

Are All Presidents Created Equal? Presidential Powers and the Shadow of Presidential Elections[†]

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Abstract:

Presidential elections with few candidates held in temporal proximity to legislative elections are believed to promote the nationalization and consolidation of the legislative party system. However, contrary to the existing literature, we argue here that the shadow presidential elections cast over legislative elections is contingent upon the relative powers of the president vis-à-vis the legislature. Specifically, we find that proximate presidential elections with few presidential candidates only promote the nationalization and consolidation of the legislative party system when the president is neither very weak nor very powerful. We also find that proximate presidential elections with many presidential candidates only promote the denationalization and fragmentation of the legislative party system when the president is at least reasonably powerful.

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. 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. 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 (Linz 1994, p. 3; see also Suleiman 1994; Moser 1998; Hazan and Rahat 2000). The most noted of these effects is the deflationary impact of presidentialism, by which popular presidential elections with few candidates 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. For example, the relative power of the

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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 (e.g., Linz 1994; Shugart and Carey 1992; Mainwaring and Shugart 1997; Tsebelis 1995). 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, it should also shape the legislative party system.

Accordingly, this paper explores how the size of the presidential prize directly shapes the legislative party system. Our hypothesis is that presidential elections will only significantly promote the nationalization and consolidation of the legislative party system when the size of the presidential prize is neither negligible nor overwhelming.¹ Hence, contrary to the existing literature, we argue that the nationalizing and consolidatory effect of presidential elections is *contingent* upon the characteristics of the presidential office—specifically, upon the horizontal centralization of authority in the presidency, i.e., the relative powers of the president vis-à-vis the legislature. In so doing, we build on previous work that demonstrates the effect of executive power upon the presidential party system (Hicken and Stoll 2008) and the ways in which presidential elections shape competition both within and between legislative electoral constituencies (Hicken and Stoll 2011).

We test our argument on two sets of cases. The first is a data set of 590 elections in sixty-four countries from 1900 to 2005 that we ourselves compiled. For robustness, we also use a data set of 603 elections in eighty-four democracies from 1946 to 2000 compiled by Golder (2005, 2006), which yields results even more supportive of our hypotheses. However, in the interest of space, we solely report the results from our broader data set in this paper.² As hypothesized, we find that for presidential elections held in temporal proximity to legislative elections, when there are few presidential candidates, these elections only promote the nationalization and consolidation of the legislative party system when presidents are moderately powerful to powerful. Moreover, when there are many presidential candidates, only elections for powerful and very powerful presidents are found to contribute to the de-nationalization and fragmentation 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).³ Political scientists have regularly observed that these presidential elections cast a shadow over the country’s legislative elections, particularly when the elections for the two offices are temporally 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, 1999; Amorim Neto and Cox 1997; Cox 1997; Golder 2006; Hicken 2009; Hicken and Stoll 2011). The former is usually referred to as the deflationary effect of presidential elections, resulting in a more consolidated legislative party system, and the latter as the inflationary effect, resulting in a more fragmented legislative party system.

Contingent though it may be, the deflationary effect of presidential elections is widely recognized by both academics and 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: “to reduce the size, number, and influence of the smaller parties in the Knesset”

(Hazan and Rahat 2000, 1318).⁴ Likewise, reformers during the French 4th 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, donors and other political elites; and, of course, from voters. This attention has wide-ranging repercussions for the legislative contest, as is well-discussed in the existing literature.⁵

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 more important an electoral prize than the Dáil, the lower house of the Irish parliament. 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 electoral prize than the Congress. 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". Or, consider a less extreme 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 the study of legislative party systems. To date, scholars studying the shadow cast by presidential elections have largely overlooked the implications of this variation in presidential power. While Cox (1997, 189) has argued 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", there has been little other theoretical and no empirical attention paid to the conditioning variable of presidential importance.⁶ Rather, scholars have treated all presidential elections as interchangeable, after taking account of the presidential party system and the temporal proximity of legislative and presidential elections (i.e., the electoral cycle).

So what determines whether or not the presidency is the most important electoral prize? The key factor is the degree to which power at the national level of government is concentrated in the presidency. Elsewhere this has been dubbed the "horizontal centralization" of policy-making authority, the primary determinant of "the size of the presidential prize," or the payoff to being aligned with the party of the president (Hicken and Stoll 2008; Hicken 2009).⁷ 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. Hence, we argue that only if the horizontal size of the presidential 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, as the literature has assumed.

Previously, Hicken and Stoll (2008) found that the size of the presidential prize, in addition to

factors previously studied such as the presidential electoral system, shapes the number of presidential candidates. This means that the size of the prize *indirectly* plays a role in shaping the legislative party system: it directly shapes 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 presidential prize has a *direct*, independent effect on the relationship between presidential and legislative elections. Our argument is that the greater the horizontal centralization of authority in the presidency, the greater the size of the presidential prize and hence the greater the shadow the presidential election casts over the legislative one, controlling for the number of presidential candidates and the temporal proximity of the elections. Conversely, the weaker the president, the less of a shadow the presidential election casts over its legislative counterpart, even when the two elections are concurrent.⁸ This leads to the following hypothesis:

Hypothesis 1 (H1): Temporally proximate presidential and legislative elections are associated with a smaller (larger) number of parties in legislative elections, conditional upon (a) there being few (many) presidential candidates and (b) policy-making authority being horizontally centralized in the presidency.

Another way to study the effect of presidential elections is to examine the extent to which political parties coordinate across legislative electoral districts. This is referred to in the literature as the aggregation of the legislative party system (e.g., Chhibber and Kollman 1998, 2004), one of several ways of conceptualizing party nationalization.⁹ 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 thereby promoting 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 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 and legislative elections are associated with greater (lesser) cross-district coordination in legislative elections, conditional upon (a) there being few (many) presidential candidates and (b) policy-making authority being horizontally centralized in the presidency.

Finally, there is reason to believe that the ability of proximate presidential elections with few presidential candidates to promote the aggregation and consolidation of the legislative party system either diminishes or disappears for *extremely* powerful presidents. Hicken and Stoll (2008) found that candidates and voters fail to coordinate on a small number of candidates in presidential elections when the president is very powerful. We believe that a similar dynamic should be at work in legislative elections held in temporal proximity to these presidential elections: specifically, in countries with very powerful presidencies, the stakes become so high that they hinder rather than induce strategic coordination by legislative candidates. The logic is as follows. 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 this 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. 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,¹⁰ 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 aggregatory and deflationary effect of presidential elections dissipates in systems with very powerful presidents:

Hypothesis 3 (H3): Where presidents are very powerful, their elections should not have a significant aggregatory and deflationary effect, even if they are temporally proximate to legislative elections 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. 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 (ENEP) (Laakso and Taagepera 1979).¹¹

The second dependent variable is the extent of cross-district coordination or party system aggregation in a national legislative election. A common way to operationalize this concept is to calculate the difference between the effective number of electoral parties in the legislative election nationally (calculated as just described) and the average effective number of electoral parties in the legislative districts (see Chhibber and Kollman 1998, 2004; Hicken 2009; Hicken and Stoll 2011). Formally, this difference score (D) is calculated as follows:

$$[D] = [ENEP] - [\text{Mean District ENEP}], \quad (1)$$

where “Mean District 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 would have a difference score of five if the effective number of parties nationally was seven. That same country would have a difference score of zero if there were only two parties nationally. Larger difference scores signal poorer cross-district coordination. 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 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.¹² While not shown here for reasons of space, a scatterplot 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). Quantifying this, the Pearson’s correlation coefficient between the national ENEP and D is 0.79, which means that only about sixty percent of the two variables’ variance is shared. We accordingly believe it is useful to investigate the effect of presidential elections upon both of these variables.

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 many recent studies (e.g., Cox 1997; Clark and Golder 2006; Golder 2006; Hicken and Stoll 2011). 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).¹³ The second independent variable is the number of national level presidential candidates. For presidential regimes, this variable is operationalized as the effective number of (electoral) presidential candidates in either the concurrent (if there is one) or preceding presidential election (if not).¹⁴ In non-presidential regimes, the variable takes the value of zero, again following the standard practice in the literature (Ibid.). Our data for both of these independent variables was obtained by extending Golder’s (2005) original data.

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, Hicken and Stoll 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.¹⁵ An overall index of presidential powers is then created by adding the scores on all ten dimensions. Hicken and Stoll's (2008) original data were generated by obtaining copies of countries' constitutions from a variety of sources and using the coding scheme just described to code them through 2005. We built upon this data by extending it to the cases included in our sample that did not appear in theirs.¹⁶ The observed values of the index range from zero to twenty-one.¹⁷ However, we still need to accommodate regimes without a popularly elected president. For consistency with the other independent variables, non-presidential regimes are assigned a value of zero and one is added to the index values of presidential regimes so that the latter cases range in value from one to twenty-two.¹⁸

Although a recent survey of different methods of measuring presidential power identifies this approach as the most useful (Metcalf 2000, 660), the index of presidential powers is not without its flaws.¹⁹ Accordingly, like Hicken and Stoll (2008), 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 fundamental differences in presidential authority: the parliamentary (a weak presidency), the mixed (a moderately powerful presidency), and the true presidential (a powerful presidency). 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.²⁰ To illustrate, Ireland is coded as a parliamentary regime even 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 as a parliamentary regime prior to 1962; and the United States is always coded as a true or pure presidential regime.

For regimes with popularly elected presidents, the presidential powers index varies predictably with the three basic types of political regimes, as expected. Presidential power increases on average from parliamentary to mixed regimes, as well as from mixed to presidential regimes. Nevertheless, the index of presidential powers reveals variation in the size of the presidential prize within each type of regime, especially true presidential regimes, that the simple trichotomy obscures. Accordingly, we rely on the full index of presidential powers to test H3.

3.0 Model Specifications and Data

Before turning to the specifics of the models estimated to test the three hypotheses, the issue of which cases are included in our empirical analysis deserves special attention. As alluded to in the discussion of how our variables are operationalized, elections in non-presidential regimes, which means "pure" parliamentary regimes lacking a popularly elected chief executive-cum-head of state

(e.g., the United Kingdom), are included in the analysis alongside elections in presidential regimes. The reason for this is simple: when trying to assess the effect of presidential elections upon the legislative party system, the ultimate counterfactual to a presidential election being held concurrently with a legislative election is no presidential election at all. In other words, at the most basic level, the experimental “treatment” is the existence of a presidential election. To determine the effect of presidential elections, we compare the legislative party systems of the treatment group (legislative elections in regimes with a popularly elected president) to the legislative party systems of the control group (legislative elections in regimes without a popularly elected president). This is why all existing quantitative studies of which we are aware have included elections in non-presidential regimes in their analyses (to name just a few, see, for example, Amorim Neto and Cox 1997; Cox 1997; Clark and Golder 2006; Golder 2006; Hicken 2009; Hicken and Stoll 2011).²¹ More details about the cases used to estimate our models appear below.

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):

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

This model, which we label Model 1, has as its dependent variable the effective number of electoral parties at the national level (ENEP). 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.²²

Estimating this model serves two purposes. First, it demonstrates that we replicate the literature’s findings 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. In the three additional versions of this model that we estimate, legislative elections in regimes without popularly elected presidents (e.g., pure parliamentary regimes such as the United Kingdom) are compared to legislative elections in regimes with either weak, moderately powerful or powerful popularly elected presidents, respectively. To elaborate, in what we label Model 2, Equation 2 is estimated using both legislative elections in pure parliamentary regimes and legislative elections in extremely weak presidential regimes (those that are classified as parliamentary using our three-fold typology), such as Ireland. In Model 3, legislative elections where the president is moderately powerful (i.e., presidential regimes that are classified as mixed), such as France, are paired with legislative elections in pure parliamentary regimes. Finally, in Model 4, the presidential regime elections are those where the president is powerful (i.e., presidential regimes that are classified as “true” presidential according to our three-fold typology), such as the United States and Brazil. By comparing the effects of proximate presidential elections in these three models, we can see how the size of the presidential prize affects the shadow proximate presidential elections cast over legislative elections, conditional upon the number of presidential candidates, à la H1.²³

We next provide an alternate test of H1 and a first test of H3 by explicitly conditioning upon our preferred measure of horizontal centralization, the index of presidential powers:

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

$$\begin{aligned} & \beta_7 \text{Proximity}_{i,t} \times \text{ENPRES}_{i,t} \times \text{PRESPOWERS}_{i,t} + \\ & \beta_8 \text{Log Magnitude} + \beta_7 \text{ENETHNIC} + \\ & \beta_9 \text{Log Magnitude} \times \text{ENETHNIC} + \varepsilon_{i,t} \end{aligned}$$

This model has the same dependent variable as before (ENEP), 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.

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

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

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 6.²⁴

To estimate the various models, we employ our own original set of cases combined with our own original data, as described above. These are all minimally democratic (à la Alvarez, Cheibub, Limongi and Przeworski 1996)²⁵ elections in independent countries from 1900 to 2005²⁶ that employed a non-fused electoral system²⁷; 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).²⁸ 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 nine.²⁹

To enable comparison with the existing literature, we also used Golder's (2006) replication data set (i.e., his set of cases and his data) and re-estimated Models 1-4.³⁰ This replication data set includes a total of 603 elections in eighty-four countries.³¹ Unless otherwise noted, the results from the two data sets are consistent, although Golder's data set provides even more support for our hypotheses. A fuller description of the Golder data set as well as the results from these models can be found in the supplemental paper.

4.0 Results

We use ordinary least squares regression to estimate Models 1-6. 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.³²

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, using our original dataset, we obtain similar findings to the extant literature (e.g. Golder 2006) regarding the overall effect of presidential elections (Model 1). But what happens when we estimate Model 1 with different sub-sets of presidential regime elections, and hence vary the size of the presidential prize? In Models 2-4, we compare the effects of presidential elections in parliamentary, mixed, and true presidential regimes, respectively, an implicit way of testing H1. Table 1 shows that

we obtain the same signs for the terms involving proximity (β_1 and β_3) as when we use all elections (Model 1). The magnitudes of the estimated coefficients vary, however, as do their statistical significances. For example, the coefficient on the interaction term between proximity and the effective number of presidential candidates (β_3) is only statistically significant when the presidential elections occur in true presidential regimes (Model 4), and it is estimated to be of much greater substantive magnitude for these presidential elections than for those in either parliamentary (Model 2) or mixed (Model 3) regimes.

Yet we know that looking at the coefficient on the interaction term alone is misleading (e.g., Brambor, Clark and Golder 2006). Instead, the nature of the conditional relationship between these two independent variables and the dependent variable 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 in presidential elections.³³ Ninety percent, two-sided confidence intervals band the estimated marginal effects.³⁴

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. Surprisingly, we do find a statistically significant deflationary effect, but the effect is substantively small, and only holds when there are very few (approximately two) presidential candidates. However, the most consequential difference between the results from the two data sets is that using Golder's (2006) data set, the deflationary effect is statistically insignificant and substantively even smaller. Second, when we turn to mixed presidential regimes, where the presidency is a larger prize, the deflationary effect of concurrent presidential elections has a larger substantive impact and is statistically significant for a greater number of presidential candidates (up to approximately three). Third and finally, we see that concurrent presidential elections in true presidential regimes, where the presidency is an even larger prize, are predicted to have a statistically 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, 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 approximately 1.5 parties.

Turning to the hypothesized *inflationary* effect, we see that proximate presidential elections with large numbers of presidential candidates do not have a statistically significant effect on the number of legislative parties when the president is either weak (parliamentary regimes) or moderately powerful (mixed regimes). 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).³⁵ This effect is also substantively significant. For example, when there are six effective presidential candidates (as in the 1995 French presidential election), concurrent presidential elections in a true presidential regime are predicted to increase the effective number of electoral parties in the legislative election by 1.3 parties, *ceteris paribus*. Accordingly, this part of the empirical analysis is generally supportive of H1.

The prior analysis is useful for its comparability with the existing literature. Yet Model 5, to which we now turn, provides us with a more nuanced test of H1, and hence with the first test of H3. Table 2 reveals that only one term attains conventional levels of statistical significance: the main effect of proximity (β_1 in Equation 3). 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.

Like Figure 1, the first column of Figure 2 graphs the estimated marginal effect of concurrent presidential elections on the effective number of electoral parties. As before, each row represents a different value of the size of the presidential prize, operationalized in Model 5 as the index of presidential powers: respectively, an index value of one (the minimum value), 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 presidential elections varies with (i.e., 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 legislative elections, in accordance with H1. For example, with concurrent presidential 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 concurrent presidential elections may 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).³⁶ Turning to elections for very powerful presidencies (e.g., contemporary Argentina), when there are few presidential candidates, they are found to have little of a deflationary effect, in accordance with H3: their predicted effect is negative for a smaller range of presidential candidates and never statistically significant.

With respect to the *inflationary* effect, Model 5 finds that when there are many presidential candidates, proximate presidential elections only have a statistically significant positive effect on the effective number of electoral parties in legislative elections when the presidency is powerful (i.e., as or slightly more powerful than the United States's president). A minimum of approximately six effective presidential candidates is required for this effect to manifest. While this is admittedly a relatively rare occurrence (see endnote 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 statistically insignificant but of an even larger substantive magnitude. Combining this finding with the prior finding that elections for very powerful presidents lack a statistically 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 possible that they will further fragment the legislative party system instead of simply failing to consolidate it, consistent with H3.³⁷

4.2 Discussion: Party System Aggregation

Finally, we turn to H2: the extent of cross-district coordination in legislative elections. Only the proximity main effect term (β_1 in Equation 4) 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 proximate (concurrent) presidential elections 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, concurrent elections for a powerful president akin to that of the United States are predicted to decrease the difference between the national and district number of electoral parties in legislative elections 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 for proximate presidential elections 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, except in the unusual situation when there are less than two (specifically, at most 1.75) effective presidential candidates.³⁸ 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 size of the presidential prize conditions the effect of presidential elections on the legislative party system, as hypothesized. Contrary to the empirical approach that the literature has taken up until now, all presidents are not created equal in terms of the shadows that their elections cast over legislative elections.

First, as the powers of the president increase, we found that the effect of an increase in the number of presidential candidates is amplified. Second, we found that when the presidency is moderately powerful to powerful, proximate presidential elections with few presidential candidates promote the *nationalization* and *consolidation* of the legislative party system, also known as the aggregatory and deflationary effect of presidential elections. However, this effect disappears when presidents are extremely powerful. There is also some evidence that presidential elections with few candidates will not promote the nationalization and consolidation of the legislative party system when the presidency is very weak. Although elections for figurehead presidents were found to have a statistically significant deflationary effect in our main model, this effect was quite small, required perfect coordination on two candidates in the presidential race, and disappeared in the alternative specifications. Nevertheless, this was contrary to our prediction. Future work might explore whether the arrow of causality instead runs from legislative to presidential elections in these regimes, as seems plausible. Third, proximate presidential elections with a large number of presidential candidates were found to significantly promote the *de-nationalization* and *fragmentation* of the legislative party system only when the presidency is powerful to extremely powerful.

Hence, this analysis has two important take-away lessons for constitutional engineers. First, if the goal is to use the presidency to develop fewer, more aggregated parties in the legislature, then ensure that the presidency is not very weak. Specifically, to produce the desired aggregatory and deflationary effect, the presidency should be at least moderately powerful—for example, a French-style president. Second, be wary of powerful presidencies, which at minimum may not contribute to the consolidation and aggregation of legislative party systems and at most may contribute to their fragmentation and de-aggregation. If powerful presidencies are to promote the consolidation and

aggregation 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. However, for *extremely* powerful, “imperial” 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 and aggregatory effect when the size of the presidential prize is this substantial.

6.0 References

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	All Elections	All Elections in Non-Presidential (Pure Parliamentary) Regimes, and Elections in Presidential Regimes Classified as:		
		Parliamentary	Mixed	True Presidential
		Model 1	Model 2	Model 3
Intercept	2.9*** (0.19)	2.7*** (0.22)	2.8*** (0.21)	2.7*** (0.20)
Proximity	-3.3*** (0.44)	-2.1*** (0.47)	-1.7** (0.70)	-4.2*** (0.62)
ENPRES	0.16 (0.10)	-0.16 (0.14)	0.35*** (0.13)	-0.048 (0.17)
Proximity * ENPRES	0.88*** (0.21)	0.50 (0.35)	0.31 (0.27)	1.4*** (0.30)
Log Magnitude	0.55*** (0.15)	0.63*** (0.14)	0.55*** (0.14)	0.69*** (0.15)
Effective Number of Ethnic Groups	0.34*** (0.095)	0.48*** (0.12)	0.50*** (0.11)	0.37*** (0.095)
Log Magnitude * Effective Number of Ethnic Groups	-0.076 (0.089)	-0.15* (0.083)	-0.15* (0.085)	-0.10 (0.086)
N	590	415	463	470
R²	0.21	0.14	0.17	0.20
Root MSE	1.5	1.4	1.5	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 in legislative elections (*ENEP*). 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 2). In Model 1, the model is estimated using *all* legislative elections; in Models 2-4, it is estimated using all legislative elections in non-presidential (pure parliamentary) regimes and legislative elections in presidential regimes classified as parliamentary, mixed, or true presidential, respectively. Significance codes are for two-sided tests, all calculated prior to rounding: 0.01, ***; 0.05, **; 0.10, *.

	ENEP	D
	Model 5	Model 6
Intercept	2.9*** (0.19)	0.89*** (0.057)
Proximity	-2.2*** (0.69)	-1.2*** (0.41)
ENPRES	0.25 (0.28)	-0.13 (0.18)
Proximity * ENPRES	0.34 (0.44)	0.30 (0.28)
Presidential Powers	-0.063 (0.059)	0.0016 (0.038)
Presidential Powers * Proximity	-0.036 (0.083)	-0.057 (0.060)
Presidential Powers * ENPRES	0.011 (0.028)	0.016 (0.016)
Presidential Powers * Proximity * ENPRES	0.029 (0.038)	0.021 (0.024)
Log Magnitude	0.55*** (0.15)	
Effective Number of Ethnic Groups	0.34*** (0.097)	
Log Magnitude * Effective Number of Ethnic Groups	-0.080 (0.088)	
N	590	590
R²	0.21	0.11
Root MSE	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 effective number of electoral parties in legislative elections (*ENEP*), and for Model 6, it is legislative party system aggregation (*D*); *ENPRES* is the effective number of presidential candidates. 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, *.

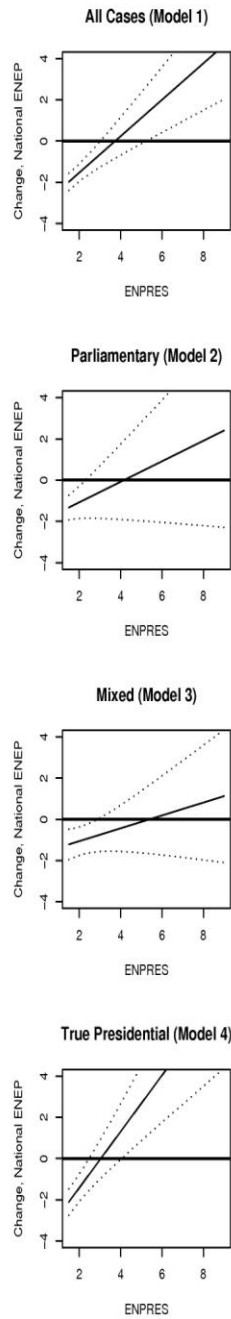


Figure 1. The estimated marginal effect of proximate (concurrent) presidential elections on the number of electoral parties for all presidential elections as well as for presidential elections classified as occurring in parliamentary, mixed or true presidential regimes (**Models 1-4**). Marginal effects are shown over the observed range of the effective number of presidential candidates (ENPRES) in presidential elections. Dotted lines are ninety percent two-sided (or ninety-five percent one-sided) confidence intervals.

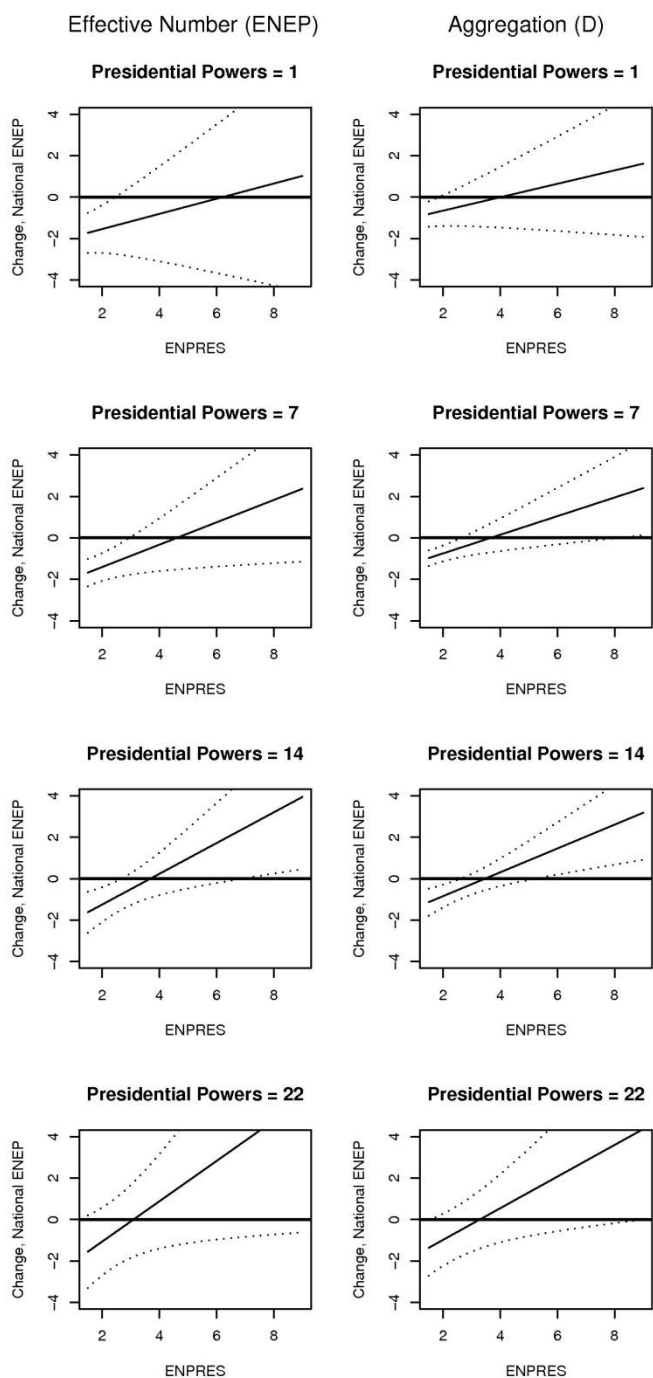


Figure 2. The estimated marginal effect of proximate (concurrent) presidential elections for presidents taking four different values of the index of presidential power (Models 5-6). In the left column the dependent variable is the effective number of electoral parties in legislative elections (ENEP;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

¹ Nationalization refers to the extent to which parties are national organization, competing and winning votes across a country's electoral constituencies. Consolidation refers to the movement in the party system toward a few viable political parties.

² Both sets of results are presented in the supplemental paper, which is available from Stoll's website, <http://www.polsci.ucsb.edu/faculty/hstoll>.

³ Included here are regimes in which the president is indirectly elected by an electoral college that is itself popularly elected by the voters, e.g., the United States.

⁴ In reality, the effect was quite the opposite.

⁵ For more on the logic behind and mechanisms underlying these arguments, see Shugart (1995), Golder (2006), Samuels (2003), and Cox (1997).

⁶ The only exceptions are Amorim Neto and Cox (1997) and Cox (1997), who treat Ireland as non-presidential in their empirical analyses. However, they treat all other presidents, from the weak Austrian to the powerful Argentinian, as equals. Other scholars such as Golder (2006) have not even separated out the Irish case.

⁷ A second factor is the degree to which policy-making authority is centralized in the national level of government vis-à-vis the sub-national level, which has previously been called "vertical centralization" (Chhibber and Kollman 1998, 2004; Samuels 2003; Hicken 2009; Hicken and Stoll 2008, 2011). However, because the national level of government always exercises substantial authority in the post-World War II era, the vertical dimension effectively does not constrain the horizontal dimension for our cases. Little is therefore lost by focusing upon horizontal centralization alone. Moreover, weak and contradictory findings have been obtained regarding vertical centralization (Ibid.; see also Brancati 2008). Still, future work should revisit this factor.

⁸ An interesting parallel is the recent Samuels and Shugart book (2010) on how the regime type shapes party organization, a related but yet distinct dependent variable. They find that where the presidency is a powerful prize, "presidentialized parties" are likely to emerge—i.e. parties in which the president and legislative leaders can have sharply different incentives and which presidents will tend to dominate.

⁹ Morgenstern and Pothoff (2004) refer to this as "static nationalization" and contrast it with "dynamic nationalization". There are other ways of conceptualizing nationalization (see, for example, Caramani 2004) that future research might also explore; we focus here upon the conceptualization that is arguably the most closely tied to party system fragmentation.

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

¹¹ 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: $ENEP = 1 / \sum_{i=1}^n v_i^2$.

¹² See <http://electiondataarchive.org/> for this data.

¹³ Here, as elsewhere in the paper, we follow the literature's empirical approach to ensure the comparability of our results. Accordingly, proximity is calculated in the conventional manner as:

$2 \left| \frac{L_t - P_{t-1}}{P_{t+1} - P_{t-1}} - 1/2 \right|$, 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. One potential drawback to this measure of proximity is that it equates midterm elections with elections held in non-presidential regimes (see Hicken and Stoll 2011). This is an issue that future work should revisit. For now, we simply note that eliminating midterm elections from the analysis leads to similar conclusions about the hypotheses. We also note that we reach similar conclusions if we employ a simple dummy variable for concurrent presidential and legislative elections. These

alternate models, like all models discussed but not reported here, are found in the supplemental paper.

¹⁴ The effective number of presidential candidates is calculated as follows: $1/\sum v_i^2$, where v_i is a candidate's vote share. For presidential elections with a run-off, the first round election results are used, as is conventional (e.g., Golder 2005, 2006). Note that to date, the literature has only considered concurrent and preceding presidential elections to have a coattails effect.

¹⁵ The supplemental paper presents the coding rules for all ten dimensions.

¹⁶ Eliminating the six cases for which we extrapolated codings (because neither we nor other scholars were able to code the appropriate constitutions) does not alter our conclusions. Additionally deleting the twenty-five cases using other scholars' extant codings (i.e., that neither we nor Hicken and Stoll 2008 coded) also leaves our conclusions unaltered. Finally, we also obtain similar findings when substituting extant values for our own for the few cases where they differ.

¹⁷ The theoretical maximum is forty, but twenty-one is the highest score obtained by a country in our sample (Argentina under its 1994 constitution). Ireland obtains the lowest score of zero.

¹⁸ Not incrementing the index yields virtually identical results.

¹⁹ For more on the strengths and weaknesses of this measure, see Hicken and Stoll (2008).

²⁰ We use Shugart and Carey's (1992) influential definitions of the various regime types. Given these definitions, our classifications follow what we believe to be the consensus in the literature. Only a few cases are problematic to code. An example is post-1990 Bulgaria, which we code as mixed but Golder (2005) codes as parliamentary. Our conclusions are not substantively changed by classifying these problematic cases as the alternative type.

²¹ Of course, the matter is more complicated than this because the electoral cycle, the number of presidential candidates and the size of the presidential prize all vary. But this does not change the fact that the logical end of the continuum is no president at all. Note, however, that Hicken and Stoll (2011) obtained substantively similar findings about the effect of proximate presidential elections when the analysis was confined to legislative elections in presidential regimes.

²² Country fixed effects are not included in the models presented here for consistency with the existing literature, which employs fully pooled models. However, including country fixed effects in Models 5 and 6 (discussed below) yields substantively similar if less statistically significant results.

²³ For this simple test, non-presidential regime elections are those where there was neither a concurrent nor a preceding presidential election. For the more sophisticated tests described below, we evaluate the constitutional provisions in effect at the time of the election

²⁴ While scholars such as Cox and Knoll (2003), Hicken (2009) and Hicken and Stoll (2011) have argued that legislative bicameralism; the percentage of upper tier seats; the logged average lower tier district magnitude; and the effective number of ethnic groups should also affect legislative party system aggregation, controlling for these variables does not alter our conclusions.

²⁵ Note that neither controlling for advanced industrial status, eliminating elections in African countries, nor eliminating the four single country elections alters our conclusions.

²⁶ Confining the analysis to the post-World War II period yields similar results.

²⁷ In fused elections, voters cast a single ballot for the presidency and the legislature, but separate legislative and presidential electoral systems then translate the votes into seats (e.g., Bolivia since the 1980s). These elections bias the results in favor of finding an effect of presidential elections (Golder 2006, 38), which is why they have generally been excluded from quantitative analyses.

²⁸ We also follow Golder (2006) in eliminating elections in Congo 1963, Colombia between 1958 and 1970 (inclusive) and Papua New Guinea.

²⁹ See Table 1a in the supplemental paper for a list of these countries and elections. The supplemental paper and Hicken and Stoll (2011) both contain more information about this data set, such as our case selection criteria.

³⁰ 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.

³¹ Descriptive statistics for all variables and both data sets are presented in the supplemental paper.

³² The Newey-West standard errors are modified for time series cross-sectional data and assume a first order autoregressive lag structure. We prefer the Newey-West robust estimator to the increasingly popular country-clustered because Kedzi (2004) has shown the latter to be biased when the number of clusters (countries) is less than fifty, and we have only slightly more than this many countries in our data set. However, we note that using country-clustered instead of Newey-West robust standard errors does not substantively alter our conclusions. Beck and Katz's (1995) panel-corrected standard errors are not appropriate because there is little theoretical reason to expect cross-country contemporaneous correlation in our models, and it is moreover difficult to obtain a good estimate of this correlation when there are hardly any common time periods across countries, as is the case here.

³³ This marginal effect is the partial derivative of Equation 2 with respect to proximity. 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. The standard errors of these marginal effects are then calculated using the well-known rule for calculating the variance of sums of random variables. Note that these marginal effects represent the *maximal* effect of presidential elections, which it is conventional to report (e.g., Golder 2006).

³⁴ 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 technically more appropriate than two-sided tests, and ninety percent two-sided confidence intervals are equivalent to ninety-five percent one-sided confidence intervals.

³⁵ 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 (about five percent) where the concurrent or preceding presidential election was contested by more than four presidential candidates. Legislative elections where the presidential election was contested by more than six presidential candidates are rarer (about one percent), but they still do occur (see below).

³⁶ Something we do not explore here but that is worth considering is whether causality instead runs from legislative to presidential elections in these weak presidential regimes.

³⁷ 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). The only difference is that dropping post-1986 elections in the Philippines keeps the inflationary effect from attaining conventional levels of significance in Model 5. A future extension of this work is to expand the set of legislative elections in regimes with extremely powerful presidencies as new data becomes available and see whether the results still hold. Another is to identify and conduct case studies of quasi-experiments where presidential power has changed.

³⁸ This happens rarely (in approximately six percent of the legislative elections in presidential regimes in our data set), almost all occurrences of which are uncontested presidential elections.