Presidential coattails and electoral coordination in multilevel elections: Comparative lessons from Brazil

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A B S T R A C T

This article seeks to understand how concurrent presidential and gubernatorial elections in strong federal systems affect electoral coordination and coattails voting between national and subnational levels of government. We seek to determine whether the nationalizing effect of presidential elections can overcome the strong incentives for regionalization that can arise in federal systems. We use individual-level survey data and time-series cross-sectional electoral data from Brazil, a federal country with decentralized electoral institutions that has recently adopted concurrent presidential and gubernatorial elections. We find that the congruence between national and subnational elections increases when elections are temporally proximate and the effective number of presidential candidates is low. In short, the coattails effect can not only operate "horizontally," by shaping national legislative elections, but also "vertically," by shaping subnational elections.

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1. Introduction

Recent comparative research has established an association between presidential coattails and party deflation in legislative elections in the presence of concurrent elections and a sufficiently low number of presidential candidates. The literature on coattails voting has, until now, focused mainly on the role played by presidential elections in shaping national legislative races. Presidentialism, however, is often associated with federal institutions, which should complicate party aggregation by introducing the issue of vertical integration. This article seeks to further an understanding of the mechanisms through which the presidential race promotes coordination between national and subnational electoral arenas.

All else being equal, concurrent national (presidential) and subnational elections will foster coordination because parties and voters are aware that the presidency is the most important electoral prize in a presidential regime. No candidate for subnational executive office receives as much media attention or as many campaign contributions as the top presidential contenders do. Voters also recognize the overwhelming importance of the presidency in comparison to other political offices in presidential regimes, and they typically pay more attention to presidential candidates than those running for other offices (Golder, 2006). This implies that the coattails effect may operate not only "horizontally," by shaping national legislative elections, but also "vertically," by shaping elections held at lower levels of government.

The article analyzes the effects of concurrent presidential and gubernatorial elections on electoral coordination in Brazil. We seek to understand how parties and voters respond to the contradictory incentives arising, on the one hand, from presidentialism and concurrent elections, and on the other hand, from strong federalism and localizing electoral rules. Although our evidence is limited to a single country, we use both aggregate and individual-level statistical analyses in order to conduct robust hypothesis testing. Whereas previous research on party nationalization and presidential coattails has relied heavily on individual-level mechanisms to explain how certain institutional arrangements promote higher/lower levels of electoral coordination, their empirical analyses have often been limited to aggregate electoral data (e.g., Hicken and Stoll, 2011; Chibber and Kollman, 2004). This article seeks to fill this gap by taking advantage of multiple data sources on Brazilian elections.

Our central claim is that the congruence between national and subnational elections increases when elections are temporally proximate and the effective number of presidential candidates is sufficiently low. On the one hand, parties running for president

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have strong incentives to coordinate strategies between national and subnational electoral arenas because they are required to mobilize a national majority of the vote to win, which in turn requires coordination with local candidates. On the other hand, parties that lack viable presidential candidates will respond strategically to the deflation of the presidential party system by coalescing around one of the major presidential contenders because supporting third candidates (or not participating in the presidential election) may cost them votes in subnational races.

As coordination efforts are repeated over time and national party divisions are successfully reproduced at the subnational level, voters should respond accordingly and make congruent choices in national and regional elections. This is especially true because party coordination provides an external cue for voters in subnational elections. Given that voting is an information- and time-intensive activity, voters are likely to rely on national policies and national party dynamics as a cognitive heuristic for making decisions about subnational elections (Rodden and Wibbels, 2011).

We evaluate these hypotheses using district-level data from Brazilian gubernatorial and presidential elections from 1945 to 2010. We complement our time-series cross-sectional (TSCS) analysis by running a series of logit regressions on survey data in order to assess the effects of presidential coattails on Brazilian gubernatorial elections. Our logit regressions use surveys from two electoral periods that were characterized by distinct levels of presidential party fragmentation: 2002 and 2010.

Brazil is an ideal case study for analyzing the effects of presidential elections and federalism on party linkage between levels of government because rules governing presidential and gubernatorial elections were changed relatively recently. From 1945 to 1962, presidential and gubernatorial elections concurred on only a few occasions, and not in all states. Lower-chamber elections concurred at the same time as presidential elections in 1945 and 1950, but not for the two elections immediately afterwards (1955 and 1960). In contrast, all elections to national and state-level posts have occurred concurrently since 1994, thereby greatly increasing the stakes of the presidential race. Given that the major traits of Brazil's political system (presidentialism, federalism, electoral system and legislation on political parties) have mostly remained constant across these two periods, Brazil's case allows us to test our hypotheses with a quasi-experimental design.

2. Presidential elections and electoral coordination in multilevel systems

Research on the effects of presidential elections on party systems shows that, all else being equal, concurrent presidential elections improve coordination both within and across districts, as long as the effective number of presidential candidate is sufficiently small. The likelihood that presidential elections will shape party systems depends mostly on the strength of the coattails effect, or how much a presidential candidate affects other candidates from the same party label in national legislative elections. When presidential elections are held concurrently with legislative elections, voters should rely on their preferred presidential candidate as an information shortcut to help them select a candidate for the legislature, generating strong coattails for the more competitive presidential candidates (Golder, 2006; Jones, 1994; Samuels, 2002; Shugart and Carey, 1992).

Within districts, proximate presidential elections with few candidates induce strategic behavior on the part of both candidates and voters, therefore decreasing the number of parties competing for seats.(Hickens and Stoll, 2011). Presidential elections may also have an effect on the extent of linkages and cross-district coordination. Effective cross-district coordination requires members of

local party systems to be linked with national parties (Cox, 1999). As a result, party system nationalization is a likely outcome of linkage (Brancati, 2008; Chhibber and Kollman, 2004; Jones, 2010; Morgenstern et al., 2009).

The main reason why presidentialism increases the incentives for cross-district alliances is because presidential elections present a large and important prize that is awarded in what is essentially a winner-takes-all fashion. Furthermore, the stakes of the presidential race are greatly increased when presidential and legislative elections are held concurrently, which in turn increases the incentives for linkage (Cox, 1999; Hicken, 2009; Hickens and Stoll, 2011).

2.1. Electoral coordination between national and regional electoral arenas in presidential systems

We believe that similar coordination effects occur under concurrent presidential and gubernatorial elections: parties and candidates know that supporting third candidates (or not participating in the presidential election) may cost them votes in the subnational race, and as a result, they have an incentive to align with one of the strongest two presidential candidates. Incentives for coordination should be stronger in gubernatorial elections than in proportional-representation legislative elections because district magnitude is equal to 1 in each and every state. If parties, in part, base their decision to enter a race on their chances of winning, then strategic entry will likely result in a two-party system under plurality rule (Cox, 1999).

Because only a few parties have a realistic chance of winning the governorship in each state, parties likely face high costs if they fail to coordinate their entry decisions across various electoral markets. If all parties were purely local, then there would be no incentive to coordinate strategies across districts, and decisions concerning entry in each district would be completely independent from one another. This is not the case when the stakes of the national election are high, as it is in presidential systems. Especially when national and subnational elections are held simultaneously, parties are aware that the decisions taken at the national level regarding electoral alliances and filing candidacies will likely have an effect on similar decisions taken locally (and vice-versa) (Filippov et al., 2004).

We claim that concurrent presidential and gubernatorial elections create incentives not only for horizontal party linkage and aggregation, but also, and most importantly, for party system integration and vertical party linkage. Simultaneous national and regional races encourage party leaders to organize voters by presenting them with slates of candidates across different levels of government. This, in turn, promotes a symbiotic relationship between national and local candidates; candidates for subnational offices benefit from sharing party labels with a popular presidential candidate, whereas a candidate running for president increases her likelihood of winning if gubernatorial candidates in each and every district integrate their campaigns with hers (Filippov et al., 2004). Concurrent national and regional elections therefore contribute to party system integration.

Party systems are vertically integrated when the issues, parties and voter behavior at the state level are linked to those at the federal level. Vertical nationalization implies that national and subnational party systems are very similar and that there is a substantial degree of correspondence in the results of elections disputed at different levels of government (Leiras, 2010; Rodden and Wibbels, 2011; Thorlakson, 2007). Furthermore, subnational elections and party cleavages have no autonomy from the national party system, as voters mostly base their choices for subnational elections on national party cues, such as the performance of the

incumbent party at the national level (Rodden and Wibbels, 2011).

Parties running for president have strong incentives to coordinate strategies between national and subnational electoral arenas because they are required to mobilize a national majority of the vote to win. They therefore must be able to compete effectively in various local electoral markets, which in turn requires coordination with local candidates. Pursuing integrated strategies requires not only the support of co-partisan gubernatorial candidates, who may help the presidential campaign at the subnational level, but also alliances with parties that are competitive in gubernatorial elections, in order to win support from local voters in regions where the presidential candidate's co-partisans lack a strong organization (Calvo and Micozzi, 2005; Cortez, 2009; Spoon and West, 2013).

From the point of view of regional party sections, integration between national and subnational electoral campaigns implies both potential benefits, such as association with a popular presidential candidate, and potential costs, such as the necessity of submitting regional party organizations to federal party control. These costs are especially salient in decentralized political systems in which regional elections are particularly important for parties' survival, and in which subnational governments have the powers to tax and spend, as well as to formulate and implement policies. Once parties attach their electoral fate to the presidential race, they may be forced to not file candidates in certain states or to enter disadvantageous electoral alliances because of the necessity of accommodating national coalition interests in gubernatorial races. Furthermore, subnational party organizations may be required to support presidential candidates that are not especially popular or well-known in the province. Conflict may also arise because the federal party has strong incentives to unify the state party branches around its presidential project. This will often require the recruitment of gubernatorial candidates that are loyal to the national party organization and/or the presidential candidate, which may be detrimental to the interests and career prospects of regional party leaders.

When parties form pre-electoral coalitions to dispute the presidency, they also add the challenge of intra-coalition coordination to that of integrating federal and regional party organizations. That is, even if a party succeeds in developing and implementing a vertically integrated strategy that works for its presidential candidacy, nothing guarantees that its coalition partners will coordinate with the leading party in regional elections.

It is also important to note that the incentives for vertical coordination arising from simultaneous national and sub-national elections do not necessarily lead to perfectly congruent coalitions across presidential and gubernatorial races. Strong presidential coattails may induce minor parties in the presidential election to make incongruent alliances in the gubernatorial race, yet still contribute to party nationalization. Let us assume that parties A and B polarize the presidential election and that both their candidates are especially strong in state Z, whereas party C's candidate counts on the support of only a tiny share of the electorate. Party C's leaders might then reason that it is in their best interest to support either party A or party B in the gubernatorial race in state Z instead of filing a candidate. Given that C is a small party nationally, such an alliance should not significantly increase vote incongruence. Yet because of the presidential race, which is for the most part two-party, the local party system will still be deflated, reproducing national party divisions.

As for the largest parties in the presidential race, they have strong reason to refrain from forming sub-national alliances in support of their opponents in the presidential election, because incongruent alliances imply not only leaving the presidential candidate without a local structure of support, but they also tend to undermine the parties' national strategy as well as the parties'

capacity to mobilize voters along national issues and policies. The incentives for coordinating national and sub-national strategies are probably not as strong for parties allied to the frontrunners in the presidential race, because they may, for instance, join the national pre-electoral coalition mainly to obtain gains in sub-national elections, and, therefore, they may attribute a lower value to national office as compared to the party leading the coalition. Still, these parties do have an incentive to make congruent alliances in order to benefit from the coattails of a strong presidential candidate.

Overall, incentives for electoral coordination should increase when gubernatorial and presidential elections are held concurrently, conditional on a low number of effective presidential candidates. When there are only two viable candidates for the presidency at the state level, parties have little incentive to field third candidates for governor. Besides, candidates who are not affiliated with the parties of the main presidential candidates (or any of the parties forming their pre-electoral coalitions) may either decide not to run in the first place or to switch parties in order to benefit from presidential coattails.

How, though, do these incentives operate at the individual-voter level? Why would all of these elite-level machinations and maneuverings matter to the average voter? One explanation could be that cross-campaign coordination—and endorsements—provide cognitive heuristics to voters in a low-information environment.

In multilevel democracies, informational requirements are higher because the responsibility for providing public policies is divided across different levels of government. Ideally, voters would like to rely on national policy results to decide how to vote in national elections and on subnational policy results to vote for provincial governments (Leiras, 2010). In other words, incongruent vote choices in elections held at different levels of government should be rather frequent under conditions of full information. In most federations, however, this view of "dual federalism" is not realistic because decentralized governments are funded mostly by federal grants and loans and because various policies are jointly implemented by national and subnational authorities (Rodden and Wibbels, 2011).

The literature on second-order elections argues that voters usually pay less attention to regional elections because there is less at stake. Instead of holding national and subnational governments accountable for the policies that they are truly responsible for, voters make their choices in subnational elections to punish or reward national incumbents (Jeffery and Hough, 2001, 2003; Schakel, 2013). Although this literature has looked mostly at parliamentary systems, the argument fits well within the coattails framework. One of the reasons why presidential coattails are so pervasive is that voters recognize the overwhelming importance of the presidency relative to other political offices in presidential regimes and, as a result, typically pay more attention to presidential candidates than to subnational candidates (Golder, 2006).

Numerous studies have shown that voters often economize their time and attention in regards to politics (Downs, 1957; Converse, 1964). As a result, they will be likely to rely on external cues as cognitive shortcuts in order to save time and effort on the act of voting (Kahnemann, Slovic, and Tversky, 1982; Lau and Redlawsk, 2001).

Endorsements can be an effective external cue for many voters (Forehand, Gastil and Smith 2004; Brady and Sniderman, 1985), as candidates who are better-known, or in races that attract more attention, lend their influence to other candidates by supporting their campaigns. In short, the inter-campaign coordination and endorsements that are part of the party-system nationalization process are campaign strategies that are aimed at winning votes by providing voters with external cues.

To summarize, we claim that parties' decisions to either concentrate on local elections or coordinate national and subnational strategies are strongly influenced by the size of the presidential party system. As the number of effective candidates approaches two, the potential costs of a regionalizing strategy will likely increase, thereby inducing parties to coalesce around the two major presidential contenders in regional elections. Furthermore, this electoral coordination should be reinforced at the individual-voter level, as voters are likely to use the external cues from national elections to help them make decisions at the subnational level.

In the remainder of the article, we test the following hypotheses:

H1. Concurrent presidential and gubernatorial elections, in combination with a small number of effective presidential candidates, should foster more effective electoral coordination, producing greater congruence between national and regional party systems.

H2. When coordination is effective and leads to vertical party linkage, a presidential coattails effect should exist at the individual-voter level as voters rely on their preferred presidential candidate as a cognitive shortcut for choosing a gubernatorial candidate.

3. The case of Brazil

As mentioned in the introduction, Brazil is an excellent case study for analyzing the effects of presidential coattails and federalism on party linkages between levels of government because rules for presidential and gubernatorial elections were recently changed after the most recent democratic transition. In the previous democratic period (1945–1962), elections were concurrent in only a few instances, and not in all states, but since 1994, all presidential and gubernatorial elections have been held concurrently. The electoral system used to elect governors and presidents has changed as well. Elections to all executive posts (including mayoralties in cities with 200,000 or more inhabitants) in the post-1985 democratic period have relied on runoff elections, whereas plurality rule was employed in both gubernatorial and presidential elections from 1945 to 1962.[1]

Strong subnational governments and decentralized party and electoral institutions have been an enduring feature of Brazilian institutions under democratic rule. State and local governments were granted substantial fiscal resources and policy authority by the 1946 and 1988 Constitutions. Both constitutions put state executives in charge of implementing public policies in areas such as health, education and public security, as well as the nomination of thousands of bureaucratic posts (Abrucio, 1998; Souza, 1997).

Electoral rules reinforce governors' influence in national politics, as several important decisions regarding elections and party organization—such as party primaries for selecting candidates to all relevant national posts except the presidency—are made at the state level. Electoral law allows regional sections of parties to select candidates, put together party lists and form pre-electoral coalitions with substantial independence from national parties (Abrucio, 1998; Lavareda, 1999; Samuels, 2003).

Large and, often, ideologically heterogeneous pre-electoral coalitions in both gubernatorial and presidential elections have been common currency in Brazil's multiparty democracy, which further complicates the task of linking national and subnational disputes.

Electoral coordination usually involves the exchange of electoral support across different levels of government between the party leading the presidential coalition and their allies. Concurrent presidential and gubernatorial elections notwithstanding, strong subnational party rivalries are sometimes a serious obstacle to integrating national and subnational alliances (Borges, 2015; Cortez, 2009). Furthermore, Brazil's electoral regimes under democratic rule have lacked provisions that could formally link simultaneous elections, whether between different states or between the presidential race and state-level elections. Two exceptions were the 2002 and 2006 elections, when the rule of verticalization was in effect. During these two elections, the Electoral Supreme Court had ruled in Resolution No. 21002-TSE/2002 that political parties in presidential coalitions could not form coalitions for gubernatorial, senatorial, federal deputy, or state deputy elections with other political parties that had also supported presidential candidates. This resolution, however, was overturned by Constitutional Amendment No. 52/2006.[2]

Brazil's open-list PR system with very high district magnitudes creates further obstacles for party integration given its tendency to foster intra-party competition and individualistic strategies of campaigning. Scholars have argued that the combination of robust federalism and strong incentives to cultivate a personal vote necessarily weakens national parties, while at the same time granting wide autonomy to subnational politicians and party branches (Ames, 2001; Mainwaring, 1999). In view of governors' control over patronage and policy and their influence in party organizations at the national and sub-national levels, Samuels (2003) has made the rather strong claim that gubernatorial coattails are predominant, as candidates for the federal chamber seek to associate their campaigns with gubernatorial races.

Institutional incentives notwithstanding, empirical evidence does not support the view that gubernatorial coattails predominate in Brazilian legislative elections. Poor model specification led Samuels (2000, 2003) to wrongly conclude that fragmentation in the presidential race had no effect on the size of the party system at the district level (Brambor et al., 2006). More recent research looking at post-1990 elections has found that parties' performance in both gubernatorial and presidential races has had a positive impact on electoral returns in lower chamber elections (Borges, 2015; Soares, 2013).

Given that our main concern is to further an understanding of the effects of presidential elections on gubernatorial races, and not on national legislative elections, we believe that this debate is of minor importance to our core argument and hypotheses. The electoral systems used to elect federal deputies and governors are different. Besides, recent changes in federal arrangements have strengthened the federal executive vis-à-vis state governments, thereby making subnational officials more dependent on presidents' electoral and coalition-making strategies (Arretche, 2009; Borges, 2011; Melo, 2005). Last, but not least, conventional arguments on how open-list PR weakens national parties are probably exaggerated in view of the existing comparative evidence. For instance, Argentina relies on an electoral system very similar to Brazil's, with extremely high magnitudes and districts that correspond to provinces. Argentina, however, relies on a closed-list system that should theoretically strengthen party leadership. In practice, Argentine parties are decentralized and have strong and autonomous provincial factions because list-formation is controlled by incumbent governors and provincial party leaders

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[1] The electoral system used in lower chamber elections, however, has mostly remained the same across the two periods. Federal deputies are elected by open-list PR rules in multimember districts that coincide with state boundaries.

[2] Decentralized electoral rules notwithstanding, it is strictly forbidden to organize regional parties that compete in only one state, or do not compete in national races Lima Júnior, 1983).

(Leiras, 2006; Jones, 1997; Jones et al., 2002).

To sum up, Brazil's institutional mix provides cross-cutting incentives. On the one hand, strong subnational governments and decentralized party and electoral institutions promote party regionalization. On the other hand, regional parties are prohibited and concurrent presidential and gubernatorial elections create incentives for electoral coordination between national and subnational electoral arenas.

4. Party system integration in Brazil and determinants of dissimilarity between national and subnational elections

We rely on dissimilarity scores to measure vote congruence between national and regional elections. Dissimilarity scores may be used to calculate a synthetic measure of the differences between parties' shares of the vote in national and regional elections. In the presence of pre-electoral coalitions in presidential elections, the appropriate units of analysis are no longer parties but coalitions, thanks to intra-coalition coordination in subnational elections. Intra-coalition coordination produces wide variation in parties' support across districts; as a result, any measure that relies on party vote shares is bound to overestimate (or underestimate, in some circumstances) actual dissimilarity.

Schakel (2013) proposes a set of indicators to measure vote congruence that can easily be adapted to the analysis of pre-electoral coalitions. He relies on a dissimilarity index (DI), which is calculated by the formula:

$$\frac{1}{2}\sum_{i=1}^{n}|X_{in} - X_{ir}| \tag{1}$$

where X_{in} is the percentage of the national vote obtained by the ith party and X_{ir} is the percentage of the vote obtained by the same party at the district level. Absolute differences are summed up and divided by two to avoid double counting. Global averages are calculated by weighting the dissimilarity indexes obtained at each district by the size of the district electorate relative to the national vote (Jeffery and Hough, 2003; Schakel, 2012). As a DI approaches zero, parties' shares at the national and district levels become more similar, which indicates a high level of congruence between the national- and district-level party systems. By the same token, a high degree of dissimilarity means that the party system is poorly nationalized.

The formula above may be used to either measure horizontal nationalization (by comparing party shares in the same election at the national and district levels) or vertical nationalization (by comparing party shares in regional and national elections). Schakel (2013, 2012) proposes a simple measure: the difference between parties' national vote share in the national election (NN) and parties' vote shares in regional elections at the regional level (RR). This measure aggregates national election results at the national level and regional election results at the regional level. The NN-RR dissimilarity score measures the extent to which a regional electorate is different from the statewide electorate, plus the extent to which voters' choices diverge between regional and national elections (Schakel, 2013, p. 634). This measure is appropriate for capturing the extent of cross-district coordination, in addition to coordination between electoral arenas: if parties and candidates coordinate effectively across districts, all local party systems should resemble the national party system, producing a low dissimilarity score.

We calculated dissimilarity scores by considering the vote shares in national and regional elections obtained by all pre-electoral coalitions with a national vote share of at least 10% in

the presidential race. Under these criteria, the number of electorally relevant presidential candidates has varied over time between two and five.[3] The pre-electoral coalitions included in our analysis concentrated no less than 80% of the vote throughout the period 1947–2010.

Due to intra-coalition bargaining across national and subnational electoral arenas in Brazil, it is often the case that the presidential candidate's co-partisans support another party in the gubernatorial election instead of filing a candidate themselves. Whenever the presidential candidate had a co-partisan disputing the gubernatorial race, we counted the latter's vote share to estimate dissimilarity scores; otherwise, we used the vote obtained by the gubernatorial candidate supported by the leading national coalition party. In those instances in which the presidential candidate's party made an incongruent alliance, supporting a gubernatorial candidate backed by a competing coalition in the presidential race (or any party absent from the national coalition), we assigned a value of zero to the national coalition's gubernatorial vote share.

Given the formula employed to estimate dissimilarity, the operationalization described above attributes higher scores to state elections characterized by incongruent coalitions. That is, once we assign a value of zero to gubernatorial votes, the difference between the presidential vote at the national level and the gubernatorial vote at the district level achieves its maximum.

The table below shows the mean dissimilarity scores calculated by type of election. We aggregated scores according to the electoral rule used to elect governors (plurality or runoff) and according to the temporal proximity between presidential and gubernatorial elections (concurrent vs. non-concurrent elections). Hypothetically, dissimilarity should be higher in runoff than in plurality elections because incentives for coordination are known to be weaker when parties might file candidates only to increase their bargaining power in a likely runoff race. As stated in our hypotheses, we expect dissimilarity to be lower in concurrent than in non-concurrent elections (Table 1).

As expected, mean dissimilarity was higher in runoff than in plurality gubernatorial elections held in 1947–2010. However, differences between concurrent/non-concurrent elections, controlling for the electoral system used to select governors, are substantive. This simple comparison of group means therefore provides preliminary evidence in favor of our core hypothesis: concurrent elections are associated with better coordination and lower dissimilarity.

Considering that national and sub-national party alignments often differ in Brazil, as in other multilevel countries, one may wonder whether the dissimilarity scores shown above do indicate that incongruent coalitions are less frequent under simultaneous presidential and gubernatorial elections. We counted as incongruent any gubernatorial alliance made by any two parties belonging to competing pre-electoral coalitions in the presidential election. National coalitions obtaining less than 10% of the national vote were excluded from our estimates, on the grounds that incentives for coalition integration are weaker for small parties.[4] For each election year, we obtained the total number of coalitions

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[3] Note that small parties competing in presidential elections are most often absent from gubernatorial elections; when they do file candidates for governor, they obtain a very small share of the vote. As a result, their exclusion should not significantly alter our dissimilarity estimates.

[4] Also, we excluded very small parties that supported a presidential candidate but obtained less than 2% of the lower chamber seats in the previous election unless the party controlled at least one governorship.

Table 1
Mean Dissimilarity Scores by type of gubernatorial/presidential election, 1947–2010.

	Plurality	Runoff	All elections
Concurrent	37.52	46.39	44.40
Non-concurrent	45.32	52.00	47.42

Sources: TSE. Authors' elaboration.

Table 2
Percentage of incongruent gubernatorial coalitions by type of gubernatorial/presidential election, 1947–2010[a].

	Plurality	Runoff	All elections
Concurrent	17.04	28.88	22.96
Non-concurrent	39.09	75.77	46.43

[a] Figures were calculated excluding the years 2002 and 2006, because the verticalization rule prohibited the formation of incongruent coalitions in gubernatorial races.

formed in support of gubernatorial candidates nationwide and then calculated the percentage of incongruent coalitions.[5] Means are presented by type of election below: (Table 2).

The differences shown in the table are large: on average, 22% of gubernatorial coalitions formed in concurrent races were incongruent as compared to 46.4% in non-concurrent races. The differences between plurality and runoff races are also similar to those observed for mean dissimilarity: plurality rule is associated with better coordination and lower coalition incongruence. Overall, the table results support our theoretical model: the largest parties in the presidential race, as well as their allies, are more likely to avoid making incongruent alliances when gubernatorial and presidential races are concurrent.

We performed a more rigorous test of the hypothesized association between the number of effective presidential candidates and vote incongruence by running a series of regressions on a panel of 254 observations covering electoral results measured at the state level from 1945 to 2010. The database covers 13 gubernatorial contests (1947, 1950, 1954, 1955, 1958, 1960, 1962, 1990, 1994, 1998, 2002, 2006 and 2010) and ten presidential races. Four presidential elections were held from 1945 to 1960 and another six from 1989 to 2010. Presidential and gubernatorial elections were concurrent in eight out of 13 occasions.

The dependent variable is the NN-RR dissimilarity score calculated for each district and election year. The main independent variables are the effective number of presidential parties measured at the district level (*enpres*) and a measure of proximity between presidential and gubernatorial races (*proxpres*). We calculated this latter variable following the operationalization adopted by Golder (2006) and Samuels (2003). Proximity scores range from 0, when gubernatorial elections are held at the midterm, to 1, when presidential and gubernatorial races are concurrent. Values between 0 and 1 indicate that non-concurrent elections were held at some point other than the midterm.

We expect fragmentation of the presidential party system to be positively associated with dissimilarity. Proximate elections should have a negative effect on dissimilarity scores. We hypothesize that the latter effect is conditional on the effective number of presidential candidates, such that a low number of presidential candidates at the district level should magnify the impact of proximity on dissimilarity. We test this hypothesis by running an interaction between *proxpres* and *enpres*.

In the years 2002 and 2006, parties were obliged to follow the verticalization rule and reproduce national coalitions in

gubernatorial elections. This legal provision had the unintended effect of worsening coordination, as some of the largest parties decided not to participate in the presidential race (Limongi and Cortez, 2010).[6] We included a dummy in all models to account for the effect of verticalization on dissimilarity.

Alternative explanations of party system integration rely on institutional, social, and economic variables and we account for these in the models. Some accounts of the nationalization of elections and parties point out the effects of social and economic modernization. According to Caramani (2004), polities nationalize as a result of the replacement of territorial cleavages by functional cleavages brought by broader processes such as the development of mass education systems, urbanization and national economic integration.

As opposed to other large federations such as Russia or India, Brazil lacks the territorialized ethnic and/or religious identities that constitute the basis of regionalist parties. However, regional economic inequalities are stark. Some explanations of why voting patterns are regionalized argue that territorialized distributive conflicts allow regional politicians to mobilize local grievances in poorer regions. Regional economic differences should be associated with distinct levels of modernization as well, with wealthier regions showing greater levels of nationalization, as predicted by Caramani's (2004) hypothesis. To account for these potential explanations, we created a relative measure of states' levels of development. This regional economic index (REI) was operationalized in a manner similar to that proposed by Schakel (2013); we divided the GDP per capita of each state by the national average and multiplied the result by 100. The interpretation of the resulting scores is straightforward: values below 100 indicate that the state has a lower level of economic development in comparison to the national average, whereas values above 100 indicate that the state is above the national average. We expect this variable to have a negative impact on dissimilarity; that is, once the poorest regions catch up with the wealthiest ones, the vote should grow more nationalized accordingly. The models also include the relative size of the urban population (*urban*) as an additional measure of modernization. We expect this latter variable to have a negative effect on dissimilarity.

Another explanation of why regional and national voting patterns might diverge focuses on the decentralization of the government and its effects on party competition (Chhibber and Kollman, 2004; Thorlakson, 2007). Although all Brazilian states are subject to the same federal arrangements set by the constitution, overall levels of centralization have varied over time. We adopted a standard indicator of fiscal centralization, which is simply the proportion of federal expenditures in total government expenditures (*fedexp*). These figures have varied from a low of 49% in 1990 to a high of 61% in 1956.

The models also account for subnational party dynamics, on the grounds that the latter may exert an effect on electoral coordination independent of presidential coattails. Previous work has claimed that reverse coattails exert a substantial impact on the presidential vote, as presidential candidates depend on the support of state

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[5] We counted as a coalition all cases in which more than a single party backed a gubernatorial candidate.

[6] By forcing political parties to make congruent alliances in each and every district, the verticalization rule greatly increased the costs of participating in the presidential election for organizations formed by strong, competing subnational factions such as the catchall PMDB. Instead of making a formal alliance with the governing Worker's Party (PT), the PMDB and other parties decided to support president Lula's re-election bid only informally to allow greater latitude to subnational party branches. Overall, the failure of the verticalization rule reveals the unavoidable tension between parties' national and subnational objectives federal countries such as Brazil.

party leaders and their political machines (Samuels, 2003). If this hypothesis were correct, we would expect to see low dissimilarity whenever the main contenders in the presidential race count on the endorsement of subnational party organizations. To control for such effects, we created a dummy variable that indicates whether or not the incumbent governor's party was a member of either one of the two largest coalitions disputing the presidential race (*coalition incumbent*).

The presence of a coalition incumbent might also create incentives for electoral coordination, conditional upon the electoral strength of the incumbent party at the state level. Assuming that the incumbent party (henceforth Party A) was a large or dominant party at the state level, it would likely emerge as the natural leader of the national pre-electoral coalition at the state level, facilitating coordination among coalition parties. The local opposition, however, in the face of a very strong incumbent candidate backed by one of the largest pre-electoral coalitions at the national level, would have a substantial incentive to coalesce around a single gubernatorial candidate in order to have a chance of beating Party A. One would also expect to see a convergence of interests between the local opposition and the national coalition that competed against Party A and its allies in the presidential race.

Because endogeneity issues would likely arise if we relied on vote shares obtained in previous state elections as a measure of the incumbent party's levels of support, we operationalize this variable more indirectly. We calculated the number of terms already completed in office in the election year (*toffice*). If, for instance, the sitting governor's party was finishing its first, non-consecutive term, *toffice* was coded as 1. Otherwise, we computed the number of consecutive terms completed up to the moment the gubernatorial election was held. The advantage of looking at the number of terms in office is that this measure is less subject to the influence of short-term forces, which often account for variation in parties' electoral returns over time. If a party wins several consecutive terms in a given state, this is likely an indication of successful efforts to mobilize voters and create a reasonably "safe" district, regardless of national electoral cycles and variation in the party's national electoral fortunes.

We interacted our measure of consecutive terms completed in office with the *coalition incumbent* dummy. Our theoretical expectation is that the marginal effect of the governor's affiliation with a coalition party should be negative on dissimilarity.

Because two of our control variables change slowly over time (urbanization and the regional economic index) such that cross-sectional variance dominates within-case variance, a fixed-effects specification would be inappropriate. We decided to use a random-effects specification with robust standard errors on the grounds that when the amount of observations per unit is small and some of the regressors are sluggish, the RE approach produces better results than fixed effects. This is even the case in the presence of moderate levels of correlation between independent variables and unit effects (Clark and Linzer, 2015). One should note, however, that our results are robust to alternative specifications. We ran fixed effects and pooled models with clustered standard errors and obtained very similar results to those obtained with the random effects specification. Below, we present random-effects modeling results for our measure of dissimilarity between presidential and gubernatorial elections: (Table 3).

Model 1 is the baseline model and does not include measures of presidential coattails and the corresponding interaction. In addition, Model 1 only presents the main effects of the number of consecutive terms in office and the coalition incumbent dummy. Model 2 includes the measures of party fragmentation in presidential elections, proximate elections and their interaction, whereas Model 3 adds the interaction between the number of

consecutive terms in office and the presence of a coalition incumbent governor. Note that Model 2 fits the data better than the baseline model, and the sign of the interaction term came out as expected; it has a positive effect, whereas the main effect of concurrent elections (assuming $enpres = 0$) is strong and negative, just as expected. To test for the magnitude and statistical significance of the conditional impact of our interactions on the dependent variable, we plot the marginal effects estimated for *proxpres* and *coalition incumbent* across levels of *enpres* and *toffice*, plus the relevant confidence intervals. Fig. 1 below shows the marginal effect of concurrent elections for different values of *enpres*:

Consistent with our hypothesis, concurrent elections have a negative effect on dissimilarity as long as the effective number of presidential candidates is sufficiently low. As *enpres* approaches three, the marginal effect becomes weaker and weaker. In fact, for values above 2.6, the effect of concurrent gubernatorial and presidential elections is no longer significant.

Fig. 2 below plots the marginal effect of the incumbent governor's affiliation with a party in either one of the two largest presidential pre-electoral coalitions. As expected, the interaction effect is negative, although it is only significant for incumbent parties with a number of consecutive terms in office between 1 and 3. For a higher number of consecutive terms, there is no longer a discernible effect, probably because an exceptionally strong incumbent party might be associated with regionalized voting patterns that deviate greatly from national averages.

Fiscal centralization had a negative effect on all model specifications, as expected, although the estimated coefficients lacked statistical significance in Models 1B and 1C. Finally, our measures of modernization (*urban*) and territorial inequality (*rei*) were not statistically significant in all three model specifications.

Model results are mostly consistent with our first hypothesis: temporally proximate presidential elections decrease dissimilarity between national and subnational elections, but this effect is only relevant for a sufficiently low (i.e., <2.6) effective number of presidential candidates. These results are independent from subnational party dynamics; that is, although incumbent governors' support for either one of the two main contenders in the presidential race does reduce dissimilarity, this effect pales in comparison with the effect of concurrent elections.

5. Presidential coattails and gubernatorial elections: evidence from survey data

We also argue that this coordination between parties leads to a coattails effect at the individual level. In other words, when coordination is effective, voters should respond by relying on their preferred presidential candidate as a shortcut for voting in gubernatorial elections. Using survey data from the 2002 and 2010 Brazilian elections, we estimated two logit models with the gubernatorial votes as our dependent variable.[7] The two models were equivalent in every way except for the fact that one measured the vote for the PT's presidential pre-electoral coalition at the subnational level and the other measured the vote for the PSDB's. We left out data from the 2006 election because the number of respondents for the 2006 ESEB was drastically smaller than for other years, which would complicate any comparison of coefficients (The, 2006 survey only had 1000 respondents whereas the 2002 version, for instance, had 2500).

In this section, we compare model results both across election

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[7] Unfortunately, there is no available survey data for elections held prior to 2002 and, for that reason, it is not possible to compare presidential coattails in concurrent, as opposed to non-concurrent, elections.

Table 3
Random-effects models, determinants of dissimilarity(NN-RR) at the state level.

	Model 1A		Model 1B		Model 1C	
	B	sd	B	sd	B	sd
(Intercept)	121.97	33.79	143.07	40.74	***142.03	40.48
Plurality	−4.69	6.86	−8.25	7.12	−8.30	7.14
Incumbent	**−5.54	2.39	***−6.86	2.42	−4.37	4.61
Toffice	***−4.38	1.40	***−3.88	1.41	−2.92	2.08
Fedexp	**−1.30	0.63	−1.04	0.69	−1.05	0.68
Verticalization	***14.56	4.41	***12.94	4.47	***13.16	4.35
Urban	−0.10	0.13	−0.07	0.13	−0.07	0.13
Rei (logged)	2.28	3.11	1.71	3.03	1.63	2.92
Enpres	–	–	*−9.92	5.63	*−9.60	5.58
Proxpres	–	–	**−40.67	19.38	**−39.49	19.17
Enpres × proxpres	–	–	11.95	7.46	11.40	7.41
Incumbent × toffice	–	–	–	–	−1.67	2.65
Unbalanced panel						
Groups − 28	N	254	N	254	N	254
T − 1−11	R2	0.140	R2	0.162	R2	0.163
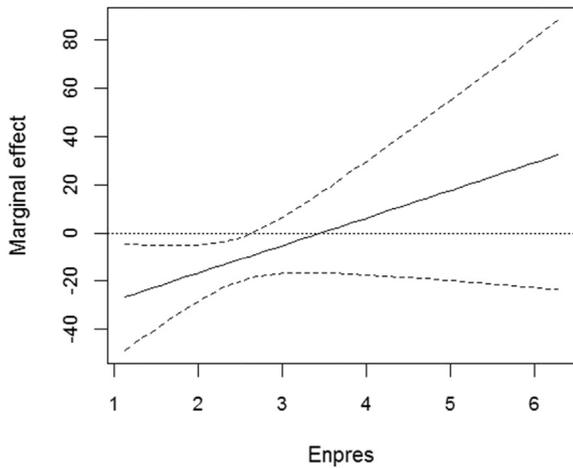
Fig. 1. Marginal Effect of Concurrent Elections conditional on *Enpres*, Model 1C.
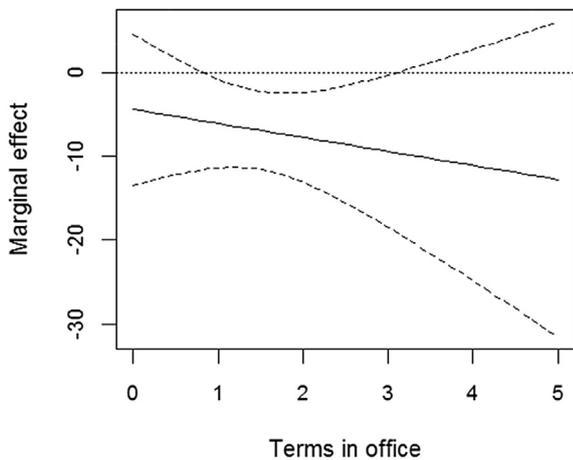
Fig. 2. Marginal effect of incumbent governor's affiliation with coalition party, Model 1C.

centralized organization that, for the most part, lacks territorially organized factions. Furthermore, the PT has implemented a truly national, vertically integrated strategy in its quest for the presidency, and conflict between the federal and state party sections is almost always solved in favor of the former. The PSDB's state sections have had greater autonomy to make subnational alliances, and competition among powerful governors and subnational leaders has often shaped presidential nominations (Cortez, 2009; Hunter, 2008; Ribeiro, 2013; Roma, 2002). For these reasons, we would expect the PSDB and its allies to be less successful than the PT and its coalition partners in integrating national and subnational electoral campaigns.

In the first model, the dependent variable (*gvpt*) was recorded as a 1 if the respondent voted for a gubernatorial candidate affiliated with the PT in the states where the party filed a gubernatorial candidate. In the states where the PT did not have a candidate of its own, we also coded *gpvt* as 1 if the respondent voted for the gubernatorial candidate supported by the PT. All other cases were coded as 0, including null and blank votes. The second dependent variable was coded the same way, with a vote for the PSDB's gubernatorial candidate, or the candidate supported by the PSDB if it did not have one, counting as 1. All other votes were recorded as 0.

The key independent variable for our argument was the respondent's evaluation of the respective party's presidential candidate. The respondent ranked both the PT's presidential candidate (*evalPTpres*)[8] and the PSDB's (*evalPSDBpres*)[9] on a scale of 0−10, with 0 indicating that the respondent greatly disliked the candidate, 10 indicating that the respondent very much liked the candidate, and the other numbers representing gradations in between. Our hypothesis was that both of these variables would have significant positive effects on our dependent variables, which would show evidence of coattails voting in gubernatorial elections.

While information on each respondent's presidential vote was also available, we chose to use presidential evaluations as our primary independent variable for two principal reasons. First, it displayed more information than one's presidential vote; while one's presidential vote was a binary variable, presidential evaluations were made on a scale of 1−10. As a result, we could get a better picture of the relationship between the two variables and determine whether it was both positive and monotonic, as we predicted.

years and across parties. We expect that coattails estimated for PT presidential candidates will be stronger than those estimated for PSDB candidates. For one, the Workers' Party has developed a more

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[8] Lula in 2002 and Dilma in 2010.
[9] José Serra in both 2002 and 2010.

Second, presidential evaluations are less subject to endogeneity problems. Whereas one's presidential vote could plausibly be determined by the endorsement of a gubernatorial candidate, it is less likely (if not altogether impossible) that one will assign a presidential candidate a certain score because of a governor's endorsement. In other words, using this measure makes it more likely that we are measuring a true presidential coattails effect in which one's opinion of a presidential candidate affects one's vote for a subnational candidate, and not a "reverse" coattails effect (Calvert and Ferejohn, 1983).[10] That said, we did use the presidential vote as an alternative measure of coattail voting in order to evaluate the robustness of our findings, and we got the same results.

We also included a variety of other explanatory variables as control variables. These control variables included family income (*fincome*), education (*educ*), and party identification (*partyid*, with positive values representing identification with the PT and negative with the PSDB). We display data from both 2002 and 2010 in the body of the text. We also included a dummy variable to account for inherent differences between elections held in 2002 and 2010 (*year*) and saw that the year did not have a significant interactive effect on coattails effects; neither predicted probabilities nor a linear combination of the marginal effects of year and coattails effects showed any significant interactive effect between the two variables.[11] Tables 4 and 5 show that, as expected, coattails voting was indeed present in gubernatorial elections. As one can see, presidential evaluations had significant effects on the vote for gubernatorial candidates linked to both the PT- and the PSDB-led coalitions; the more a respondent approved of the presidential candidate, the more likely she was to vote for the gubernatorial candidate supported by that candidate's party. These results are robust, holding for data from 2002, data from 2010, and data from both years, in addition to a variety of different specifications.

Furthermore, the marginal effects of presidential evaluations are large (comparable to those of incumbency) and robust, holding when covariates are at their means, maxima, and minima. It should also be noted that the coattails effect seems stronger for PT candidates than for PSDB candidates, which is consistent with our hypothesis that the Workers' Party coordinated its national and regional strategies more effectively, thereby inducing greater congruence in voters' choices. The PT's presidential candidate, for instance, faced no internal resistance in either 2002 or 2010, whereas the PSDB dealt with internal leadership disputes in both years. It is therefore plausible that fractiousness in the PSDB led to less effective coordination in 2002 and 2010 in comparison to the PT. Furthermore, these differences cannot be attributed to higher levels of partisanship among PT supporters, as both models control for party identification.

The predicted probabilities shown in Figs. 3 and 4 also show the effects of coattails voting. The confidence intervals of predicted probabilities with the minimum presidential evaluation are clearly distinct from predicted probabilities with the maximum presidential evaluation. As a result, we can say that presidential evaluations clearly have significant effects on the predicted probability that a respondent will vote for a given gubernatorial candidate.

Table 4
Logistic regression of coattails voting, 2002 and 2010.

	Model 1 (*gvpt*)	Model 2 (*gvpsdb*)
Intercept	−3.99*** (−0.35)	−1.23*** (−0.2)
Evalpres	0.29*** (−0.03)	0.08*** (−0.09)
Fincome	0.00 (0.00)	0.00 (0.00)
Educ	0.04 (−0.05)	0.02 (−0.04)
Partyid	0.11*** (−0.011)	−0.11*** (−0.01)
Incumbent	−0.51*** (−0.09)	0.72*** (−0.08)
Year	1.64 (−0.32)	−0.20 (−0.17)
Year × evalpres	−0.12*** (−0.04)	0.01 (0.03)
Prob > chi squared	<0.01	<0.01
N	3088	3104
*=p-value < 0.1	**=p-value < 0.05	***=p-value < 0.01

Table 5
Marginal effects on gubernatorial vote, 2002 and 2010.

	Model 1 (*gvpt*)	Model 2 (*gvpsdb*)
Evalpres		
Marginal Effect	0.058*** (0.006)	0.02*** (0.004)
+1 Standard Deviation	0.234*** (0.029)	0.067*** (0.015)
Incumbent		
Marginal Effect	−0.102*** (0.018)	0.163*** (0.019)
+1 Standard Deviation	−0.048*** (0.008)	0.085*** (0.01)
*=p-value < 0.1	**=p-value < 0.05	***=p-value < 0.01

Marginal effects calculated with other variables set at means.

One curious difference between the PT and the PSDB is that incumbency has a negative effect on the vote totals of PT gubernatorial candidates and a positive effect on those for PSDB-backed candidates. This difference holds when using data from 2002, 2010, and from both years at once. This could be explained by the fact that the PSDB simply supported more incumbent governors than the PT in both years, which, *a priori*, makes it more likely that an individual voting for an incumbent was voting for a PSDB-backed candidate.

To ensure that our estimates did not suffer from simultaneity bias because of the possible effects of a reverse coattails effect, we ran several tests. First, we used a bivariate probit model with the same control variables as our normal model, specifying it with the presidential and gubernatorial votes as our joint dependent variables. This specification allowed us to account for a possible correlation between the presidential and gubernatorial votes by not assuming that errors in the two equations were uncorrelated. Even accounting for this potential correlation, the presidential evaluation had a strong, significant effect on the gubernatorial vote for both the PT ($z = 11.33$) and the PSDB ($z = 6.74$).
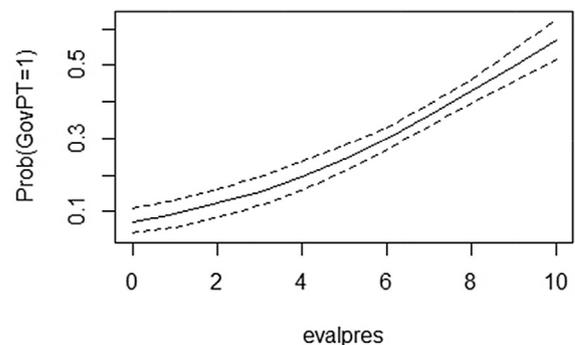

Fig. 3. Effect of voters' evaluation of PT presidential candidate on the probability of voting for PT or allied party in the gubernatorial race.
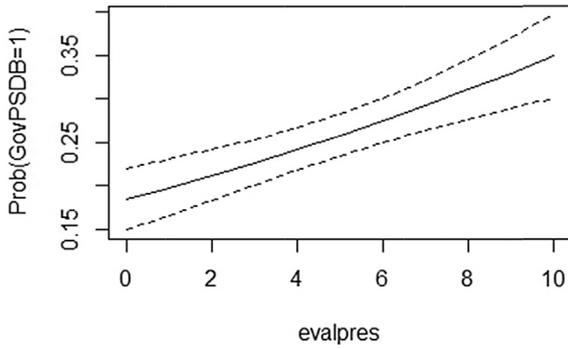
Fig. 4. Effect of voters' evaluation of PSDB presidential candidate on the probability of voting for PSDB or allied party in the gubernatorial race.

Table 7
Logistic regression of second-round gubernatorial voting, 2002 and 2010.

	Model 1 (*gvpt_2ndround*)	Model 2 (*gvpsdb_2ndround*)
Intercept	−2.723*** (−0.567)	−0.099 (0.502)
Evalpres	0.119*** (0.427)	0.12*** (0.035)
1stRoundPT	2.732*** (0.25)	−1.88*** (0.247)
1stRoundPSDB	−1.938*** (0.261)	2.88*** (0.254)
Prob > chi squared	<0.01	<0.01
N	1007	1008
*=p-value < 0.1	**=p-value < 0.05	***=p-value < 0.01

Second, we ran a logit model using our individual survey data with votes in second-round gubernatorial elections in 2002 and 2010 as our dependent variable. The advantage of this latter specification is that it allows for the inclusion of controls for voters' preferences in the gubernatorial election (the first-round vote for governor) that are not simultaneous with the (second-round) vote for president. Note that gubernatorial candidates competing in the runoff race are almost always required to attract voters other than their first-round supporters to obtain a majority and defeat their opponent. As a result, our model estimates whether having the support of the PT or PSDB's presidential candidate in the second round increases the candidate's likelihood of expanding her original support base (we also used the same control variables as in the original equation). In the presence of reverse coattails, presidential evaluations would be strongly correlated with the first-round gubernatorial vote and would therefore contribute little to the explanation of the second-round vote for both president and governor. This, however, is not the case: our models show that the first-round vote and presidential evaluations both have significant effects, suggesting that the coattails effect existed even with these controls. Full results for both of these tests can be found in Tables 6 and 7 in the appendix.

In short, our third hypothesis finds support, just like our first two. The coordination between parties does indeed seem to be reinforced and reflected in individual-level data, as we find evidence that presidential evaluations have significant effects on the probability that one will vote for that the gubernatorial candidate of the presidential candidate's coalition. In other words, presidential coattails voting exists at the level of the individual voter in gubernatorial elections.

6. Final remarks

Our findings indicate that the nationalizing effect of presidential elections has partly compensated for built-in incentives for party regionalization in Brazil: a fragmented party system with strong subnational governments and localizing electoral rules. Specifically, dissimilarity between national and subnational races decreases systematically when elections are concurrent, as long as there is a sufficiently low effective number of presidential candidates. Individual-level survey data reinforce our findings, showing evidence of presidential coattails voting in gubernatorial elections. Voting for governors is significantly affected by how voters evaluate the president. If a voter likes a presidential candidate, she will be more likely to vote for the gubernatorial candidate supported by the presidential candidate's party.

Although our findings rely on evidence gathered on a single country, Brazil is undoubtedly a least-likely case given that the country's combination of an extreme multiparty system, decentralized party and electoral institutions, and low levels of party institutionalization should conspire against effective coordination between national and subnational elections. In this sense, our case provides for a rather stringent test of our hypotheses. Under more favorable circumstances, the effect of concurrent elections on electoral coordination would likely be stronger.

Note, however, that we do not intend to claim that Brazil's party system has become integrated. Dissimilarity has remained high, despite improved coordination, whereas broad (and often ideologically heterogeneous) pre-electoral coalitions are an obstacle to more effective linking between national and subnational cleavages. Local party divisions remain strong, and it is not uncommon to see parties that are members of the same national coalition disputing gubernatorial elections against each other, often because regional party sections cannot agree on a single, coalition-backed candidate. What we do claim is that, in the absence of concurrent elections and low party fragmentation in presidential races, Brazil's party system would likely be much more volatile and unstable. In this sense, we tend to agree with recent accounts of party politics in Brazil that see polarization between the PT and the PSDB as responsible for structuring party competition and ordering the country's messy and fragmented party system (Melo and Câmara, 2012; Samuels and Zucco, 2014).

Recent research on vote congruence and second-order elections has focused mostly on parliamentary countries (Schakel, 2013). The literature on presidential elections and party systems, however, has neglected the issue of vertical party linkage. This article contributes

Table 6
Bivariate probit model, gubernatorial and presidential vote, 2002 and 2010.

	Model 1 (PT)		Model 2 (PSDB)	
	DV1 (*gvpt*)	DV2 (*prespt*)	DV1 (*gvpsdb*)	DV2 (*prespsdb*)
Intercept	−1.673*** (0.126)	−1.549*** (0.13)	−0.775*** (−0.104)	−1.536*** (0.127)
Evalpres	0.114*** (0.01)	0.208*** (0.011)	0.54*** (0.008)	0.162*** (0.01)
Correlation	0.512*** (0.039)		0.406*** (0.38)	
Prob > chi squared (Wald chi-sq)	<0.01		<0.01	
N	3088		3104	
*=p-value < 0.1**=p-value < 0.05***=p-value < 0.01				

to both literatures by demonstrating that concurrent presidential elections, in the presence of a low number of presidential candidates, improve coordination between national and subnational elections. In this sense, presidential coattails promote not only horizontal party linkage, as shown by Hicken and Stoll (2011), but also vertical party linkage, leading to greater party system integration. Given that poorly integrated party systems have been said to undermine the stability of federal arrangements and complicate policy coordination across levels of government (Filippov et al., 2004; Rodden and Wibbels, 2002), this implies that the choice of electoral rules for electing presidents and governors is key for building effective federal institutions.

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