-.25*	-	.46*
Seats of majority party in committees	-.027***	-	-.025***
Dummy majority party-other parties	.33	.62**	-
Interactive majority party dummy and electoral cycle	-.23***	-.341***	-
Polarization (blocks displays same estimates)	.004***	-	-
Seats of majority party in committee and type of committee	.008***	-	.006*
Executive authority (constitutional)	-	.41***	-
Bill alters the order-of-the-day	-	-	-.026
Size of each committee			.11**
Goodness of fit measures			
Sample size	932	1055	905
Chi-square	448.9	64.06	417.8
p-value	.000	.000	.000
Pseudo-R²	.20	.022	.18
Loglikelihood	-905.08	-1392.08	-916.6
LL Intercept only model	-1129.5	-1424.1	-1125.5
Variance of latent variable (like variance explained)	.66	.86	.70
McKelvey and Zavoina R²	.38	.06	.37
AIC	1.96	2.65	2.04

Note: Tobit estimation, with frequency weights of variable country. Left-censoring at minimum of dependent variable (zero). No upper censoring settled. Coefficients reported. McKelvey and Zavoina R squared to be interpreted with regard to the latent variable.
*** Significant at the 0.01 level of confidence; ** significant at the 0.05 level of confidence; * significant at 0.10 level.

These competing models show that, while the combination of endogenous and exogenous explanatory factors does better than any other model at explaining the total time of legislative approval, the model with only endogenous factors does better at capturing the variance of the latent variable and fitting the observed data.

In this case, policy characteristics, surprisingly, and in general the only-exogenous variables, poorly explain this tool of agenda control (timing). Instead, the coefficients (which are like odd ratios with respect to the latent variable), reveal that the type of committee system, which provides valuable resources to the majority party to monopolize decisional gates, offers varied and crucial assets to affect the total time of legislative approval.

A problematic aspect of this estimation is that it probably suffers from heteroscedasticity or non-normal errors, as it was hinted in the data exploration of the dependent variable[16], since tobit estimators are inconsistent (i.e., not robust) when these problems are present. The solution to this problem is not straightforward and it is commonly

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[16] Recall, see Appendix 3 for a visual approximation to the distribution of the variable 'timing'. I have included as well the graph for the transformed variable (with no missing cases and logged), whose distribution approaches much more a Normal one.

suggested that "the solution to the heteroscedasticity problem in limited dependent variable models is to make some reasonable assumption about the nature of the heteroscedasticity" (Maddala, 1983: 179). A plausible assumption for this data is that the analytical design suffers from endogeneity, a typical source of non-random variance of the errors across different values of the independent variables. The problem of endogeneity commonly emerges in institutional analysis and it is difficult to find suitable instrumental variables that would eventually absorb that variation having an exogenous reasonable meaning. The problem of endogeneity is embedded from the research question in this work: the dependent variables resource from the institutional design, hopefully capture partial dimensions of a latent variable which is furthermore an institutional outcome, which are then a function of endogenous factors to the characteristics of the legislative process of approval – such as the type of procedural rules at hand to political actors.

      With all the piecewise information from the previous models, if providing detailed account and theoretical explanations of when, how and why agenda control happens, we still have little information of the structural correlation between the set of dependent variables, indicators of agenda control, and the set of independent variables. I run a final canonical correlation model to estimate the linear structural correlation that maximizes the explained variance between the two sets of dependent and independent variables, controlling for the within groups correlations. Table10 displays the results, with three minimal canonical roots, or linear combinations, corresponding to the minimal number of variables (i.e. the dependent variables set).

Table 10. Canonical correlation model for agenda control

Sets of variables	Linear combination 1	Linear combination 2	Linear combination 3
(DV1) Dummy Executive initiative-other actors	-2.19***	.11	-.07
(DV2) Dummy emergency procedure used to pass bill	.099	1.8***	2.2*
(DV3) Logged total time of legislative approval	.049	1.06***	-.58
(IV1) Electoral cycle	-.19*	.31	1.05
(IV2) Scope of bill	.19	-.05	1.46
(IV3) Innovation of bill	-.65***	-.49**	-.85
(IV4) Committee type	.63***	-.48***	-.47
(IV5) Bill is budget bill	-1.21***	-.16	-.10
(IV6) Seats of majority party in committees	.009*	-.015	.07
(IV7) Interactive scope of bill and electoral cycle	.06	.01	-.41
(IV8) Polarization	-.02***	.04***	.003
Model measures Sample size Canonical correlations Canonical correl. Squared Eigenvalues Proportion (eigenvalues squared) Wilks' Lambda	1002 .52 .27* .38 ; .11 ; .005 .77 ; .22 ; .01 .65***		
Model notes: canonical correlation model, frequency weights of variable country. Coefficients reported (canonical weights are standardized). Only first canonical correlation reported (maximal). The analysis uses a multivariate normal distribution assumed to be true for the population. * Sig. at .10 level; ** Sig. at .05 level; *** Sig. at .01 level. The other exogenous variables of electoral and party system (size of majority party in Congress, number of blocks, type of electoral competition) displayed the same effect as polarization. They are not in the equation for their large shared variance, which would not allow the model to find a solution.			

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The canonical correlation model contributes in two remarkable ways to shed light on the phenomenon of agenda control: first, the overall goodness of fit is satisfactory, indicating that there is a significant linear association of the two sets of variables. The correlation coefficients (eigenvalues squared) display large loadings for the two first canonical variates, while the total time of legislative approval appears as a poorer indicator of agenda control. With this model, we are certain at the 10% level of confidence that we are capturing the 27% of the variance of agenda control in these countries with the set of independent variables in the model, controlling for the correlations within each of the variables sets. This result is robust and significant at the 0.01 level for all the linear combinations displayed (Wilks' lambda is large and highly significant).

Second, the three canonical roots display different combinations and levels of significance indicating how agenda control is performed. The first pair of linear combinations are interpretable in meaningful ways, since they capture 77% and 22% respectively of the variance accounted for by the correlations between the canonical variates. In practice, this fact implies that we discard as meaningfully interpretable the third linear combination[17]. Essentially, agenda control in these two countries is explained by either Executive dominance of the agenda (linear combination one displays significance of this unique dependent variable) or by the strategic manipulation of the time-related (emergency procedures and total time of approval) endogenous procedures to the legislative design (which are mostly available to the actors within Congress, i.e. the majority parties). This result appears as a holistic confirmation of the results from previous models, but with the additional characteristic of testing for the across-groups correlations controlling for the within-groups correlation, a desired modeling strategy when endogeneity is expected as in this case. This result implies that, when unified government is in place, the party in office finds at least two institutional devices to get its most-preferred legislation passed: (1) Executive dominance of the agenda through its authoritative capability to enact legislation in some important policy areas, the possibility to veto and employ decree power – i.e. constitutionally-granted power resources – and (2) procedural resources available to the majority party within the boundaries of the legislature and its design, such as the characteristics of the committee system and the available types of emergency procedures. In this context, whether agenda control is a systematic tool of decision-making will depend on the links between the Executive and its party in the legislature. That is: whether the Executive may systematically trust the support of his party's legislators – the degree of cohesion and discipline – appears to explain two types of strategic behavior mucho more than the characteristics of the institutional design alone.

Concerning the explanatory variables of theoretical interest, it is remarkable that the two variables that are significant under any of the agenda control scenarios are innovation of bill and polarization, plus the committee system variables significantly contributing to explain the first type of agenda control (Executive dominance). These results also confirm the previous ones: while the combination of endogenous and exogenous factors increases the explanatory capacity of the models, the characteristics of the policy (whether it involves pork-barreling and spending) and the degree of expected conflict on the floor (polarization) are substantially associated to agenda control.

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[17] Whereas canonical correlation analysis will usually display at least the number of linear combinations equivalent to the number of variables in the minimal set (in this case three, corresponding to the three indicators of the latent dependent variable), I am also concerned with the issue of practical significance. The squared eigenvalues or proportion of variance is a customary measure to evaluate the practical significance of the canonical correlation model, with the disclaimer that this proportion is actually relative to the variance accounted for by the correlation between the canonical variates, so it must be taken as a relative measure to the variability in the sample and the structural correlation between the sets of variables (see Tacq, 1997).

IV. SUMMARY OF FINDINGS

In this section, I elaborate an argument about why methodological choices need to unfold in a parallel vein to conceptual choices. Because alternative methodological choices have an essential impact on the research output – especially in Comparative Politics – it may well be that a substantive limitation to the cumulative nature of the discipline derives from a limited attention to the arrows of association between these. In fact, the proliferation of measures and modeling strategies may not be a stochastic result when research is developed along the same conceptual choices which are then tested via different modeling strategies. According to Shepsle, this problem is particular of legislative institutional analysis and "the distancing of the analytical from the empirical has had unhappy consequences: it diminishes the impact of insights derived from more analytical approaches and it minimizes the prospects for cumulativeness from more descriptive studies" (1985: 7).

A methodological possibility is the adoption of a competing modeling strategy, which may allow for comparison across results and, perhaps more importantly, for a transparent review of the importance and weight of each separate approach to explain a given complex phenomenon. Substantially, the question of how forms of government affect political outcomes has been a major point of contention among scholars guided by institutional theory premises during two decades (Cheibub and Limongi, 2002: 151). Unfortunately enough, these two decades' work has not produced clear results and, to a lesser extent, predictability. Without strictly implying that there has been a futile accumulation of knowledge, my claim is that theory testing is a needed strategy to boost renewed communication between conceptual frameworks, hypotheses and empirical findings. This work has pursued such enterprise in an attempt of connecting actor-centered approaches (by hypothesizing what explains political actors' behavior) and institutional approaches (by including both endogenous and exogenous institutional variables). It seems, in fact, that institutional analysis is poor unless such bridging effort is incorporated at the very stage of conceptual elaboration[18].

My theoretical point here is that, specifically referred to the debate where this work contributes, there have been two conceptual flaws biasing the research agenda in the analysis of institutional performance of presidential systems. These flaws have pertained to conceptual choices of both the dependent and the independent variables with strong implications for the methodological realm. On the left-hand side of the equation, survivability of regime has typically been the focus of attention. Being such focus important, it is a definitional choice that has constrained the production of more middle-range analyses. The analysis of lawmaking in detail constitutes an effort in this direction, since it allows particularly well to generate theory as well as to carry out empirical analysis – once data are increasingly made available.

On the right-hand side, the definitional and measurement choices have been biased towards macro structural variables, such as constitutional rules. While this work has found evidence of the positive and significant effect of the constitutional power and authority variables, the results mainly indicate that the emphasis on the constitutional design has been overestimated. Basically, we have learned that constitutional engineering may not lead to the desired outcomes of an ideal quality of democracy for various reasons (Sunstein, 2001), but mainly because *how* actors use power resources does not depend on the formal rules *per se*. Importantly, we also need to pay attention to the *way* those formal rules are used.

Empirically, the main results of this work are three: (1) while we cannot fully reject the strong significance of the variables pertaining to the characteristics of the legislative

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[18] See Diermeier and Krehbiel (2003).

scenario (particularly ideological polarization), we have identified several conditions that are associated to the strength of this consistent significance. Political actors do take into account the fragmentation and polarization on the floor because these characteristics contribute to their estimations of conflict upon policy (be it policy interests, policy areas or spending priorities), which is a determining factor for agenda control to appear. However, given expected conflict over policy, the two strategic ways to exert agenda control are: (1) plain circumvention of ordinary procedures (i.e. using emergency procedures) and (2) the control of key decisional gates such as the design of the committee system.

A second remarkable empirical result is that political actors use informational advantages on their benefit, especially those derived from the structure and efficiency of the committee system, which depends upon the degree of fragmentation in Congress. Under conditions of a party with absolute majority in Congress, a large committee system with small committees internally, advantages this party since it will gain majority representation in all committees. When such large committee system is also a product of blurred jurisdictions – thus where overlapping of jurisdictions occurs – the majority party has a further arbitrary space available to assign a bill to the committee where approval without amendments is most certain. Furthermore, this kind of strategic behavior appears more outstanding when the bill is micro-sectional – targeting particularized interests – and when elections are closer. In turn, when the majority party holds a scarce majority on the floor, the chances to control the agenda increase with the use of emergency procedures which require simple majority voting.

The third empirical result delivered by the pooled analysis confirms that agenda control is manifested through either Executive dominance of the legislative agenda, reflecting the amount of exclusive policy enactment which is constitutionally assigned to this actor – particularly in presidential systems – or through procedural tools such as emergency procedures and the speed of approval which depend on the internal characteristics of the House more clearly.

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- Panama Constitution and Legislative proceedings, at [http://iberoame.usal.es/legislativo/legislativos/Normasyreglamentos/normasyreglamentos.htm]

Appendix 1.Visual approximation to the legislative process in Panama and Guatemala

PANAMA

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                        ┌─────────────────────┐
                        │   LAW INITIATIVE    │
                        └─────────────────────┘
                                  │
                        ┌─────────────────────┐
                        │ Standing Committee  │
                        └─────────────────────┘
                                  │
┌──────────────────┐    ┌─────────────────────┐    ┌──────────────┐
│ Special committee│    │ Dictum of Standing  │    │   Ad-hoc     │
│                  │    │ Committee is 1st    │    │  Committee   │
└──────────────────┘    │ Debate              │    └──────────────┘
                        └─────────────────────┘
                          │                  
                ┌─────────────┐      ┌──────────────┐
                │   Passed    │      │  Not Passed  │
                └─────────────┘      └──────────────┘
                      │
                ┌──────────────────────┐
                │ 2nd Debate in Floor (1)│
                └──────────────────────┘
                      │              
             ┌─────────────┐   ┌──────────────┐
             │   Passed    │   │  Not passed  │
             └─────────────┘   └──────────────┘
                      │
             ┌──────────────────────┐
             │ 3rd Debate in Floor (1)│
             └──────────────────────┘
                      │              
             ┌─────────────┐   ┌──────────────┐
             │   Passed    │   │  Not passed  │
             └─────────────┘   └──────────────┘
                      │
             ┌─────────────┐
             │  Executive  │
             └─────────────┘
                  │       │
           ┌──────────┐ ┌──────┐
           │  Passed  │ │ Veto │
           └──────────┘ └──────┘
```

┌──────────────────────────┐ ┌──────────────┐ ┌─────────────┐ ┌──────────────────────────┐
│ Published Official Bulletin│ │ Partial veto │ │ Total veto │ │ Supreme Court Of Justice │
└──────────────────────────┘ └──────────────┘ └─────────────┘ └──────────────────────────┘

┌──────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│ Returns to │ │ Not passed │ │ Returns to │ │ Not passed │
│ 2nd debate │ │   │ │ 3rd debate │ │   │
└──────────────┘ └──────────────┘ └──────────────┘ └──────────────┘

─·─·─▶	Absolute Majority
·········▶	Relative Majority
─ ─ ─▶	Qualified Majority (2/3)

1) For organic laws, a majority of the total number of MPs is required.

GUATEMALA

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                          ┌─────────────────────┐
                          │   LAW INITIATIVE    │
                          └─────────────────────┘
            ┌──────────────────────┼──────────────────────┐
            ▼                      ▼                      ▼
  ┌──────────────────┐  ┌──────────────────────┐  ┌──────────────────────┐
  │ Human Rights     │  │ Legislative Directive│  │ Constitutional issues│
  │ Issues           │  │                      │  │                      │
  └──────────────────┘  └──────────────────────┘  └──────────────────────┘
            │                      │                  │            │
            ▼                      ▼                  ▼            ▼
  ┌──────────────────┐  ┌──────────────────────┐  ┌──────────┐ ┌──────────────┐
  │ Special Committee│  │ Standing Committee   │  │ Supreme  │ │ Referendum   │
  │ for Human Rights │  │                      │  │ Court    │ │              │
  └──────────────────┘  └──────────────────────┘  │ Justice  │ └──────────────┘
                                                   └──────────┘
```

Passed	Not Passed

Floor[1]

3 Debates	1 Debate

Passed	Not Passed

Presidium[2]

No objections	Objections

Executive

Passed	Veto[3]

Published Official Bulletin	**Congress**	**Supreme Court Of Justice**

Passed	Disregarded

|	
– · – · → Absolute Majority	1) The Floor can send back an initiative to the Standing Committee that emitted the dictum (or another one) by majority of present.
– – – → Qualified Majority (2/3)	2) The Presidium sends copies to all legislators. If within five days there are no objections, the bill is considered passed.
	3) A Veto is not possible in matters of internal regulation of Congress, Budget, Interpellations and Conferral of Honors.

Appendix 2. Nature and level of aggregation of the independent variables

| Nature of variable	Independent variable
1- Procedural	Recocomi: Common coding of committee system depending on whether they deal with "political reform issues", "economic issues", "infrastructure issues", "socio-cultural issues"
2- Institutional 2.1)Electoral system	Enpelec: average effective number of electoral parties for the 1990's decade
	Biaselec: size of the biasing effect due to the electoral system in favor of big parties (moderate for Guatemala, strong for Panama)
	Lists: type of ballot system (closed and blocked lists for Guatemala and open lists for Panama)
	Competition: type of electoral competition: centripetal (value zero, for Panama) and centrifugal (value one, for Guatemala)
	Cycle: Electoral cycle: categorical variable that measures the closeness of coming elections[19] (year of the term in which the bill is passed)
2.2) Party system	Age: average age of the party system, including all parties: it adopts value 21 for Guatemala and 14 for Panama, so in practice it is a dummy variable sorting between a moderately young party system for the first country and a young party system for the latter
	Size: percentage of seats of majority party in Congress
	Blocks: number of legislative blocks in Congress
	Polariz: index of polarization following Coppedge (1998), that is, assuming unidimensional competition along left-right political divides and weighting by the seats in Congress of those parties
3-Constitutional design variables	Executive authority: dummy for authority of the Executive based on two key constitutional design issues: Executive has total and partial veto power and has strong decree power (i.e., a law that is immediately effective). Both are present in Panama, therefore adopting value one, and none goes for Guatemala, therefore adopting value zero
	Executive independence: dummy for independence of Executive based on three strong prerogatives of this actor vis-à-vis the Legislative branch: Executive has authority to dissolve Congress; the legislative cannot impeach the President; Executive can call for referenda directly without the ratification of Congress. Guatemala adopts value one, since all three items are in place in that country, and Panama value zero, since none of the items is in place
4-Policy characteristics	Scope: scope of bill following the coding by Di Palma (1976): bill is national (with effect over the whole national territory of country), sectional (with effect over a targeted societal sector – i.e. unemployed – which is heterogeneous) or microsectional (with effect over a targeted societal sector which is homogeneous – i.e. unemployed of the sugar production sector)
	Ecocomi: dummy for whether the bill was assessed by an economic issues committee vs. otherwise, as proxy to capture whether the bill is a budget bill
	Innovation: Dummy for whether it is a law reform (reactive policy-making style, but that offers more opportunities for pork-barreling) or a law creation ex novo (most often, derived from International treaties and regional integration policies in the countries under analysis)

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[19] The electoral cycles are concurrent in both countries, so the exogenous time pressure affects both the Executive and the Legislative branch in a same temporal framing.

Appendix 3. Graphical exploration of distributional characteristics, variable timing per country and pooled dataset

- P-P Plot for DV3: Timing, GUATEMALA
Distributional test: Normal distribution
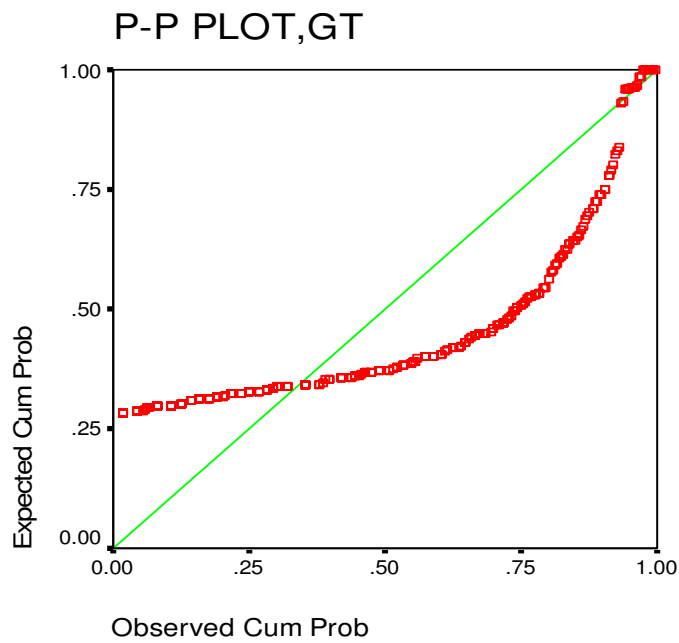
P-P PLOT,GT

- P-P Plot for DV3: Timing, PANAMA
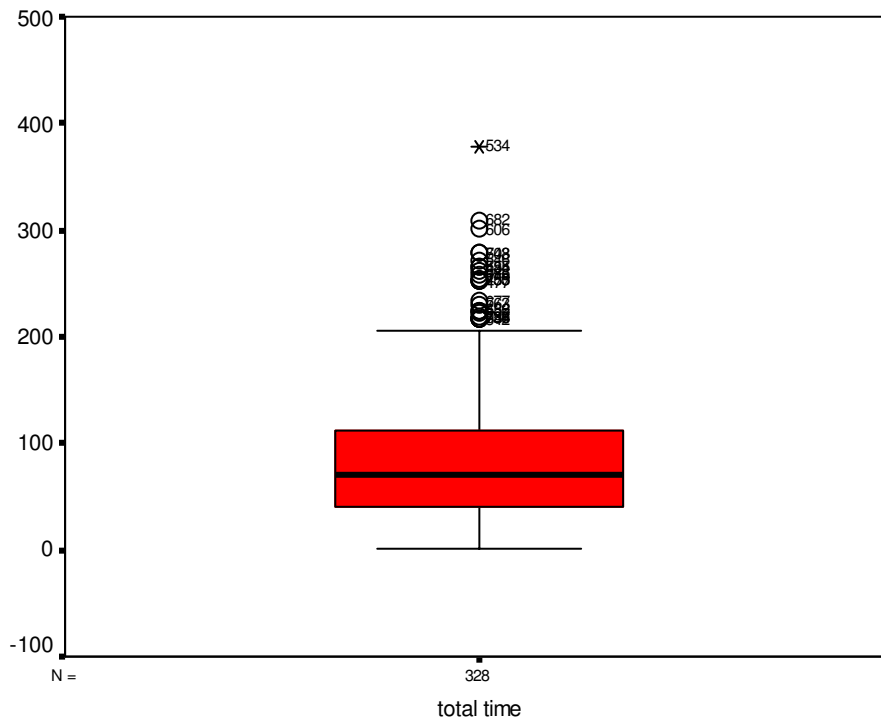Distributional test: Normal distribution

P-P PLOT, PA
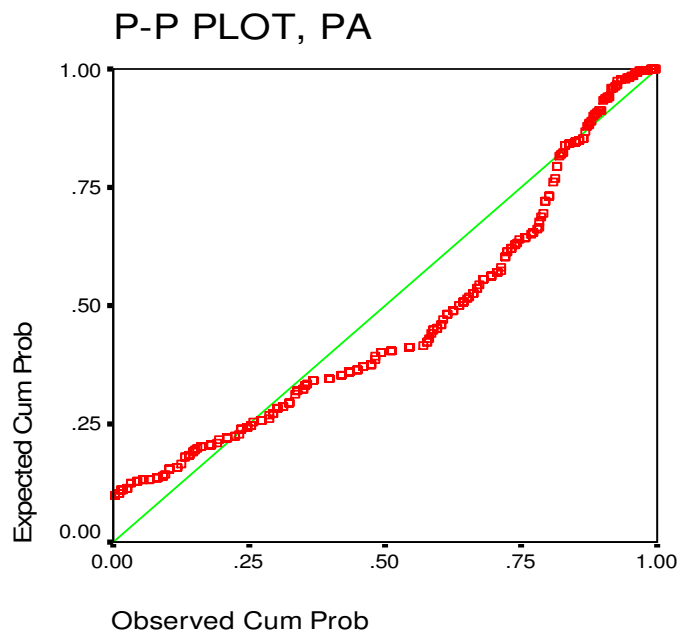
- PANAMA, TIMING. DISTRIBUTIONAL EXPLORATIONS

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
total time bill is passed	.159	328	.000	.876	328	.000

a Lilliefors Significance Correction

- GUATEMALA, DISTRIBUTIONAL TESTS VARIABLE TIMING

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
total time bill is passed	.284	269	.000	.511	269	.000

a Lilliefors Significance Correction
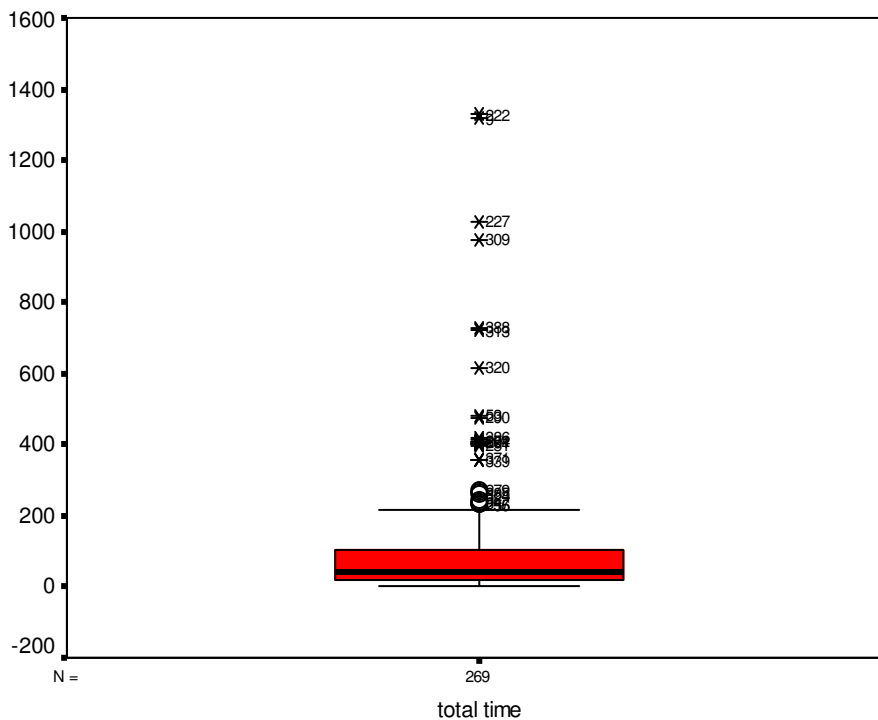
- POOLED DATASET. DISTRIBUTIONAL EXPLORATION OF VARIABLE TIMING

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
total time bill is passed	.232	597	.000	.550	597	.000

a. Lilliefors Significance Correction

Normal Q-Q Plot of total time bill is passed
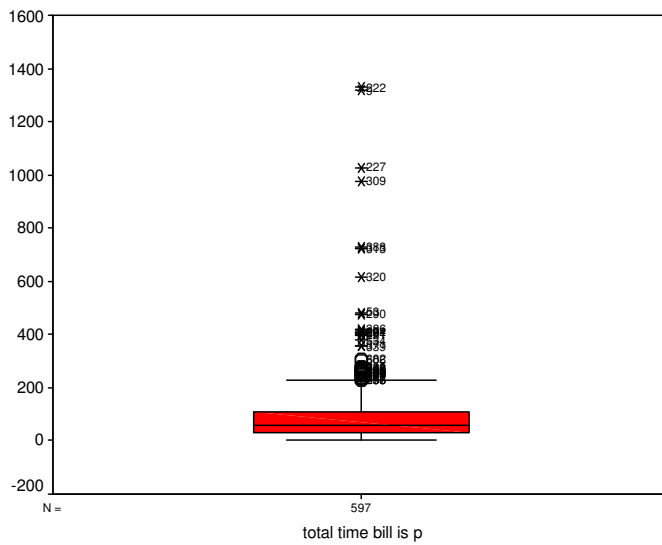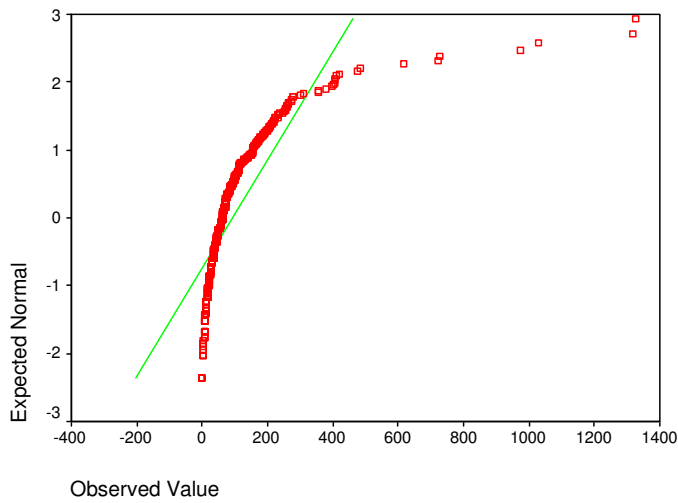
- TRANSFORMED VARIABLE: LOGGED TIME WITH NON-MISSING VALUES
(Substituted by median of each country dataset)
From the plots, we can see that the transformed variable approaches more the normal distribution, still with some deviation from it.

Normal P-P Plot of logged time