Presidential Coattails: A Closer Look[*]

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The electoral system is not the only political institution that shapes the number of parties competing in legislative elections: the system of government, otherwise known as the type of political regime, is also increasingly recognized by political scientists as having an important role to play (e.g., Shugart and Carey, 1992; Jones, 1994, 1999; Shugart, 1995; Amorim Neto and Cox, 1997; Cox, 1997; Mozaffar, Scarritt and Galaich, 2003; Golder, 2006; Clark and Golder, 2006; Hicken, 2009; Hicken and Stoll, 2011, 2013). Initially, scholars compared presidential and parliamentary regimes, finding that presidential regimes had fewer legislative parties (e.g., Lijphart, 1994). Most recent studies have taken a more nuanced approach (e.g., Golder, 2006). The effect of presidentialism, a.k.a. the coattails of presidential elections, has been found to depend upon two variables: the presidential party system and the electoral cycle, i.e., the temporal proximity of presidential and legislative elections. Specifically, presidential elections held in temporal proximity to legislative elections reduce the fragmentation of the legislative party system when there are few presidential candidates (the deflationary effect of presidentialism), but increase it when there are many presidential candidates (the inflationary effect of presidentialism). The more temporally proximate the presidential and legislative elections are, the larger this effect.[1]

Yet the quantitative empirical evidence regarding presidential coattails relies on some potentially problematic modeling choices (see, for example, Hicken and Stoll, 2011, 2013). For one, many studies treat all legislative and presidential elections held in the same year as concurrent, instead of distinguishing between truly concurrent (i.e., simultaneous) elections and those separated by anywhere from a few weeks to almost twelve months. For another,

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[1]This hypothesis accordingly postulates an *interaction* between the temporal proximity of presidential and legislative elections and the number of presidential candidates. The logic underlying it is well developed in the existing literature. See, for example, Shugart (1995), Cox (1997), Samuels (2002, 2003), Golder (2006) and Hicken and Stoll (2011). Hicken and Stoll have also recently provided evidence regarding the mechanism of the aggregate effect: how presidential elections shape electoral coordination both within and across legislative electoral districts.

legislative elections in a presidential regime held at the presidential midterm (i.e., midterm elections) are equated with legislative elections in a pure parliamentary regime. Last but not least, at the intersection of theory and measurement, if there is not a concurrent presidential election, only presidential elections held prior to legislative elections are allowed to cast a shadow. What are the implications of these modeling choices for the empirical findings about the shadow that presidential elections cast over legislative elections?

This article attempts to answer this question. It first reviews the conventional modeling approach of the quantitative empirical literature. It then discusses the aspects of this approach that might be viewed as problematic. For each of the three major problems identified, it then proposes solutions, such as alternative operationalizations of the variables. Last but not least, the article undertakes a sensitivity analysis using Golder's (2006) replication data set. Fortuitously, using both new data and measures of the variables capturing the effect of presidential elections, the article finds that the literature's conclusions are fairly robust to alternative modeling choices. The only area in which there was found to be some sensitivity concerned the effect of midterm elections (i.e., a presidential regime with maximally non-proximate presidential elections). It is also worth noting that the article's analysis demonstrates that preceding presidential elections are not the only type of non-concurrent presidential elections to have coattails: presidential elections held subsequent to legislative elections have coattails, too.

1 Modeling Presidential Coattails

To date, the quantitative literature has empirically modeled the coattails of presidential elections as an interaction between two variables: the fragmentation of the presidential party system and the temporal proximity of presidential and legislative elections. Below, we review each component of this approach.

1.1 Measuring Presidential Party System Fragmentation

Following Amorim Neto and Cox (1997) and Cox (1997), instead of focusing on the presidential electoral system, scholars empirically exploring the coattails of presidential elections have turned their attention to the actual amount of electoral coordination in the national presidential race. The abstract concept of presidential party system fragmentation has conventionally been operationalized as the effective number of (electoral) presidential candidates (Laakso and Taagepera, 1979):

$$\frac{1}{\sum_{i=1}^{n} v_i^2} \text{ ,}$$

where v_i is each presidential candidate's vote share. This is comparable to how the dependent variable, the amount of coordination in the national level legislative race, is operationalized: as the effective number of electoral parties in the legislative election. Larger values of this measure indicate a larger number of presidential candidates, as weighed by their vote shares, and hence less coordination in the presidential election.

This still leaves the question of *which* presidential elections might have coattails, however. The conventional answer to this question is the concurrent presidential election, if there is one, or the preceding presidential election, if there is not. To elaborate, if a presidential election is held at the same time as (i.e., concurrently with) the legislative election, the effective number of presidential candidates is calculated for that presidential election. There is little to quibble with here: a concurrent presidential election is the natural presidential election to cast a shadow over the legislative election. However, if there is not a concurrent presidential election, the effective number of presidential candidates is instead conventionally calculated for the most recent (i.e., most temporally proximate) presidential election held *prior* to the legislative election. As we will argue below, here there is more with which to quibble. Note that for legislative elections in non-presidential regimes, this variable is coded as taking the value of zero.

1.2   Measuring Temporal Proximity

The temporal proximity of presidential and legislative elections has been conceptualized as a continuum ranging from minimally to maximally proximate. As alluded to above, the maximally proximate presidential election is one that is held concurrently with a legislative election. By way of contrast, when a legislative election is held at the presidential midterm, the presidential election is minimally proximate. Henceforth, we will refer to the latter situation as midterm elections. The most common way of operationalizing this abstract concept was originally proposed by Amorim Neto and Cox (1997):

$$2 \left| \frac{L_t - P_{t-1}}{P_{t+1} - P_{t-1}} - 1/2 \right| \, ,$$

where L_t is the date of the legislative election; P_{t-1} is the date of the previous presidential election; and P_{t+1} is the date of the subsequent presidential election. This measure ranges from zero, which indicates that the presidential election is minimally proximate (i.e., midterm elections), to one, which indicates that the presidential election is maximally proximate (i.e., concurrent elections). As before, legislative elections in non-presidential regimes are coded as taking the value of zero.

A less common alternative operationalization is a simple dummy variable for concurrent presidential elections (see, for example Hicken and Stoll, 2011). That is, if a presidential election is held concurrently with the legislative election, the dummy variable takes the value of one; if either the presidential election is held non-concurrently or the legislative election is in a non-presidential regime, the dummy variable takes the value of zero. Our focus here is upon the former measure, however, because it is by far and away the most commonly employed.

1.3   The Model

To empirically model the effect of presidential elections, given the hypothesis that the presidential coattails depends upon an interaction between the temporal proximity of presidential

and legislative elections and the fragmentation of the presidential party system, scholars estimate the following interaction model (see, for example Golder, 2006; Hicken and Stoll, 2011).[2]:

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\begin{aligned}
\text{ENEP}_i \;=\; & \beta_0 + \beta_1 \text{Proximity}_i + \beta_2 \text{ENPRES}_i + \beta_3 \text{Proximity} \times \text{ENPRES}_i \\
& + \beta_4 \text{Ethnic}_i + \beta_5 \text{Log Magnitude}_i + \beta_6 \text{Ethnic} \times \text{Log Magnitude} + \epsilon_i \;.
\end{aligned}
\tag{1}
$$

In this equation, "ENEP" is the effective number of electoral parties in a legislative election, the dependent variable. Of the independent variables, "Proximity" is the temporal proximity of the presidential election, calculated as described above; "ENPRES" is the effective number of presidential candidates; "Ethnic" is the effective number of ethnic groups; and "Log Magnitude" is the logged average district magnitude. Hence, this model also controls for an interaction between the ethnic heterogeneity of the country and the restrictiveness of its legislative electoral system.

2 Drawbacks and Solutions

In this section of the paper, we discuss the potential drawbacks to the modeling strategy reviewed in the prior section of the paper and suggest some alternatives.

2.1 Calculating Proximity with Years as the Unit

One criticism of the operationalization of temporal proximity developed by Amorim Neto and Cox (1997) is that it may result in legislative and presidential elections that are held in the same year, but not on the same day, being treated as concurrent. This is a function of which units are used in the formula: days (i.e., actual election dates) or years. Amorim Neto and Cox seem to use days. However, Golder (2006) explicitly uses years, and subsequent studies have followed suit (e.g., Hicken and Stoll, 2011).

   This seemingly subtle matter has important substantive implications. When using days (i.e., actual dates) as the unit, only presidential and legislative elections held on exactly the same day are classified as concurrent. However, when years serve as the unit, all presidential and legislative elections held in the same calendar year are classified as concurrent. For example, a presidential election held in January is treated as concurrent with a legislative election held in December of that same year. But in actuality, eleven months, almost an entire year, separate these two elections. Is it really plausible to think that this January presidential election's coattails are the same as the coattails of a presidential election held on the same day as the December legislative election, *ceteris paribus*? Yet by using years as the unit for calculating proximity, this is what is assumed. This measurement strategy accordingly

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[2]In a departure from this conventional model, Hicken and Stoll (2013) add an additional conditioning variable: the size of the presidential prize. This enables them to test their hypothesis that the shadow cast by presidential elections depends upon the policy-making authority of the presidency vis-à-vis the legislature. Because even their baseline is the model represented by Equation 1, however, it is this simpler model upon which we focus here.

overestimates the temporal proximity of, and hence the shadow cast by, presidential elections held in the same year but not on the same day. The observed effect of presidentialism is likely to be attenuated as a result. Note that this is not simply a technical concern: there are many real world examples of such presidential and legislative elections.[3] More generally, information is lost by ignoring when elections occur within a given year.

To avoid these problems, there is an obvious solution: use days (i.e., actual election dates) as the unit in the Amorim Neto and Cox (1997) formula instead of years.

2.2 Equating Midterm Elections with Elections in Pure Parliamentary Regimes

Another criticism of the Amorim Neto and Cox (1997) operationalization of temporal proximity is that midterm elections (i.e., legislative elections held at the presidential midterm) are equated with legislative elections held in pure parliamentary regimes (i.e., regimes where there is not a popularly elected president). This is a function of both of these types of elections being coded zero using the Amorim Neto and Cox measurement strategy: midterm elections by the design of the formula, and legislative elections in pure parliamentary regimes by fiat.

Certainly, it seems plausible to object to this assumed equality.[4] Presidential elections might still shape legislative electoral coordination even when legislative elections are held at the presidential midterm. Golder (2006, 36) explicitly hypothesizes that this might be the case by distinguishing between what he calls the "short" and the "long" presidential coattails. The short coattails hypothesis holds that only temporally proximate presidential elections shape legislative electoral coordination. The long coattails hypothesis, by way of contrast, holds that even non-temporally proximate presidential elections shape legislative electoral coordination. Moreover, Hicken and Stoll (N.d.) hypothesize that we should see less electoral coordination in legislative elections when both the regime is presidential and presidential elections are not temporally proximate enough to cast a shadow (e.g., in midterm elections).

While it may seem that the testing of these hypotheses is precluded by the conventional operationalization of temporal proximity, given its equation of midterm elections and elections in pure parliamentary regimes, this is actually not the case. In Equation 1, β_2 represents the estimated effect of the effective number of presidential candidates when temporal proximity is equal to zero. Given the measures described above, the temporal proximity can be equal to zero when the effective number of presidential candidates is non-zero only if the legislative election is a midterm election. The empirical support for the "long coattails"

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[3]A mild example is the 1981 French legislative election. The legislative election was held in June and the presidential election in May, a one month difference. A more extreme example is the 1971 Austrian legislative election, held six months after the 1971 Austrian presidential election.

[4]Amorim Neto and Cox (1997, 159) report having included an additional parameter to test whether midterm elections are significantly more affected by presidentialism than elections occurring in non-presidential regimes, but that this test did not reveal a significant difference. However, they do not disclose exactly what form this additional parameter took.

hypothesis is accordingly given by the substantive and statistical significance of this coefficient. Conversely, the marginal effect of temporally proximate presidential elections, the partial derivative of Equation 1 with respect to temporal proximity, allows for the testing of the "short coattails" hypothesis (Golder, 2006, 38).[5] Hence, one "solution" to the supposed problem of the measure's equating midterm elections with elections in pure parliamentary regimes is simply to test for the significance of *both* the marginal effect of temporal proximity *and* the coefficient on the number of presidential candidates, β_2.

Another solution, though, is to simply increment the value of temporal proximity calculated using the Amorim Neto and Cox (1997) formula. For example, consider adding one to this value. For legislative elections in presidential regimes, proximity will then range between one (midterm elections) and two (concurrent elections) instead of between zero and one. By continuing to code legislative elections in pure parliamentary regimes as zero, a clear distinction is made between the two types of elections.[6]

2.3 Only Allowing Concurrent or Preceding Presidential Elections to Cast a Shadow

Last but not least, there is the issue of *which* presidential election should be able to cast a shadow over a legislative election. This issue has obvious implications for the measurement of both key independent variables: it determines for which presidential race the effective number of presidential candidates is calculated and which presidential race's date appears in the numerator of the Amorim Neto and Cox (1997) formula for temporal proximity.

If a presidential election is held concurrently with a legislative election, it is the natural candidate for coattails. But if there is not a concurrent presidential election, why only allow preceding presidential elections to have coattails? The literature's arguments apply just as well to subsequent as to preceding presidential elections. Accordingly, we argue here that presidential elections held subsequent to a legislative election should have coattails, too. The more temporally proximate the subsequent presidential election, the larger this effect should be. In fact, if a subsequent presidential election is more temporally proximate to a legislative election than a preceding presidential election is, it is more likely to have coattails, *ceteris paribus*. Like measuring proximity in years instead of in days, ignoring more temporally proximate subsequent presidential elections in favor of less temporally proximate preceding presidential elections might lead us to underestimate the shadow cast by presidential elections.

Many real world examples can be provided that bolster the case for allowing subsequent presidential elections to have coattails. Consider, for one, the legislative election in June of

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[5]Using the notation from Equation 1, the marginal effect of proximity is equal to $\beta_1 + \beta_3$ENPRES. The standard error of this marginal effect is then derived using the rules for calculating the sums of random variables.

[6]Another simple solution is to eliminate midterm elections from the analysis (e.g., Hicken and Stoll, 2013) or to confine the analysis to legislative elections in presidential regimes (e.g., Hicken and Stoll, 2011). We believe that eliminating cases is less preferable than either altering the measure or simply taking full advantage of the interaction model, however.

1992 in Congo (Brazzaville). If actual election dates instead of years are used to calculate proximity, as we argued for doing above, a presidential election was not held concurrently with this election. The closest preceding presidential election was in 1961. Yet less than two months after the legislative election, a presidential election was held. It seems implausible that the preceding presidential election held almost three decades earlier might have coattails, but it seems very plausible that the subsequent presidential election held in August of that same year might. Now consider a less extreme example. Take the March 2002 Colombian legislative election, again calculating proximity using days instead of years. In May of that same year, i.e., three months later, a presidential election was held. The closest preceding presidential election, by way of contrast, was in June of 1998—almost four years earlier. Here, too, the subsequent presidential election seems more likely to have coattails than the preceding one.[7] Finally, consider the October 1995 legislative election in Portugal. The closest preceding presidential election was in January of 1991. The closest subsequent presidential election was in January of 1996. Which of these presidential elections is more likely to cast a shadow over the legislative race—the one almost five years earlier, or the upcoming (three months hence) one, for which campaigning should already have been in progress? The answer seems clear, yet regardless of whether days or years are used to calculate proximity in this case, the conventional approach would consider only the 1991 presidential election to have coattails in the 1995 legislative election.

Accordingly, we propose the following. If there is a concurrent presidential election, allow it to have coattails. If there is not, allow the temporally closest preceding or subsequent presidential election to have coattails, but privilege the preceding presidential election. Privileging the preceding presidential election means two things. First, if the legislative election is a midterm election, it is the preceding presidential election that is allowed to cast a shadow. Second, if the subsequent presidential election is more than two years from the legislative election, even if it is temporally closest to the legislative election, it is again the preceding election that is allowed to cast a shadow. We suggest privileging the preceding election, *ceteris paribus*, because what actually happened in the preceding election seems more likely to shape actors' strategies than what might happen in the subsequent election, given the uncertainty over the latter's outcome. Moreover, if the subsequent election is more than two years away, the presidential campaign is likely to not even be underway yet.[8]

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[7]For example, in their comparison of the 2002 and 2006 congressional elections in Colombia, Pachón and Shugart (2010) initially draw upon the conventional wisdom to argue that the subsequent (by eleven weeks) presidential elections should not exert an effect on legislative electoral coordination. However, they then consider the possibility that these presidential elections might in fact have coattails. They ultimately reject this possibility, but for reasons specific to the elections studied: because of the similar degrees of presidential party system fragmentation in the 2002 and 2006 presidential elections, any observed differences in the Colombian legislative party system over time cannot be attributed to differences in the Colombian president's coattails.

[8]We picked two years as the threshold because we do not know of any presidential campaigns that operate more than two years before a presidential election. The United States, with the 2012 presidential campaigns just beginning to get underway in late 2010 and early 2011, is a case in point. Note that to calculate the temporal proximity between a legislative election and the subsequent presidential election, one needs only to replace the numerator in the Amorim Neto and Cox (1997) formula with $P_{t+1} - L_t$. The effective number

3 A Sensitivity Analysis: How Robust Are the Findings about the Coattails of Presidential Elections?

So are the literature's empirical findings about presidential coattails sensitive to these different ways of measuring temporal proximity and presidential party system fragmentation? To explore this issue, this section of the paper conducts a sensitivity analysis using Golder's (2006) replication data set. The cases are all minimally democratic legislative elections from 1946 through 2000, a total of 603 elections. OLS with robust (country-clustered) standard errors is used to estimate Equation 1. Data is taken directly from Golder for the dependent variable (the effective number of electoral parties in a legislative election) and the control variables (the effective number of ethnic groups and the logged average lower tier district magnitude). However, we ourselves compile data for the key independent variables of temporal proximity and the effective number of presidential candidates, given our obvious need to go beyond the conventional measures of these variables that appear in Golder's replication data set. This data is compiled by drawing upon a variety of secondary (e.g., Golder, 2005) and primary sources. Table 1 presents the results from the five versions of this model that we estimate.

<center>Table 1 about here.</center>

Each of these models varies the measures of temporal proximity and/or the effective number of presidential candidates in some way.

The first of these models (Model 1) is a strict replication of Golder (2006, 39). We estimate this model to show that we draw the same conclusions about presidential coattails using our own data on temporal proximity and the effective number of presidential candidates: both of these variables are calculated as Golder calculated them, in accordance with the standard practice in the literature; only the data itself differs. In other words, in Model 1, it is the concurrent (if there is one) or preceding (if there is not) presidential election that is allowed to cast a shadow, and temporal proximity is calculated using the Amorim Neto and Cox (1997) formula with years as the unit of analysis. The results are very similar to Golder's: all estimated coefficients have the same signs, and both the magnitudes and statistical significances are in the same ballpark. The minor difference in the magnitudes of the estimated coefficients can be attributed to marginal disagreements about whether or not a political regime should be considered presidential at the time of a legislative election.[9] The

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of presidential candidates is straightforwardly calculated for the subsequent presidential election.

[9]For example, Golder (2006) treats the 1996 and 1999 Israeli elections as occurring in a pure parliamentary regime. However, at the time of these elections, Israel actually employed a unique hybrid regime where the prime minister was popularly elected concurrently with the legislature. Using Shugart and Carey's (1992) influential typology, scholars such as Hazan (1996) have argued for viewing this regime as president-parliamentary; others such as Samuels and Shugart (2010) have argued for classifying it as a unique "elected prime ministerial" regime. If, like almost all of the presidential coattails literature to date, we do not question how the characteristics of the presidency's relationship with the legislature conditions the shadow cast by a presidential election, Israel's "presidential" elections should be allowed to have coattails like any others (but see Hicken and Stoll 2013 and Stoll N.d. for some steps in this direction). Another example is the 1948

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only minor difference regarding the statistical significance of the coefficients is that β_2, the coefficient on the main effect term for the effective number of presidential candidates, is significant at conventional levels using our data, whereas it narrowly falls short using Golder's data.

Turning to the real sensitivity analysis, the second of these models (Model 2) employs a different operationalization of temporal proximity. In this model, days (i.e., actual election dates) serve as the unit for calculating the temporal proximity according to the Amorim Neto and Cox (1997) formula. An examination of Table 1 reveals that these results are similar to the results obtained using the more conventional years as the unit (Model 1). Moreover, they surprisingly happen to more closely resemble Golder's (2006) original results, also calculated using years, than the results from Model 1 do. To elaborate, as before, the estimated coefficients all have the same signs, are of similar magnitudes, and have similar statistical significances. The only differences of note are twofold: first, β_2 now narrowly falls short of conventional levels of significance and second, the magnitudes of β_1 (the coefficient on the proximity main effect term) and β_3 (the coefficient on the interaction term) are of larger magnitude. The latter suggests that as hypothesized, using years as the unit of analysis, and hence conflating truly concurrent presidential elections with non-concurrent presidential elections held in the same year, underestimates the magnitude of the presidential coattails. But overall, the literature's empirical findings are upheld by the use of this alternative and preferred operationalization of temporal proximity.

The third model (Model 3) continues to use days to calculate the temporal proximity, given the clear advantages of this measurement strategy, but now additionally increments the value for legislative elections in presidential regimes by one. This allows the measure of proximity to discriminate between legislative elections in pure parliamentary regimes and midterm elections. The third column of Table 1 presents these results. Three observations jump out. First, β_3 now narrowly falls short of attaining conventional levels of significance. Second, the magnitudes of the coefficients on the terms involving proximity (β_1 and β_3) seem very different. However, this is largely due to the range of the measure changing: the coefficients are roughly one-half of the size of those obtained in Model 2, but the range of proximity has doubled. Third, the magnitude of β_2 also differs in a seemingly non-trivial way. In Model 2, β_2 can be viewed as the estimated effect of instituting completely non-concurrent presidential elections (the "long coattails"), as discussed above. Table 1 shows that this effect is estimated to be positive, if moderate, as hypothesized by scholars such as Golder (2006). But in Model 3, the coefficient no longer has this interpretation: the effective number of candidates cannot be non-zero when proximity is zero; to switch from a pure parliamentary regime to a presidential regime with midterm elections, both the effective number of presidential candidates and proximity must *simultaneously* become non-zero. This makes theis coefficient hard to interpret.

Finnish legislative election. We treat this election as occurring in a pure parliamentary regime because the last popular presidential election in Finland had been held more than a decade earlier, in 1937. It seems implausible to us that the 1937 presidential election could have any coattails in 1948. Golder (2006), by way of contrast, treats this legislative election as having been held in a presidential regime.

An easy way to see how the two models differ regarding their findings about the "short" and "long" presidential coattails is to calculate the predicted effective number of electoral parties in legislative elections for each model. These predictions can be made for different values of proximity and the effective number of presidential candidates, holding the effective number of ethnic groups and the logged average lower tier legislative district magnitude constant at their means.[10] Table 2 specifically presents predictions for pure parliamentary regimes; presidential regimes with midterm legislative elections; and presidential regimes with concurrent legislative elections.

Table 2 about here.

For the presidential regimes, two types of presidential party systems are considered: presidential elections with few presidential candidates (the effective number of presidential candidates equal to two), and presidential elections with many presidential candidates (the effective number of presidential candidates equal to six).[11]

From this table, we see that the predictions from the two models for pure parliamentary regimes are similar: about four effective electoral parties in legislative elections. The predictions are also fairly similar for presidential regimes with concurrent presidential and legislative elections. With few presidential candidates, we see the well-documented deflationary effect of presidential elections in that the number of electoral parties in legislative elections is predicted to drop to approximately three; conversely, with many presidential candidates, we see the well-documented inflationary effect of presidential elections in that the number of electoral parties is predicted to jump to almost eight. Hence, the empirical findings regarding the "short" coattails of presidential elections are not sensitive to how the operationalization of temporal proximity treats midterm elections. However, perhaps not surprisingly, the two models' findings regarding the effect of midterm elections, i.e., maximally non-proximate presidential elections, diverge in important ways. What they have in common is that neither finds that presidential elections with few presidential candidates have a deflationary effect. Specifically, with two presidential candidates, Model 2 seemingly counterintuitively finds an *inflationary* effect, while Model 3 finds no effect at all.[12] With six presidential candidates, both find an inflationary effect, although the magnitude of the effect differs substantially. Accordingly, the empirical findings regarding the "long" coattails of presidential elections do depend to some extent on how the operationalization of temporal proximity treats midterm elections.

Last but not least, Models 4 and 5 assess the sensitivity of the literature's findings to which presidential elections are allowed to have coattails. Instead of only allowing the preceding presidential election to have coattails if there is not a concurrent presidential election, either the preceding or subsequent presidential election is treated as capable of casting a

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[10]The mean effective number of ethnic groups is 1.8. The mean logged average district magnitude is 1.5, which translates to an average magnitude of 4.5

[11]Two effective presidential candidates is the minimum typical value for contested presidential elections, and six effective presidential candidates is the maximum observed value, rounding down.

[12]This inflationary effect is consistent with the hypotheses of both Golder (2006) and Hicken and Stoll (N.d.), however, even though the arguments underlying the two hypotheses differ.

shadow, depending on which one is more temporally proximate. Employing this alternative approach affects the operationalization of both temporal proximity and the effective number of presidential candidates, as discussed earlier. Additionally, both models continue to calculate proximity using days (instead of years) as the unit. The difference between Models 4 and 5 is that Model 4 otherwise uses the standard operationalization of proximity while Model 5 increments the value of proximity for presidential regimes by one to distinguish between midterm and pure parliamentary regime elections. Accordingly, to the extent that the results from Model 4 resemble those of Model 2, and the results from Model 5 resemble those of Model 3, the findings are not sensitive to whether or not subsequent presidential elections are allowed to have coattails.

When not incrementing proximity (Model 4) as is conventional, the results are very similar. Hence, the status of subsequent presidential elections does not affect the conclusions about presidential coattails if midterm elections are equated with pure parliamentary elections. However, when incrementing proximity (Model 5), there are some differences. Most notably, the interaction term obtains conventional levels of statistical significance only when allowing subsequent presidential elections to cast a shadow. To help make sense of the less prominent but still noticeable differences in the magnitudes of the estimated coefficients, the last column of Table 2 presents comparable predictions for the effective number of electoral parties for Model 5. When contrasting the predictions for Models 3 and 5, we see that the only real difference is that with few presidential candidates, midterm elections are predicted to slightly decrease the effective number of electoral parties in Model 5 instead of having no effect—a minimal deflationary effect. Again, though, the difference is so minor (0.20 effective parties) that effectively the results are not sensitive to this modeling choice. In sum, we did not find a much larger effect of presidential elections once subsequent presidential elections were allowed to cast a shadow, contrary to our hypothesis. Yet the overall similarity of the results suggests that subsequent presidential elections have similar coattails to preceding presidential elections, *ceteris paribus*.

4   Conclusion

This paper explored the sensitivity of the literature's empirical findings about the coattails of presidential elections. It gathered new data; employed different variable operationalizations; and at the intersection of theory and measurement, allowed for a different type of non-concurrent presidential election to cast a shadow over legislative elections. Specifically, the paper presented evidence that presidential elections held subsequent to a legislative election have coattails, too. The paper also found some evidence that on the margin, the shadows cast by maximally non-proximate presidential elections (i.e., when legislative elections are held at the presidential midterm) depends upon how variables are measured. However, in general, the conclusions that have been drawn about the effect of presidential elections upon legislative electoral coordination seem robust to a variety of different modeling choices. Calculating the temporal proximity of presidential and legislative elections using days instead of years; allowing subsequent presidential elections to cast a shadow; and even treating

midterm elections differently from pure parliamentary elections, measurement strategies that all strike us as superior, do not alter the basic empirical findings. This is reassuring news for scholars concerned with the effect of political institutions such as the political regime, and particularly for constitutional engineers.

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Model	1	2	3	4	5
Measure of Proximity	Original	Days	Days, Proximity Incremented	Days, Temporally Closest	Days, Proximity Incremented, Temporally Closest
Measure of ENPRES	Original	Original	Original	Temporally Closest	Temporally Closest
Proximity	−3.0***	−3.6***	−1.6***	−3.6***	−1.7***
	(0.57)	(0.59)	(0.33)	(0.56)	(0.33)
ENPRES	0.40**	0.32*	0.48*	0.31*	0.33*
	(0.17)	(0.18)	(0.29)	(0.16)	(0.20)
Proximity × ENPRES	0.62***	0.88***	0.31*	0.93***	0.42***
	(0.22)	(0.25)	(0.17)	(0.22)	(0.12)
Ethnic Groups	0.14	0.13	0.12	0.13	0.12
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Log Magnitude	0.43**	0.44**	0.43**	0.45**	0.43**
	(0.20)	(0.20)	(0.19)	(0.19)	(0.19)
Ethnic Groups × Log Magnitude	0.0094	0.0059	0.0067	0.0038	0.00027
	(0.11)	(0.11)	(0.11)	(0.10)	(0.10)
Constant	3.0***	3.1***	3.2***	3.1***	3.2***
	(0.33)	(0.33)	(0.33)	(0.33)	(0.33)
R^2	0.23	0.25	0.26	0.25	0.26
Root MSE	1.7	1.7	1.7	1.7	1.7
N	603	603	603	603	603

Table 1: Coefficient estimates and robust (country-clustered) standard errors in parentheses for Models 1–5, replications of Golder's (2006) model of presidential coattails using our own measures of temporal proximity and the effective number of presidential candidates (ENPRES). The dependent variable is the effective number of electoral parties in a legislative election. Significance codes are for two-sided tests, all calculated prior to rounding to two significant digits: 0.01, ***; 0.05, **; 0.10, *.

	Model 2		Model 3		Model 5	
ENPRES	2	6	2	6	2	6
Pure Parliamentary Regime	4.0	4.0	4.1	4.1	4.1	4.1
Midterm Election	4.6	5.9	4.1	7.2	3.9	6.9
Concurrent Presidential Election	2.8	7.6	3.1	7.7	3.0	7.7

Table 2: The predicted number of electoral parties in legislative elections from Models 2, 3 and 5 for a pure parliamentary regime; a presidential regime with maximally non-proximate presidential elections; and a presidential regime with maximally proximate presidential elections (i.e., concurrent elections). For the presidential regimes, predictions are made for two presidential party systems: one with few (specifically, two effective) presidential candidates (ENPRES), and one with many (specifically, six effective) presidential candidates. The effective number of ethnic groups and the average lower tier legislative district magnitude are held at their means.