

# Are All Presidents Created Equal? Presidential Powers and the Shadow of Presidential Elections

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## Abstract:

Temporally proximate presidential elections with few candidates are known to promote the consolidation and nationalization of the legislative party system. However, contrary to the existing literature, we argue here that the shadow cast by presidential elections over legislative elections is contingent upon the characteristics of the presidential office in a country—specifically, upon the relative powers of the president vis-à-vis the legislature. More specifically, we hypothesize that these presidential elections will only have a significant deflationary and aggregatory effect on the legislative party system to the extent that the presidency is neither very weak nor very strong. We find support for our argument using a quantitative analysis of two different data sets, one of which contains unique district-level data. We also find that under certain conditions, elections for powerful and very powerful presidents may be inflationary, in contrast to elections for weaker presidents.

A defining feature of presidential democracy is the separate election of the chief executive and the legislature. Yet even as scholars acknowledge the importance of separate electoral origins, they also recognize that presidential and legislative elections are not independent of one another. On the one hand, the outcome of legislative elections held prior to a presidential contest can affect calculations about which presidential candidates are the strongest contenders. On the other hand, when presidential and legislative elections are reasonably proximate, presidential elections can lead to fewer legislative parties if there are few viable presidential candidates (Shugart and Carey 1992; Jones 1994, 1999; Shugart 1995; Cox 1997; Mozzafar, Scarritt and Gladich 2003; Golder 2006; Hicken 2009; Hicken and Stoll 2011). This article, like most of the literature, focuses upon the latter: the effect of presidential elections upon legislative elections.

As Juan Linz noted more than a decade ago, the choice between presidentialism, parliamentarism, or a hybrid regime is more than simply a question of who will exercise executive power. These core constitutional engineering decisions have profound effects on a variety of outcomes, including the nature of the party system (Linz 1994, p. 3). From France to Indonesia and from Israel to Russia, constitutional reforms either creating or strengthening the office of the president have had the effect (sometimes intended, sometimes not) of reshaping the legislative party system (e.g., Suleiman 1994; Moser 1998; Hazan and Rahat 2000). One of the most noted of these

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effects is the deflationary impact of popular presidential elections on the legislative party system. Particularly by promoting better cross-district coordination, leading to more nationalized legislative party systems, proximate presidential elections with few candidates are believed to encourage the consolidation of the legislative party system.

As good as existing studies are, they are not without their shortcomings. While they acknowledge the ways in which different types of presidential and legislative electoral rules can affect strategic behavior, they tend to treat the institutions themselves as uniform, black boxes. Comparative scholars know, however, that variations in the characteristics of the presidency and the legislature have important implications in other contexts. Specifically, the relative power of the president and legislature is known to affect such things as the propensity for policymaking gridlock, the proximity of policy outcomes to the median voter, and even overall government and regime stability (Linz 1994; Lijphart 1999; Shugart and Carey 1992; Mainwaring and Shugart 1997; Tsebelis 1995, 2002). We argue here that the power of the presidency relative to the legislature should also have a fundamental, independent effect prior to the formation of any government. Namely, the power of the presidency should also shape the outcome of legislative elections and the nature of the legislative party system.

Recent work on presidential elections has found that the number of presidential candidates is contingent on the size of the prize that is up for grabs, particularly the powers of the president (Hicken and Stoll 2008). In this paper, we build upon this work by exploring the ways in which the size of the presidential prize also shape political competition for the legislature. Accordingly, we first make note of its indirect effect through its influence on the number of presidential candidates. We then analyze its direct effect, our primary focus. Our hypothesis is that proximate presidential elections will only have significant deflationary effects on the number of legislative parties when the size of the presidential prize, which we define to be the horizontal centralization of policy-making authority in the presidency, is neither negligible nor overwhelming. In other words, contrary to the existing literature, we argue that the deflationary and aggregatory effect of presidential elections is *contingent* upon the characteristics of the presidential office—specifically, upon the relative powers of the president vis-à-vis the legislature.

We test our argument on two sets of cases. The first is a data set of 603 elections in eighty-four democracies from 1946 to 2000 that we obtain from Golder (2005), and the second is a data set of 590 elections in sixty-four countries from 1900 to 2005 that we ourselves compiled. We find that when presidential power ranges from moderately powerful to powerful and there is a small number of presidential candidates, presidential elections in temporal proximity to legislative elections have the hypothesized deflationary and aggregatory effect on the legislative party system. We also find some evidence that elections for both very weak and very powerful presidencies, by way of contrast, produce no such deflationary and aggregatory effects. Moreover, under the right conditions, elections for powerful and very powerful presidents, in contrast to moderately powerful presidents, may actually lead to a *de-nationalization* and *inflation* of the legislative party system.

## 1.0 Theory

In many democracies, voters elect a head of state-cum-chief executive, an office that is usually referred to as the “presidency,” in addition to a legislature (Shugart and Carey 1992).<sup>1</sup> Political

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<sup>1</sup> Included here are regimes in which the president is indirectly elected by an electoral college that is itself popularly elected by the voters, an example of which is the United States. In this paper, we contrast presidential regimes so defined with regimes lacking popular presidential elections: those in which either (i) the president is elected by the legislature with no voter participation except to elect the legislature itself, such as Turkey, or (ii) there is no popularly elected president whatsoever, such as the United Kingdom.

scientists have regularly observed that these presidential elections cast a shadow over the country's legislative elections in the eyes of both voters and elites, particularly when the elections for the two offices are proximate, but even—if to a lesser degree—when they are not (Shugart 1995; Cox 1997). This shadow takes the form of fewer legislative parties when there are few viable presidential candidates, and more legislative parties when there are many viable presidential candidates (e.g., Shugart and Carey 1992; Jones 1994; Amorim Neto and Cox 1997; Cox 1997; Mozaffar, Scarritt and Galaich 2003; Golder 2006; Hicken 2009; Hicken and Stoll 2011).<sup>2</sup> The former is usually referred to as the deflationary effect of presidential elections and the latter as the inflationary effect.

Contingent though it may be, the deflationary effect of presidential elections is widely recognized by academics as well as by constitutional engineers—so much so that the introduction of a popularly elected president is sometimes proposed as a way to reduce the fragmentation of the legislative party system. A prominent recent example is Israel's experiment with the direct election of its prime minister from 1996 to 2001. While nominally still called a prime minister, the switch to directly electing the chief executive transformed the Israeli system from a parliamentary regime into the type of regime that Shugart and Carey (1992) label “president-parliamentary” (Hazan 1996). This reform was proposed for a variety of reasons, but among them was a desire to reshape the Israeli party system:

...[T]he reformers hoped that the direct election of the prime minister would also reduce the size, number, and influence of the smaller parties in the Knesset. That is, they hoped that a separate ballot for the prime minister, with its requirement of an absolute majority, would reduce the prime ministerial race to the two main parties and encourage “straight-ticket” voting in the ballot for the Knesset. (Hazan and Rahat 2000, 1318)

Likewise, reformers during the French 4<sup>th</sup> Republic saw the introduction of popular presidential elections as a remedy to France's fragmented and disorganized party system, and hence to its chronically unstable “régime des partis” (Suleiman 1994).

Both reformers' expectations and scholars' predictions about the effect of presidential elections are typically based on the assumption that “[t]he presidency is nearly always the most important electoral prize in a presidential regime...” (Golder 2006, 35). In other words, all presidents are created equal, and all presidents equally trump legislatures in importance. Competition for the presidency shapes competition for the legislature precisely because the presidency is important enough that presidential candidates draw attention from the national media; from legislative candidates and other political elites such as donors; and, of course, from voters. This attention has wide-ranging repercussions for the legislative contest, as is well-discussed in the existing literature.<sup>3</sup>

However, the assumptions that the presidency is the most important electoral prize, and that the size of this prize is more or less constant across polities, are more problematic than the literature recognizes. Take the president of Ireland, effectively a popularly elected head of state charged with performing ceremonial functions. It seems implausible to argue that the Irish presidency is as important an electoral prize as the Dáil, the lower house of the Irish parliament, let alone a more important electoral prize. Now take the president of the United States, the head of state but also the commander-in-chief of the armed forces; the wielder of a legislative veto; and the maker of treaties. Here it becomes plausible to claim that the presidency is a more important prize than the Congress,

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<sup>2</sup> For an opposing view, see Filippov, Ordeshook & Shvetsova (1999) and Coppedge (2002).

<sup>3</sup> For more on the logic behind and mechanisms underlying these arguments, see Shugart (1995), Golder (2006), Samuels (2002, 2003), and Cox (1997).

although the case is still not clear cut.<sup>4</sup> Regardless, few would dispute that the presidency of the United States is a greater electoral prize than the Irish presidency. Should not elections for the relatively more important American presidency attract more candidate, media, donor, and voter attention than elections for the relatively less important Irish presidency? And should not the latter elections accordingly cast a much larger shadow over the legislative contest than the former? We think that the answer to both questions is a resounding “yes”.<sup>5</sup> In fact, because the parliament is the electoral prize of consequence in Ireland, not the presidency, the arrow of influence may be reversed: it may be the legislative contest that casts a shadow over the presidential one.<sup>6</sup> Or consider a less extreme but perhaps more interesting comparison. Should we expect the shadow cast by presidential elections in the U.S., where the president’s power is checked by the legislature, to be of the same magnitude as presidential elections in a system where the president’s power is less constrained, such as in Brazil?

This leads us to our central claim: all popularly elected presidents, and hence all presidential elections, are *not* in fact created equal. While this is not a novel claim in general (see, for example, Shugart and Carey 1992), it is novel for *this literature* in that scholars have overlooked the implications for the shadow cast by presidential elections. In order to claim that temporally proximate presidential elections with few candidates provide incentives for coordination (as well as that temporally proximate presidential elections with many candidates discourage coordination), we first need to take the presidency’s importance into account. Some scholars have acknowledged this: for example, Cox (1997, 189) argues that presidentialism will only lead to a smaller number of national level parties in legislative elections when the presidency is “a big prize, worth considerable effort to attain”. However, to date, there has been little theoretical and no empirical attention paid to the conditioning variable of presidential importance.<sup>7</sup> Rather, scholars have treated all presidential elections as interchangeable, once the amount of coordination in the presidential race and the temporal proximity of legislative and presidential elections have been taken into account.

So what determines whether or not the presidency is the most important electoral prize? One factor is the degree to which power at the national level of government is concentrated in the presidency, as opposed to either being widely dispersed among several institutions from the

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<sup>4</sup> Consider, for example, Franklin Delano Roosevelt’s 1937 quip that “It is the duty of the president to propose and it is the privilege of the Congress to dispose”.

<sup>5</sup> To briefly provide some evidence on behalf of the former claim, five of the eleven elections for the Irish presidency held since 1945 have been uncontested. Moreover, while voter turnout since 1945 (through 2005) has averaged seventy-three percent in Ireland’s parliamentary elections, turnout has only averaged fifty-seven percent in the six contested and non-concurrent presidential elections (our calculations based on voter turnout data from IDEA 2008). Compare these statistics with those of the United States. Not one of the fifteen presidential elections since 1945 has been uncontested, and while voter turnout in concurrent presidential and legislative elections (through 2005) has averaged fifty-five percent, it has only averaged forty percent in non-concurrent, midterm legislative elections (Ibid.).

<sup>6</sup> For example, Elgie (2005, 106) argues that Irish presidential elections are often uncontested for two reasons: first, because parties do not want to bear the financial cost of the election given the implications for their ability to fight the next legislative election; and second, because parties do not want to risk upsetting their legislative election strategy by running a poor presidential campaign. Reversing the causal arrow in this manner is a promising avenue for future research to explore.

<sup>7</sup> The only exceptions are Amorim Neto and Cox (1997) and Cox (1997), who treat Ireland as non-presidential in their empirical analyses because the Irish president lacks both legislative and governmental powers. However, they treat all other presidents possessing at least some power, from the weak Austrian to the powerful Argentinian, as equals. Other scholars such as Golder (2006) have not even separated out the Irish case from other presidential regimes.

presidency to the judiciary or concentrated in one institution other than the presidency, such as the legislature. Elsewhere this has been dubbed the “horizontal centralization” of policy-making authority (Hicken and Stoll 2008). While there are obviously several institutional bodies to consider, we focus here upon the powers that the president wields vis-à-vis the legislature, the institution that most scholars view as the key competitor to the presidency. A second factor is the degree to which policy-making authority is centralized in the national level of government vis-à-vis the subnational level, which has previously been called “vertical centralization” (Chhibber and Kollman 1998, 2004; Samuels 2003; Hicken and Stoll 2008). Together, these two factors determine “the size of the prize”, i.e. the payoff to being aligned with the party of the president (Hicken and Stoll 2008; Hicken 2009). Because vertical centralization has already received a good deal of empirical attention with contradictory results (Ibid.; see also Brancati 2008 and Hicken and Stoll 2009, 2011), we focus here upon the horizontal dimension of the size of the prize. Hence, we argue that only if the horizontal size of the prize is sufficiently large, i.e., if the president wields a fair amount of policy-making authority vis-à-vis the legislature, will the presidency indeed be the most important electoral prize in regimes with popularly elected presidents, as the literature has assumed.

Previously, Hicken and Stoll (2008) found that the horizontal size of the presidential prize shapes electoral competition for the presidency itself. Specifically, they found that the number of presidential candidates is a non-linear function of presidential powers: elections for very weak presidencies such as Ireland’s are often uncontested; elections for moderately powerful presidencies are contested by more candidates than elections for more powerful presidencies; and elections for very powerful presidents are contested by many candidates, *ceteris paribus*. This means that the size of the prize, and specifically the horizontal centralization of power in the president vis-à-vis the legislature, *indirectly* plays a role in shaping the legislative electoral contest: it directly affects the number of presidential candidates, and the number of presidential candidates in turn directly shapes the number of legislative parties, as discussed above.

In this paper, we additionally hypothesize that the size of the prize has a *direct*, independent effect on the relationship between presidential and legislative elections. In general, we hypothesize that the greater the horizontal centralization of authority in the presidency, the greater the size of the presidential electoral prize and hence the greater the shadow the presidential contest casts over the legislative one. Conversely, the weaker the president, the less of an impact presidential elections should have on their legislative counterparts, even when they are maximally proximate.<sup>8</sup> This leads to the following hypothesis:

*Hypothesis 1 (H1): Temporally proximate presidential elections are associated with a smaller (larger) number of parties in legislative elections, conditional upon (a) there being few (many) presidential candidates and (b) the horizontal centralization of authority in the presidency. Specifically, the effect of the number of presidential candidates in proximate presidential elections should increase with the horizontal centralization of authority in the presidency.*

Another way to study the effect of presidential elections is to examine the extent to which political parties coordinate across districts, which is also referred to in the literature as party system aggregation or nationalization (e.g., Chhibber and Kollman 1998, 2004). Many scholars have posited that the primary mechanism by which presidential elections with few candidates lead to fewer legislative parties at the national level is by facilitating cross-district linkages and hence better aggregation (e.g., Cox 1997; Cox and Knoll 2003; Chhibber and Kollman 2004; Hicken and Stoll 2011). In keeping with the prior hypothesis, we argue that the effect of presidential elections upon

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<sup>8</sup> Again, the assumption about the effect of proximity is drawn from the existing literature.

this characteristic of the legislative party system should also be conditional upon the size of the presidential prize. Hence, a second hypothesis is:

*Hypothesis 2 (H2): Temporally proximate presidential elections are associated with greater (lesser) cross-district coordination in legislative elections, conditional upon (a) there being few (many) presidential candidates and (b) the horizontal centralization of authority in the presidency. Specifically, the effect of the number of presidential candidates in proximate presidential elections should increase with the horizontal centralization of authority in the presidency.*

Finally, there is reason to believe that the deflationary effect of proximate presidential elections either diminishes or disappears for *extremely* powerful presidents. As noted above, Hicken and Stoll (2008) find that candidates and voters fail to coordinate on a small number of candidates in presidential contests in systems with very powerful presidents, and we believe a similar dynamic could be at work in proximate legislative contests. To elaborate, in countries with very powerful presidencies, the stakes become so high that they might actually hinder rather than induce strategic coordination by legislative candidates. When power is extremely concentrated in the office of the presidency, the elections approach a zero sum contest—either you are part of the party that captures the executive, or you are left wandering in the political wilderness until the next election. Under such a scenario, candidates from trailing parties might rationally choose to avoid throwing their hat in with one of the two frontrunners before the election for fear of choosing incorrectly and alienating the eventual winner. A sounder strategy would be to wait until after the election when the outcome is certain and then align with the winner.<sup>9</sup> There are several testable implications of this hypothesis that could be explored in future work, including the pattern of party switching before and after elections,<sup>10</sup> as well as the difference between coordination during concurrent presidential elections (when the president’s party is not known with certainty) and coordination during midterm elections (when the president’s party is known with certainty). Here we simply test whether the deflationary effect of proximate elections dissipates in systems with very powerful presidents:

*Hypothesis 3 (H3): Where presidents are very powerful we should observe no significant deflationary effect, even if presidential elections are proximate and there are few presidential candidates.*

## 2.0 Variable Descriptions

We now turn to the operationalization and measurement of the variables appearing in our hypotheses. We have two dependent variables, one for each of the hypotheses. The first is simply the number of electoral parties competing in a national level legislative election. We operationalize this variable in the conventional manner as the *size-weighted* or effective number of electoral parties. (Laakso and Taagepera 1979).<sup>11</sup> This variable is labeled “ENEP nat”.

The second dependent variable is the extent of cross-district coordination or party system aggregation in a national legislative election. One way to operationalize this concept is to calculate the difference between the effective number of electoral parties nationally (calculated as just

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<sup>9</sup> Another arguably more basic logic is that in such regimes the legislature is inconsequential enough that actors at both the elite and mass levels simply do not bother to link the legislative and presidential campaigns, with the legislative contest assuming the role of the poor relation.

<sup>10</sup> See Hicken (2009) for some analysis of these patterns in the Philippines.

<sup>11</sup> Letting  $v_i$  represent the  $i$ th party’s vote share in a given country and election, the effective number of electoral political parties,  $ENEP$ , is calculated as follows:  $ENEP = 1 / \sum_{i=1}^n v_i^2$ .

described) and the average effective number of electoral parties in the districts (see Chhibber and Kollman 1998). Formally, this difference score, denoted “ $D$ ”, is calculated as follows:

$$D = \text{ENEP nat} - \text{Mean ENEP} , \quad (1)$$

where “Mean ENEP” is the average effective number of electoral parties in the districts. To illustrate, a country that has an average of two effective parties per district (Mean ENEP = 2.0) would have a difference score of five if the effective number of parties nationally was seven (ENEP nat = 7). That same country would have a difference score of zero if there were only two parties nationally (ENEP nat = 2).<sup>12</sup> Larger difference scores signal poorer cross-district coordination. In other words, the former country with the difference score of seven has poorer cross-district coordination and hence a less aggregated or nationalized party system than the latter country with the difference score of zero. To provide a real world example, a country that often has a large difference score and hence poor cross-district coordination is South Korea, where state- and region-specific parties commonly contest national legislative elections. Conversely, a country that usually has a small difference score and hence good cross-district coordination is the United States, where two nationally competitive parties have dominated politics in the post-World War II era.

We construct measures of both dependent variables using district level electoral returns from the Constituency Level Electoral Archive (CLEA) at the University of Michigan. While not shown here for reasons of space, a plot of these two variables shows that while countries with highly aggregated party systems tend to have a small effective number of national electoral parties (e.g., Greece), and that countries with poorly aggregated party systems tend to have a large effective number of national electoral parties (e.g., India), the relationship is far from perfect: in particular, there are many countries with highly aggregated party systems that nevertheless have a large number of electoral parties at the national level (e.g., Norway). This is why we investigate the conditional effect of presidential elections upon both of these variables. To quantify the prior observations, the Pearson’s correlation coefficient is 0.79, which has the interpretation that only about sixty percent of the two variables’ variance is shared.

Turning to our independent variables, to operationalize the temporal proximity of legislative and presidential elections, we use a continuous measure originally developed by Amorim Neto and Cox (1997) that has been the measure of choice in several recent studies (e.g., Golder 2006).<sup>13</sup> It ranges from zero (minimally proximate, i.e., the legislative election either occurs at the presidential midterm or in a non-presidential regime) to one (maximally proximate, i.e., concurrent).<sup>14</sup> The

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<sup>12</sup> This variable is closely related to Cox’s (1999, 17) inflation score, which divides the difference measure  $D$  by the effective number of electoral parties at the national level (ENEP nat). We use the simpler  $D$  instead of the inflation score as our dependent variable because the former, which is unbounded on the real line, is more suitable for regression analysis than the latter, which is constrained by definition to be less than or equal to one.

<sup>13</sup> Here, as elsewhere in the paper, we follow the literature’s empirical approach when possible, such as by employing its operationalizations. Because we introduce a new conditioning variable, departing too drastically from previous approaches would reduce the comparability of our results.

<sup>14</sup> Proximity is calculated as follows:  $2 \left| \frac{L_t - P_{t-1}}{P_{t+1} - P_{t-1}} - 1/2 \right|$ , where  $L_t$  is the year of the legislative election;  $P_{t-1}$

is the year of the previous presidential election; and  $P_{t+1}$  is the year of the following presidential election. We note that we obtain reasonably similar if more inflationary results, as well as more significant coefficients on the interaction terms, by alternatively employing a simple dummy variable for concurrent presidential and

second independent variable is the number of national level presidential candidates. Comparable to how we operationalized the legislative electoral party system, this variable is operationalized as the effective number of (electoral) presidential candidates in either the concurrent or preceding presidential election,<sup>15</sup> where legislative elections in non-presidential regimes receive a value of zero—again following the standard practice in the literature. Our data for both of these independent variables was obtained by both extending and correcting Golder’s (2005) original data using a variety of primary and secondary sources, such as the CLEA.

Our third independent variable, the horizontal centralization of policy-making authority in the presidency, is the focus of this paper. Drawing upon the work of Hicken and Stoll (2008), we employ two operationalizations of this variable. The first and most preferred is an index of *de jure* presidential powers at the time of the legislative election. To create this index for our set of cases, we relied upon a coding scheme first developed by Shugart and Carey (1992) and later modified by Frye, Hellman and Tucker (2000). This scheme measures ten dimensions of presidential power. The first six dimensions concern the president’s legislative powers and include: package veto/override; partial veto/override; decree power; exclusive introduction of legislation (in reserved policy areas); budgetary powers; and referenda proposal. The remaining four dimensions concern non-legislative powers: cabinet formation; cabinet dismissal; censure; and dissolution of the assembly. For each election, countries with a popularly elected president are assigned a score ranging from zero (minimal presidential authority) to four (maximal presidential authority) on each dimension, based on the constitution in effect at that time.<sup>16</sup> We follow Shugart and Carey in then creating two additive indices from these scores, an index of legislative powers and an index of non-legislative powers, each of which assigns the related dimensions an equal weight. Finally, we sum across all ten dimensions (i.e., additively combine the prior two indices) to create an overall index of presidential powers.

Our original data was generated by obtaining copies of countries’ constitutions from a variety of sources and using the coding scheme just described to code them through 2005.<sup>17</sup> For the few cases for which we ourselves were not able to code the appropriate constitution (usually older ones, such as the 1925 Chilean constitution), we (i) used other scholars’ extant codings where they were available; and (ii) otherwise extrapolated our nearest coding either backwards or forwards in time, as appropriate.<sup>18</sup> The index ranges from a minimum of zero to a maximum of twenty-one.<sup>19</sup>

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legislative elections. These alternate models, like all models discussed but not reported here, are found in the supplemental paper (available upon request).

<sup>15</sup> The effective number of presidential candidates is calculated by dividing 1 by the sum of each candidate’s squared vote share,  $v_i$ :  $1/\sum v_i^2$ .

<sup>16</sup> The supplemental paper presents the coding rules for all ten dimensions.

<sup>17</sup> We collected this data at the University of Michigan in collaboration with Orit Kedar and we are grateful for her permission to use it here.

<sup>18</sup> Our sources of extant codings were Shugart and Carey (1992), a dataset focusing largely on the Americas and running through 1992, and Frye, Hellman and Tucker (2000), a data set running from the early 1990s through 1995 and focusing on Eastern Europe and the former Soviet republics. The second of the two choices, extrapolation, is clearly the most problematic. There were only six such cases included in the analyses reported here. The alternative, coding these cases as missing and hence list-wise deleting them, yields similar results. Additionally list-wise deleting the twenty-five cases for which we drew upon extant codings, i.e. using only the cases that we ourselves coded, also yields similar findings. There were only two countries for which no extant codings were available and which we ourselves were unable to code (and hence are coded as missing): Guinea-Bissau and Kenya. Finally, there were a few cases for which we disagreed with an extant coding. Our conclusions when we substitute such extant values for our own also remain substantively unchanged.

However, we still need to accommodate regimes without a popularly elected president. For consistency with the other independent variables, we assign non-presidential regimes a value of zero and add one to the index values of presidential regimes so that the latter cases range in value from one to twenty-two.<sup>20</sup> When trying to assess the affects of presidential power, we believe it is wise to include non-presidential regimes because the logical end of the continuum is not a weak president, but no president at all. Including non-presidential regimes also conforms to the approach in the existing literature (e.g., Golder 2006). However, because we are cognizant of the possibility that non-presidential regimes may be fundamentally different, we include an alternative specification (described below) that uses non-presidential regimes as a baseline to which we compare the effects of presidentialism. We also note that previous studies have not found results sensitive to the inclusion of non-presidential regimes (Hicken and Stoll 2011).

Although a recent survey of different methods of measuring presidential power identifies the approach pioneered by Shugart and Carey as the most useful (Metcalf 2000, 660), our additive index is not without its flaws.<sup>21</sup> Accordingly, we employ a more holistic classificatory scheme as a second, alternative operationalization: the type of political regime in effect at the time of an election. For our set of cases, we classify countries with popularly elected presidents as taking one of three regime types that capture basic differences in presidential authority: the parliamentary, the mixed, and the true presidential.<sup>22</sup> In the empirical analysis, we compare these elections with the base-line sample of elections in “pure” parliamentary systems (i.e., regimes without a popularly elected president). This typology is a slightly modified version of Shugart and Carey’s (1992): as is conventional, we have combined their rare president-parliamentary regime and the more common premier- or semi-presidential regime in one “mixed” category.<sup>23</sup> To illustrate, Ireland is coded as a parliamentary

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<sup>19</sup> The theoretical maximum is forty, but twenty-one is the highest score obtained by the countries in our sample: specifically, the score by Argentina under its 1994 constitution. The lowest score of zero is obtained by Ireland.

<sup>20</sup> Not incrementing the index yields virtually identical results.

<sup>21</sup> Comparative scholars regularly employ Shugart and Carey’s index in both quantitative and qualitative analyses (see, for example, Clark and Wittrock 2005; Kitschelt 1999; Nielson 2003; Nijzink, Mozaffar, and Azevedo 2006; Penning 2003; Protsyk 2005; and Whitefield 2006). For a critique of this way of operationalizing presidential powers, however, see Tsebelis and Aleman (2005) and Tsebelis and Rizova (2007). These authors have recently developed an intriguing measure of a president’s agenda-setting powers based on an analysis of veto procedures, which could be a useful alternative to the one that we employ once it is available for more cases. Other flaws of our index include its failure to take into account the informal powers of the president, from media technology to presidential popularity and personality (see, for example, Woolley 2005 for a discussion of these matters with respect to the United States) and issues of inter-coder reliability. To deal with the latter concern, we use both our version of the index and previous versions of the index where there is disagreement over how to code a given constitution (discussed above).

<sup>22</sup> Like Shugart and Carey (1992), we refer to the third of these regime types as “true” or “pure” presidential to distinguish it from the broader category of “presidential” regime, countries that possess a popularly elected chief executive-cum-head of state, introduced earlier.

<sup>23</sup> We employ Shugart and Carey’s (1992) influential definitions of the various regime types. Our actual classifications follow what we believe to be the consensus in the literature, drawing upon numerous sources from Shugart and Carey themselves to Elgie (2005). These definitions differ on the margins from those used by Alvarez, Cheibub, Limongi and Przeworski (1996, 1999) in constructing their similar typology (see also Przeworski, Alvarez, Cheibub and Limongi 2000), the measure of which was extended forward in time by Golder (2005). Despite these different definitions, there are only a few cases in the analysis for which our codings diverge from the latter’s. An example is post-1990 Bulgaria, which we code as mixed but Golder codes as parliamentary. Our conclusions are not substantively altered by employing an alternate version of

regime following the introduction of a popularly elected president with the 1937 Constitution; France is classified as a mixed regime from 1962 onwards, when popular elections for the president were introduced to the Fifth Republic by referendum; and the United States is always coded as a true or pure presidential regime. The Appendix shows that the presidential powers index varies predictably with these three basic types of political regimes for the set of cases used in this paper. As expected, presidential power increases on average from parliamentary to mixed regimes and from mixed to presidential regimes. Nevertheless, the index of presidential powers reveals variation within each type of regime that the simple trichotomy obscures. For example, while both Colombia and the United States are classified as true presidential regimes, the United States' president receives a score of thirteen on the overall index of presidential powers whereas Colombia's receives a score of twenty prior to 1991, reflecting the substantially greater legislative powers that the Colombian president was constitutionally granted for most of the post-war period. Accordingly, it is only the index of presidential powers that allows us to test H3.

### 3.0 Model Specifications and Data

We begin our empirical analysis by replicating the state-of-the-art model for the overall effect of presidential elections upon the national level legislative party system (e.g., Golder 2006):

$$\begin{aligned} \text{ENEP nat}_{i,t} = & \beta_0 + \beta_1 \text{Proximity}_{i,t} + \beta_2 \text{ENPRES}_{i,t} + & (2) \\ & \beta_3 \text{Proximity}_{i,t} \times \text{ENPRES}_{i,t} + \beta_4 \text{Log Magnitude} + \\ & \beta_5 \text{ENETHNIC} + \beta_6 \text{Log Magnitude} \times \text{ENETHNIC} + \varepsilon_{i,t} \end{aligned}$$

This model, which we label Model 1, has as its dependent variable the effective number of electoral parties at the national level (ENEP nat). It posits a two-way interaction between the temporal proximity of presidential and legislative elections (Proximity) and the effective number of presidential candidates (ENPRES). The model also controls for the interaction between two other variables that have been found to shape the national level party system: the logged average lower tier district magnitude (Log Magnitude), measured using data from various sources such as Golder (2005), and the effective number of ethnic groups (ENETHNIC), measured using data from Fearon (2003). Note that  $i$  indexes countries and  $t$  indexes elections throughout.

Estimating this model serves two purposes. First, it demonstrates that we replicate the literature's findings about the effects of presidential elections upon legislative elections using our different set of cases (described below) and our own data. Second and more importantly, it allows us to vary the baseline model in ways that are relevant for testing H1. To elaborate, in what we label Model 2, out of the elections that occur in regimes with popularly elected presidents, we only include those where the popularly elected president is weak: that is, elections in presidential regimes that are classified as parliamentary using our three-fold typology (e.g., Ireland). In Model 3, we instead include elections where the popularly elected president is moderately powerful: i.e., elections in those presidential regimes that are classified as mixed (e.g., France). Finally, in Model 4, we only include elections where the popularly elected president is powerful: i.e., elections in presidential regimes that are classified as "true" presidential according to our three-fold typology (e.g., the United States and Brazil). All of these presidential elections can be contrasted with the baseline elections: those in regimes without popularly elected presidents (e.g., the United Kingdom). The

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our typology that classifies mixed regimes such as Bulgaria whose classification is in dispute as the more extreme type (e.g., as parliamentary).

latter are included in each of Models 2-4.<sup>24</sup>

We next provide an alternate test of H1 and a first test of H3 by building our preferred measure of horizontal centralization, the index of presidential powers, directly into the model:

$$\begin{aligned} \text{ENEP nat}_{i,t} = & \beta_0 + \beta_1 \text{Proximity}_{i,t} + \beta_2 \text{ENPRES}_{i,t} + \beta_3 \text{PRESPOWERS}_{i,t} + & (3) \\ & \beta_4 \text{Proximity}_{i,t} \times \text{ENPRES}_{i,t} + \beta_5 \text{Proximity}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_6 \text{ENPRES}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_5 \text{Proximity}_{i,t} \times \text{ENPRES}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_6 \text{Log Magnitude} + \beta_7 \text{ENETHNIC} + \\ & \beta_8 \text{Log Magnitude} \times \text{ENETHNIC} + \varepsilon_{i,t} \end{aligned}$$

This model has the same dependent variable as before (ENEP nat), but now posits a three-way interaction between the proximity of presidential and legislative elections (Proximity); the effective number of presidential candidates (ENPRES); and the index of presidential power (PRESPOWERS). We label it Model 5 in Table 2. In other words, this model explicitly conditions upon horizontal centralization, unlike the prior Models 2-4, which implicitly condition on it by using different sets of cases.

Last but not least, in order to test H2 as well as H3, we estimate the following model:

$$\begin{aligned} D_{i,t} = & \beta_0 + \beta_1 \text{Proximity}_{i,t} + \beta_2 \text{ENPRES}_{i,t} + \beta_3 \text{PRESPOWERS}_{i,t} + & (4) \\ & \beta_4 \text{Proximity}_{i,t} \times \text{ENPRES}_{i,t} + \beta_5 \text{Proximity}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_6 \text{ENPRES}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_5 \text{Proximity}_{i,t} \times \text{ENPRES}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_6 \text{Log Magnitude} + \beta_7 \text{ENETHNIC} + \\ & \beta_8 \text{Log Magnitude} \times \text{ENETHNIC} + \varepsilon_{i,t} \end{aligned}$$

Here, the dependent variable is the difference between the effective number of electoral parties at the national level and the average effective number of electoral parties at the district level (D). All other variables are again as before. We label this Model 6.<sup>25</sup> While scholars have argued that several additional variables such as legislative bicameralism and the effective number of ethnic groups should also exert a significant effect on legislative party system aggregation, we find that controlling for these variables does not affect our conclusions about the three-way interaction of concern to this paper, so we omit them from Model 6 to simplify the presentation.<sup>26</sup>

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<sup>24</sup> For this simple test, non-presidential regime elections are those where there was neither a concurrent nor a preceding presidential election (i.e., the effective number of presidential candidates equals zero) and presidential regime elections are those where there was either a concurrent or a preceding presidential election (i.e., the effective number of presidential candidates is non-zero). For the more sophisticated tests described below, our approach is more nuanced in that we evaluate the constitutional provisions in effect at the time of the election. This distinction is not merely academic because there are three “founding” legislative elections in our data set where the regime was formally presidential at the time of the election but the first popular presidential elections had not yet been held, although they followed within the next two years. Alternative approaches to problematic elections like these in the more sophisticated analyses, such as treating them as occurring in non-presidential regimes, leave our conclusions substantively unaltered.

<sup>25</sup> We note that including country fixed effects in Models 5 and 6 yields substantively similar if less significant results.

<sup>26</sup> These control variables, drawing from work by Cox and Knoll (2003); Hicken (2009); and Hicken and Stoll (2009), include the percentage of seats distributed in an upper tier; the logged average lower tier district

We employ two sets of cases for estimating the various models. First, we use our own original set of cases combined with our own original data described above to estimate each model (Models 1-6). These are all minimally democratic<sup>27</sup> elections in independent countries from 1900 to 2005<sup>28</sup> that employed a non-fused electoral system<sup>29</sup>; had identifiable political parties; had a population of at least one million in 2006; had more than one legislative electoral district; and for which we were able to obtain district level election results (which are necessary to calculate our difference measure, *D*). For bicameral legislatures, we followed convention in using lower house elections. After list-wise deleting the five cases with missing presidential powers data (three elections in Kenya and two in Guinea-Bissau), the resulting data set consists of 590 elections in sixty-four countries. The number of elections observed per country ranges from one to forty, with an average of approximately nine.<sup>30</sup>

Second, to enable comparison with the existing literature, we also use Golder's (2006) replication data set (i.e., his set of cases and his data) to estimate Models 1-4. We do not use his data set to estimate Models 5 and 6 because in order to make our presidential powers variable commensurate with his remaining variables, we would have to amend either his or our codings for several cases.<sup>31</sup> His cases consist of all minimally democratic lower house elections in independent countries from 1946-2000 that employed a non-fused electoral system; had identifiable political parties; had fifteen percent or less of the votes going to parties in the residual "other" category in official election statistics; and were fully observed on the variables appearing in his model.<sup>32</sup> This replication data set includes a total of 603 elections in eighty-four countries.<sup>33</sup>

#### 4.0 Results

We use OLS to estimate Models 1-6. Two sets of data are used to estimate Models 1-4 (Golder's 2006 replication data set and our original data set), but only our original data set is used to estimate

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magnitude; the existence of an upper legislative chamber (bicameralism); and the effective number of ethnic groups.

<sup>27</sup> While we agree that there are good reasons to believe that political institutions and hence presidential elections might not have the same effects in both consolidated and unconsolidated democracies (see, for example, Shugart 1999 and Hartlyn, McCoy and Mustillo 2008), neither controlling for advanced industrial status, eliminating elections in African countries, nor eliminating the four single country elections substantively alters our conclusions. We also obtain reasonably similar if more inflationary results by estimating the models separately for elections in advanced industrial and non-advanced industrial democracies.

<sup>28</sup> Confining the analysis to the post-World War II period yields substantively similar results.

<sup>29</sup> In fused elections, voters cast a single ballot for the presidency and the legislature, but distinct and separate legislative and presidential electoral systems then translate the votes into seats (e.g., Bolivia since the 1980s). These elections are problematic because it is not clear to which electoral system voters and elites respond: that of the legislature or that of the presidency (see, for example, Cox 1997, 217). Moreover, their inclusion risks biasing the results in favor of finding an effect of presidential elections (Golder 2006, 38). For these reasons, they have generally been excluded from quantitative analyses by scholars working in this literature.

<sup>30</sup> See Table 1a in the supplemental paper for a list of these countries and elections. The supplemental paper also contains more information about our case selection criteria.

<sup>31</sup> We accordingly find it reassuring that we replicate his findings in Model 1 and obtain similar findings from Models 2-4 using our own data set.

<sup>32</sup> He also eliminated elections in Congo 1963; Colombia between 1958 and 1970 (inclusive); and Papua New Guinea. We follow suit with our own set of cases.

<sup>33</sup> Descriptive statistics for all variables and both data sets are presented in the supplemental paper.

Models 5 and 6. The coefficient estimates for Models 1-4 are shown below in Table 1, and the coefficient estimates for Models 5 and 6 appear in Table 2.

*Tables 1 and 2 about here.*

These tables report Newey-West (1987) standard errors, which are robust to both autocorrelation and heteroskedasticity, in parentheses.<sup>34</sup>

#### **4.1 Discussion: The Number of Electoral Parties**

While not discussed here in the interests of space, Table 1 and the first row of Figure 1 show that we obtain similar findings to Golder (2006) from our original data set regarding the overall effect of presidential elections (Model 1). But what happens when we estimate Model 1 by combining the non-presidential regime elections with different sub-sets of the presidential regime elections: i.e., when we separately confine our attention to elections that occur in parliamentary, mixed, and true presidential regimes (Models 2-4, respectively), an implicit way of testing H1? Table 1 shows that we obtain the same signs for the terms involving proximity ( $\beta_1$  and  $\beta_3$ ) as when we use all elections. The magnitudes of the estimated coefficients vary, however, as do their statistical significances: for example, the coefficient on the interaction term ( $\beta_3$ ) is only significant for true presidential regime elections (Model 4), and it is estimated to be of much greater magnitude for true presidential regime elections than for either parliamentary (Model 2) or mixed regime (Model 3) elections.

Yet we know from Brambor, Clark and Golder (2006) and Franzese and Kam (2007) that looking at the significance level of the interaction coefficient is misleading. Instead, the nature of the conditional relationship between these two independent variables and the dependent variable, the effective number of electoral parties at the national level, is more precisely conveyed by plotting the interaction effects, as we do in Figure 1.

*Figure 1 about here.*

For each of Models 1-4, the corresponding row of this figure graphs the marginal effect of temporally proximate (concurrent) presidential elections over the range of the observed effective number of presidential candidates.<sup>35</sup> It does so for the two versions of the model resulting from the use of the two data sets: specifically, the left column of the figure graphs the marginal effects that are estimated using Golder's (2006) data set, and the right column graphs those estimated using our data set. Ninety percent, two-sided confidence intervals band the estimated marginal effects.<sup>36</sup>

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<sup>34</sup> We note that using the increasingly popular country-clustered robust standard errors instead of Newey-West robust standard errors does not substantively alter our conclusions. While Beck and Katz (1995) also raised the issue of cross-country contemporaneous correlation in the context of TSCS models like ours, there is little theoretical reason to expect it in our *electoral* (as opposed to their political economy) data. Moreover, it is difficult to obtain a good estimate of the contemporaneous correlation when there are hardly any common time periods across countries, as is the case here. This makes their panel corrected standard errors (PCSE) inappropriate for our use.

<sup>35</sup> This marginal effect is the partial derivative of Equation 2 with respect to proximity (see Brambor, Clark and Golder 2006). Using the notation of Equation 2, it is calculated as follows:  $\beta_1 + \beta_3 \text{ENPRES}_{i,t}$ . Marginal effects for other models are calculated similarly.

<sup>36</sup> We use ninety percent, two-sided confidence intervals for two reasons. First, for consistency with previous studies (e.g., Golder 2006, 41). Second, because our hypotheses are directional, making one-sided tests

Beginning with the hypothesized deflationary effect, we see from this figure that temporally proximate presidential elections with few presidential candidates cast a weak shadow in parliamentary regimes, as hypothesized by H1. Using Golder's (2006) data set, the deflationary effect is insignificant and small: if presidential elections are a perfect two party contest, the effective number of electoral parties is predicted to decrease by only approximately 0.5. While we do find a significant and larger, if still small, deflationary effect using our data set, this is only the case when there are very few (approximately two) presidential candidates. Second, when we turn to mixed presidential regimes, where the presidency is a larger prize, the substantive magnitude of the deflationary effect of proximate presidential elections increases using Golder's data set in line with H1, even though it decreases using ours. Magnitude aside, this effect is now significant using both data sets and it is significant for a greater number of presidential candidates (up to approximately three) using our data set. Third and finally, we see that presidential elections in true presidential regimes, where the presidency is an even larger prize, are predicted to have a significant deflationary impact for approximately the same range of presidential candidates. But this effect is now of even greater substantive magnitude, as predicted. To illustrate using Golder's data set, concurrent presidential elections that are a perfect two party contest are predicted to decrease the effective number of electoral parties in the legislative election by a whopping 2.2.

Turning to the hypothesized *inflationary* effect, using both sets of data, we see that large numbers of presidential candidates do not have a significant effect on the number of legislative parties in systems with either weak (parliamentary regimes) or moderately powerful (mixed regimes) presidents. By way of contrast, proximate presidential elections in true presidential regimes are predicted to have a statistically significant inflationary effect when there are many presidential candidates (specifically, when there are more than approximately four candidates using our data set and more than approximately six candidates using Golder's).<sup>37</sup> This effect is also substantively significant. For example, using Golder's data set, when there are six presidential candidates (as in the 1995 French presidential election), proximate presidential elections in a true presidential regime are predicted to increase the effective number of electoral parties in the legislative election by an impressive 1.8 parties (i.e., by almost two whole effective parties), *ceteris paribus*. Accordingly, the first portion of the empirical analysis is generally supportive of H1.

While useful for its simplicity, its comparability with the existing literature, and its separation of presidential from non-presidential regimes, the prior analysis is undeniably simplistic. Accordingly, we now turn to our other measure of horizontal centralization, the index of presidential powers, and hence to Model 5. This provides us with both a more direct and a more nuanced test of H1, as well as with a test of H3. Table 2 reveals that only one term attains conventional levels of significance: the main effect of proximity. However, as before, the real action is not in this table's coefficients themselves, but in a quantity derived from them: the marginal effect of proximity, which is what Figure 2 graphically conveys.

*Figure 2 about here.*

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technically more appropriate than two-sided tests, and ninety percent two-sided confidence intervals are equivalent to ninety-five percent one-sided confidence intervals.

<sup>37</sup> While not common, presidential elections with this many candidates are not rare, either: for example, in our data set, there are thirty-two legislative elections (i.e., approximately five percent of all elections) where the concurrent or preceding presidential election was contested by more than four presidential candidates. Legislative elections where the concurrent or preceding presidential election was contested by more than six presidential candidates are much rarer (about one percent of all elections), but they still do occur (see below).

Like Figure 1, the first column of Figure 2 graphs the estimated marginal effect of proximate presidential elections on the effective number of electoral parties over the observed range of the effective number of presidential candidates. As before, each row represents a different value of the size of the prize, operationalized in Model 5 as the index of presidential powers: one (the minimum for presidential regimes), a very weak president such as post-1937 Ireland's; seven, a moderately powerful president such as the French Fifth Republic's; fourteen, a powerful president such as the United States's; and twenty-two (the maximum), a very powerful president such as post-1994 Argentina's. By comparing the marginal effect graphs across the rows, we can explore how the effect of proximate presidential elections is conditional upon the powers of the president.

One can see from this figure that as hypothesized, the slope of the marginal effects line increases as presidential powers increase, indicating that an increase in the number of presidential candidates has a larger effect when the president is more powerful. More specifically, with respect to the deflationary effect, proximate presidential elections for moderately powerful (e.g., France) to powerful (e.g., the United States) presidents with few candidates are predicted to have a statistically and substantively significant negative effect on the effective number of electoral parties, in accordance with H1. For example, with concurrent elections, two presidential candidates and a presidency with powers akin to the French president's, the model predicts that the number of effective electoral parties in the legislative contest will decrease by 1.4 parties. By way of contrast, while the model predicts that presidential elections can have a statistically significant deflationary effect on the legislative party system even when the presidency is exceedingly weak (e.g., Ireland), contrary to H1, this is only the case when the presidential party system is extremely consolidated (i.e., when the presidential race is a perfect two party contest, as before). Turning to elections for very powerful presidencies (e.g., contemporary Argentina), they are found to have little of a deflationary effect when there are few presidential candidates, in accordance with H3: the predicted effect is negative for a smaller range of presidential candidates and is never significant.

With respect to the *inflationary* effect, Model 5 predicts that when there are many presidential candidates, proximate presidential elections only significantly increase the effective number of electoral parties when the presidency is powerful (i.e., as or slightly more powerful than the United States's president). A minimum of approximately six presidential candidates is required for this significant inflationary effect to kick in. While this is admittedly a relatively rare occurrence (see footnote 34), if the presidential race has fragmented to this extent, the inflationary impact upon the legislative party system will be substantial: a predicted increase of at least 1.7 effective parties. When the president is extremely powerful, the inflationary effect is found to be insignificant but of an even larger magnitude. Combining this finding with the prior finding that elections for very powerful presidents lack a significant deflationary effect, we arrive at the conclusion that elections for very powerful presidencies are almost as unlikely to encourage coordination in legislative elections as elections for very weak presidencies. In fact, it is not unlikely that they will further fragment the legislative party system instead of simply failing to consolidate it, consistent with H3.<sup>38</sup>

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<sup>38</sup> To ensure that these results were not being unduly driven by individual countries' experiences, we separately eliminated elections in regimes with very powerful presidencies (those with an index score of at least eighteen). These are elections in post-1993 Argentina; Brazil; Chile; pre-1991 Colombia; and post-1986 Philippines. The only substantive difference is that dropping post-1986 elections in the Philippines keeps the inflationary effect from attaining conventional levels of significance. The results about the aggregatory effect (discussed below) are also unaffected. A future extension of this work is to expand the set of elections in extremely powerful presidential systems in the analysis as new data becomes available and see whether the results still hold. Another is to identify and conduct case studies of natural quasi-experiments where presidential power has changed from the powerful to very powerful, such as pre- and post-1993 Argentina.

## ***4.2 Discussion: Party System Aggregation***

Finally, we turn to H2: the extent of cross-district coordination in legislative elections, otherwise known as the aggregation of the party system. Only the proximity main effect term attains statistical significance in Model 6, as shown in Table 2. But as before, examining this table alone does not suffice: we need to calculate the marginal effect of proximity in order to draw conclusions about H2. The second column of Figure 2 presents these estimated effects.

Akin to our findings regarding the number of electoral parties (H1), we see from this figure that with few presidential candidates, proximate presidential elections for moderately powerful to powerful presidencies are predicted to encourage cross-district coordination, in accordance with H2. This aggregatory effect is both statistically and substantively significant. For example, proximate elections for a powerful president akin to that of the United States are predicted to decrease the difference between the national and district levels by almost an entire effective party (specifically, by 0.86) when there are two presidential candidates. Also comparable to our earlier findings, Model 6 fails to find a statistically significant aggregatory effect with few presidential candidates when the presidency is very powerful, in accordance with H3. However, commensurate with H2 and contrary to our earlier findings, concurrent presidential elections with few presidential candidates are not predicted to have a significant aggregatory effect when the presidency is very weak. Last but not least, with many presidential candidates (more than approximately four), Model 6 predicts that proximate presidential elections for powerful and all but the most extremely powerful presidencies can significantly discourage cross-district coordination in legislative contests. The latter is another facet of the inflationary shadow cast by elections for very powerful presidencies.

## **5.0 Conclusion**

On balance, we find evidence that the impact of temporally proximate presidential elections on the legislative party system is indeed contingent on the size of the presidential prize, as hypothesized. Contrary to the empirical approach that the literature has taken up until now, we find that all presidents are not created equal in terms of the shadows that their elections cast over legislative elections. For one, as the powers of the president increase, the effect of an increase in the number of presidential candidates is amplified. For another, while proximate presidential elections with few presidential candidates generate the expected significant deflationary and aggregatory effects when the presidency is moderately powerful to powerful, there is strong evidence that these effects disappear when presidents are extremely strong. Moreover, proximate presidential elections with a large number of presidential candidates have a significant inflationary and de-aggregatory effect only for powerful to extremely powerful presidencies.

There is also some evidence in support of our hypothesis that the deflationary and aggregatory effects do not hold when the presidency is very weak, although the results on this point were somewhat mixed. Specifically, in some models, elections for even very weak presidencies were found to have a significant deflationary effect when there are few presidential candidates. Granted, this effect requires perfect coordination on two candidates in the presidential race and disappears in other models; nevertheless, we did not expect to find it. Future work might explore whether or not the arrow of causality indeed runs from legislative to presidential elections in these regimes, as we earlier suggested, and whether or not this might account for these findings.

Hence, two important take-away implications for constitutional engineers follow from the analysis undertaken here. First, if the goal is to use the presidency to develop fewer, more nationalized parties in the legislature, then ensure that the presidency is not very weak. Specifically, to produce the desired deflationary effect, the presidency should be at least moderately powerful, e.g., a French-style president. Second, be wary of powerful presidencies, which at minimum may not

contribute to the consolidation of legislative party systems and at most may contribute to their fragmentation. If powerful presidencies are to promote the consolidation and nationalization of the legislative party system, they must be paired with electoral rules that will tend to produce few (ideally, two) presidential candidates, such as simple plurality. More permissive rules that allow for a proliferation of presidential candidates are likely to undermine any potential deflationary effects of temporally proximate presidential elections and in fact to encourage the *inflation* of the legislative party system. However, for *extremely* powerful presidencies, it is not clear that even restrictive electoral rules will do the job: two presidential candidates may still not suffice to produce a deflationary effect when the size of the presidential prize is this substantial. Accordingly, constitutional engineers with an eye to consolidating the legislative party system would be advised to steer clear of these “imperial” presidencies.

## 5.0 Appendix

<b>Presidential Powers (Index)</b>	
<b>Mean Powers by Regime Type</b>	
Parliamentary	4.1
Mixed	11
True Presidential	16
<b>Descriptive Statistics</b>	
Median	14
Mean	12
1 <sup>st</sup> Quartile	8
3 <sup>rd</sup> Quartile	16
Standard Deviation	5.7

**Table A1.** Mean presidential powers by political regime type and descriptive statistics for this variable for the presidential regime elections used to estimate Models 5 and 6. All statistics are rounded to two significant digits.

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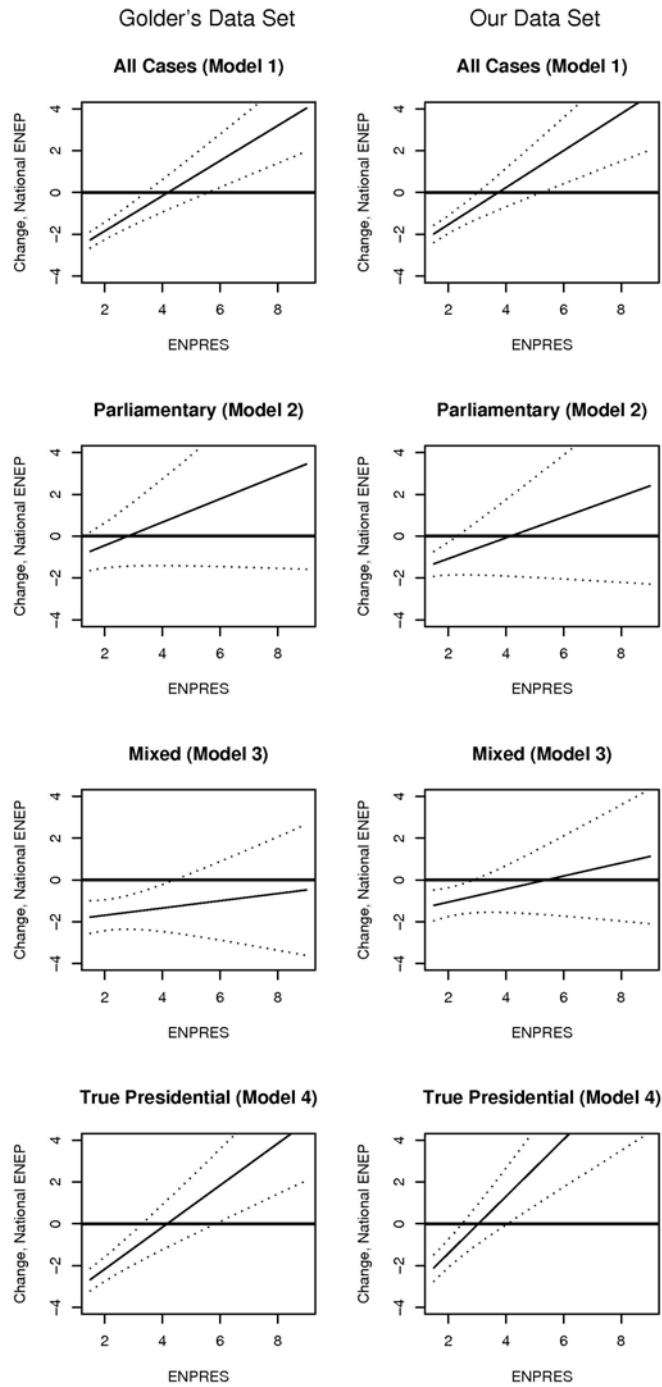
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	Subset of Cases: All Non-Presidential Regime Elections, and Presidential Regime Elections in:							
	All Cases		Parliamentary Regimes Only		Mixed Regimes Only		True Presidential Regimes Only	
	Model 1		Model 2		Model 3		Model 4	
	Golder's Data Set	Our Data Set	Golder's Data Set	Our Data Set	Golder's Data Set	Our Data Set	Golder's Data Set	Our Data Set
<b>Intercept</b>	3.1*** (0.20)	2.9*** (0.19)	3.2*** (0.22)	2.7*** (0.22)	3.3*** (0.20)	2.8*** (0.21)	3.0*** (0.21)	2.7*** (0.20)
<b>Proximity</b>	-3.5*** (0.34)	-3.3*** (0.44)	-1.6** (0.62)	-2.1*** (0.47)	-2.0*** (0.71)	-1.7** (0.70)	-4.2*** (0.44)	-4.2*** (0.62)
<b>ENPRES</b>	0.33*** (0.097)	0.16 (0.10)	-0.20 (0.12)	-0.16 (0.14)	0.46*** (0.13)	0.35*** (0.13)	0.41*** (0.15)	-0.048 (0.17)
<b>Proximity * ENPRES</b>	0.84*** (0.16)	0.88*** (0.21)	0.56 (0.37)	0.50 (0.35)	0.17 (0.27)	0.31 (0.27)	1.0*** (0.22)	1.4*** (0.30)
<b>Log Magnitude</b>	0.44*** (0.12)	0.55*** (0.15)	0.45*** (0.15)	0.63*** (0.14)	0.40*** (0.14)	0.55*** (0.14)	0.56*** (0.12)	0.69*** (0.15)
<b>Effective Number of Ethnic Groups</b>	0.13 (0.091)	0.34*** (0.095)	0.11 (0.11)	0.48*** (0.12)	0.084 (0.094)	0.50*** (0.11)	0.15 (0.098)	0.37*** (0.095)
<b>Log Magnitude * Effective Number of Ethnic Groups</b>	0.0022 (0.072)	-0.076 (0.089)	0.0051 (0.088)	-0.15* (0.083)	0.017 (0.087)	-0.15* (0.085)	-0.034 (0.068)	-0.10 (0.086)
<b>N</b>	603	590	395	415	413	463	507	470
<b>R<sup>2</sup></b>	0.25	0.21	0.16	0.14	0.19	0.17	0.27	0.20
<b>Root MSE</b>	1.7	1.5	1.5	1.4	1.6	1.5	1.6	1.4

**Table 1. Coefficients and robust (Newey-West) standard errors for Models 1-4.** The dependent variable is the effective number of electoral parties. The independent variables are proximity, the temporal proximity between the legislative and presidential elections; ENPRES, the effective number of presidential candidates; Log Magnitude, the logged average lower tier district magnitude; and the effective number of ethnic groups. The model is Golder's (2006) replication model (Equation 3) estimated using *all* elections (Model 1) as well as different subsets of elections in presidential regimes (those in parliamentary, mixed, and true presidential regimes, respectively) along with all non-presidential regime elections (Models 2-4). Two data sets are used: Golder's (his cases and his data) and our own (our cases and our data). Significance codes are for two-sided tests, all calculated prior to rounding: 0.01, \*\*\*; 0.05, \*\*; 0.10, \*.

	<b>ENEP</b>	<b>D</b>
	<b>Model 5</b>	<b>Model 6</b>
<b>Intercept</b>	2.9*** (0.19)	0.89*** (0.057)
<b>Proximity</b>	-2.2*** (0.69)	-1.2*** (0.41)
<b>ENPRES</b>	0.25 (0.28)	-0.13 (0.18)
<b>Proximity * ENPRES</b>	0.34 (0.44)	0.30 (0.28)
<b>Presidential Powers</b>	-0.063 (0.059)	0.0016 (0.038)
<b>Presidential Powers * Proximity</b>	-0.036 (0.083)	-0.057 (0.060)
<b>Presidential Powers * ENPRES</b>	0.011 (0.028)	0.016 (0.016)
<b>Presidential Powers * Proximity * ENPRES</b>	0.029 (0.038)	0.021 (0.024)
<b>Log Magnitude</b>	0.55*** (0.15)	
<b>Effective Number of Ethnic Groups</b>	0.34*** (0.097)	
<b>Log Magnitude * Effective Number of Ethnic Groups</b>	-0.080 (0.088)	
<b>N</b>	590	590
<b>R<sup>2</sup></b>	0.21	0.11
<b>Root MSE</b>	1.5	1.0

**Table 2. Coefficients and robust (Newey-West) standard errors for Models 5-6.** For Model 5, the dependent variable is the number of electoral parties (ENEP), and for Model 6, it is party system aggregation (D). The independent variables are proximity, the temporal proximity between the legislative and presidential elections; ENPRES, the effective number of presidential candidates; Log Magnitude, the logged average lower tier district magnitude; and the effective number of ethnic groups. Our own data set was used to estimate these models. Significance codes are for two-sided tests, all calculated prior to rounding: 0.01, \*\*\*; 0.05, \*\*; 0.10, \*.



**Figure 1.** The estimated marginal effect of proximate presidential elections on the number of electoral parties for all cases as well as for different types of presidential regimes (Models 1-4). The left column contains the versions of Models 1-4 estimated using Golder's data set, and the right column contains the versions estimated using our data set. Dotted lines are ninety percent two-sided (or ninety-five percent one-sided) confidence intervals.

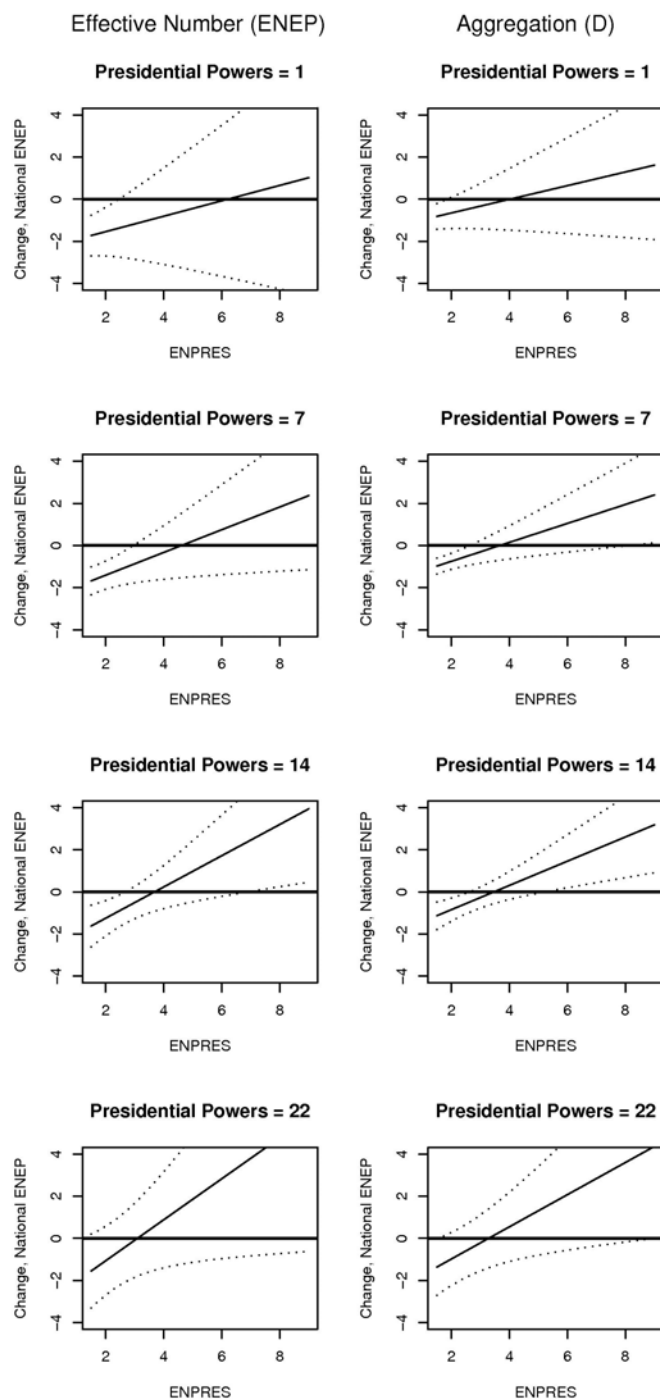


Figure 2. The estimated marginal effect of proximate presidential elections over the observed range of the effective number of presidential candidates (ENPRES) for four different values of the index of presidential power (Models 5-6). In the left column the dependent variable is the effective number of electoral parties (ENEP; Model 5) and in the right column it is aggregation (D; Model 6). Dotted lines are ninety percent two-sided (or ninety-five percent one-sided) confidence intervals.