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The nationalization of electoral change in the Americas

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Abstract

This paper examines the nationalization of electoral change in multiparty settings. We present a method to measure the relative magnitude of national and sub-national shifts in electoral support across parties and elections that is appropriate for the compositional structure of multiparty electoral data. We apply this new method to the analysis of legislative elections in six Latin American countries and the United States. Our findings indicate the widespread influence of local (i.e., state-specific) factors in electoral change, but highlight the drastic impact that intermittent nationalized shifts have on partisan support.
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Electoral outcomes often reflect much more than voters' enduring allegiances to parties and ideologies. Political parties, vote-seeking candidates, pundits and academics, all spend a great deal of time trying to understand the forces that influence changes in constituency voting behavior. The literature on electoral politics has shown a long-standing interest in measuring and explaining national and local patterns of electoral behavior over time across districts and regions in the United States (Schattschneider, 1960; Stokes, 1965; Sundquist, 1973; Katz, 1973; Sorauf, 1980; Claggett et al., 1984; Brady, 1985; Kawato, 1987; Cox and McCubbins, 1993; Bartels, 1998; Brady et al., 2000). A smaller set of works has focused on the nationalization of partisan support across countries (Stokes, 1967; Rose and Urwin, 1975; Bawn et al., 1999; Jones and Mainwaring, 2003; Caramani, 2004; Chhibber and Kollman, 2004; Morgenstern and Potthoff, 2005). Comparative nationalization interests scholars because it helps to distinguish party systems from one another in ways that have implications for governability and political representation.

Fluctuations in the partisan distribution of the vote, whether uniform or idiosyncratic across districts, affect constituent representation, partisan behavior, and government policy priorities. Elections that are decided on local issues tend to make congressional parties a composite of different parochial interests, and make harder the task of forming a legislative majority behind policy proposals that have a national scope. Moreover, if district delegations (or individual candidates) are convinced that their electoral success depends primarily upon local issues unrelated to the fate of the party as a whole, weaker bonds will exist among members of the legislative party (Stokes, 1967; Cox and McCubbins, 1993). A nationalized electorate, in contrast, can

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strengthen partisan ties despite electoral rules that emphasize personal characteristics (the personal vote) or decentralized candidate nomination procedures.

The level of nationalization of electoral change can affect not only the unity of legislative parties, but also the influence of the executive. A nationalized electorate, for instance, provides a favorable context for presidents that seek to rally public support as a way to force congress to support their legislative programs. The nature of electoral change can also influence presidential coalition building strategies through its effect on the priorities of legislators. It may create conditions favorable to the adoption of national policy programs or it may encourage the proliferation of particularistic goods.

Whether shifts in voter support follow a common pattern or reflect, instead, idiosyncratic changes in different parts of the country has also been of interest to scholars analyzing consolidation in new democracies. Latin Americanists, for instance, tend to associate lower levels of electoral volatility with more institutionalized party systems that, they argue, are better able to structure the political process and to provide citizens and organizations with predictable choices (Mainwaring and Scully, 1995; Mainwaring, 1998; Roberts and Wibbels, 1999). Yet, studies of volatility at the national level can mask stability—or change—at the district level, where voters actually make such choices. When electoral volatility varies across districts, conflicting trends in different regions of the country may cancel each other out at the national level (Morgenstern and Potthoff, 2005). Identifying patterns of electoral change at the subnational level can help scholars better understand national electoral volatility, electoral incentives, and executive strategies.

A drawback for comparative analysis has been that most of the methods so far employed to decompose electoral change into its local and national components were developed with the US case in mind and are not applicable to the study of electoral change in countries where more than two parties regularly compete in elections. The analysis of variance methods typically used in comparative studies of the nationalization of electoral change ignore the compositional structure of the data found in multiparty systems, like those of Latin America.

In this paper we present a new method, applicable to any multiparty setting, to assess the relative impact of national and local forces in voting behavior across parties and elections. We apply this method, which builds on advances in the analysis of compositional data (Katz and King, 1999; Tomz et al., 2002), to the analysis of district or state-level data across a total of 60 elections in seven countries in the Americas: Argentina, Brazil, Chile, Colombia, Mexico, Venezuela and the United States. Thus, this paper makes both methodological and substantive contributions to the study of nationalization.[1]

The rest of the paper is divided into five main sections. Section 1 discusses the concept of a nationalized electorate, while Section 2 specifies our questions about electoral change specific to Latin America and its comparison to the United States. Section 3 describes the data that we use and explains the statistical model that we estimate. Section 4 discusses the results. Finally, we conclude by highlighting our main findings.

1. A nationalized electorate

The notion of a nationalized electorate generally refers to the uniformity of political behavior—what Schattschneider (1960, 93) called the 'universality of political trends'—across the different districts or regions of a country. Although sometimes used ambiguously, it is meant to point to similarities in the aggregate voting behavior of the different sub-units within the nation. This broad definition has encompassed two main concepts of nationalization: (1) convergence in the level of partisan support across the nation, and (2) uniform response of the different sub-units to political forces (Claggett et al., 1984). This distinction is both substantively and empirically relevant; therefore it is important to clarify its use.

Under the first conceptualization, a nationalized electorate is one that exhibits a *convergence* in the level of partisan strength across the nation, leading to a system in which parties receive a uniform level of support across sub-units of the electorate. Nationalization as convergence in party support focuses on the homogeneity of the electorate, where similar mixtures of political support replace distinctive regional patterns. Nationalized electorates are supposed to reflect a move away from politically salient regional cleavages and towards an alignment based on national political issues, with a similar partisan make up across districts. This view of a nationalized electorate is present in several influential works on US politics, including those of Schattschneider (1960) and Sundquist (1973), as well as comparative analyses such as those of Caramani

[1] Data and replication files are available from the authors upon request.

(2004), Chhibber and Kollman (2004), and Jones and Mainwaring (2003).

The second conceptualization of a nationalized electorate focuses on the *common response* of voters in a given election. The *movement* of the electorate as opposed to its *configuration* is the key difference between the two definitions of nationalization. Within the common response framework, the degree of observed similarity in electoral change across sub-national units provides evidence of national trends in partisan attitudes, whereas the variation across units indicates the importance of constituency level influences. A nationalized electorate is one that responds in a similar fashion across the country. As others have emphasized, this is significantly different from the prior conceptualization since common (i.e., nationalized) response can occur despite wide differences in the level of party support within the country and highly idiosyncratic changes can occur across sub-units that have had relatively similar partisan configurations. The focus of this paper is on this second conceptualization, the nationalization of electoral *change*, which we examine on an election-by-election basis.

Donald Stokes' (1965, 1967) influential work on electoral change focused on nationalization as a uniform response to political 'forces'. He used congressional election returns from the United States and Britain to identify historical changes in partisan support and to compare the relative importance of national and local forces in voting behavior and electoral turnout.[2] Since Stokes' original work, several authors have sought to improve the method used to measure the various components of electoral change.[3] Particularly relevant for our analysis is an article by Larry Bartels (1998) that presents a regression model to capture the influence of three distinct components which are said to make up the US presidential election outcome: 'a partisan component reflecting standing loyalties carrying over from previous elections, an election-specific component reflecting the shifting tides of national electoral forces, and an idiosyncratic component reflecting new sub-national electoral forces at work in the specific state' (Bartels, 1998, 303). Later in the paper we apply some of these insights to multiparty systems and suggest an alternative approach to interpreting some of the same substantive quantities of interest in a multiparty context. Modeling differences aside, we, like Stokes (1965, 1967) and Bartels (1998), are fundamentally interested in comparing the magnitude of nationalized electoral shifts to sub-national electoral change.

2. National and local forces in Latin America and the US

In Latin America, just as in the United States, political scientists and political pundits often speculate about the influence of national political issues on the direction of electoral change. This effect also concerns politicians in both regions of the Americas: the electoral impact of national partisan tides may directly jeopardize, or boost, their political careers and indirectly influence their policy priorities once in office.

In the literature on US congressional elections, scholars have argued that a weakening of presidential coattails and a decline in marginal districts reflect salient differences in the bases of voting for president and Congress, 'with personal and local considerations exerting an increasingly important influence in House voting decisions' (Ansolabehere et al., 1992, 36; Ragsdale, 1980). The evidence from congressional elections portrays voters as responsive to mostly local issues, with national electoral shifts having a relatively minor impact on district results (Mann, 1978; Mann and Wolfinger, 1980; Claggett et al., 1984; Kawato, 1987). This evidence is consistent with some influential works on voter representation that portrayed US legislators as electorally oriented actors primarily responsive to the interests of their local districts (Mayhew, 1974; Fenno, 1978). These trends solidify the view that decentralized parties, highly autonomous incumbents, and locally oriented voters characterize congressional elections in the United States.

But even within this context of highly decentralized party organizations, Cox and McCubbins (1993, 110–122) argue that the party label, understood as the central tendency in mass beliefs about actions and outcomes attributed to the national party, often changes in ways that affect the election probabilities of co-partisan candidates in the same manner. They examine inter-election swing (i.e., the change in party vote shares from one election to the next) across the US states and show that there is an important commonality in the electoral chances of incumbents of the same party. Jacobson (1996) and Ferejohn (1998) find evidence that in the 1994 election Democratic incumbents were adversely affected by their support for Clinton's legislative proposals. And Brady et al. (2000) argue that the impact of national forces in elections for the House of

[2] Stokes' variance component model is: $Y_{ijk} = \alpha + \beta_i + \gamma_{ij} + A_k + B_{ik} + C_{ijk}$, where i indexes the states, j indexes the districts, and k indexes the election years.

[3] See for instance Katz (1973), Claggett et al. (1984), Brady (1985), Kawato (1987), Bartels (1998), Bawn et al. (1999), Brady et al. (2000); and Morgenstern and Potthoff (2005).

Representatives has been growing since the 1970s, with peaks in the elections of 1994 and 1998.

In the literature on Latin American parties and elections, there is no obvious consensus about the relative effects of local and national forces. The conventional wisdom assigns primacy to national political figures and a powerful executive, who is commonly portrayed as responsible for all major political initiatives. The national leadership of major parties usually explains electoral results as a public referendum on national issues such as the government's economic or social policy, even when they refer to purely local elections. For instance, analysts see the ability of Carlos Menem's government to control inflation in Argentina as the most important element behind the impressive electoral performance of Peronist (PJ) candidates across the country during the first half of the 1990s; while they blame the dismal presidency of Fernando De La Rua for having the opposite effect on radical (UCR) candidates after 2001. In Colombia, pundits frequently link the state of the civil war and the popular image of the national leadership to changes in electoral support for congressional parties. And in contemporary Venezuela, the media portrays recent elections as a referendum on the role of President Hugo Chavez, a popular yet polarizing figure whose personalist party rapidly established itself in all regions of the country. One finds similar examples signaling national events and personalities as the driving force behind legislative voting behavior in the other three Latin American countries included in our analysis.

Notwithstanding the relevance of national politics, diffusion of authority and regional concerns also suggest that partisan attitudes may fluctuate within many Latin American nations. Regional politics often provide another set of prominent political actors that many times overshadow the national party structure. In many countries, regional party organizations have significant autonomy from the national party leadership in selecting candidates, and an ongoing process of political decentralization has assigned significant power to the respective local governments. Most Latin American countries have well-established local political organizations that, independently from the national leadership, exert control over important clientelistic networks. Argentina, Brazil, Mexico and Colombia (after 1991) have directly elected governors with substantial influence over the political careers of members of congress and over large budgetary resources. Venezuela began in 1989 a process of political decentralization that included the direct elections of mayors and governors. Although Chile is a unitary country with fairly centralized parties, and a comparatively smaller population, local politics have always played an important role.[4]

In sum, the study of US congressional elections demonstrates that even in locally driven elections, national forces can occasionally have an impact. In Latin America, conventional wisdom would lead us to believe that strong presidents and national policy issues exert a strong influence in voting behavior in legislative elections, yet the influence of powerful governors, local political bosses, and more mundane provincial priorities may dampen the intensity of these national forces. In the rest of this paper, we introduce a new method that allows us to survey the electoral landscape of these seven countries to capture the actual patterns of party competition and electoral change. We measure the shift in partisan support at the local level that can be attributed to national electoral forces, relative to the total change in support given to each party from one election to the next. As we will explain in the following section, we look for common movement in the electorate across the different sub-national units for each party in each election in all seven countries.

3. Measuring the nationalization of electoral change

As the previous section made clear, scholars hypothesize that both national and local forces influence voting behavior in legislative elections. In this section, we follow Bartels (1998) in using regression to measure the magnitude of each of these components of electoral change.[5] Unlike the US case analyzed by Bartels, however, the Latin American cases we analyze are multiparty systems.[6] To properly capture change in such context we introduce an alternative model that accommodates the compositional voting data with which we must work. Our model is more sensitive to abnormal elections than Bartels' (due to fewer lags) but it is more applicable to the shorter periods of democratic electoral contestation in most Latin American countries. We also

[4] Valenzuela's (1977) analysis of Chile in the period prior to the 1973 coup highlights the political influence of local actors despite centralized government, and Eaton's (2004) work on post-1973 politics shows an institutional shift towards greater decentralization.

[5] Because he wants his analysis to reflect voting behavior in the national electorate, Bartels gives more weight in the regressions to the more populous states. In our model, we follow Bartels by weighting all of the data by the number of votes cast in each district in each election year.

[6] In the most recent election as of 2000, the effective number of parties (based on lower chamber seats) in the 18 presidential democracies of Latin America ranged from 2.18 to 7.13, with an average of 3.52 (Payne et al., 2002, Table 6.10).

offer a somewhat different interpretation of our regression results adapted to a multiparty framework, although the quantities of interest we calculate are in the same spirit as those of Bartels and Stokes. Prior to the presentation of our empirical model, we discuss methodological considerations related to the data used in estimating the model.

3.1. Multiparty electoral data

We base our analysis on the state/province vote in lower chamber legislative elections held in each country during the current democratic period (see Appendix A for information on the data and data sources).[7] The seven countries we study have varying rules for the election of legislative representatives, and quite different party systems. The US has single-member districts and Mexico uses a segmented system (our data aggregate single-member results at the state level). Venezuela used proportional representation until it moved to mixed member elections in 1993 (after the change we use only list results). The other four countries use some variant of list PR.[8]

Our analysis is done at the party level, except in Chile where we use electoral coalitions (i.e., electoral lists).[9] The United States, Argentina and Colombia are predominantly two-party systems, although other parties have accounted for a considerable portion of the vote in both Argentina and Colombia in recent years. Brazil, Chile and (more recently) Mexico, on the other hand, are clear cases of multiparty systems. In Chile, however, most parties group into one of two large, stable electoral alliances that coordinate coalition candidacies across districts. For our analysis we focus on all parties that receive at least 5 percent of the vote nationally in at least two consecutive elections and group minor parties in an 'others' category. In the United States and Colombia, this leaves us with 2 parties plus others; in Argentina 2 or 3 (depending on the election) plus others; in Mexico and Chile 3 plus others; in Venezuela between 3 and 5 plus others, and in Brazil 7 plus others.[10]

Multiparty electoral data require special methodological treatment.[11] As a type of compositional data, the vote cast for each party falls between 0 and 1. Also, the vote shares of all parties sum to 1. These constraints make standard OLS regression an inappropriate method for the analysis of aggregate electoral data (Katz and King, 1999).[12] We follow conventional modeling procedures in dealing with such constraints by applying the multivariate logistic transformation (Aitchison, 1986; Katz and King, 1999; Honaker et al., 2002; Tomz et al., 2002). We calculate the natural log of the ratio of each party's vote share to that of a designated 'base' party. This converts vote shares to an unbounded scale and makes the transformed variables collectively unconstrained. For district i with J parties, this gives us a vector of $J-1$ log ratios for each election:

$$\mathbf{Y}_i = \left[\ln\left(\frac{v_{i1}}{v_{iJ}}\right), \ln\left(\frac{v_{i2}}{v_{iJ}}\right), \ldots, \ln\left(\frac{v_{i(J-1)}}{v_{iJ}}\right)\right] \quad (1)$$

We also follow recommended procedures in analyzing multiparty electoral data by estimating our model using 'seemingly unrelated regression' (Jackson, 2002; Tomz et al., 2002). SUR provides separate regression equations for each party but allows error terms across the regression equations to be correlated. We expect error terms to be correlated across equations 'because the dependent variable is constructed

[7] In Chile, where there are no meaningful state or province designations, we use the electoral district.

[8] Districts in Argentina (provinces), Brazil (states) and Venezuela (states) have relatively large magnitudes, but in Brazil the voters select a candidate from a party list whereas in Argentina and Venezuela party lists are closed. The Chilean binominal system, in contrast, has 60 districts with a magnitude of two. In Colombia, parties can run multiple lists in a single district, but the votes received by each list are not pooled for seat allocation.

[9] Given our assumptions about parties that do not contest in every district, discussed below, it would not be appropriate to use parties as the unit of analysis in Chile.

[10] Although the PTB had only 4.5 and 4.6 percent of the national vote in 1986 and 2002, respectively, we make a minor exception and include the PTB in our analysis across all Brazilian elections.

[11] Recent work by political methodologists offers competing statistical models and techniques for appropriately dealing with multiparty data (Katz and King, 1999; Honaker et al., 2002; Tomz et al., 2002; Jackson, 2002). Here, we generally follow the method proposed by Tomz et al. (2002). However, we avoid the problem of partially contested districts by assuming that had a party presented candidates in a particular district that they did not actually contest, they would have received virtually none (0.1 percent) of the vote. Katz and King (1999) assume, instead, that if a non-contesting party had nominated candidates in a particular district, it would have received fewer votes than the parties that did nominate candidates. In Latin America, it is common to find several small parties picking up a very small share of the district vote. So even if we were to adopt a similar assumption to that used by Katz and King (1999), our results are unlikely to differ much for most countries in most years. In any case, this assumption mostly affects only the 'others' category and a few small parties in a few districts in a few years.

[12] One might minimize concerns with using OLS, in a two-party setting, by looking at the margin of one party over the other, converting the DV to a scale of −100 to 100 where observations near those endpoints appear infrequently in the sample, as in Bartels (1998).

from vote shares, such that a higher log ratio for one party means a lower log ratio for the others' (Tomz et al., 2002, 68). While separate regressions would yield the same coefficient and standard error estimates in this case (because each of the seemingly related regression equations includes the same right-hand-side variables), predicted values that account for fundamental variability, not just estimation uncertainty (King et al., 2000), would draw from the incorrect variance-covariance matrix.

Using SUR to measure electoral change and continuity in multiparty systems, we model each party's log ratio at time t as dependent on its log ratio in the prior election at time $t-1$ plus the log ratios of all other parties at time $t-1$. That is, we predict the log ratio for each party in the current election based on the partisan make-up of the district in the previous election. All other factors that might explain a party's vote share at the district level above and beyond the distribution of partisan support in the last election fall into the stochastic component. This is not to say that these other district level influences are random, rather for the purposes of this analysis we simply want to isolate the systematic shift from one election to the next, across all electoral districts, from the idiosyncratic movement that occurs at the sub-national level.

Our model is as follows:[13]

$$\begin{aligned}(Y_{i1t}, Y_{i2t}, \ldots, Y_{i(J-1)t}) \sim \\ N(y_{i1t}, y_{i2t}, \ldots, y_{i(J-1)t} \mid \mu_{i1t}, \mu_{i2t}, \ldots, \mu_{i(J-1)t}, \\ \sigma_1, \sigma_2, \ldots, \sigma_{J-1}, \sigma_{12}, \ldots, \sigma_{(J-2)(J-1)})\end{aligned} \tag{2}$$

$$\begin{aligned}\mu_{i1t} &= a_{1t} + y_{i1(t-1)}\beta_{1t} + y_{i2(t-1)}\beta_{2t} + \cdots + y_{i(J-1)(t-1)}\beta_{(J-1)t} \\ \mu_{i2t} &= a_{2t} + y_{i1(t-1)}\beta_{1t} + y_{i2(t-1)}\beta_{2t} + \cdots + y_{i(J-1)(t-1)}\beta_{(J-1)t} \\ &\vdots \\ \mu_{i(J-1)t} &= a_{(J-1)t} + y_{i1(t-1)}\beta_{1t} + y_{i2(t-1)}\beta_{2t} + \cdots \\ &\quad + y_{i(J-1)(t-1)}\beta_{(J-1)t}\end{aligned}$$

This notation emphasizes both the systematic (μ_{ij}) and stochastic components (σ_{jj}) of the model (King, 1998). The dependent variables, the parties' district-level vote shares (expressed as log ratios) at time t ($\mathbf{Y_i}$), are distributed multivariate normal with mean vector $\boldsymbol{\mu_i}$ and variance matrix $\boldsymbol{\Sigma}$. We model the different $\boldsymbol{\mu_i}$'s—the mean district vote share (as a log ratio) for each party—as a linear function of the log ratios of all the prior vote shares and the slope coefficients, $\boldsymbol{\beta}$.[14]

3.2. The magnitude of national and local forces in electoral change

For a given electoral period, the systematic component of electoral change across districts reveals the extent of national forces at work whereas the stochastic component of electoral change captures the effect of sub-national forces (Bartels, 1998; Stokes, 1967). To measure each of these components of the district vote in our multiparty framework, we use an approach based on statistical simulation (King et al., 2000). Based on random draws from the parameter estimates, we generate a distribution of predicted vote shares for each party in each election, $\tilde{\mathbf{v}}_{jt}$, conditional on a particular district-level electoral outcome in the prior election.[15] We set the prior vote shares for all parties to their average across the districts at time $t-1$ and simulate the predicted vote shares for party j at time t.[16] This gives us a set of predicted vote shares for the *typical* district, a hypothetical district that represents the average district-level distribution of support across the country. We assess the relative nationalization of party j in election t for the typical district by decomposing the distribution of predicted vote shares into a systematic and a random component.[17]

[13] In our SUR analyses, we specify with the options 'dfk' and 'small' that Stata make small-sample adjustments. With the option 'isure', we specify that Stata estimation is done by iteration, which converges to the maximum likelihood results.

[14] Within the stochastic component, the variance for each party is assumed to be constant across all i districts, but not necessarily equal for all parties. The contemporaneous covariances are also assumed to be constant across all districts, but are not restricted to be equal to 0.

[15] Actually, we calculate a set of 'predicted' values of $\mathbf{Y_i}$ (log odd ratios) based on a chosen value of x and then reverse the logistic transformation to convert these predicted $\mathbf{Y_i}$ values back into predicted values of vote shares $\mathbf{v_i}$ (Tomz et al., 2002). We do this because the data are expressed as log ratios, and so quantities of interest based on the parameter effects and standard errors cannot be interpreted directly from the model estimates. This step is automated in Clarify, a program that works in conjunction with Stata (Tomz et al., 2003).

[16] Prior district mean vote shares are weighted by the district vote at time t.

[17] By simulating 1000 predicted values for each of 1000 draws of the model parameters, we difference estimation uncertainty from the variance in the predicted values, leaving us with an estimate of the fundamental uncertainty, σ. The average of these 1000 predicted values indicates the expected vote share, while the variance is a measure of the stochastic variability across districts. By repeating all of the above 1000 times, we then average over estimation uncertainty to arrive at a 'best guess' point estimate of the expected vote as well as a point estimate of the expected variance, σ. (The variance of each set of 1000 values of both the expected vote and the expected variance would indicate the extent of estimation uncertainty in each estimate, respectively.)

In measuring the nationalization of electoral change, we first isolate change from continuity. To do so, we subtract the average vote share for party j in election $t-1$ from its predicted vote shares in election t:

$$\tilde{\boldsymbol{\delta}}_{jt} = \tilde{\mathbf{v}}_{jt} - \overline{v}_{j(t-1)} \tag{3}$$

The difference, $\tilde{\boldsymbol{\delta}}_{jt}$, represents the distribution of predicted electoral change for party j, both systematic and idiosyncratic, from the previous election.

In measuring the magnitude of the systematic component of electoral change, we average over the variability in $\tilde{\boldsymbol{\delta}}_{jt}$ to identify the typical shift to each party that is common across all districts. That is, we take the mean of $\tilde{\boldsymbol{\delta}}_{jt}$ to represent the magnitude of the shift attributable to *national forces* for or against party j from election $t-1$ to election t.

Our method thus offers a slightly different measure of national forces than that of Bartels (1998), based on the predicted mean shift in the vote rather than the intercept. Bartels uses the intercept as a indicator of the magnitude of national forces. However, intercepts will be consistent for equal-sized shifts in the vote margin across different starting points (i.e., prior vote margins) only if the slopes on the prior vote margins are one. If the slope coefficients are different from one (and they often are) and holding the magnitude of sub-national variation constant, then a shift in the average vote margin from 10 to 0, for example, will produce a different intercept than will a shift from 0 to 10 or a shift from 10 to 20. As a result, Bartels' measures of nationalization will differ in each of these cases even though the relative magnitudes of change attributable to national and sub-national forces do not. Our measure, however, would indicate an equal shift of 10 points attributable to national forces in each of these three cases, resulting in three equivalent measures of relative nationalization. The strict two-party analog to our measure of national forces is the predicted mean shift in vote margin rather than the intercept. (Given the multiparty electoral settings of Latin America, however, we study the logged ratio of party vote shares rather than vote margins, and our measure of national forces is actually the predicted mean shift in those ratios from one election to the next.) We choose this measure of national forces over Bartels' because it depends only upon the magnitude of inter-electoral change for each party—our substantive interest in this paper—and not parties' absolute levels of support relative to one another.

We measure the idiosyncratic (or 'random') element of change in district-level electoral outcomes by the variation in the distribution of predicted electoral change. The standard deviation of $\tilde{\boldsymbol{\delta}}_{jt}$, that is, represents the magnitude of the typical movements towards and away from party j in election t resulting from *sub-national forces*.

Both the mean and standard deviation of $\tilde{\boldsymbol{\delta}}_{jt}$ are measured in percentage point changes in the vote. We can therefore assess the relative magnitude of national forces, following Bartels (1998), by the ratio of national variance to national variance plus sub-national variance. National 'variance' is measured as the square of the average national shift to make it in comparable units to sub-national variance. The relative nationalization, N, is calculated as follows:

$$N_{jt} = \frac{\left(\overline{\tilde{\boldsymbol{\delta}}}_{jt}\right)^2}{\left(\overline{\tilde{\boldsymbol{\delta}}}_{jt}\right)^2 + \mathrm{Var}\left(\tilde{\boldsymbol{\delta}}_{jt}\right)} \tag{4}$$

If electoral change at the district level was completely random across districts, such that there was no common shift either for or against a party, then relative nationalization in this election would equal 0. If, on the on the other hand, a party gained, or lost, exactly the same share of the vote in all districts from one election to the next, the relative nationalization score would equal 1. In actuality, district level electoral change falls to neither one of these extremes. In each election, parties experience some change in the vote share they receive in almost every district.[18] This change can be more or less idiosyncratic across districts and, hence, more or less nationalized. If national and sub-national forces are evenly balanced, then the relative nationalization score would equal 0.5.

Using Colombia as an example, the ternary plots shown in Figs. 1 and 2 provide a graphical illustration of the quantities of interest discussed above.[19] We plot the distribution of 'predicted' vote shares for all parties, based on the model estimates $\widehat{\beta}$ and $\widehat{\sum}$.[20] The arrow points from the actual mean district vote in the previous election to the estimated district vote in the current election for all three parties. The cloud of

[18] If there was absolutely no change in the level of support accorded to a party from one election to the following across any of the districts, showing that the vote in the prior election perfectly predicts the vote in the current election, then relative nationalization would be undefined. This is an unlikely scenario to say the least.

[19] See Grofman et al. (2004) for a discussion of the use and interpretation of ternary plots for displaying patterns of multiparty competition.

[20] That is, we draw 1000 $\tilde{Y}$'s from the multivariate distribution $N(X_c\widehat{\beta}, \widehat{\sigma}^2)$ where X_c is set to the prior average (weighted) district vote shares expressed as log ratios.

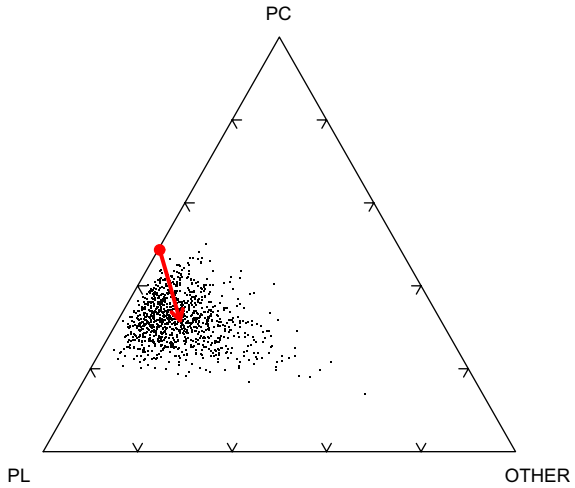

Fig. 1. Electoral change in Colombia, 1974.

points shows the entire distribution of simulated draws of the predicted vote shares at time t for all three parties, representing the extent of district-level variation. The tip of the arrow lies at the center of the cloud, such that its direction illustrates the systematic electoral shift away from some party(ies) and towards others. Thus, while the arrow indicates both the magnitude and direction of the nationalized partisan swing, the spread of the cloud illustrates the magnitude of sub-national electoral change. Overall, we see that electoral change from 1970 to 1974 was much more nationalized than the change from 1991 to 1994. Within each electoral period, the nature of the swing experienced by the main Colombian parties also differed. In 1974, we see a large nationalized drop in the vote for the Conservative Party (PC), and only a small nationalized increase for the Liberal Party (PL), as a considerable number of Colombian voters opted for third parties.[21] In 1994, on the other hand, we see a weakly nationalized shift away from small parties and towards the Conservatives. However, there is considerable variation in the change in Conservative support. In the case of the Liberal party, there is virtually no systematic increase or decrease in their vote share between 1991 and 1994, but their electoral fate varied widely across districts.

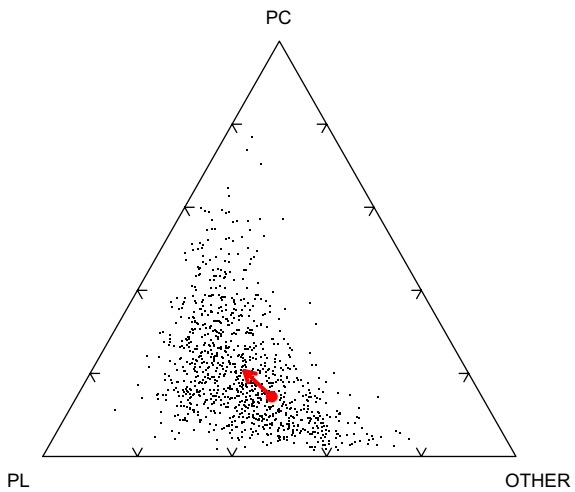

Fig. 2. Electoral change in Colombia, 1994.

In the next section we analyze Argentine, Brazilian, Colombian, Chilean, Mexican, Venezuelan and US elections to measure the national component, in size and direction, of the change in the partisan composition of the district vote. For each party, we discuss the degree of relative nationalization, as well as the levels of absolute change, in inter-election swing.

4. Results

Table 1 presents the magnitude of national and sub-national shifts in electoral support for each party, along with each party's relative nationalization. Overall the results provide cross-country evidence of both national and sub-national forces at work on the electorate. The findings illustrate the widespread influence of sub-national forces in electoral change. They also reveal the drastic impact that intermittent nationalized forces have on partisan support across some countries.

Fig. 3 plots, for each country and for the complete data set, the estimated magnitudes of national versus sub-national components of electoral change for all parties in every election. Major parties are plotted as solid points, while hollow points represent the 'others' category. The $Y = X$ line represents a relative nationalization score of 0.5. It is important to note that a relative nationalization score of 0.5 can occur at low-levels of absolute electoral change (south-west quadrant) or at high-levels of absolute electoral change (north-east quadrant).

The plots illustrate major differences across countries in terms of both relative nationalization and absolute change. In the majority of elections in both Mexico and Venezuela, national forces are stronger than sub-national forces. Hence, we classify electoral change in these countries as highly nationalized. Yet, Venezuela experienced much greater absolute levels of national change than did Mexico. In stark contrast to both of these countries, sub-national forces account for most

[21] See Appendix A for complete names of all political parties included in our analysis.

Table 1
The nationalization of electoral change

	National forces	Sub-national forces	Relative nationalization
Argentina			
1985			
PJ	−13.4	14.6	0.46
UCR	−4.9	8.0	0.26
Other	18.3	17.7	0.51
1987			
PJ	16.8	10.8	0.70
UCR	−6.3	7.4	0.42
UCD	6.9	8.8	0.39
Other	−17.4	7.9	0.82
1989			
PJ	2.9	6.7	0.18
UCR	−8.3	4.9	0.74
UCD	4.0	6.7	0.26
Other	1.4	8.5	0.05
1991			
PJ	−2.9	9.0	0.11
UCR	−1.2	7.3	0.06
UCD	−3.5	9.5	0.20
Other	7.6	11.1	0.32
1993			
PJ	2.8	5.7	0.21
UCR	1.5	5.5	0.09
Other	0.8	7.9	0.04
1995			
PJ	1.1	8.8	0.05
UCR	12.6	8.7	0.67
Other	−13.7	9.3	0.67
1997			
PJ	−7.4	9.5	0.38
UCR	3.5	10.6	0.13
Other	3.9	16.2	0.07
1999			
PJ	−5.7	8.2	0.33
UCR	−2.0	9.1	0.07
Other	7.7	14.4	0.22
2001			
PJ	0.0	8.5	0.03
UCR	−21.3	10.0	0.81
ARI	8.6	16.8	0.20
Other	12.8	12.5	0.50
2003			
PJ	3.4	17.1	0.06
UCR	−4.6	22.4	0.10
ARI	3.7	10.3	0.11
Other	−2.5	19.8	0.06
Brazil			
1990			
PMDB	−24.7	12.2	0.80
PDT	2.7	9.1	0.08
PFL	−8.8	3.0	0.89
PT	3.5	5.3	0.31
PTB	1.7	7.6	0.05
PPB	5.9	8.4	0.33
PSDB	9.0	7.4	0.61
Other	14.0	12.1	0.58

(*continued on next page*)

Table 1 (*continued*)

	National forces	Sub-national forces	Relative nationalization
1994			
PMDB	−0.3	9.9	0.04
PDT	−3.5	4.9	0.37
PFL	−0.6	11.4	0.05
PT	2.1	6.3	0.11
PTB	−0.3	5.7	0.06
PPB	4.1	13.8	0.09
PSDB	5.4	10.8	0.20
Other	−7.1	10.9	0.33
1998			
PMDB	−3.3	12.7	0.12
PDT	−1.5	4.6	0.17
PFL	4.6	11.5	0.14
PT	0.4	6.8	0.03
PTB	0.2	4.7	0.03
PPB	−4.5	8.0	0.28
PSDB	2.7	5.8	0.19
Other	1.4	6.2	0.07
2002			
PMDB	−2.6	5.3	0.22
PDT	−0.3	3.0	0.05
PFL	−4.9	7.5	0.32
PT	5.1	5.5	0.46
PTB	0.6	7.5	0.04
PPB	−3.2	4.2	0.39
PSDB	−1.7	11.0	0.07
Other	7.2	6.7	0.54
Chile			
1993			
CON	3.5	9.2	0.14
ALIANZA	1.9	7.6	0.07
COM	6.8	6.5	0.53
Other	−12.2	3.8	0.90
1997			
CON	−4.3	8.2	0.22
ALIANZA	−0.8	7.6	0.03
COM	0.9	3.0	0.09
Other	4.2	5.8	0.35
2001			
CON	−3.3	7.4	0.17
ALIANZA	7.3	6.2	0.58
COM	−1.5	6.5	0.08
Other	−2.5	6.9	0.17
Colombia I			
1974			
PL	4.4	7.5	0.26
PC	−17.1	5.9	0.89
Other	12.7	8.0	0.72
1978			
PL	−0.7	3.5	0.06
PC	7.0	3.2	0.82
Other	−6.3	4.6	0.65
1982			
PL	1.7	4.5	0.16
PC	0.6	2.9	0.07
Other	−2.3	3.7	0.34

Table 1 (*continued*)

	National forces	Sub-national forces	Relative nationalization
1986			
PL	−8.2	8.6	0.48
PC	−2.5	7.0	0.13
Other	0.7	9.3	0.57
1990			
PL	9.1	19.3	0.20
PC	−6.9	19.0	0.14
Other	−2.3	18.3	0.07
Colombia II			
1994			
PL	1.9	10.2	0.06
PC	6.4	13.6	0.18
Other	−8.3	14.3	0.26
1998			
PL	−3.7	12.3	0.10
PC	−4.5	15.5	0.12
Other	8.2	15.1	0.23
2002			
PL	−12.3	16.8	0.35
PC	−2.5	17.3	0.07
Other	14.8	21.7	0.32
Mexico			
1994			
PRI	−9.8	4.5	0.82
PAN	7.6	4.8	0.71
PRD	7.1	4.8	0.69
Other	−4.9	1.6	0.90
1997			
PRI	−8.9	5.5	0.72
PAN	0.0	5.8	0.03
PRD	7.3	5.7	0.62
Other	1.6	2.3	0.31
2000			
PRI	−0.9	4.0	0.07
PAN	13.4	6.2	0.82
PRD	−7.8	5.6	0.65
Other	−4.7	1.2	0.93
2003			
PRI	5.9	5.8	0.50
PAN	−7.6	5.6	0.64
PRD	−2.7	6.4	0.18
Other	4.5	3.0	0.69
Venezuela			
1963			
AD	−14.6	5.6	0.87
COPEI	4.9	3.9	0.61
URD	−8.7	5.3	0.72
Other	18.4	8.3	0.83
1968			
AD	−5.9	5.3	0.55
COPEI	2.7	4.5	0.28
URD	−8.0	2.2	0.92
Other	11.1	6.3	0.75
1973			
AD	19.8	4.0	0.96
COPEI	6.8	3.3	0.81

(*continued on next page*)

Table 1 (*continued*)

	National forces	Sub-national forces	Relative nationalization
URD	−6.8	0.9	0.98
MAS	5.3	3.1	0.75
Other	−25.0	3.4	0.98
1978			
AD	−4.2	4.1	0.51
COPEI	10.1	3.6	0.89
URD	−1.8	0.6	0.88
MAS	0.6	1.7	0.14
Other	−4.8	2.9	0.73
1983			
AD	10.5	3.2	0.91
COPEI	−11.5	2.9	0.94
URD	0.1	0.6	0.05
MAS	−0.3	2.3	0.06
Other	1.2	1.8	0.32
1988			
AD	−6.0	2.8	0.82
COPEI	3.6	3.0	0.59
URD	−0.5	0.6	0.47
MAS	3.3	4.5	0.36
Other	−0.4	2.6	0.06
1993			
AD	−21.2	6.3	0.92
COPEI	−10.0	6.0	0.73
MAS	2.5	13.1	0.05
Other	30.3	11.3	0.87
1998			
AD	−1.3	7.0	0.07
COPEI	−11.8	6.9	0.73
MAS	−1.4	5.6	0.12
MVR	21.4	11.5	0.78
PRVNZ	9.3	5.7	0.73
Other	−16.2	9.8	0.73
2000			
AD	−9.9	5.0	0.79
COPEI	−7.8	3.2	0.84
MAS	−3.1	6.3	0.28
MVR	26.1	11.7	0.83
PRVNZ	−3.9	9.0	0.24
Other	−1.3	13.5	0.05
United States			
1976			
DEM	−1.9	5.0	0.14
REP	2.3	5.2	0.18
Other	−0.4	2.9	0.07
1978			
DEM	−1.5	5.4	0.08
REP	2.2	5.5	0.15
Other	−0.8	1.9	0.20
1980			
DEM	−4.1	8.5	0.19
REP	3.8	8.3	0.18
Other	0.2	3.2	0.02
DEM	5.8	10.2	0.25
REP	−5.1	10.3	0.20
Other	−0.8	1.7	0.22

Table 1 (*continued*)

	National forces	Sub-national forces	Relative nationalization
1982			
DEM	−3.2	5.8	0.24
REP	3.9	5.7	0.32
Other	−0.7	1.7	0.24
1986			
DEM	2.4	10.3	0.07
REP	−1.9	10.3	0.05
Other	−0.4	0.9	0.26
DEM	−0.5	6.3	0.03
REP	1.0	6.3	0.04
Other	−0.5	0.8	0.33
1990			
DEM	−0.5	5.8	0.03
REP	0.2	5.6	0.02
Other	0.2	2.4	0.02
1992			
DEM	−0.3	4.3	0.03
REP	2.1	4.3	0.20
Other	−1.8	0.3	0.98
1996			
DEM	−6.4	7.6	0.41
REP	6.6	7.5	0.43
Other	−0.3	0.2	0.66
DEM	3.9	6.0	0.30
REP	−3.8	6.1	0.29
Other	−0.2	0.3	0.30
1998			
DEM	−1.2	7.5	0.04
REP	1.5	7.5	0.06
Other	−0.4	0.1	0.88
2000			
DEM	−1.2	7.7	0.04
REP	−4.2	7.2	0.26
Other	5.3	8.2	0.30
2002			
DEM	−2.3	8.6	0.08
REP	3.1	8.0	0.15
Other	−0.8	3.2	0.10

of the electoral change across every election in both Chile and the United States. These countries fall in the low nationalization category. In an intermediate category lie Argentina, Brazil and Colombia. In these countries, sub-national forces predominate, but intermittent nationalized elections do appear. Below we review the most important results for each country within these three categories.

4.1. High nationalization: Venezuela and Mexico

Venezuela and Mexico are the two countries where electoral change has been predominantly nationalized. While the magnitudes of electoral swings in Venezuela have been much larger than in Mexico, national forces have tended to swamp local forces in the majority of elections in both countries. A comparison of the Venezuelan and Mexican plots in Fig. 3 illustrates this pattern.

In Venezuela, electoral support for the major parties has shifted in a common fashion in almost every election since the first democratic election of 1958. Until 1993, nationalized shifts dominated total electoral change for the two major parties of this period, AD and COPEI. The results also reflect the demise of the decades old two-party system that began in 1993. Both AD and COPEI have confronted adverse national shifts which eroded the tight control they had over all the electoral districts. AD was badly hit in 1993, when voters uniformly withdrew support for what had been the largest Venezuelan party for almost 50 years. COPEI's debacle followed three straight losses that left the party as a small minority in almost every district.

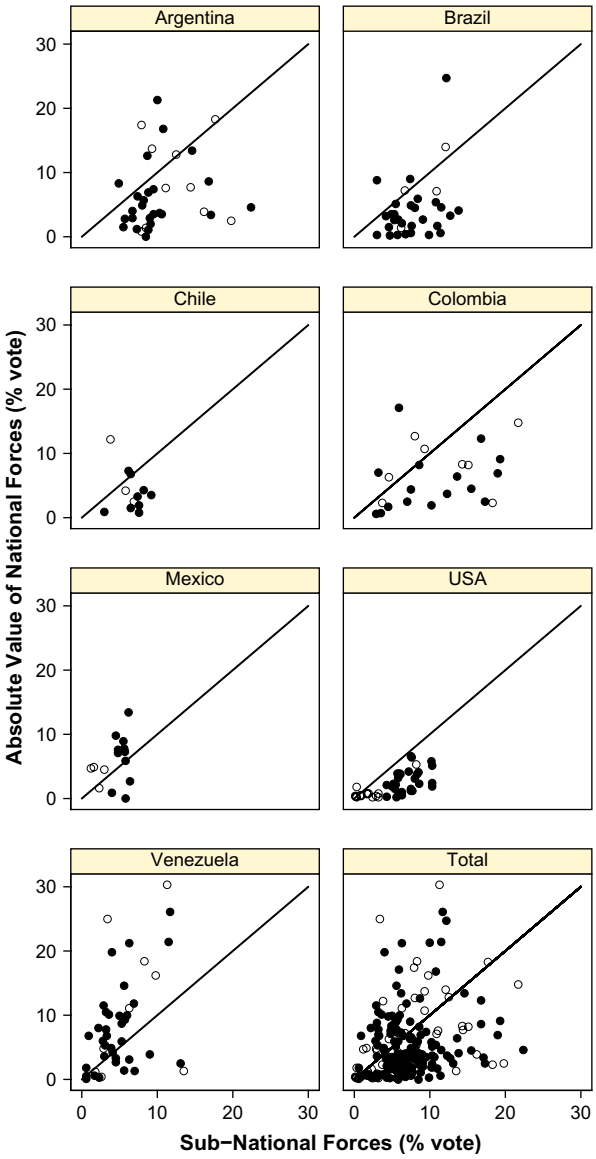

Fig. 3. National vs. sub-national forces at the district level.

In recent elections, national forces had a strong positive impact on President Hugo Chavez's MVR, which became the largest party in Venezuela. Our results illustrate that the ascendance of the MVR in legislative elections has occurred in a nationalized fashion, thus perpetuating a party system in which electoral change is highly homogeneous across the country.

For other smaller parties the national component of the change has at times also been important. Between 1963 and 1978, the decline of the URD followed a highly nationalized pattern. Support for the socialist MAS has followed a mostly idiosyncratic pattern over the last 30 years, with only their first election showing a highly nationalized pattern. And for the recently created PRVNZ, its debut in the electoral arena was fairly nationalized, but subsequent change in support lacked a common pattern across electoral districts.

The examination of Mexican elections shows that changes in partisan support across Mexico's 32 states follow a rather common trend. For all three major parties, the main component of inter-election change in voter support is the national component. The results demonstrate how a highly nationalized trend resulted in the historic end of the PRI's one-party dominance. We see that in both 1994 and 1997, national forces were pulling support away from the PRI in the typical state by about 9 percent over the previous vote, while at the same time pushing support towards the PAN and PRD. After the nationalized election of 1997, the PRI relinquished its majority in the Chamber of Deputies for the first time in over seven decades and in 2000 it lost the presidency. While the magnitude and direction of national shifts changed over time, idiosyncratic state-level shifts for the PRI hovered around 4–6 percent across elections.

The vote for the other two major parties, PAN and PRD, also tended to change in a uniform style across states. Both parties benefited from very nationalized elections in 1994. The midterm election of 1997 benefited the PRD in a uniform fashion—it gained ground in 31 out of 32 states (62 percent relative nationalization)—but for the PAN state level electoral change was more regionalized. However, the PAN experienced an impressive common gain of over 13 percent in the following election of 2000, which coincided with its capture of the country's presidency. National forces subsequently punished the PAN in the midterm elections of 2003, when nationalized movement accounted for 64 percent of the change in voter support.

Our analysis of electoral change in Mexico demonstrates how a pattern of nationalized inter-election change can at times coincide with regionalization in the absolute levels of partisan support. The literature on Mexican voting behavior has highlighted the appearance of a regional cleavage in the late 1980s and early 1990s, which led the PRD to become the main challenger of the PRI in the south of the country and the PAN to become the main challenger of the PRI in the north (Domínguez and McCann, 1996; Klesner, 1993; Magaloni, 1999; Poiré, 1999). Our results suggest that subsequent electoral shifts consolidated this new partisan make-up across Mexico. The positive nationalized shifts for the PAN and PRD in election of 1994, for instance, solidified their regional bases of support that were already present by the election of 1988 (Klesner, 1995).

4.2. Intermittent nationalization: Argentina, Brazil and Colombia

A different pattern of electoral change is shown for Argentina, Brazil and Colombia. In these countries changes in voter support is mostly influenced by sub-national forces but nationalized elections have at times great impact. Intermittent nationalization for major parties in each of the countries stands out in the plots shown in Fig. 3, which also reflect how sub-national forces still predominate. In fact, the absolute size of sub-national change is at times much greater in these three countries than in the next set of countries characterized by low nationalization.

Our examination of twenty years of Argentine elections shows that although changes in support for both major parties, the Peronists (PJ) and the Radicals (UCR), has been frequently uneven across provinces, it has been punctuated by fairly large nationalized shifts. The UCR faced highly nationalized shifts in 1989, 1995 and 2001, whereas the PJ faced a nationalized shift in 1985 and 1987 and moderate nationalized shifts in 1997 and 1999.

For instance in 1985, soon after democratization, the Peronists suffered a rather nationalized loss reflecting the bitter inner struggle between a growing renewal movement that presented dissident lists and the party's old guard, which still controlled the party label. This systematic movement away from the PJ did not lead to a positive shift for the UCR, the other major party, as former Peronist voters switched their support to various dissident lists, provincial parties and others competing across the 23 Argentine provinces and the City of Buenos Aires. In the following election, after most of the inner struggles of the party had been overcome, 70 percent of the change in support for the PJ was nationalized, and national forces provided a boost of about 17 percent of the provincial vote, which made up for the losses experienced in the prior election.

In 1989 and 2001 it was the UCR that suffered sharp nationalized drops in electoral support while the PJ experienced uneven results across districts. The 1989 nationalized backlash against the UCR government occurred in the context of a severe economic crisis and food riots and was followed by the anticipated transfer of the presidency (before the constitutionally mandated term). The second and most dramatic national shift occurred in the midterm election of 2001, immediately preceding the resignation of President Fernando de la Rua and the subsequent economic collapse. In 1995, the nationalized shift for the UCR reflects a common move upwards after heavy losses in prior years. In short, the sharp nationalized movements that occur in about a third of Argentine elections reveal that common electoral shifts can have a significant impact on the vote congressional candidates get at the provincial level, even if most of the time this change lacks a nationalized pattern.

Our examination of Brazilian elections confirms the importance of regional forces in the politics of Brazil. This is most evident in the elections of 1994 and 1998, where the sub-national component of change is very large for all major parties. The results for the 1990 election, however, show a sharp nationalized change in voter support away from the PFL and the PMDB, which suffered major defections, and towards the emerging PSDB, where many PMDB dissidents went. The effect of this nationalized shift for the PMDB was highly significant, reducing its legislative contingent by more than half.[22] For the leftist PT, the change in support from 1998 to 2002, the year in which it won the presidency, was moderately nationalized. In this last election a positive national shift towards the PT increased its typical district (state) voteshare by over 5 percent. The smaller PPB and PDT parties have also experienced one moderately nationalized election: the former in 2002 and the latter in 1994. For the PTB, however, the national component of electoral change has been low, never reaching more than 6 percent of total change.

The results for Colombian elections presented in Table 1 are divided in two parts because voting districts were changed following the constitutional reform of the early 1990s. The split also reflects two periods in Colombian politics, the first competitive phase that followed the end of the National Front,[23] and the subsequent volatile period of renewed civil conflict since the 1990s. These phases also differ in terms of the relative nationalization of electoral change. The first shows a common move away from the Conservatives, while the second shows that change in partisan support has been mostly state-specific.

The election of 1974, for instance, shows a sharp nationalized shift away from the Conservatives, which no longer benefited from an artificially high influence due to the consociational agreements of the National Front. This exodus, however, did not translate into an equal size nationalized shift towards their historic adversaries, the Liberals. Most of the conservative exodus moved in

[22] The PMDB went from having 48.1 percent of the seats after the 1986 election to 19.3 percent after the 1990 election.

[23] The National Front was a sixteen-year agreement between the Liberal and Conservative party following the civil war and subsequent military government of the late 1950s. It established a coalition government in which both parties divided all elected and administrative positions equally.

a highly unified fashion towards smaller parties and alternative alliances. After a favorable nationalized shift in 1978, the Conservatives entered an era in which the national component has been relatively small, never surpassing 18 percent of total change. For the major party of Colombia, the Liberal Party, the sub-national component of electoral change has been dominant. Still, the Liberals faced moderately nationalized shifts in 1986 and 2002. Although common movement still contributes to electoral change in Colombia, the analysis shows that during the last thirty years Colombian voters have been increasingly influenced by sub-national factors. When one of the two major parties experiences a common loss across districts, related nationalized gains seem to go to various small parties and alliances and not to the other major party.

4.3. Low nationalization: Chile and the United States

Our analysis shows that national forces play a minor role in electoral change in Chile and the US. The plots for these countries, shown in Fig. 3, clearly illustrate how the sub-national component of electoral change for major parties has been greater than the national component. In addition, the two have also experienced relatively low levels of absolute change overall.

The examination of the four Chilean elections since re-democratization shows that although absolute levels of support for the major electoral alliances have been relatively constant, voters who switched their support usually reacted differently across districts. For the governing *Concertación* coalition, the nationalized component has been between 14 percent and 22 percent of the total electoral change. The opposition *Alianza* experienced a moderately nationalized shift in 2001, which had a favorable impact of more than 7 percent over the previous district vote. The Communist Party also experienced one moderately nationalized performance when it first emerged onto the field of electoral competition in 1993, but in subsequent elections support for the Communists changed in highly uneven ways across the different districts.

Overall, the evidence for Chile suggests that since re-democratization 'swing voters' have not responded in a common way throughout the country. These results reveal how sub-national forces can dominate even within a centralized and unitary governmental structure. This finding also fits well with recent analyses of Chilean electoral law that highlight the lack of inter-coalition competition and the prevalence of safe-districts (Navia, 2006). The two-member electoral districts introduced by the binomial system, in combination with sufficiently large captive constituencies, have led to the proliferation of 'safe districts' (i.e., where one seat is habitually won by each of the two major coalitions and there is almost no chance of either side doubling to win both seats). The lack of inter-coalition competition in most districts, according to this perspective, has made legislative elections unsurprising affairs, and swing voters more attuned to intra-coalition options at the district level than national trends.

Lastly, our analysis of electoral change in the United States over the thirty year period beginning in the early 1970s reveals the absence of a nationalized pattern, a finding that concurs with prior historical analyses of electoral change in the US (Claggett et al., 1984; Vertz et al., 1987). Our results are also partly consistent with findings from Brady et al. (2000), which show that changes in the contests of 1994 and 1996 were the most nationalized in their sample. We found national change to represent a bit over 40 percent of total electoral change for both parties in 1994 and around 30 percent in 1996. In 1994 there was a nationalized shift of close to 7 percent in the typical state towards the Republican Party and away from the Democratic Party, coinciding with the GOP's national campaign strategy under the 'Contract with America.' While in 1996, the Democratic Party appears to have been helped by a smaller national shift of close to 4 percent of the district vote. Moderately nationalized shifts also occurred in the elections of 1982 and 1984.

However, our results do not support Brady et al.'s (2000) claim of an increasing role for national forces in US elections.[24] Our sample, which includes the recent elections, of 2000 and 2002, instead confirm the overwhelming influence of sub-national forces portrayed in most of the literature and reject the notion that the elections of 1994 and 1996 were the beginning of a new phase of nationalized elections. From a comparative perspective, electoral change in the US appears to be dominated by sub-national forces, at least since the 1970s. In contrast to places like Mexico or Venezuela where party systems were fundamentally altered and change moved mostly in common fashion, we have not seen drastic shifts in electoral support for major US parties.

Our results also show that the relative nationalization of both major parties is not always identical; this is because our analysis, unlike prior analyses of nationalization in US elections, incorporates the vote for 'third-parties.' In fact the most nationalized shifts observed

[24] It should be noted that Brady et al. (2000) use a different measure of nationalization based on a method modified from Gelman and King (1990).

throughout the period analyzed occurred in 1992 and 1998 and belong to the 'others' category. Both represent common shifts away from third parties. The magnitudes of these shifts, of course, are very small.

These patterns of electoral change also illuminate some aspects of the current debate about the regional polarization of partisan support in the US. Pundits commonly remark that the country has become split into two distinct camps characterized as predominantly Republican 'red' states and predominantly Democratic 'blue' states (Brooks, 2001), and that fundamental divisions between these two groups of states have increased in the last elections (Dionne, 2003). If the US is indeed becoming increasingly polarized nationally, we should expect inter-election change to be less uniform across states. As the red states become more red and the blue states more blue, so to speak, electoral change should move in opposite directions in different regions of the country. Although we show that sub-national forces have overwhelmed national forces of electoral change in the in the last three elections analyzed (1998–2002), we find similar results for the 1986–1990 period. The sub-national component of change has been high, but the magnitude of these shifts has been relatively low. In this respect, our results seem consistent with historical evidence of the stability of partisan support. They are also consistent with those who argue that divisions among US citizens, both on policy preferences and voting behavior, are much smaller than hypothesized by those stressing a regional divide (Fiorina et al., 2004). Recent analyses have shown that since the 1960s there has been a sharp decline in one-party dominance in US states (Ansolabehere et al., 2006), that there is no evidence of a downward trend in the number of swing states, and that the two parties are not more spatially segregated than in the past (Glaeser and Ward, 2006). Taken together these findings suggest that the sub-national forces of change we identify reflect mostly state-specific factors and not divergent regional responses to a common national stimuli.

5. Conclusions

In this paper, we propose a way to measure common partisan shifts across electoral districts in multiparty systems and apply it to the study of electoral behavior in six Latin American countries and the United States. We develop a statistical model that reveals the relative contribution of national vs. sub-national forces to inter-election change, and provides intuitively appealing measures of change for individual parties over time.

The findings presented in this paper shed new light on patterns of electoral support in legislative elections in the Americas. Our analysis of 26 parties in 60 congressional elections shows variations in patterns of partisan support over time and across countries. We find major differences in the ratio of nationalized change to total change in partisan support across countries as well as variation in the magnitudes of national forces and sub-national forces experienced by different parties over time. Of the seven countries analyzed, Mexico and Venezuela are the only ones where national forces dominate. These nationalized patterns of electoral change contrast with the mostly district-specific change evident in Chile and the US. While the sub-national component of electoral change tends to dominate, major parties in Argentina, Colombia, and occasionally in Brazil have also experienced highly nationalized shifts. Overall, the results for five of the seven countries demonstrate the underlying potential of a common partisan bond on state-level outcomes.

By specifying the degree and magnitude of nationalized change across different party systems, our analysis helps to pave the way for further comparative studies. At this time, we lack systematic cross-national studies of the causes or consequences of nationalized electoral shifts. The literature has often speculated that the presence, or absence, of common electoral tides linking party candidacies across districts or states affects the electoral strategies of legislators, the cohesion of legislative parties, and the governmental priority given to national political issues vis-á-vis regional concerns. Appropriate measures of nationalization are necessary to examine the empirical link between nationalized electoral change and the behavior of politicians. As the literature on US elections has noted, if politicians believe that their electoral fortunes depend primarily upon local issues unrelated to the fate of the party as a whole, they will have fewer incentives to invest in protecting the national reputation of the party and greater incentives to pursue a 'personal vote,' which is likely to foster a membership seeking particularistic goods. Although national party leaders may have other mechanisms to foster party discipline and advance a national agenda, the primacy of sub-national forces in electoral change promotes a membership of heterogeneous interests and forces national leaders to be proactive in their quest for party unity.

Our measures of national change also reveal important aspects of the transformation of party systems, thus illuminating broader historical processes. This is the case for Mexico and Venezuela and to a lesser extent for Colombia and Argentina. For Mexico we show the

change away from one-party rule and towards a three-party competition, and for Venezuela's we show the demise of the resilient two-party system and the rise of the new 'Chavista' movement. We also indicate the direction and national impact of these shifts and discriminate between the parties that eventually benefited from a systematic influx of new voters.

To conclude, this paper complements other analyses of sub-national patterns of partisan configuration and change, by examining election-by-election change across parties and drawing appropriate cross-country comparisons given Latin America's multiparty systems. We also hope to have contributed to Donald Stokes' goal of comparing patterns of electoral change in the US with those of other countries. Both the causes and consequences of nationalized patterns of electoral change certainly demand further scrutiny; we believe that our model and our findings reflect an important step forward in this research agenda.

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Appendix A. Party names and data sources

A.1. Argentina

Parties: P. Justicialista (PJ), Unión Cívica Radical (UCR), Unión de Centro Democrático (UCD).

Data source: 1983–2003 electoral returns are from the Dirección Nacional Electoral (Departmento Estadisticas), Ministerio del Interior.

Notes: In 1985, 'UCD' was called Alianza del Centro. We include the Frepaso vote from 1995 to 2001 with the UCR vote. In 2001 in the province of San Luis, Frepaso runs with ARI instead of UCR. However, we compare UCR in 2001 in San Luis to Alianza (UCR and Frepaso) in 1999. In 2003, ARI does not run in San Luis and Frepaso had disappeared. In 1987, Tierra del Fuego did not renew deputies. We used results for the Provincial Deputy election instead. In 2003, in the Capital, we attribute to the PJ the entire vote for a coalition of parties, of which PJ was a partner. In 2003, in Corrientes, all national parties competed in coalition against a local party. We split the coalition vote equally between the PJ and the UCR and give 0.1 percent to the UCD.

A.2. Brazil

Parties: P. do Movimento Democrático Brasileiro (PMDB), P. da Frente Liberal (PFL), P. Populista Brasileiro (PPB), P. da Social Democracia Brasileira (PSDB), P. dos Trabalhadores (PT), P. Democrático Trabalhista (PDT), P. Trablhista Brasileiro (PTB).

Data source: Electoral data are from Jairo Nicolau (IUPERJ), 'Brazilian Electoral Data (1982–2002),' available at http://www.iuperj.br.

Notes: In 1990, a new state, Tocantins, was created out of Goias. Given the substantial boundary changes, our analysis does not include electoral change from 1986 to 1990 in Goias. Vote figures for PPB in 1986, 1990 and 1994 include votes for its descendant parties.

A.3. Chile

Parties/coalitions: Concertación de Partidos por la Democracia (CON), Democracia y Progreso 1989/Unión por el Progreso de Chile 1993/Unión por Chile 1997/Alianza por Chile 2001 (ALIANZA), P. Comunista de Chile (COM).

Data source: 1989–2003 electoral returns downloaded from the Chilean Ministerio del Interior at http://www.elecciones.gov.cl/indexf.html.

A.4. Colombia

Parties: P. Liberal, P. Conservador.

Data source: Vote share data for 1970 and 1974 come from Jorge Mario Eastman (1982). Vote shares for 1974 through 1986 are from 'Scott Morgenstern's District Level Electoral Data Website,' available at http://www.pitt.edu/~morgens/componentsdata.html. The total number of votes cast in each state for 1970–1982 come from Eastman (1982), except for the states of Atlántico and Bolivar in 1982 (which, according to Eastman's footnote, were still incomplete when his book was published). For 1982, vote totals for these two departments come from Gómez Pineda (1994). We were not able to track down total votes cast in each state for 1986; therefore 1986 totals are the average of 1982 and 1990. We downloaded 1990 vote share data and total votes casts from Georgetown University's Political Database of the Americas. Complete data for 1991–1994, come from the official publication of the Colombian Registraduria Nacional del Estado Civil (1994). We downloaded data for 1998–2002 from the website of the Registraduria, at http://www.registraduria.gov.co/. We are missing vote share data for two small states, San Andrés and Guaviare, but given that all of

the data are weighted by total votes cast the missing data should not affect our results much.

Notes: We split our analysis of Colombia into two periods because of the changes in state boundaries following the creation of seven new states in the 1991 Constitution. Colombia I includes elections from 1970 to 1990. We include the last election of the National Front for the purpose of measuring the extent of electoral change with the return to fully competitive elections. Colombia II includes legislative elections from 1991 to 2002.

A.5. Mexico

Parties: P. Revolucionario Institucionalista (PRI), P. Acción Nacional (PAN), P. Revolucionario Democrático (PRD).

Data source: Data for 1991 through 2003 downloaded from the Mexican Instituto Federal Electoral, at http://www.ife.org.mx/. We include results from deputies elections by 'relative majority' in single member districts, aggregated at the state level.

Notes: For 2000, we include votes for Alianza por Cambio (PAN and P. Verde Ecologista de Mexico) in the PAN figures, and votes for Alianza por Mexico (PRD, PT, Convergencia, PAS, PSN) in the PRD figures. In 2003, we include votes for PV (P. Verde) and PRI-PV alliance in the PRI figures.

A.6. United States

Parties: Democratic P. (DEM), Republican P. (REP).

Data source: Professor Jim Snyder (Department of Political Science, MIT).

Notes: Cross-filing allows individuals to run as the candidate for multiple parties in a single election. Multiple parties are listed for a single candidate in CT, NY, PA, SC, and VT. Where individual party subtotals are not given, we count the candidate's entire vote share towards the vote for their main party affiliation. We exclude four states from our analysis (AR, FL, LA, and OK) because votes were not recorded when candidates ran unopposed.

A.7. Venezuela

Parties: Acción Democrática (AD), Partido Social Cristiano de Venezuela (COPEI), Unión Republicana Democrática (URD), Movimiento al Socialismo (MAS), Movimiento Quinta Republica (MVR), Proyecto Venezuela (PRVNZ).

Data source: Jones and Samuels (2006).

Notes: In 1993, Venezuela switched from a proportional representation (PR) system to a mixed electoral system. We analyze party vote shares of PR votes only, such that our analysis is comparable across all elections in the current democratic period.

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