

Combining Deductive and Inductive Elements to Measure Party System Responsiveness in Challenging Contexts: An Approach with Evidence from Latin America

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Abstract

Contexts outside the advanced developed democracies present a challenge to assessing how well party systems reflect voter preferences across over-arching policy dimensions because not all electorates readily interpret political conflict in dimensional terms. In this contribution, I advocate an approach suited for such contexts that combines deductive and inductive elements: It starts out with what observers consider the most important dividing lines in a party system, and then goes on to operationalize these dimensions in an inductive fashion by drawing on all theoretically relevant items that are available in mass and elite surveys. I devise a *relative-fit* measure of responsiveness that can be compared across space and time, even if positions at the elite and mass levels are measured on different scales. To illustrate the usefulness of the strategy, I show how it leads to novel contrasts in terms of programmatic responsiveness among four Latin American countries, namely, Chile, Brazil, Venezuela, and Bolivia.

Keywords Latin America • Representation • Responsiveness • Party systems •

Party systems in new democracies differ dramatically in the extent to which they reflect the programmatic demands of voters (e.g., Kitschelt et al., 2010, Roberts, 2014, Joignant, Morales and Fuentes, 2017, Bornschieer, 2019; see also Shim and Gherghina, 2020, this issue). Scholars have explained these differences in terms of different historical trajectories, strategic decisions during the transition process, or the behaviour of parties under democratic competition. One of the problems in identifying which of these causal factors carries most weight has been the difficulty of devising a valid measurement strategy for party system responsiveness outside the world of long-established democracies.

While looking at the correspondence between the political preferences of voters and their representatives is an established approach in the advanced democracies (Dalton, 1985, 2017), I suggest that we should adopt a strategy that is more contextualized when looking at younger democracies. The approach I develop in this contribution is deductive in that it takes the most important political divisions in a country as a starting point. It is inductive in determining how this dimension is best captured at the issue item level. Relying on Linear Canonical Discriminant Analysis does away with the assumption that is plausible in the advanced democracies but problematic elsewhere that voters are able to assimilate most issues into a limited number of latent dimensions. Instead, this method makes the measurement of latent dimensions centre on those issues that actually cleave parties and voters. Because the items measuring these issues frequently do not have the same wording or measurement scales at the party and elite levels, I then use a measure of *relative fit* between the policies that voters seek and those that parties offer. Following Wlezien (2017), I refer to this fit as party system *responsiveness* – rather than congruence or correspondence – even if no over-time adaptation of party positions to voter demands is implied. The goodness-of-fit between party positions and voter preferences is a measure that we can compare across space and time.

To illustrate this approach, I focus on Latin America, where the challenge to measuring responsiveness lies in the strongly varying degrees to which party competition rests on long-term cleavages, more short-term issue divides, and non-programmatic linkages between parties and voters (e.g., Kitschelt et al., 2010). As a consequence, the implications of the widely studied “left turn”, which brought left-wing governments to power in almost every country in the late 1990s and 2000s on party system responsiveness have not been analysed from a comparative perspective. Indeed, prior analyses have tended to lump the two populist left cases (Venezuela and Bolivia) and the two moderate left cases (Chile and Brazil) together by suggesting that programmatic alignments prevail in the latter two, while charismatic linkages trump programmatic mandates in the former. In this contribution, focusing on the state-market dimension, which is the most relevant in Latin America (e.g., Moreno, 1999; Wiesehomeier and Benoit, 2009; Bornschier, 2013), I show that the effects of the “left turn” on party system responsiveness is much more varied.

Measurement strategy

In spite of the conceptual challenges, the Latin American context is perhaps unique among younger democracies in that it offers excellent data to capture party positions and voter preferences at a fine-grained issue level. At the level of the party system, I rely on the Surveys of Latin American Legislators (PELA), which conducts face-to-face interviews with a large sample of legislators (Alcántara Sáez, 2018). At the mass level, I match the elite data with temporally proximate sources, including the World Values Survey (WVS), the Latinobarómetro (LB), and the Brazilian Election Survey (ESEB), because no single data source covers all the countries I study. Appendix A explains the choice of datasets and time points for the analysis in more detail. One of the key advantages of the approach presented here is precisely that it

allows for a comparison of responsiveness over time and across countries even when the issue items available differ.

Determining the relevant dimensions: a plea for a middle level of abstraction

My approach is deductive in that it seeks to construct dimensions at the party system and mass level based on prior information concerning the salient political divisions in a country. The prior information may be found in the literature, or can rely on a preparatory analysis that precedes the actual measurement of responsiveness. The dimensions I propose to focus on – such as the state-market dimension in Latin America – are more theoretically meaningful than over-arching divides such as the left-right super-issue. Although elites and masses tend to be more in tune along more abstract dimensions such as left-right (Shim, 2019), measuring responsiveness along such a divide makes the nature of political competition opaque, because left and right mean different things in different contexts and to different voters (Lachat, 2017). Looking at left-right may therefore overstate substantive responsiveness.

Parties, in fact, often do combine several dimensions into an over-arching divide, but the degree to which the constitutive sub-dimensions overlap or cross-cut each other is time bound: It depends on the way parties combine positions on the various dimensions in a multi-dimensional space (see for example Lachat and Kriesi, 2008, 271–74). This aggregation provided by parties thus needs not reflect the way voters think about politics, and the sub-dimensions may differ in importance for the individual voter. This can bias measurement in a different way than looking at left-right: Lumping together sub-dimensions assumes that they are all equally important for an individual voter, which is often not the case. In Chile, for example, at the elite level, the economic state-market divide overlapped strongly with an authoritarian-democratic regime dimension in the period following re-democratization. Left-

wing parties were both state interventionist and pro-democratic, while right-wing parties defended market liberalism and were less critical of the outgoing authoritarian regime. The two dimensions coincided far less at the voter level, however (Bornschieer, 2013). Any attempt to combine the two dimensions into a single one in a non-inductive fashion (for example by forming additive indices) would substantially understate party system responsiveness in Chile for this period. It proved far more informative to measure party system responsiveness along the economic and regime dimensions separately because it turned out that they independently shaped partisan alignments.

In sum, in line with the strategy employed in most empirical approaches, as noted in the introduction to this symposium (Shim and Gherghina, 2020), I propose that we focus on an intermediate level of abstraction when measuring responsiveness (for a similar approach, see Farag, 2020, this issue). This level is more general than that of specific issues that may or may not be salient in a given country, and that for example Luna and Zechmeister (2005) focus on in their seminal article. If we focus on several countries, we often do not know which of the issues included in the surveys were politically salient at the time of measurement, and comparability across countries and over time is difficult. The intermediate level is more specific, on the other hand, than the over-arching left-right super-dimension and provides much more information on what constitutes the issue basis of responsiveness or unresponsiveness.

Operationalizing the dimensions

Having identified the antagonism between state intervention and market liberalism as the relevant dimension, I propose to devise a latent construct to tap into this dimension, drawing on all available issue-specific items in the elite and mass surveys that on theoretical grounds are appropriate (while omitting valance issues). The inductive element in the strategy I use

pertains to the way in which the issue items chosen on theoretical grounds actually feed into the measurement of a latent state-market dimension at the party and voter level. If voters are sophisticated, measuring a latent dimension is easily accomplished using Factor Analysis, because survey respondents will have cognitive schemas allowing them to relate specific issues – even new ones – into their mental representation of political space (Bornschieer, 2010, chap. 3). In much of the world outside the advanced democracies, however, there is much more cross-sectional variance in the extent to which voters are able to integrate issues into the dimensions of conflict that shape their party system (Harbers, de Vries and Steenbergen, 2013). Appendix B discusses the potential problems involved in using Factor Analysis in such contexts.

We can circumvent these problems by using canonical linear discriminant analysis to operationalize latent dimensions, both at the level of legislators, as well as at the voter level. This technique uncovers dimensions that are politically meaningful because they help to distinguish respondents according to their party alignments (Klecka, 1980). In other words, the analysis makes the operationalization of policy dimensions centre on those political issues that set politicians and voters from different parties apart. We can then use respondents' value on the discriminant functions to determine their positions on a given dimension. For reasons of space, I centre the discussion of the results of the Discriminant Analyses on the voter level, while I show the corresponding results for parliamentary elites in Appendix C.

While the state-market dimension is meaningful and significantly sets apart legislators from different parties, we will see that voters are not aligned with parties to the same extent in the four countries. The next step to show this is to construct the state-market dimension at the electoral level. The results are presented in Table 1.¹ A significant economic policy divide

¹ For explanations concerning the interpretation of the Linear Canonical Discriminant Analysis results, see Klecka (1980).

Table 1: The Economic State-Market Dimension at the Voter Level, Mid-2000s (Results of Canonical Linear Discriminant Analysis using mass-level data, only significant first function reported)

Issue items	Chile	Brazil	Venezuela	Bolivia LB	Bolivia LAPOP
<i>World Values Survey (WVS)</i>					
Private or public ownership	0.79		-0.34		
Competition good or bad	0.19				
Income equality	0.54		-0.47		
Gov. should provide for all			-0.46		
Battery on society aimed at (only 2000):					
- Egalitarian vs. competitive			-0.78		
- Welfare vs. taxes					
- Regulated vs. self-resp.					
<i>Latinobarómetro (LB) 2005</i>					
Privatization beneficial				-0.51	
Market economy beneficial					
Private enterprise indispensable				-0.67	
Regional economic integration				-0.35	
<i>LAPOP 2006</i>					
Nationalization of petroleum companies					0.71
Nationalization of petroleum and gas					
Foreign companies more taxes					
Public or private gas trade					0.81
<i>ESEB 2002</i>					
Public or private service provision (index)		-0.53			
Battery on state vs. market:					
- Price control services		-0.44			
- Price control products		-0.66			
- Help enterprises in trouble		-0.37			
- Set wages					
Limit imports					
N	500	1013	733	362	1646
Canonical correlation	0.27	0.14	0.18	0.30	0.15
Eigenvalue	0.08	0.02	0.03	0.10	0.02
Prop. variance explained	89%	63%	69%	87%	93%
p-value of F-statistic	0.0000	0.0068	0.015	0.0000	0.0000
z-value of ologit regression of party positions on voter preferences	5.0	-2.2	-3.2	4.1	5.7

Note: Results presented in this table are based on variables with imputed missing values. For imputation, I ran a prior Canonical linear discriminant analysis, and used only those variables with canonical structure coefficients of |0.20| or higher and pointed in the expected direction. The variables for which no canonical structure coefficients are shown in this table are those omitted from the analysis.

Note also that the direction of loadings on the function is not relevant; for the graphical presentation of the positions of parties and electorates, the direction of the dimension has been inverted where necessary to make positions in favour of state intervention come to lie on the left and those in favour of market liberalism on the right.

emerges throughout the four countries studied. The items featured in the different surveys are not the same and even where they are, those that emerge as relevant differ from country to country. Yet the state-market divide centers predominantly on privatization and economic liberalism throughout, capturing a latent dimension similar to that at the party system level (see Appendix C). The overall measure of responsiveness divided in the next step should thus be comparable across countries and over time. To underline this point, I include two different data sources for Bolivia in 2005 – one that features items on private enterprise and privatization in general (the 2005 Latinobarómetro), and one that centers more specifically on a central conflict in Bolivia, namely, natural resource governance (see Appendix A). As we will see, the results in terms of party system responsiveness are very similar for Bolivia independent of the data source used (although the second source constructs the dimension much more narrowly than the first). The items used for the measurement of the state-market dimension in the World Values Survey, the Latinobarómetro and the Brazilian election survey (ESEB), on the other hand, are fairly similar in that they cover domains similar to those in the elite data. The antagonism between public and private service provision or privatization is relevant throughout, and the dimensions are based on at least three items that are fairly general.

Measuring responsiveness

The final step in the analysis is to measure the correspondence between the positions of parties and those of their voters. Because the positions of parties and voters are usually not measured on the same scales, we can only judge the correspondence between political demand and supply in *relative* terms (Achen, 1978). I do so by regressing party positions on the state-market dimension on their individual preferences of their voters. This is done by attributing to each individual the policy position of his/her party, and then assessing how well individual

preferences explain the position of the party respondents voted for. Since the variance of the dependent variable is limited to the number of parties competing, I use ordered logit instead of OLS regression. The most important information provided by the regression analysis is not the coefficient, which again is not independent of the differing scales on which parties and voters are placed. Rather, I am interested in whether individual preferences are a *significant predictor* of party position. This makes the z-statistic of the ordered logit regression a straightforward measure for congruence. Its most important feature is that we can compare it within countries over time as well as across countries.

Although the discriminant analyses uncover significant divisions between electorates in all four countries, the last row in Table 1 shows that they differ quite dramatically in the degree to which party positions reflect voter preferences along the state-market dimension. The positive z-values in Chile and Bolivia indicate a highly significant and positive relationship between voter preferences and parties' policy positions (z-values over $|1.96|$ are statistically significant at the 0.05 level). For Bolivia, this holds true regardless of whether I use the Latinobarómetro or the LAPOP survey at the voter level. In Brazil and in Venezuela, on the other hand, representation is significantly distorted. The negative values indicate that more left-wing citizens vote for more right-wing parties, and vice versa.

To get an idea where this misrepresentation comes from “on the ground” in the Venezuelan case and to compare it to that of Bolivia, I show the positions of parties and voters for these two countries in Figures 1 and 2, respectively (for reasons of space, I do not show the corresponding figures for Chile and Brazil). Venezuela and Bolivia represent an interesting comparison in that they both saw left-wing populist parties reach power during the “left turn” – Venezuela in 1998 and Bolivia in 2005 – but with dramatically different consequences for substantive policy representation. Although the Venezuelan Movimiento V República (MVR)

constitutes a clear state interventionist pole in the party system, Figure 1 shows that these convictions are not a reflection of preferences at the voter level. Rather, MVR voters are situated in the centre of the distribution of voter preferences, and their overlap with the other electorates indicates that these voters are highly heterogeneous in their economic preferences (the bars below the location of parties and electorates in these figures show the standard deviations around the mean positions). This suggests that MVR voters are not mobilized on programmatic grounds and do not have clear understandings of where they and their preferred party stand on the economic dimension (for supporting evidence, see Hawkins, 2010, 114–29). The fact that the traditional parties (AD and COPEI) clearly misrepresent their voters contributes to making the overall responsiveness measure turn negative. These and all other results are sustained by a non-parametric construction of the state-market dimension (see Appendix D).

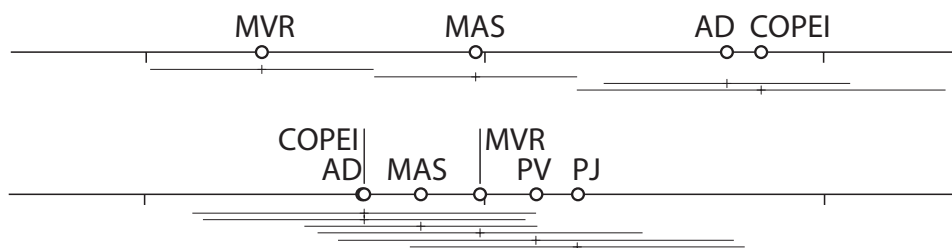


Figure 1: Parties (above) and voters (below) on the state-market divide in Venezuela, 2000
(after the 1998 elections)

Legend: MVR, Movimiento V República (Chavista/Bolivarian Movement); MAS, Movimiento al Socialismo; AD, Acción Democrática; COPEI, Comité de Organización Política Electoral Independiente; PV: Proyecto Venezolano (Henrique Sallas Romer); PJ: Primero Justicia (Henrique Capriles).

By contrast, the Bolivian MAS contributes to high levels of responsiveness in the party system by rallying an electorate that stands out for its state-interventionist political preferences and

does not overlap very much with other electorates (Figure 2). The other parties also represent their voters relatively well, although AND/POD is actually more right-wing than its voters. Overall, the contrast between Venezuela and Bolivia suggests that the effect of populism on party system responsiveness is not uniform across countries (Bornschier, 2018).

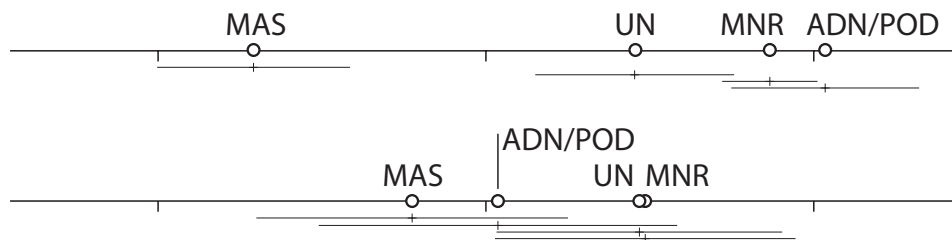


Figure 2: Parties (above) and voters (below) on the state-market divide in Bolivia, 2005 elections

Legend: MAS, Movimiento al Socialismo; UCS; UN, Frente de Unidad Nacional; MNR, Movimiento Nacionalista Revolucionario; AND/POD, Acción Democrática Nacionalista, renamed Podemos.

Conclusion

The approach presented in this contribution suggests that efforts to measure responsiveness in “challenging contexts” (Carlin, Singer, and Zechmeister, 2015) should be cautious not to set the bar too high. This would not only mask important differences between countries, but we might also fail to detect substantive representation when it is actually there. My approach is rather conservative in that it takes a “relative fit” between parties and their voters – that does not require absolute congruence between parties and voters, but rather that voters engage in directional voting (e.g., Rabinowitz and Macdonald, 1989) – as sufficient evidence for substantive representation. Another advantage of this approach is that it allows for a comparison of party system responsiveness even if positions at the party and the voter level are not measured

using the same scales.² Likewise, it allows for a comparison across countries and over time when the items used to tap dimensions differ.

If the approach developed is conservative in that it is unlikely to underestimate responsiveness, it nonetheless uncovers some stark differences between my four cases that shed new light on the different types of left-wing parties that drove Latin America's "left turn" of the late 1990s and early 2000s: Although Bolivia ranks last in terms of socio-economic development, its party system offers levels of responsiveness to voter preferences that are comparable to those found in Chile, which until quite recently constituted a showcase of democratic representation in Latin America (Luna and Zechmeister, 2005, Joignant, Morales and Fuentes 2017). Venezuela, on the other hand, has seen the rise of a populist movement that – contrary to MAS in Bolivia – does not contribute to restoring the responsiveness of a party system that by failing to represent voters in programmatic terms had helped the populist left to stage a breakthrough (Bornschier, 2013). And although the Brazilian and Chilean left are often considered of the same flesh (Panizza, 2009; Levitsky and Roberts, 2011; Weyland, Madrid and Hunter, 2010), my approach shows that they, too, differ in terms of their effect on party system responsiveness. Indeed, the Brazilian party system has lost touch with its electorate concomitant to the dramatic growth of the PT between the 1980s and the victorious 2002 elections. While these findings are plausible in the light of the country-specific literature on these cases, they are new in that they substantiate these claims from a comparative perspective.

The approach set out thus opens up a host of possible applications in new democracies beyond Latin America regarding the likely impact of party types and their strategies in driving differences in party system responsiveness.

2 Of course, if the same scales are available, as in recent rounds of the PELA and LAPOP data, this opens up interesting possibilities for measuring responsiveness along the lines of Saiegh (2015), and Lupu, Selios, and Warner (2017).

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