

# Coalition Management Under Divided/Unified Government

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## Abstract

“If the opposite of pro is con, then the opposite of progress must be the Congress,” says a popular joke about the divided government in the US two-party presidential regime. Divided government occurs when different political parties control different branches of government. By this arithmetic definition, however, divided government almost always takes place in multiparty presidential regimes, given that the party of the president rarely obtains solely the majority of seats in Congress. In order to govern and pass legislation, a minority president has to build and sustain post-electoral coalitions in multiparty settings. The received wisdom on multiparty presidential regime is that constitutional and agenda-setting powers and presidential preferences would be the key determinants for a successful minority government. In addition to those aspects, however, this paper claims that the degree of congruence between the preference of the presidential coalition and the preference of the floor of the Congress is the crucial ingredient. That is, regardless of presidential preferences or characteristics, the higher the preference incongruence between the president’s coalition and the floor, the more difficult would be the coalition management and the higher the probability that the Congress would work as the opposite of progress. It is, in fact, the equivalent functional of divided government in multiparty presidential settings. This paper explores conceptually and empirically the effect of the distance of preferences between the coalition and the floor in the multiparty presidential regimes in Latin America.

## 1 Towards a new definition of Divided Government

When one thinks about divided government the first image that comes to mind is a minority US president, either in just one or in both legislative houses. To the extent that the US is the paradigm case of a presidential regime, it is not surprising the prevalence of this “arithmetical” (Elgie 2001) understanding of divided government. In an early general treatment of divided governments, Laver and Shepsle (1991) argued that minority governments in parliamentary systems, in which the executive is controlled by parties that, between them, control less than a legislative majority, was the closest analogue to divided government in the US. In each case, the executive needs to seek support in the legislature beyond its own partisan base. These authors claim that the “constitutional roots of divided governments” are distinct in parliamentary and presidential systems: divided governments are negotiated in parliamentary regimes whereas they are mandated electorally in separation-of-powers regimes”. Against the explicit claim in the title of this paper - that “America is not exceptional” -, the implicit assumption in that work is the notion of presidentialism in a typical majoritarian presidential system, such as the US. However, approximately a third of presidential systems in Latin America (Chaisty, Cheeseman, Power, 2012) – and similar rates can be found elsewhere – are multiparty presidential regimes.

This earlier discussion of divided governments conflates system of government and electoral rules. Admittedly the focus of the discussion is the different incentives across regime types to form coalitions – an assumption shared in classic works such as Linz (1994). Presidential systems were held to be inimical to coalition formation, and hence were prone to stalemate. Shugart and Carey (1992) refined this argument and attributed the conflict prone nature of such systems to specific features of some presidential systems, including the strength of the constitutional powers of presidents, their partisan powers, the timing of presidential and legislative elections. Minority status, however, remained a key element in the discussion. Minority presidents

faced governability problems because they have weak incentives to engage in coalition bargaining, which ultimately resulted from constitutional design (Alemán and Tsebelis 2011; Figueiredo et al. 2012).

The criterion for distinguishing governments types was essentially arithmetical: the size of the presidential coalition and the resulting minority or majority status. This is in fact a very straightforward arithmetical definition. That is, if the president's political party enjoys majority of seats in Congress the government it is called unified; and it is called divided government otherwise. As Elgie (2001: 3) wrote: "In the US, therefore, divided government is commonly understood as the situation where no single party controls both the executive and legislative branches of government simultaneously, or, alternatively, where the president's party fails to control a majority in at least one house of the legislature. In this sense, the concept concerns nothing more than a simple description of a certain arithmetic reality and is quite uncontroversial."

Based on this definition, it has been possible to identify periods of unified and divided governments and, as a consequence, this concept has been very useful to understand various political and governing features as well as policy dynamics of the two-party presidential environment of the US majoritarian electoral system. The main assumption is that divided government is synonymous with gridlock, legislative paralysis, and all sort of conflicts between the executive and Congress. In fact, there is a established literature investigating both the determinants and the consequences of divided government, which challenged the received wisdom. A key finding in that literature is that unified government is not a prerequisite for the approval of significant public policy (Mayhew 2005).

This arithmetical definition of divided government, nevertheless, fails to address the issue in multiparty presidential regimes. In this institutional environment almost always elected presidents does not enjoy majority of seats in the legislature. Presidents elected in multiparty, sometimes hyper-representative systems with significant party fragmentation in the legislature, like in Brazil, often face a minority condition. That is, divided government would necessarily be the norm. Therefore, presidents must build post-electoral coalitions if they wish to enjoy majority status.

Figueiredo et al (2009) have found that during the more than a quarter-century from 1979 through 2006, Latin America was host only two countries (Costa Rica and Mexico) that had single-party governments the whole time. Six countries (Bolivia, Brazil, Chile, Colombia, Ecuador, and Panama) had coalition governments throughout that same period, while four others (Argentina, Paraguay, Venezuela, and Uruguay) had coalition governments at least some of the time (Amorim Neto 2006; Alemán and Tsebelis 2011). In later works, authors have extended the notion of divided government from the minority status of presidents to include minority coalition governments (Figueiredo et al 2012; Chaisty et al 2016).

The phenomenon of multiparty coalition presidentialism is not restricted to Latin America. It is now the modal form of democratic governance in Africa, Asia, and post-communist Europe as well (Chaisty, Cheeseman, Power, 2012). Indonesia, for instance, has also a multiparty presidential regime since the fall of Suharto's authoritarian New Order and the transition to democracy in 1999.

The unexplored high frequency of elected minority presidents in multiparty presidential regimes and the consequent outcome of post-electoral divided coalition governments has led to a research agenda aimed at exploring the puzzle of minority coalitions as an equilibrium (Figueiredo et al 2009; Chaisty et al 2016). Conceptually speaking the arithmetical understanding of divided government seems useless to explain this phenomenon in multiparty presidential settings given that almost always the president's party fails to control, say, at least one house of the legislature. That is, divided government has been increasingly the norm.

The lack of partisan majority backing the president in one or both legislative houses does not necessarily mean, however, that the opposition party must automatically control the legislature in a multiparty presidential regime. Instead, the very often outcome is to observe a coalition post-electoral majority supporting the president, usually composed by more than one political party. Presidents in multiparty presidential institutional contexts, on the one hand, tend to be strong and capable of attracting partisan support. On the other hand, many parties get motivated to work as satellites of the president as an opportunity to extract political and financial benefits in exchange for political support in the legislature.

In a multiparty environment, therefore, an arithmetical definition of divided government in presidential regimes can be understood to comprise not simply the situations where a party opposed to the president

actually controls at least one house of the legislature, but also the more general cases where the majority comprises more than one party in coalition supporting the president in Congress.

Shugart (1995), in a comparative assessment of divided presidential government, argues that situations of opposition-party majorities (divided government) are much less common outside the United States. He distinguishes three types of governments in presidential regimes: unified, divided and no-majority government. Shugart makes that distinction to clearly differentiate the arithmetic sense of a pure divided government, when a legislative majority is held by a party or pre-electoral coalition different from the president's party, from a situation in which no party hold a majority in one or both houses of the legislature.

This is indeed a conceptual advancement, especially because the idea of divided government could be applicable to other institutional environments beyond the US two-party presidential regime. However, it is still based in a numerical criterion, which also reduces its scope and applicability.

Elgie (2001) proposes a behavioral interpretation of divided government. For him divided government corresponds to the situation where there is conflict between the executive and the legislative branches of government whatever the support for the executive in the legislature. Similar to the arithmetical definition, the behavioral interpretation of divided government has its roots in the study of the political system of the US, but Elgie claims that it also finds a clear counterpart in studies of parliamentary and semi-presidential regimes as well, especially in coalition government.

This behavioral interpretation, however, mistakenly characterizes coalition government as a form of divided government ignoring thus that in many occasions the preferences of the governing coalition could exactly match the preferences of the legislature. If it is the case, rather than interpreting coalition government as a divided government, it could be a unified government instead. In order to deal with these peculiarities, especially in multiparty presidential regimes, a non-arithmetical and a non-behavioral definition of divided government is required.

The extant empirical literature on divided governments have focused on a range of issues: from the executive's strategies in contexts of lack of majority (Cox and Kernell 2001; Amorim Neto 2006; Cheibub and Limongi 2010) to its determinants, with a focus on the puzzle of why majority coalition governments fail to emerge (Elgie 2001; Figueiredo et al 2012; Chaisty 2016)). This paper aims at contributing with this conceptual debate by proposing an alternative theoretical interpretation of divided/unified government in multiparty presidential regimes. We claim that the degree of congruence between the preference of the presidential coalition and the preference of the floor of the Congress is the crucial ingredient. That is, regardless of presidential preferences or characteristics, the higher the preference incongruence between the president's coalition and the floor, the more difficult would be the coalition management and the higher the probability that the Congress would work as the opposite of progress. It is, in fact, the functional equivalent of divided government in multiparty presidential settings.

To be precise, when the median preference of the presidential coalition matches the median preference of the floor of the Congress we consider a unified government. On the other hand, when the median preferences of the floor and the coalition are incongruent we have a divided government. Cheibub et al (2004), Chaisty et al (2016), and Figueiredo et al (2012) have investigated to what extent ideological congruence affect the incentives for the existence of both single party minority governments and its majority variant. Our approach considers a different question, namely, what the consequences of congruence are, and more importantly how congruence can be used analytically as a criterion for identifying governments.

Keeping this innovative interpretation in mind, the paper is organized as follows: in the next session we comparative identify the incidence of divided government in a sample of Latin American countries. Next we particularly analyze the effects of divided government in Brazil with regard to cost of governing and legislative success of presidential initiatives in Congress. The final session concludes with the main finds and with a broad discussion about this new research agenda.

## 2 Empirical approximation to a new definition of Divided Government

The definition of divided government proposed in this paper may shed light over unexploited cleavages in literature. In this section we will go over an empirical description of how much Latin American governments were divided during the last 3 decades or so. We used parties data from the Database of Political Institutions 2015 dataset (Cruz, Keefer and Scartascini 2016) and ideology scores from several different sources, such as Baker and Greene (2011) and Saiegh (2015). Ideology scores were re-scaled to a 1 to 10 scale, where 1 is extreme left and 10 is extreme right. Our definition of divided government consists in a continuous measure, not a binary condition. In this sense the challenge posed here is to set a ex-ante threshold for a government to be considered as divided. We set the space between -1 and 1, which is 10% of the ideological scale as the unified government interval. All the countries-years within the grey shaded area are considered to be unified under this arbitrary definition. Although We expect that further tests, comprising a different set of variables, can help in defining a more accurate threshold.

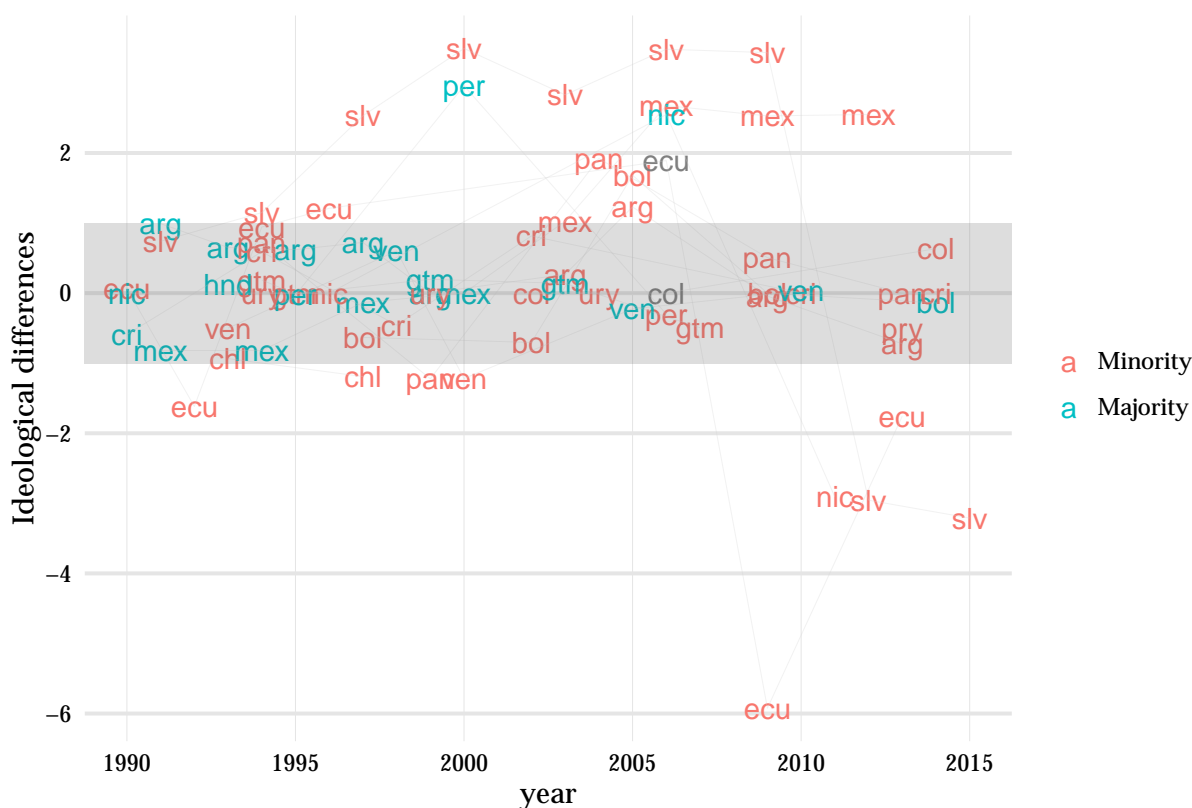


Figure 1: Majorities vs Divided Government in Latin America

Countries above the y-axis zero line are countries where coalitions ideology scores are higher than the congress ideology scores, so they are more to the right side of the spectrum. Argentinian coalitions tend to position themselves to the right. Chilean coalitions tend to position themselves to the left of congress.

There is a lot of variation both between and within countries, however, most presidents were able to keep the preferences of their coalitions very close to the preferences of the floor. Ecuador and El Salvador were cases in which preferences were consistently divergent. After a period of unified government, Mexico recently moved a to a more diverse environment.

This empirical approach define as unified some governments that classic literature would (mis)identify as minority governments as in the DPI dataset. This is precisely the case of countries plotted in red letters that

are inside the grey shaded area (Figure 1). Panama in 2009 and 2013 or Colombia in 2002 and 2014, for instance.

### 3 Divided Government in Brazil

Brazil was intentionally left out of Figure 1 since this country will be the case study. The main reason why we test our theory with Brazil is the ample availability of data with considerable granularity. Two complementary hypotheses will be tested, one concerning Legislative Support and another one encompassing Governing Costs. The idea is that a divided government will decrease the probability of legislative success and will make the executive-legislative relations more expensive to manage. The data on Brazil comes from the Coalition Management in Brazil dataset (Bertholini, 2016), ideology scores were taken from Power and Zucco (2012). Monthly data covers October 1988 to December 2014 and was applied quarterly.

(Figure 2)

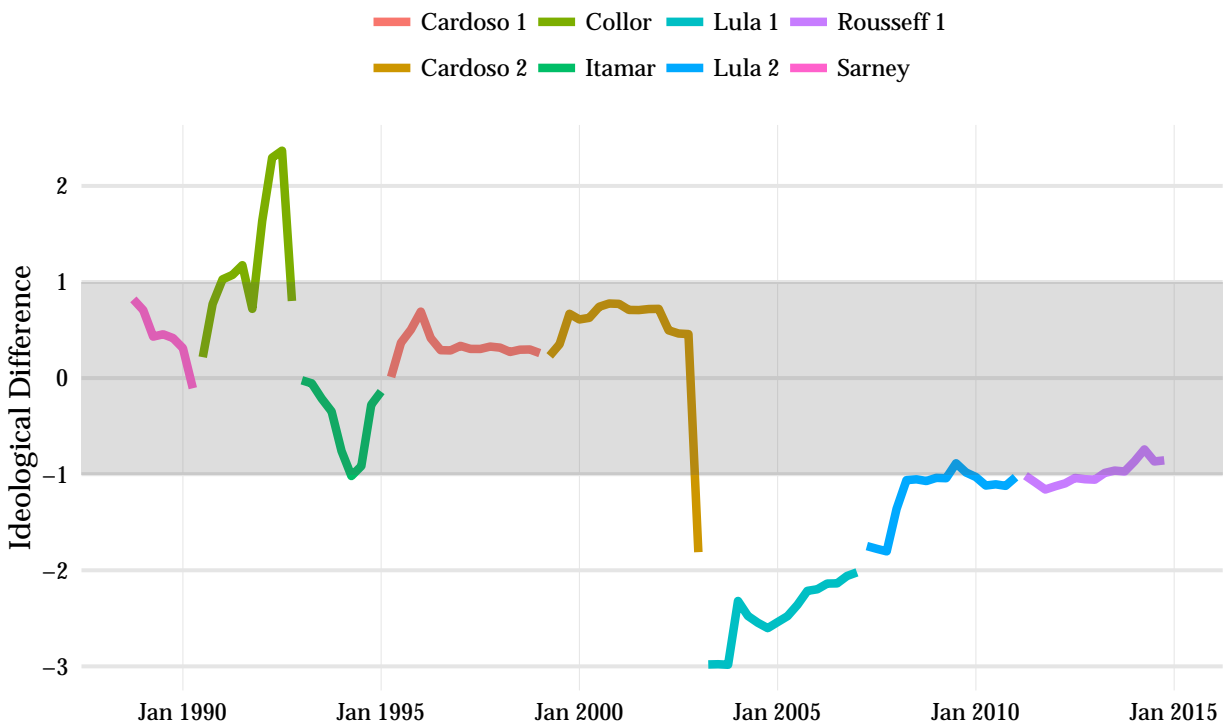


Figure 2: Ideological differences Coalition-Congress in Brazil

The empirical approach of this paper opens space for two ways of measuring divided government. The first one consists in subtracting the average congress ideology from the average coalition ideology. This will generate a variable called Ideological Difference Coalition-Congress (*ideo\_dist\_coal\_con*) which can vary from -9 - when the coalition is on the extreme left of the political spectrum and the floor is on the extreme right of this theoretical continuum - to 9 - when the very opposite occur. The second divided government measure, that we will call Ideological Difference Coalition-Congress (*abs\_dist\_coal\_con*), is the absolute of the difference. This second measure goes from 0 - a situation of perfect symmetry - to 9 - a status of high asymmetry. While the first measure is affected by the direction of ideological incongruence, the second measure does not indicate if a government is to the left or to the right of congress average position.

### 3.1 Legislative support Models

We will first estimate a model to test if the definition of divided go proposed here has any relation with Legislative Support. The hypothesis is that a divided government will face difficulties in passing legislation. Interestingly, our preferred estimations contain only the Ideological Difference variable, which is, legislative support in Brazil appears to have a strong ideological bias, and the congress tend to punish what they consider to be a left wing coalition. We control for several aspects: Agenda Size, Average Congress Ideology, Effective Number of Parties, GDP and Popularity. As expected, the size of the agenda is correlated to Legislative Support, the higher the support, the bigger the agenda. Other controls play no significant role to the model.

Table 1: Regression models with Newey-West correction for autocorrelation - Legislative Support

	Legislative Support					
	(1)	(2)	(3)	(4)	(5)	(6)
Ideo Diff Coalition-Congress	-4.445*** (1.043)	-4.758*** (1.055)	-4.647*** (1.082)	-5.163*** (1.423)	-5.231*** (1.595)	-4.931*** (1.149)
Agenda Size		0.257* (0.150)	0.281** (0.139)	0.258** (0.119)	0.234* (0.132)	0.243* (0.138)
Average Congress Ideology			-1.528 (3.632)	-3.414 (2.740)	-3.250 (3.000)	-3.311 (3.411)
Effective Number of Parties				-1.098 (1.415)	0.718 (2.703)	0.803 (2.881)
GDP					-2.772 (2.233)	-4.012 (2.973)
Popularity						0.052 (0.131)
Constant	59.847*** (1.696)	55.525*** (3.348)	63.448*** (21.623)	82.727*** (18.865)	67.807*** (25.043)	66.742*** (24.083)
Observations	105	105	105	105	103	103
Adjusted R <sup>2</sup>	0.231	0.258	0.257	0.259	0.279	0.282

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

### 3.2 Governing Costs Models

To estimate the effect of a more divided government on the resources the executive has to spend in order to govern, we used the Governing Costs Index, developed by Bertholini and Pereira (2015). The elaboration of a reliable aggregate measure for comparing the cost of governing among different presidents and at different moments in time is an empirical task that we have met in constructing the Governing Costs Index (GCI). The GCI is composed by three complementary measures of presidential costs associated with coalition management: 1. the number of cabinet positions (and state secretaries with the status of a minister) that a president decides to include in the administration on a monthly basis; 2. the natural log of the total amount of budgetary resources allocated to each cabinet position on a monthly basis; and 3. the natural log of the total amount of legislators' individual amendments to the annual budget (i.e., pork) appropriated by the government on a monthly basis.

The technical procedure used to calculate the GCI was a principal component analysis (PCA). The PCA analytic solution is produced through decomposition of the correlation matrix by identifying the first principal component or the linear combination of the variables that explains the larger part of the total variance. The GCI is a formative indicator, meaning that causality flows from the measurable variables to the latent variable, and the latter is the result of a linear composition from the first. Formative indexes are a plausible approach for combining a number of indicators to form a construct without any previous assumptions as to

the patterns of inter-correlations among these items. Although the reflexive view dominates the psychological and management sciences, the formative view is common in economics and sociology. The construction of formative indicators implies a decision on the weights to be assigned to each variable in its composition. One possible solution is to assign weights based on consolidated theory or expert opinion. Another option is to let the variance matrix set these weights. In the absence of consolidated theory, we chose to assign weights for each variable in the index based on its contribution to explaining the total variance, which is the factor loading of this variable in the composition of factors.

As independent variables we now substitute the ideological difference measure by an ideological distance measure. Here, our preferred specifications contain only the distance and not the difference between coalition and congress. Other controls were kept the same, except for GDP, since the GCI already incorporates a GDP correction in its calculation. We expect that the higher the ideological distance between governing coalition and congress the higher will be GCI. Controls are expected to follow the same intuition of the Legislative Support model, however in the opposite direction.

Results (Table 2) indicate the feasibility of our main hypothesis, with the strongly significant variables being the ideological distance between congress, the average ideology of the congress and the president's popularity; the was also strongly significant. However, a more robust model is necessary in order to deal with the time series characteristics of the GCI.

Table 2: Regression models with Newey-West correction for autocorrelation - Governing Costs

	Governing Costs Index					
	(1)	(2)	(3)	(4)	(5)	(6)
Ideo Dist Coalition-Congress	0.105*** (0.034)	0.062** (0.024)	0.063** (0.027)	0.075*** (0.015)	0.077*** (0.011)	0.085*** (0.011)
Ideo Dist Coalition-Congress (lag1)		0.045** (0.019)	0.043*** (0.015)	0.021* (0.011)	0.031* (0.018)	0.019 (0.017)
Agenda Size			-0.0004 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Average Congress Ideology				-0.071*** (0.021)	-0.123*** (0.045)	-0.129*** (0.032)
Effective Number of Parties					-0.027 (0.020)	-0.007 (0.015)
Popularity						-0.001*** (0.0004)
Constant	0.170*** (0.065)	0.168** (0.071)	0.175*** (0.061)	0.557*** (0.098)	1.061*** (0.390)	0.962*** (0.277)
Observations	73	73	73	73	73	73
Adjusted R <sup>2</sup>	0.640	0.647	0.643	0.800	0.807	0.862

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

### 3.3 Governing Costs - Bayesian Times Series Structural Models

When it comes to time series, these models are still useful, but they fail to address issues such as trends or seasonality. In such case, ARIMA modelling has an advantage to explain data in many contexts. To combine both approaches, Bayesian Structural Time Series is a tool described in Scott & Varian (2013) that uses space state methods (Harvey, 1988) to provide a complete model of the time series, while maintaining the spike-and-slab idea in the regression components.

This method yielded an analogous result to the linear regression models. The space state model used as a base for developing the results is a local linear trend model with quarterly seasonality (Figure 3). Probabilities

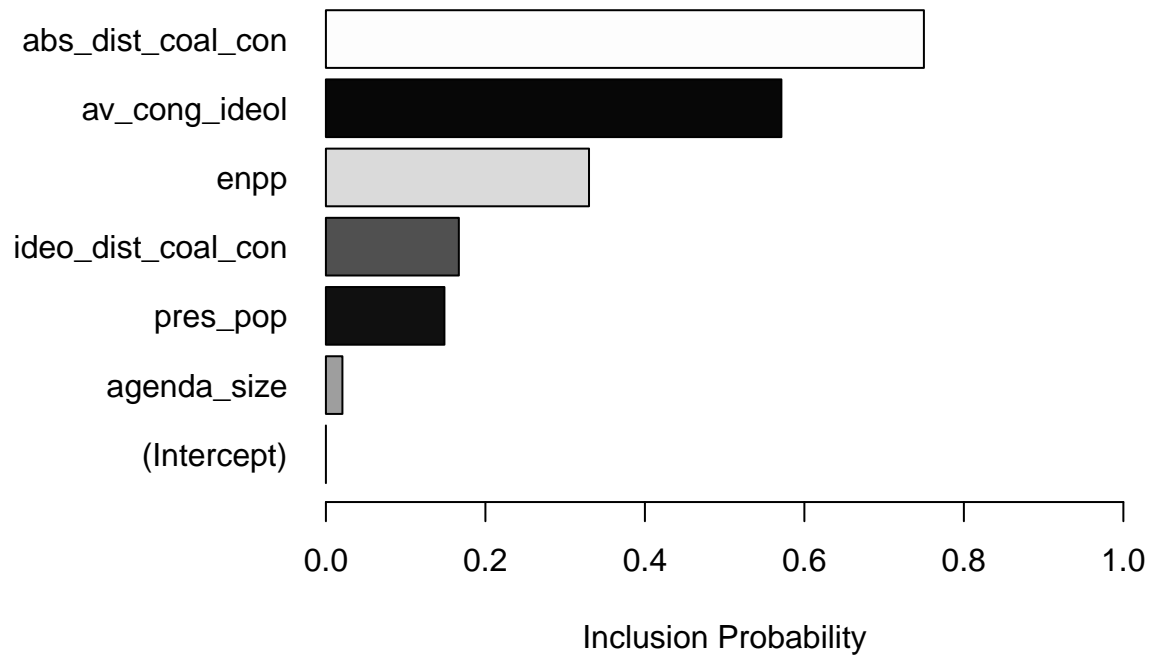


Figure 3: BSTS Model - Governing Costs - Independent Variables Inclusion Probabilities

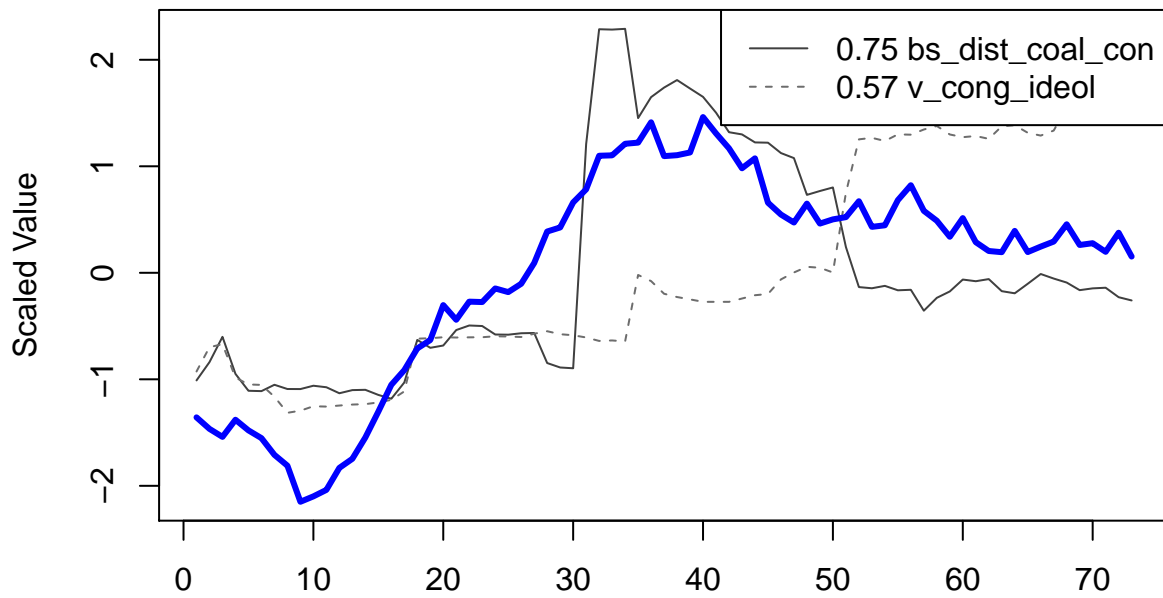


Figure 4: BSTS Model - Governing Costs - Predictors



higher than 50% indicate a strong chance of having this variable as a good predictor. Based on this model, the two variables with higher probability of being selected are the ideological distance between coalition and congress (`abs_dist_coal_con`) and the average ideology of congressmen (`av_cong_ideo`). The effective number of parties was selected with probability larger than 50%, is also being considered relevant by this model. President popularity, although previously pointed out as significant was not selected on this approach. The results strongly sustain our hypothesis that divided governments generate more governing costs. Model predictors also present a very good fit with our dependent variable, as the graphic analysis suggest (Figure 4) which adds robustness to our initial conclusion.

## 4 Discussion

To be written

## 5 References

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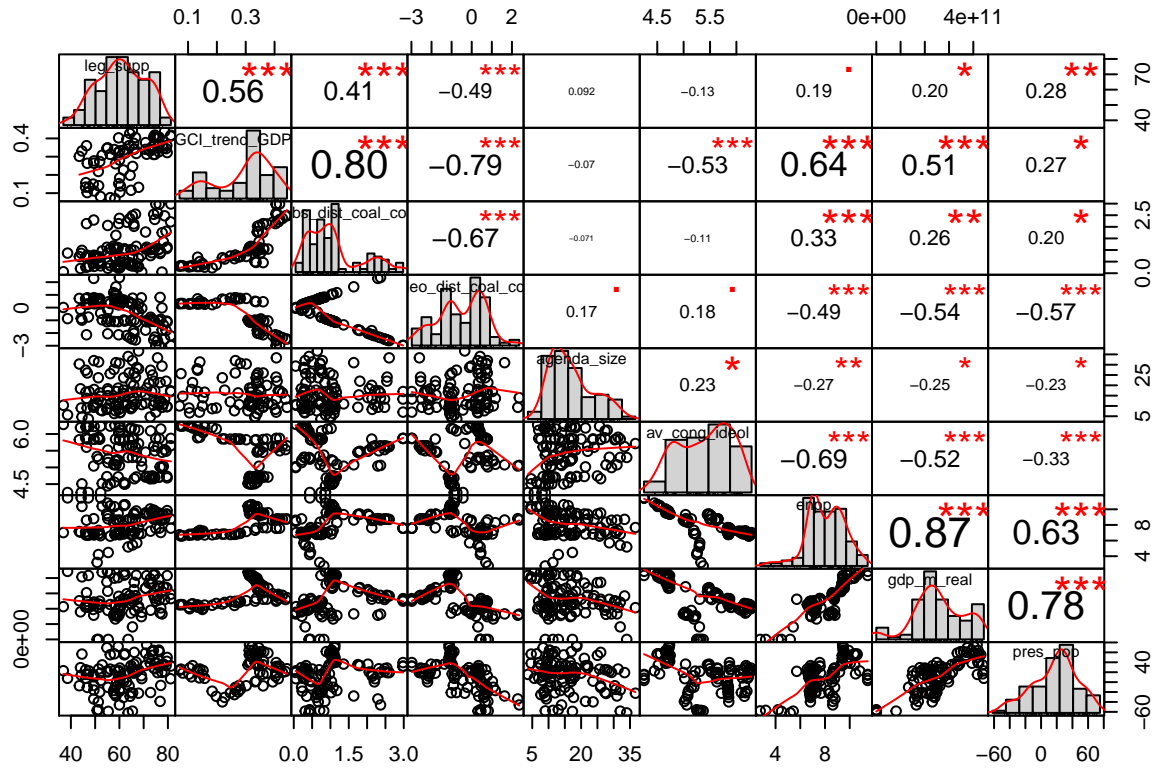
## Annex

### Descriptives

Table 3:

Statistic	N	Mean	St. Dev.	Min	Max
Legislative Support	105	61.985	10.801	36.881	81.227
Governing Costs Index	73	0.292	0.103	0.070	0.443
Ideo Dist Coalition-Congress	106	1.037	0.749	0.050	2.983
Ideo Diff Coalition-Congress	106	-0.469	1.186	-2.983	2.367
Agenda Size	106	16.148	7.879	3.667	36.667
Average Congress Ideology	106	5.402	0.603	4.249	6.287
Effective Number of Parties	106	8.110	1.693	2.755	11.456
Popularity	106	13.253	32.685	-62.056	75.167

## Data Correlation



## BSTS model Residuals and decomposition

