

Elite Polarization and Voting Turnout in Latin America, 1993-2010
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Abstract

Despite substantial advances in political participation across Latin America, relevant data from the region reveals an important cross-national and temporal variation in voter turnout. Unlike existing region-specific explanations of voter turnout, but in line with research on advanced democracies, we show here that *actual* electoral mobilization in Latin America is linked to the ideological and programmatic shifts experienced by political elites since the 1990s. Specifically, we first suggest that by setting clear programmatic stances and differentiation polarization allows voters to better understand the costs and benefits of turning out to vote. When more public policy is at stake, elections become more consequential, and thus voters are more likely to turnout. Second, polarization facilitates the formation of party brands that structure the policy preferences of voters, easing their mobilization to the polls. Our results, using elite survey data and electoral turnout for eighteen Latin American countries during the 1993-2010 period, provide strong statistical support for the *elite polarization-turnout hypothesis*, and remain robust to different specifications of the model. Substantially, an increase in one standard deviation in elite polarization increases turnout –measured as a percentage of registered voters– by about 7 percentage points. This effect increases to 9 percentage points when turnout is measured as a percentage of the voting age population.

1. Introduction

The third wave of democratization in the developing world created an opportunity for millions of citizens to participate in politics. In Latin America, for example, the vast majority of citizens can now vote in competitive elections. Yet a careful examination of relevant data from the region reveals important cross-national and temporal variation in voter turnout (see Figure 1).¹ Given the important consequences of turnout, scholars of Latin American politics have devoted time and effort to study its determinants. Comparative accounts have primarily explained variation in turnout rates across the region using either institutional (Pérez-Liñán 2001; Fornos, Power and Garand 2004; Kostadinova and Powell 2007; Carreras 2010) or socio-economic factors (Carreras and Castañeda-Angarita 2013). While insightful, the aforementioned studies overlook important aspects of political competition.

Unlike the aforementioned studies, we ask here whether the substantial ideological and programmatic shifts experienced by Latin American political elites since the 1990s –i.e. elite polarization– affects voter turnout. In our argument, polarization of political elites plays a key role in mobilizing voters to the polls by providing them with clearly differentiated policy options. Our research also contrasts with extant arguments of political mobilization in the region like clientelism (Kitschelt and Wilkinson 2007) or segmented representation (Luna 2014) because rather than aiming at either vote-buying or creating political coalitions, we build on the idea that elite polarization increases the stakes of elections and thus affects voter turnout. Furthermore, we differentiate this supply-side logic from other demand-side mechanisms that directly link social polarization to electoral participation rates. Specifically,

¹ For example, electoral turnout has been as low as 28% in El Salvador during the 2003 elections, but as high as 86% in the 2006 Peruvian election. Turnout in Ecuador, in addition, increased from 47% (1998) to 75% (2006) while turnout in Peru went from 68% (1998) to 83% (2010).

we put forth two main answers that account for the link between elite polarization and electoral turnout: polarization not only mobilizes voters by making explicit the costs and benefits of turning out to vote, but also clarifies voters' choices and generates party attachments, which in turn increases turnout.

Two reasons make the Latin American context particularly interesting for testing our argument. First, the economic reforms promoted by the Washington Consensus dramatically altered the political landscape of most Latin American countries during the 1990s. Several new political parties (predominantly from the left) whose rhetoric and policies challenged the traditional debates at the elite level became successful players in elections across the region and political realignment occurred (Singer 2016: 182; Roberts 2013, Lupu 2016). As a result, the scope of programmatic politics increased dramatically over the 1995-2010 period, polarizing numerous party systems across the region (Singer 2016). Furthermore, several cases in Central America inaugurated their new democratic experience from post-conflict societies, some of which are still the most polarized countries across the Americas (e.g. Nicaragua and El Salvador). In general, although elite polarization has influenced both public opinion and voting behavior in Latin America (Zechmeister and Corral 2013; Harbers et al. 2013; Singer 2016), we still do not know how elite polarization affects turnout across the region.

We test the *elite polarization-turnout* hypothesis using an original dataset that covers all democratic presidential elections that occurred in Latin America during the 1993-2010 period.² We measure elite polarization using survey data from individual legislators of more than ninety political parties observed over the aforementioned period. Our findings suggest

² Please see the Online Appendix for a list of all the country-elections considered.

that an increase in one standard deviation in polarization produces an increase of about 7 points of turnout as a percentage of registered voters and about 9 points as a percentage of the voting age population. These findings are robust to alternative specifications, including measures of social polarization.

The paper proceeds as follows. We first develop our theoretical argument that generates the main hypothesis of this piece. We then present our statistical methodology, data, variables and the empirical results. The paper concludes by discussing the theoretical contributions and practical implications of our research.

2. Polarization and Voting Turnout

A vast scholarship has analyzed the determinants of voter turnout in developed and developing democracies. While some studies suggest that institutional incentives such as electoral systems, registration rules, parliamentary and presidential forms of government, among other factors affect turnout (Jackman and Miller 1996; Powell 1982; Blais and Dobrzynska 1998; Franklin 1999; Cox 1999; Norris 2004; Dettrey and Scwindt-Bayer 2009; Fornos, Power and Garand 2004; Valasek 2012), others focus on individual level explanations linking voters' assets (such as income, education, and time) and the voters' exposure to recruitment networks of civic engagement and electoral participation (see e.g., Verba, Scholzman and Brady 1995; Putnam 1995; Blais and Rubenson 2013). A different stream of research has emphasized the set of contextual factors affecting the utility of voting, such as the impact of electoral competitiveness on the perceived probability to cast the decisive vote (Aldrich 1993; Shachar and Nalebuff 1999; Duffy and Tavits 2008).

Scholars have also analyzed strategies of political mobilization in developing democracies, as this is often crucial for parties to win elections. A prominent view suggests that political parties develop networks of clientelistic exchanges in combination with

different programmatic strategies in return for effective electoral support (Kitschelt and Wilkinson 2007; Luna 2014). Yet, much less attention has been paid to alternative strategies to mobilize voters on programmatic or ideological grounds, such as polarizing policy proposals. This is surprising given that there is a vast literature on advanced democracies suggesting a causal relationship between ideological polarization and voting turnout (Heterington 2001; Layman, Carsey and Menasce Horowitz 2006; Crepaz 1990; Abramowitz and Saunders 2008).

Polarization may affect voting turnout through different channels. First, polarized societies may involve higher levels of electoral participation as shown by early studies (Crepaz 1990; Dalton 2008). But, while polarization in citizens' preferences is important, it does not necessarily lead to higher turnout if policy platforms do not adjust accordingly. Theoretically, the supply-side of policy is crucial for the relationship between polarization and turnout. Particularly relevant for our purpose is the argument that the stakes of an election affect the propensity to vote because voters realize which elections are those that matter the most (Pacek, Pop-Eleches and Tucker 2009). By setting clear programmatic stances and differentiation, polarization affects citizens' understanding of the costs and the benefits of turning out to vote.

Results from a number of studies indeed confirm that when more public policy is at stake, elections become more consequential, and thus voters are more likely to turnout (Blais and Dobrzynska 1998; Brockington 2004; Franklin 1999 & 2004; Jackman 1987; Powell 1982; Rosenstone and Hansen 1993). This is because political polarization provides clear cues about parties' ideological and policy stands (Knutson and Kumlin 2005; Lachat 2008; Garner and Palmer 2011; Thornton 2013) thus increasing the visibility of policy stakes (Franklin 2004). For example, parties may mobilize voters by arguing that the difference

between turning out to vote and staying at home can make the difference between endorsing a tax cut for the rich or an expansion of welfare policies for the working class. Clear choices also create social pressure and a sense of moral duty that drive voters to the polls (see e.g. Hetherington 2001; Brooks and Geer 2007).

This is in line with the literature suggesting that parties collapsing around the center can increase the number of indifferent voters and depresses voter turnout (Plane and Gershtenson 2004; Callander and Wilson 2007; Fiorina, Abrams and Pope 2005; Rogowski 2013). We build on this stylized perspective, and assume that citizens' decisions such as whether casting a vote and their actual vote choice are taken after candidates and parties have set their location into the policy space. Of course, elites may anticipate this and adopt strategies based on socio-economic and cultural factors shaping the polarization of social preferences, so it is important to emphasize the opportunistic role of parties and party leaders in setting ideological policy proposals.

A strong result from competing theories of spatial voting (Downs 1957; Rabinowitz and MacDonald 1989), is that citizens with non-moderate preferences have higher utilities from voting for parties with more intense or polarized ideological stands. If this is the case, opportunistic parties may offer more extreme policy proposals given a polarized underlying distribution of preferences in society. Extant studies have indeed found that increasing trends of income inequality in the U.S. lead to a more politically polarized society and party platforms alike (McCarty, Poole and Rosenthal 2006; Bartels 2008). Naturally, if social preferences collapse around the center, there are few incentives for the elites to polarize. This makes our argument particularly interesting for developing countries as we suspect that unequal societies such as those in Latin America may quickly react to polarized policy proposals. This is because strong social conflict in those countries offers important grounds

for opportunistic elite polarization.

Second, political elites may not merely adjust their programmatic outlook to a given level of social polarization, but also try to affect the distribution of social preferences to mobilize voters to the polls. When parties are absent in the process of preference formation and citizens do not see them as legitimate channels of representation, programmatic ties are weakened. Such low programmatic structuration of parties and party systems across many Latin American and other developing democracies is ultimately reflected at the polls, resulting in high levels electoral volatility (Mainwaring, Gervasoni and España 2016). In this context, polarization (Lachat 2008) helps the voters' ability to distinguish between different options, easing party attachments (see e.g. Berglund et al. 2006, Holmberg 1994, Schmitt 2009, Lupu 2015), and making them feel efficacious and more prone to participate in politics by either volunteering their time to political campaigns or voting in elections (Bartels 2000; Karp and Banducci 2008; Carlin and Love 2013).

Therefore, by distinguishing themselves from other competitors, partisan elites facilitate the formation of party brands that structure voters' policy preferences and stimulates stable patters of electoral behavior (Lupu 2016). Political elites, therefore, may overcome weak linkages with society and mobilize voters to the polls by increasing the scope of programmatic differentiation (see e.g. Berglund et al. 2006; Holmberg 1994; Schmitt 2009; Lupu 2015). The preceding argument leads to state the following hypothesis: *higher levels of elite polarization will increase the level of voting turnout.*

We do not claim here that parties incur in cooperative polarization, but that they do so because they expect an electoral advantage from movements away from the political center (Ossokina and Swank 2004; Matsushima 2007). The content of such strategic interactions involving individual parties or group of parties may further depend on specific

conditions in each polity. Also, we cannot empirically differentiate strategies that seek to increase the stakes of an election from those that seek to mobilize by facilitating the formation of new partisan attachments.

Our argument that elite polarization increases electoral turnout in Latin America is therefore consistent with more than a single reason why parties choose to radicalize their policy proposals. While we leave these questions open to future investigation, we find the comparison of alternative elite driven strategies as an important contribution to the analysis of electoral turnout in developing democracies. Empirically, we are able to differentiate between elite and social polarization and demonstrate the relevant impact of the supply-side of policy on electoral participation. In sum, our work has the broader implication that political opportunism may not only be an intrinsic feature of politicians deliberately casting the median voter but also of those who appear to present themselves as ideologically motivated or policy-oriented actors.

This is certainly not the first research linking ideological polarization to voting turnout. But, extant literature on this topic has focused almost exclusively at the mass level (i.e., social preferences) in advanced democracies (Crepaz 1990; Dalton 2008; Moral 2017) thus downplaying the role of *elite* polarization. This is particularly relevant to understand developing country context such as in Latin America, where polarization has been traditionally linked to party system and democratic instability (Linz 1978), but it has never been considered as an explanatory factor behind electoral participation (Pérez-Liñán 2001, Fornos, et al. 2004; Carreras 2017).

3. Data and Methods.

The main empirical implication of our theoretical argument is that political polarization at the elite level should positively affect voting turnout. We compiled a

comprehensive dataset of presidential elections in 18 Latin American countries during the 1993-2010 period, which ensures substantial cross-sectional and temporal variation in both dependent and independent variables of interest.

Our main dependent variable is electoral participation in presidential elections – labeled as *Turnout*–. It is measured as the percentage of registered voters that cast a vote in a given election. This measure of turnout is particularly useful as registration is a pre-requisite for voting in many Latin American countries. Also, registered voters are likely to entail lower mobilization costs for parties. But it is worth noticing that in some countries registration is not used or the register itself may be inaccurate. Given this potential problem, we also evaluate our main hypothesis using an alternative dependent variable –*Turnout-VAP*– that measures the number of votes as a percentage of the voting age population. The alternative dependent variable allows us to estimate the potential number of voters when all systemic and administrative barriers are removed (López Pintor and Gratschew 2002). The data come from the International Institute for Democracy and Electoral Assistance (IDEA). We show the variation of both dependent variables in Figure 1, which confirms important variation across space and time.

[Figure 1 about here]

We estimate OLS regressions with fixed effects by country and year. Year dummies control for unobserved contemporaneous common shocks. Since we observe an average of 5 elections per country and the within country variance is about half of the total variation in the data, we can also efficiently control for unit-specific effects. We also account for panel heteroscedastic and serially correlated errors (Beck and Katz 1995).

There exists panel serial correlation but only due to the persistence in the levels of the data, therefore there is no need to add a lag dependent variable once that country dummies are introduced. We nevertheless include a first order auto-correlated structure in the error term (AR1) to purge potential remaining serial correlation. We show in the Online Appendix that serial correlation is unlikely to be a problem for the estimations.

To measure the degree of programmatic or policy differentiation among parties (usually but not exclusively in the left-right axis), we construct our main independent variable –labeled as *Elite Polarization*– using the Taylor and Herman (1971) index of ideological polarization, which is the square sum of the deviations between the mean party position for party i (\bar{x}_i) and the total mean for all parties (\bar{x}), multiplied by the share of votes of party i (f_i), such that:

$$P = \sqrt{\sum f_i * \left(\frac{\bar{x}_i - \bar{x}}{5}\right)^2}$$

Where f_i is the share of votes won by the i^{th} party and \bar{x}_i is the ideological mean among voters of the i^{th} party, and \bar{x} is the ideological mean of the whole electorate. The Taylor and Herman index is particularly advantageous as it allows us to measure both the parties' right-left position on the ideological spectrum as well as the party strength of electorally successful parties.

To calculate this index, we first use data from the “Programa de Elites Parlamentarias de América Latina” (PELA hereafter) which surveys individual legislators from more than ninety political parties on issues about democracy and political values, political institutions, the state and market reforms, military issues and international relations.

With respect to ideological self-placement, PELA specifically asks legislators the following question: “*When we talk about politics we generally use the expression left and right. Regarding a scale where 1 is the left and 10 is the right, where would you locate your own party?*”³ Answers to this question for each legislative period are available for eighteen Latin American countries. Our main independent variable, *Elite Polarization*, also has substantial variation across space and time.

We use polarization of legislative members to proxy for the level of elite political polarization at the election year. Elite polarization is observed every time a legislature is surveyed by the PELA. When legislative and presidential elections are concurrent, we relate the level of electoral turnout in a given presidential election to the level of polarization of the elected legislative body in that election. This is the case for the 82% of the sample. For the remaining observations where presidential and legislative elections are instead noncurrent, we code the polarization value of the current working legislature. The coding rule to match electoral turnout and elite polarization seeks to capture polarization of elites involved in the setting of electoral platforms for a given presidential election. We acknowledge, however, that elite surveys are often posterior to the election year (56% of the observations) which may induce potential endogeneity. We provide robustness checks for alternative lag structures of elite polarization in the Online Appendix. Our main results remain robust after checking for potential endogeneity.

We also recognize that our main independent variable -*Elite Polarization*- is based on information about legislators’ ideological positions instead of a direct measure of presidential candidates’ polarization.⁴ However, we expect that polarization at the legislative level is a

³ Available at: http://americo.usal.es/oir/Elites/bases_de_datos.htm

⁴ We thank an anonymous reviewer for noting this point.

good proxy of polarization in presidential elections when analyzing presidential systems in Latin America. The lion share of concomitant presidential and legislative elections supports this claim. Moreover, the political supply remains very similar across executive and legislative elections. This is because the correlation between the effective number of parties in presidential and legislative elections is remarkably high as 0.954. Hence, our strategy is measuring polarization at the legislative level to capture systemic polarization, which is likely to be dominated by presidential electoral contests in Latin America.

Several political and socioeconomic controls are included in the specification. We have no substantial interest in the effects of covariates per se. Instead, control variables are considered because they are known to affect voter turnout and are potentially correlated with *Elite Polarization*. We control for *Multipartyism* as extant research suggests that highly fragmented party systems reduces the identifiability of governments which, in turn, depresses turnout (Jackman 1987; Fornos, Power and Garand 2004). To do so we introduce the effective number of parties (*ENPP*) in the parliament (Laakso and Taagepera 1979). We also control for political competition (Downs 1957; Aldrich 1993; Blais 2006; Cox and Munger 1989; Altman and Perez-Linan 2002) and introduce the variable *Competitiveness*, which is the difference in votes between the first and second-place winners (Cox 1988). The data come from the Database of Political Institutions (DPI).

Common wisdom also suggests that turnout may be higher when executive and legislative elections are held simultaneously. Following Fornos et al (2004), we include a dummy variable for concurrent elections. The data come from the IDEA. We also control for the possibility that the size of electoral districts affects the level of turnout (Jackman 1989; Jackman and Miller 1995; Fornos et al 2004, Kostadinova and Powell 2007). To this end, we introduce the variable *District Magnitude*, which is the average number of seats

allocated to each district in any given country. Fornos et al (2004) suggest that higher levels of democracy are likely to produce higher turnout rates not only because citizens are free to participate in elections, but also because they are well acquainted with the traditions of voting (Fornos, et al. 2004: 921). We introduce the variable *Democracy*, which is a dummy variable based on the Polity index from the Polity IV project database (Marshall and Jaggers 2004) identifying countries with scores higher or equal to six. In addition, we introduce the variable *Age of democracy* to account for the possibility that older democracies provide citizens with better incentives and tools to participate in the electoral process. Data for these variables comes from the World Bank's DPI.

Regarding socio-economic factors affecting turnout, we control for economic development as suggested by early studies (Powel 1982) and introduce the variable *GDP per capita (log)*. Data are from World Bank, WDI. Economic crises may also affect political polarization so we incorporate a price index, *Inflation*, into the specification. Reliable data on inflation come from the Penn World Tables. We also add the level of urbanization to control for the variation in interpersonal bonds, primary social structures, and consensus of norms (Hoffmann-Martinot, Rallings and Thrasher 1996). *Urbanization* is the percentage of population living in urban areas. The data are taken World Bank, WDI.

4. Results

Our main purpose is testing the effect of polarization on electoral turnout. Regression estimates are reported in Table 1. We limit the analysis to the main independent variable. Since model specification in regression is designed for isolating the effects of a main independent variable, interpretation of control variables should be made with great caution, if not avoided. The first pair models use turnout as a percentage of registered voters as a dependent variable. The second pair of models use turnout as a percentage of voting age

population. We observe that *Elite Polarization* positively affects turnout in the four models from Table 1 and it is highly significant in all cases despite the small sample size. This means that the effect of elite polarization is robust to different measures of electoral participation as well as the inclusion and exclusion of independent variables. Importantly, the inclusion of covariates has little impact on the point estimates of *Elite Polarization*, which increases the confidence in estimated parameters.

[Table 1 about here]

The effects of *Elite Polarization* are also substantially large and therefore politically relevant. Figure 2 uses the estimated models 2 and 4 to simulate the expected values of electoral turnout across levels of polarization. An increase in one standard deviation in polarization produces an increase in 7.3 points of turnout as a percentage of registered voters and an increase in 8.8 points of turnout as a percentage of the voting age population. This suggests that electoral participation is highly sensible to the supply side of politics, which is in line with our theoretical expectations.

[Figure 2 about here]

4.1. Robustness checks

We begin by considering potential bias due to omitted covariates in our main models from Table 1. First, there is important literature suggesting that compulsory voting affects voter turnout. (Jackman 1987; Jackman and Miller 1995; Blais and Dobrzynska 1998). Others have argued that higher levels of turnout will be observed only when compulsory voting laws are accompanied by credible sanctions against noncompliance (Fornos, et al.

2004). Data from IDEA allows to identify observations where compulsory voting and sanctions are both in place. However, this variable has virtually no within-country variation and therefore its point estimates become highly unreliable in models with fixed effects (Plümper and Troeger 2007). Nevertheless, the addition of compulsory voting with sanctions makes no difference for the effect of polarization, precisely because country dummies already account for such variation.

Other time-variant covariates are worth considering and included in Table OA1 in the Online Appendix. Unemployment may be related to electoral turnout and political polarization. We introduce a measure of the share of the labor force without work but available for and seeking employment. Data for unemployment comes from World Bank's WDI. Another potential confounder is political clientelism and party system structuration (Kitschelt et al 2010). Party system structuration is important because our theoretical argument assumes that the left-right axis is dominant and meaningful. Previous studies have shown that this may not be the case in several Latin American countries (Van Cott 2005; Madrid 2012). Therefore, we include the *Linkages* measure, which is based on country expert reports about the predominant type of linkages between parties and citizens. This variable is estimated by the Varieties of Democracy project (Pemstein et al. 2015) using the question "Among the major parties, what is the main or most common form of linkage to their constituents? Answers are 0= Clientelistic; 1= Mixed clientelistic and local collective; 2= Local collective goods; 3= Mixed local collective and policy or programmatic; 4=Policy or programmatic. Finally, the presence of presidents seeking re-election may turn the election into a plebiscitary decision about the incumbent. This may simultaneously induce polarization and voting turnout. We therefore include a dummy variable, *Incumbency*, indicating whether there is an incumbent running for the presidential election. Models 1 and

2 from Table OA1 in the Online Appendix show that the inclusion of these additional control variables rather strengthen the effects of polarization on our two variables of voting turnout. Notably, our reported estimates in the article are rather conservative given these results.

Another important robustness test is to check whether elite polarization among legislators affect voting turnout in legislative elections. We analyze the data and report results in Table OA2 in the Online Appendix. The results confirm that legislative turnout is also dependent upon the level of elite polarization. Moreover, we have also specified a model considering both non-concurrent legislative elections and presidential elections. The results remain unchanged (please see Table OA3).

We also pay attention to the presence of different types of dynamics. To be clear, our current static specification assumes that all the movement in polarization translates completely and immediately into turnout. This is grounded in both the theoretical argument and the fact that this restriction is often valid with high levels of temporal aggregation (De Boef and Keele 2008). Still, we consider and test for the inclusion of a lagged dependent variable. This involves different assumptions about the data generating process. In this case, the effects of polarization would build over time depending upon a potential autoregressive process in the turnout data. Please note that our panel has only few observations over time which may potentially increase inefficiency (and therefore potential bias) in the estimation of a dynamic model. Table OA4 in the Online Appendix reports the results. First, the inclusion of a LDV does not affect the sign and significance of the coefficient for elite polarization. Second, the effect of the LDV is small and insignificant in model 1 (turnout as % of registered). In the model using turnout as a % of VAP as a dependent variable, the LDV is only significant at the 10% level while the point estimate is also small. The long-run

multiplier for elite polarization in this model (or the total effect over time) is 6.15. This effect almost duplicates what we have reported in the main article, suggesting our estimations are rather conservative. We conclude that this information is first insufficient to reject the static model specification and even if the dynamic model would apply our findings would be strengthened.

Another important aspect of our specification is the timing in the measurement of elite polarization. We have argued that the best way to capture elite polarization in a given election of interest is considering information about the political elites involved in that particular electoral contest. However, it may be problematic the fact that such information is often collected after the election has passed. In models from Table OA5 in the Online Appendix, we investigate the effects of elite polarization when this variable is measured either before or in same election year. The models show that this decision has no substantial impact on our estimates.

Our argument emphasizes elite polarization. However, it may be possible that the effects of elite agency disappear once the distribution of social polarization is considered. We allow for this possibility and include a variable of social polarization. We use public opinion data coming from the Latinobarómetro surveys. We apply the Taylor and Heman's Index to each country-year sample available and consider all respondents' ideological self-placement on the classical left-right scale. Results are provided in Table OA6 of the Online Appendix. The evidence suggest that elite polarization is unaffected by the levels of social polarization, which provides again support to our argument. Interestingly, social polarization seems to have a significant and direct effect on voting turnout.

Finally, we acknowledge that this study provides no analysis of individual level data. This type of analysis may help to uncover the mechanisms by which elite polarization may

affect voting. Among the many options, it is possible that elite polarization increases the stakes of an election attracting more interest in politics. As a consequence, citizens' involvement in politics may help to mobilize voters. We have also argued that polarization may help to increase partisanship or party identification. This is reason for not including aggregate data such as interest in politics or party identification in our models. These variables should partially capture the effects of polarization because they are potentially part of the causal chain. Yet, we do test whether there is initial evidence that elite polarization increases the levels of interest in politics. There is no sufficient data to do the same exercise with party identification. Using public opinion data from the Americas Barometer survey, conducted by the Latin American Public Opinion Project, we compute the percentage of citizens interested in politics measured with a four-points scale capturing the degree of interest in politics. In the Online Appendix, we show that polarization significantly increases aggregate levels of interest in politics (See Table OA7). This result helps to increase confidence in that voters are more likely know about parties' policy positions in a context of polarization.

5. Conclusion

In this article, we develop and empirically test an alternative explanation for the observed variation in turnout rates across Latin American countries. Our main hypothesis predicts that elite polarization has a positive effect on turnout in the region, because it allows parties to increase the stakes in electoral competition with clear policy options to voters, and also enhances party attachments that increase turnout as a particular form of political engagement. Our empirical results provide strong statistical and substantive support for our main hypothesis, and are robust to alternative estimation techniques and to different specifications of the main model.

This study has important theoretical and practical implications. First, we mentioned before that extant studies have primarily explained voter turnout in Latin America using institutional (Pérez-Liñán 2001; Fornos, et al. 2004; Carreras 2010) or socio-economic factors (Carreras and Castañeda-Angarita 2013). Our theory does not rival these studies. Rather, it complements them by providing a causal mechanism that explains why political elites can use polarization to mobilize voters and how voters respond to such strategies. The robust statistical results presented in this paper should thus motivate scholars to analyze more carefully the different ways by which political agency affects voter turnout in Latin America and other regions of the world.

Second, scholars and pundits often argue that political polarization is one of the most important issues affecting democratic politics and the quality of democracy in Latin America. It was not only systematically observed as a threat for democratic stability after the third wave of democracy in the region (Linz 1978; O'Donnell and Schmitter 1986; Huntington 1991), but also as a negative influence for policy reform and its inter-temporal consistency (Frye 2002; Scartascini, Stein and Tommasi 2013). However, if we agree that electoral participation is good for democracy, our results suggest that polarization is not necessarily bad for democracy. Turnout to vote in elections indicates that voters have the compromise to participate in the decision making process, by choosing the parties and candidates that best fit their preferences. If, as we argue, polarization affects positively voting turnout, it has to be observed with more indulgent eyes with regard to democracy.

Polarization could indeed limit cooperation and compromise, making it difficult to facilitate inter-temporal agreements among parties. In such scenario, it may have negative consequences for some political systems, especially when they need agreements on policies that may affect large portions of society. But we believe that one still has to think indulgently

with regard to the effect of polarization on electoral participation – but not necessarily with regard to public policy-. Thus, polarization may contribute with democracy by mobilizing voters to the polls, but does not necessarily improves the functioning of democratic governments by providing effective and efficient responses to the demands of citizens (see e.g. Linz 1978).

Third, extant studies have suggested that parties and their candidates in Latin America often rely on clientelistic strategies to boost turnout and thus increase their chances of electoral victory (Schaffer 2007; Kitschelt et al 2010). We concur that parties and candidates often use clientelistic strategies to mobilize voters during elections, but the high transaction costs and their uncertain electoral returns make them undesirable and unattainable to many political organizations. Our results also have a practical implication: political parties should devote more attention to develop strategies that differentiates them from their competitors in key policy issues. Mobilizing voters on these grounds can help to mitigate the use of public and private resources to mobilize voters to the polls.

Given that polarization is able to engage citizens in the policy process, either by increasing their perception that turning out to vote might be crucial for policy outcomes or by involving citizens in the life of parties, our findings for Latin America might have important implications for other developing and advanced democracies.

In the former case, where several countries suffer low levels party system institutionalization, polarization may help to consolidate the scope of programmatic politics *vis-à-vis* the use of charismatic and particularistic exchanges to mobilize voters to the polls. Especially in third wave of democratization, where polarization has been traditionally observed as a negative trait, citizen engagement on programmatic grounds may contribute to improve the type of linkages between citizens and politicians.

In the case of advanced democracies, where voting disaffection is on the rise and several party systems have suffered an important process of voting de-alignment over the last decades, policy differentiation among parties may be able to recapture the interest of citizens in politics and ultimately in the act of voting. Several European countries have shown an increase in polarization due to the growing electoral size of the radical right and left, as well as minor niche and anti-immigration parties. For these cases, mandatory voting rules with efficient enforcement procedures still maintain high turnout rates across the region. However, the effects of polarization in US politics remains highly divisive among scholars, as a case featured by voluntary voting rules and comparatively low levels of turnout among industrial democracies. While some prominent students have argued that polarization has had a positive effect on turnout (Abramowitz and Saunders 2008), others have pointed out that this picture is an overestimation of the actual preferences of American voters. Indeed, Fiorina, Abrams and Pope (2005) argued that polarization has a sorting effect that affects voters with clear partisan preferences. Consequently, polarization has no impact on moderates and voters without party identification. Yet, if Hetherington (2001) is right and polarization explains increasing levels of party identification, it may accomplish the double purpose of increasing the strength of parties in elections and easing the process of mobilizing voters to the polls, as we have seen in Latin America.

Figures and Tables

Figure 1. Turnout in Latin America (1993-2010)

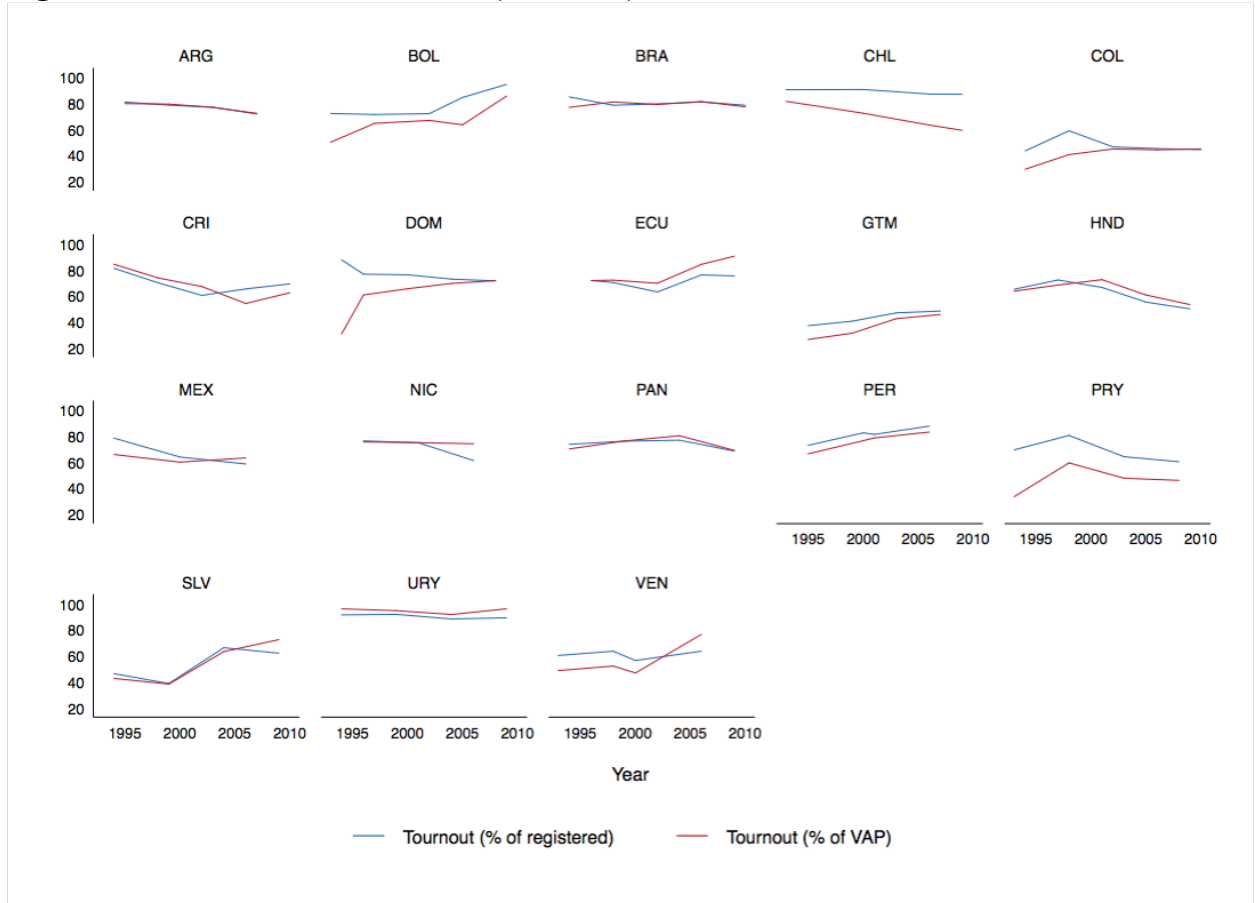
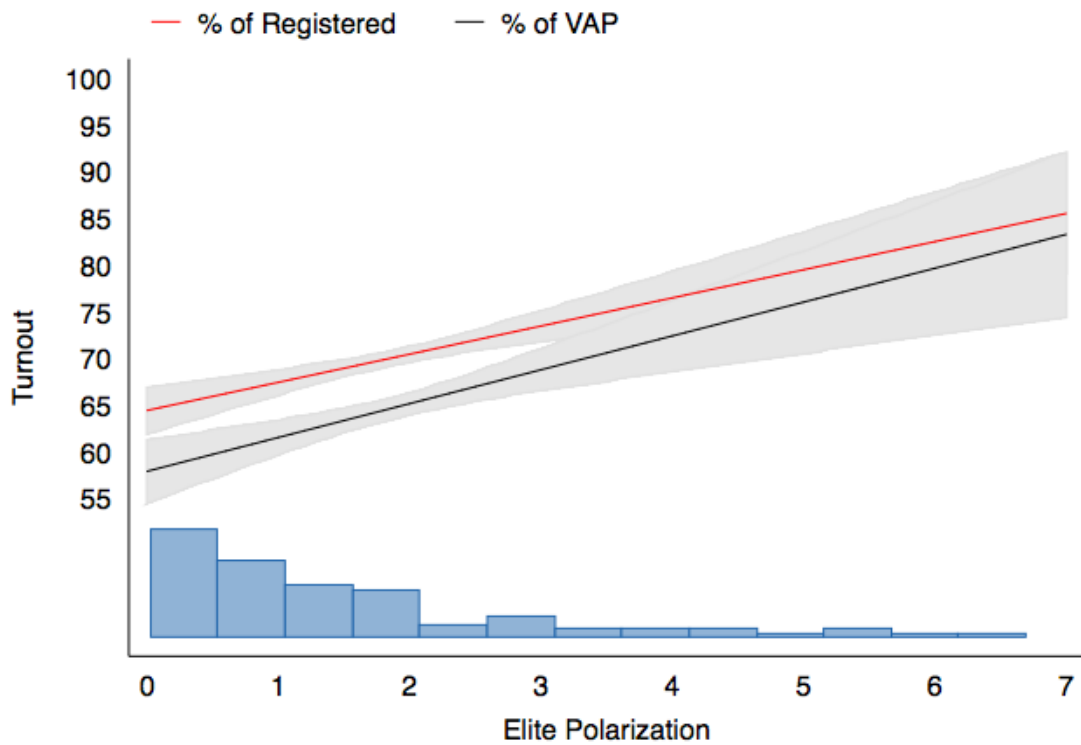


Figure 2. Predicted Electoral Turnout in Latin America



Note: The slopes correspond to model 2 and 4 from Table 1. Shaded areas are 95% confidence intervals obtained through simulation by setting all other covariates to their mean level. The histogram in the x-axis depicts the distribution of our variable of Elite Polarization.

**Table 1. Effects of Elite Polarization on Voter Turnout in Presidential Elections.
Latin America, 1993-2010**

	Turnout % of registered voters				Turnout % VAP			
	(1)		(2)		(3)		(4)	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Elite Polarization	2.72***	(0.77)	3.01***	(0.65)	3.14***	(0.85)	3.62***	(0.88)
Inflation			-0.29***	(0.10)			-0.10	(0.15)
GDP pc (log)			11.64	(10.55)			-14.92	(18.39)
Urbanization			0.03	(0.80)			0.50	(0.98)
Democracy			3.61	(4.46)			24.04***	(6.59)
Age of Democracy			1.81**	(0.80)			1.25	(1.46)
Concurrent			1.56	(3.26)			-6.41	(5.32)
District magnitude			-0.08	(0.07)			0.07	(0.10)
ENPP			-2.17***	(0.82)			-0.48	(1.11)
Competitiveness			-0.07	(0.07)			0.09	(0.11)
Country dummies	<i>yes</i>		<i>yes</i>		<i>yes</i>		<i>yes</i>	
Year dummies	<i>yes</i>		<i>yes</i>		<i>yes</i>		<i>yes</i>	
Observations	71		71		71		71	
R-squared	0.90		0.95		0.89		0.94	
Number of countries	18		18		18		18	

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

References

- Abramowitz, Alan, and Kyle Saunders. 2008. "Is Polarization a Myth?" *Journal of Politics* 70: 542-55.
- Adams, James and Samuel Merrill III. 2006. "The Political Consequences of Alienation-Based and Indifference-Based Voter Abstention: Applications to Presidential Elections," *Political Behavior* 28(1): 65-86.
- Aldrich, John. 1993. "Rational Choice and Turnout," *American Journal of Political Science* 37: 246-78.
- Bartels, Larry. 2000. "Partisanship and Voting Behavior, 1952–1996," *American Journal of Political Science* 44(1): 35–50.
- Bartels, Larry. 2008. *The Political Economy of the New Gilded Age*. New Jersey: Princeton University Press.
- Beck, Nathaniel, and Jonathan Katz. 1995. "What To Do (and Not To Do) with Time-Series Cross-Section Data in Comparative Politics," *American Political Science Review* 89(3): 634-647.
- Berglund, Frode, Holmberg, Soren, Schmitt, Hermann and Jacques Thomassen. 2006. Party Identification and Party Choice. *The European Voter: A Comparative Study of Modern Democracies*. Oxford: Oxford University Press.
- Blais, André. (2006). "What affects Voter Turnout?" *Annual Review of Political Science*. 9: 111-125.
- Blais, André, and Agnieszka Dobrzynska. 1998. "Turnout in Electoral Democracies," *European Journal of Political Research* 33: 239-61.
- Brooks, Deborah, and John Geer. 2007. "Beyond Negativity: The Effects of Incivility on the Electorate," *American Journal of Political Science* 51(1): 1-17.
- Carlin, Ryan, and Gregory Love. 2013. "The Politics of Interpersonal Trust and Reciprocity: An Experimental Approach," *Political Behavior* 35(1):43-63.
- Carreras, Miguel. 2017. "Presidential Institutions and Electoral Participation in Concurrent Elections in Latin America," *Political Studies*. Online First, September 2017.
- Carreras, Miguel, and Nestor Castañeda-Angarita. 2013. "Who Votes in Latin America? A Test of Three Theoretical Perspectives," *Comparative Political Studies* XX: 1-26.
- Cox, Gary W. (1988). "Closeness and Turnout: a Methodological Note," *The Journal of Politics*. 50 (3): 768-775.
- Cox, Gary, and Michael Munger. 1989. "Closeness, Expenditures and Turnout: The 1982 U.S. House Elections," *American Political Science Review* 83: 217-32.
- Cox, Gary. 1999. "Electoral Rules and the Calculus of Mobilization," *Legislative Studies Quarterly* 24: 387-419.
- Crepaz, Markus. 1990. "The Impact of Party Polarization and Postmaterialism on Voter Turnout," *European Journal of Political Research* 18: 138-205.
- Dalton, Russell. 2008. "The Quantity and the Quality of Party Systems: Party System Polarization, Its Measurement, and Its Consequences," *Comparative Political Studies* 41: 899-920.
- De Boef, Suzanna, and Luke Keele. 2008. "Taking Time Seriously," *American Journal of Political Science* 52 (1): 184–200.

- Dettrey, Bryan, and Leslie Schwindt-Bayer. 2009. "Presidential Institutions and Voter Turnout." *Comparative Political Studies* 42(10): 1317-1338.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper & Ro.
- Duffy, John, and Margit Tavits 2008. "Beliefs and Voting Decisions: A Test of the Pivotal Voter Model," *American Journal of Political Science* 52 (3): 603-618.
- Fiorina, Morris, Samuel Abrams, and Jeremy Pope. 2005. *Culture War?* New York: Pearson Longman.
- Fornos, Carolina, Timothy Power, and James Garand. 2004. "Explaining Voter Turnout in Latin America, 1980 to 2000." *Comparative Political Studies* 37: 909.
- Franklin, Mark. 1999. "Electoral Engineering and Cross-National Turnout Differences: What Role for Compulsory Voting?" *British Journal of Political Science* 29: 205-224.
- Franklin, Mark. 2004. *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies since 1945*. Cambridge, UK; New York: Cambridge University Press.
- Frye, Timothy. 2002. "The Perils of Polarization: Economic Performance in the Postcommunist World," *World Politics* 54: 308-37.
- Garner, Andrew, and Harvey Palmer. 2011. "Polarization and Issue Consistency over Time," *Political Behavior* 33 (2): 225-246.
- Hetherington, Mark. 2001. "Resurgent Mass Partisanship: The Role of Elite Polarization". *American Political Science Review* 95(3): 619-631.
- Hoffmann-Martinot, Vincent, Colin Rallings, and Mishael Thrasher. 1996. "Comparing Local Electoral Turnout in Great Britain and France: More Similarities than Differences?" *European Journal of Political Research* 30 (2): 241-257.
- Holmberg, Soren. 1994. Party Identification Compared Across the Atlantic. In M. K. Jennings & T. E. Mann (Eds.), *Elections at home and abroad: Essays in honor of Warren E. Miller* (93-122). Ann Arbor: University of Michigan Press.
- Huntington, Samuel 1991. *The Third Wave: Democratization in the Late Twentieth Century*. University of Oklahoma Press.
- Jackman, Robert. 1987. "Political Institutions and Voter Turnout in Industrialized Democracies." *American Political Science Review* 81: 405-23.
- Jackman, Robert, and Ross Miller. 1995. "Voter Turnout in Industrial Democracies During the 1980s," *Comparative Political Studies* 27: 467:92.
- Jackman, Robert, and Ross Miller. 1996. "A Renaissance of Political Culture?" *American Journal of Political Science* 40: 632-59.
- Karp, Jeffrey, and Susan Banducci. 2008. "Political Efficacy and Participation in Twenty Seven Democracies: How Electoral Systems Shape Political Behavior," *British Journal of Political Science* 38(2): 311-334.
- Kitschelt, Herbert, and Steven Wilkinson. 2007. *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition*. Cambridge, UK ; New York: Cambridge University Press.
- Kitschelt, Herbert, Kirk Hawkins, Juan Luna, Guillermo Rosas, and Elizabeth Zechmeister. 2010. *Latin American Party Systems*. New York: Cambridge University Press.
- Knutsen, Oddbjørn, and Staffan Kumlin 2005. *Value Orientations and Party Choice*, in Jacques Thomassen (ed.). *The European Voter. A Comparative Study of Modern Democracies*. Oxford: Oxford University Press, pp. 125-166.
- Kostadinova, Tatiana, and Timothy Power. 2007. "Does Democratization Depress Participation?: Voter Turnout in Latin American and Eastern European Democratic Transitions," *Political Research Quarterly* 60(3): 363-377.

- Laakso, Markku, and Rain Taagepera. 1979. "Effective Number of Parties - Measure with Application to West Europe," *Comparative Political Studies* 12: 3-27.
- Lachat, Romain. 2008. "The Impact of Party Polarization on Ideological Voting," *Electoral Studies* 27: 687-98.
- Layman, Geoffrey, Thomas Carsey and Juliana Menasce Horowitz. 2006. "Party Polarization in American Politics. Characteristics, Causes, and Consequences". *Annual Review of Political Science*. (9) 83-110.
- Linz, Juan. 1978. *The Breakdown of Democratic Regimes: Crisis, Breakdown and Re-equilibration*, Baltimore, Johns Hopkins University Press.
- López Pintor, Rafael and Maria Gratschew (Eds.) 2002. Voter Turnout Since 1945: A Global Report, International Institute for Democracy and Electoral Assistance: Stockholm
- Luna, Juan Pablo. 2014. *Segmented Representation. Political Party Strategies in Unequal Democracies*. Oxford University Press
- Lupu, Noam. 2015. "Party Polarization and Mass Partisanship: A Comparative Perspective," *Political Behavior* 37(2): pp. 331– 356.
- Lupu, Noam. 2016. *Party Brands in Crisis: Partisanship, Brand Dilution, and the Breakdown of Political Parties in Latin America*. New York: Cambridge University Press.
- Madrid, Raúl. 2012. *The Rise of Ethnic Politics in Latin America*. New York: Cambridge University Press.
- Mainwaring, Scott, Carlos Gervasoni and Annabella España-Nájera. 2016. "Extra- and Within-System Electoral Volatility," *Party Politics* (January 2016, on-line version).
- Marshall, Monty, and Keith Jagers. 2004. Polity IV Project. Center for International Development and Conflict Management, University of Maryland.
- Matsushima, Noriaki. 2007. "Uncertainty of Voters' Preferences and Differentiation in a Run-off System," *European Journal of Political Economy* 23: 1185-1189
- McCarty, Nolan, Keith Poole and Howard Rosenthal. 2006. *Polarized America: The dance of ideology and unequal riches*. Cambridge (MA), MIT Press.
- Moral, Mert. 2017. "The Bipolar Voter: On the Effects of Actual and Perceived Party Polarization on Voter Turnout in European Multiparty Democracies," *Political Behavior* 39: 935-965.
- Norris, Pippa. 2004. *Electoral Engineering: Voting Rules and Political Behavior*. New York: Cambridge University Press.
- O'Donnell, Guillermo, and Philippe Schmitter. 1986. *Transitions from Authoritarian Rule*. Baltimore: Johns Hopkins University Press.
- Ossokina, Ioulia, and Otto H. Swank. 2002. "The Optimal Degree of Polarization," *European Journal of Political Economy* 20: 255-262.
- Pacek, Alexander, Grigore Pop-Eleches, Joshua Tucker. 2009. "Disenchanted or Discerning: Voter Turnout in Post-Communist Countries," *Journal of Politics* 71(2): 473-491.
- Pemstein, Daniel, Kyle Marquardt; Eitan Tzelgov Yi-ting Wang and Farhad Miri. 2015. TheV-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data. Working Paper # 21. Department of Political Science, University of Gothenburgh.
- Pérez-Liñán, Aníbal. 2001. "Neo-Institutional Accounts of Voter Turnout: Moving Beyond Industrial Democracies," *Electoral Studies* 20: 281-97.
- Plane, Dennis and Joseph Gershtenson. 2004. "Candidates' ideological locations, abstention, and turnout in U.S. midterm senate elections," *Political Behavior* 26(1): 69-93.
- Powell, Bingham. 1982. *Contemporary democracies: Participation, stability and violence*. Cambridge,

- MA: Harvard University Press.
- Putnam, Robert. 1995. "Bowling Alone: Social Capital in the U.S.". *Journal of Democracy*.
- Rabinowitz, George and Stuart Elaine Macdonald. 1989. "A Directional Theory of Voting," *American Political Science Review* 83: 93–121.
- Rogowski, John. 2013. "Electoral Choice, Ideological Conflict, and Political Participation," *American Journal of Political Science* 58: 479-94.
- Roberts, Kenneth 2013. "Market Reform, Programmatic (De)alignment, and Party System Stability in Latin America," *Comparative Political Studies* 46 (11): 1422-1452.
- Rosenstone, Steven and Mark Hansen. 1993. *Mobilization, Participation, and Democracy in America*. MacMillan: New York.
- Scartascini, Carlos, Ernesto Stein, and Mariano Tommasi. 2013. "Political Institutions, Inter-temporal Cooperation, and the Quality of Public Policies," *Journal of Applied Economics* XVI: 1-32.
- Schaffer, Frederic Charles. 2007. *Elections for Sale: The Causes and Consequences of Vote Buying*. Boulder (Co): Lynne Rienner Publishers.
- Schmitt, Hermann 2009. Partisanship in nine western democracies: causes and consequences. In J. Bartle & P. Bellucci (Eds.), *Political parties and partisanship: Social identity and individual attitudes* (pp.75-87). New York: Routledge.
- Shachar, Ron and Barry Nalebuff. 1999. "Follow the Leader: Theory and Evidence on Political Participation," *American Economic Review* 89(3): 525-47
- Singer, Matthew. 2016. "Elite Polarization and the Electoral Impact of Left-Right Placements: Evidence from Latin America, 1995–2009," *Latin American Research Review* 51(2): 174-94.
- Taylor, Michael, and V. M. Herman. 1971. "Party Systems and Government Stability," *American Political Science Review* 65: 28-37.
- Thornton, Judd. 2013. "The Impact of Elite Polarization on Partisan Ambivalence and Indifference," *Political Behavior* 35: 409-428.
- Valasek, Justin. 2012. "Get Out the Vote: How Encouraging Voting Changes Political Outcomes," *Economics and Politics* 24: 34673.
- Van Cott, Donna Lee. 2005. *From Movements to Parties in Latin America: The Evolution of Ethnic Politics*. New York: Cambridge University Press.
- Verba, Sidney, Kay Lehman Schlozman and Henry Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, Mass.: Harvard University Press.
- Zechmeister, Elizabeth and Margarita Corral. 2013. "Individual and Contextual Constraints on Ideological Labels in Latin America," *Comparative Political Studies* 46(6): 675-701.