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Presidential Support in Latin America 2010-2012: Economic Vote and Political Preferences

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The study of the economic vote focused primarily in the States and industrialized democracies. Using the evidence from 24 Latin American countries for the years 2010 and 2012, I analyzed economic vote patterns. Both individuals and macroeconomic performance indicators allowed me to prove that the Latin American electorate presents some patterns of similarities with the previous evidence, especially when considering individuals characteristics such as Party Identification and perceptions about the economy. But on the other hand the Latin American electorate behaves counterintuitively with all the previous evidence when considering the macroeconomic performance.

Keywords: Economic vote, Latin America, Presidential Support, Party Identification


El estudio del voto económico se ha enfocado principalmente en los Estados Unidos y en democracias industrializadas europeas. Este paper explora los patrones del Voto Económico en América Latina usando los resultados de encuestas e indicadores macroeconómicos de 24 países para los años 2010 y 2014. Los resultados del análisis muestran que los ciudadanos Latinos Americanos se comportan de manera similar a toda la evidencia acumulada a nivel individual, ya sea respecto a su identificación partidaria así como al efecto de las percepciones de la economía sobre la aprobación presidencial. Sin embargo encontramos resultados contraintuitivos cuando se analizan los indicadores macroeconómicos.

Palabras claves: Voto Económico, América Latina, Aprobación Presidencial, Identificación Partidaria
Introduction

Presidential approval has been a largely studied subject in the Unites States and other industrialized countries. The study of presidential support in Latin America is relevant because it is an important indicator of the accountability that exists between people and their authorities. In this approach, citizens reward or punish their presidents based on their political and economic decisions and the economic performance of the country (Morgan, 2001; Przeworski, Stokes and Manin, 1999). Yet, alternative approaches would suggest that people assess their presidents based on party identification rather than on short-term economic evaluations (Campbell et al, 1960; Converse, 1964). This paper explores the economic vote and party identification theories to explain the determinants of presidential approval in Latin America. According to a multilevel analysis, I report that people evaluate their authorities primarily based on a sociotropic perspective view of the economy and that perceptions of economic performance do not have a significant impact on presidential approval. However, in countries where political party identification is high, party id has the strongest effect on the presidential popularity.

1. Determinants of presidential approval

Each of the main theoretical voting schools emphasizes different variables to explain vote intention in the U.S. and presidential approval. I briefly summarize these theoretical models in order to identify the key variables that explain the presidential approval and the discussion surrounding their effect.

According to the Columbia school, long-term variables are strong determinants of political preferences. Following Bartels (2010: 240), “voters’ choices seem to be based upon strong ‘brand loyalties’ rooted in religion and social class and reinforced by face-to-face interactions with like-minded acquaintances.” Therefore, people would tend to vote with groups that they belong to because they define their values and political attitudes early in their lives, based on social cleavages and family perceptions that remain unchanged over time. In this context, sex, age, social class and religion would be the main predictors of vote choice.

On the other hand, the Michigan school identifies variables developed in early life processes to explain voting behavior, with party identification being the most

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1 Previous versions of this paper were presented in the Midwest Political Science Association on 2012 and 2014.
important determinant of vote choice. Campbell et al. claim that party id is stable and characterized “by a persistent adherence and resistance to contrary influence”. Therefore, citizens would develop determined political orientations based on their party identification adopted early in life (Bartels, 2010:244). According to Bartels (2010), one of the most important contribution of the revisionists wing of this schools was Key and Cummings (1966:2) who specified that the electoral process would be a “echo chamber”, which means that citizens attitudes would be the result of a selective choice among alternatives presented by the authorities (Key and Cummings (1966:246), supporting the idea that there is a relationship between political leaders’ attitudes and the electorate’s beliefs.

The rational choice perspective, also known as the Rochester School, complemented the study of electoral behavior in United States. According to this paradigm, voting behavior can be explained by economic conditions and perceptions. Key and Cummings (1966) claimed that citizens were understood to respond to personal economic conditions, defined as “voting one’s pocketbook”; which means that people would vote based on their own economic situations rather than by looking at national conditions. However, Kinder and Keiweit (1979) argued that vote choice is substantially sociotropic, which means that citizens vote based on the national economic condition rather than their personal economic circumstances.

Further showing the different approaches that can be derived from the Rochester School, Tufte (1978) claimed that the citizens are “myopic retrospective voters” because they would be unable to respond to future implications of current policy or look beyond current economic conditions. Finally, in his influential work, Fiorina (1981) claims that voters use current and past economic circumstances to generate expectations about the future and then evaluate the incumbent based on a retrospective view. However, according to the main micro level evidence, people would vote based on a sociotropic perspective and in a strongly prospective view (MacKuen, et al., 1992:598).

The Rochester School identified a strong correlation between variables that explains presidential approval and vote choice. The so-called Vote-Popularity (VP) function, described by Nannestad and Paldam (1994) and Lewis-Beck and Paldam (2000), argues that both presidential approval and vote choice for the incumbent can be explained by economic and political variables. The concept is also known as the Economic Vote. The pioneering work by Mueller (1970), about the determinants of presidential approval in the U.S., showed that popularity depends on the existence of international crises, the time has elapsed since the incumbent came into office and
was re-elected, the presence of the U.S. in a war and national economic conditions, in particular, the level of unemployment. Following the evidence from the specialized literature, the most relevant economic variables that affect presidential approval are the unemployment rate, inflation, economic growth and the change in the growth rate (Duch and Stevenson, 2008:138; Lewis-Beck & Paldam, 2000:117; Shapiro and Conforto, 1980).

Following the Macro Polity approach (Erikson, et al., 2002), the most important determinant of presidential approval is the presidential competence in the economy arena. Thinking about the future, citizens expect the president to be in charge and be competent on the main policy issues. Therefore, people would consider current economic information to form their perceptions about the future and then, evaluate the presidential performance, as bankers (Erikson, et al., 2002:30). According to the authors, voters would be “farsighted, rather than myopic” (Erikson, et al., 2002:106); thus, they would use the information available to anticipate events and conditions rather than just react to the facts.

Rational choice theory plays a special role in this research. Latin American scholars have argued that governments should be mainly dedicated to solving economic problems of the countries (Mainwaring and Scully, 2010:21). Because high inflation and unemployment affect the well-being of people (Mainwaring and Scully, 2010), we expect that the economic performance and the perceptions about the economy will play a significant role on presidential approval in Latin America.

2. Evidence from Latin America

Presidential approval in Latin America has been studied for some time now. In general, the main characteristic of these analyses is the study of particular cases and the examination of the effect of economic performance on presidential popularity. According to the economic vote theory, inflation and unemployment are negatively associated with presidential approval, which means that people would tend to punish their authorities when inflation and unemployment are high. In general, the analysis of Latin American cases confirms these hypotheses, with some exceptions.

Using different evidence from case studies or cross national studies, inflation and unemployment have been found to have the expected effect on presidential approval (Arce and Carrion, 2010; Buendia, 1996; Gélineau 2002; Luna, 2002; Stokes, 1996, 2001). However, there are exceptions. Examining the Peruvian case during the first term of Alberto Fujimori, Stokes (1996, 2001) showed that decreasing unemployment
and increasing real wages were associated with a decline in presidential approval. According to Stokes, the evidence suggests that Limeños have “intemporal postures”, which means that they would think that short-term improvements would come with a long-term cost (1996:556). Following Stokes, bad economic conditions would tend to increase presidential approval, because people will blame earlier authorities, exonerating the current president. Arce (2002) found that employment does not have the expect effect on presidential approval in Peru between 1985 and 1997.

Echegaray and Elordi (2001) argued that neither inflation nor real wages had a significant impact on the presidential approval of Carlos Menem during his first 6 years in office (1989-1995). Higher unemployment was the most important determinant of the decrease in presidential approval. Morgan (2003) showed the inflation and changes in GDP did not have a significant effect on presidential approval in Peru. Finally, Cuzan and Bundrick (1997) showed a mixed effect of macroeconomic indicators on presidential approval in Central America. Economic growth has a positive impact on presidential approval in all cases, but unemployment had a negative effect on Costa Rica and El Salvador. Inflation only had a negative effect in Honduras.

According to the examination of the effect of economic perceptions on presidential approval, the analysis of some Latin American cases suggests that the sociotropic perspective has the most important effect on the evaluation of the presidential performance. However, there is no conclusive evidence when retrospective and prospective views are examined (Luna, 2002; Weyland, 2000; Morgan, 2003; Weyland, 1998). In particular, Cohen (2004) found that people retrospectively evaluate their presidents when countries are less economic and political developed. Though he used 41 countries, he included Argentina, Brazil, Guatemala, Honduras, Mexico, Peru and Venezuela in his study.

Finally, we found evidence on the effect of long-term determinants on presidential approval (Cabezas and Navia, 2010; Gélineau, 2007; Morales, 2008; Morales and Saldaña, 2009). In particular, the party and ideological identification seem to be good predictors of presidential approval. In a comparative perspective, Gélineau (2019) showed that party identification matter in explaining presidential approval. Using the cases of Argentina, Brazil and Venezuela, Gélineau explained that those who are members or feel close to the government party are more likely to approve of the president.
As we can note, there is no conclusive evidence on the predictors of presidential approval in a comparative perspective in Latin America. In general, there are valuable findings regarding individual cases, but those results are less useful in helping identify the variables that impact presidential approval across the region. In this paper, I examine the main determinants of presidential popularity to obtain a general picture of Latin America.

3. Hypotheses

Considering the economic voting theory, I expect that a good macroeconomic performance will have a positive and significant effect on presidential approval. Consequently, I expect a negative effect of inflation and unemployment on presidential approval—the lower the inflation, the higher the presidential approval ($H_1$). The lower the unemployment is, the better the evaluation of presidential performance will be ($H_2$). Finally, I expect a positive impact of economic growth on presidential approval. Therefore, the higher the economic growth, the higher the presidential approval will be ($H_3$).

I also examine if Latin Americans evaluate their presidential authorities based on prospective or retrospective views and based on sociotropic or egotropic perspectives. According to the main evidence, sociotropic prospective perceptions have the highest effect on presidential popularity in the United States, when using aggregate country variables (MacKuen, Erikson, & Stimson, 1992). Therefore, we expect the national economic perceptions have a higher impact than the egocentric or personal perspectives ($H_4$). Moreover, I examine whether citizens evaluate their authorities based on expectations about the future—as bankers—or based on extrapolations from economic past experience—as peasants (MacKuen, et al., 1992). According to the main evidence, our assumption is that Latin Americans evaluate their presidents as bankers rather than peasants ($H_5$).

Following the Michigan School, I expect that people who identify with the president’s party will be more likely to approve of the president’s performance regardless of their perceptions on their personal and/or national economy. Consequently, we expect a high positive effect of party identification on presidential approval ($H_6$). My assumption is that this variable should be stronger than the economic indicators or perceptions when I include it in the model. Finally, I include in the model some socio demographic variables to examine the effect of long-term predictors on presidential popularity. According to some evidence, gender and social class play an important role
explaining presidential popularity (Baum and Kernell, 2001; Morales and Saldaña, 2009; Morales, 2008). Additionally, I control for age and education in the models.

4. Data and methods

I analyze the effect of economic perceptions, political identification and macroeconomic indicators on presidential approval in Latin America. I control for some socio demographic factors to examine the effect of long-term variables on presidential approval. The dependent variable, presidential approval, socio demographic information and economic perceptions come from the Latin American Public Opinion Project (LAPOP) in 2010 and 2012. This survey is conducted by Vanderbilt University in most countries in the Americas, with a sample of at least 1,500 cases in each country. The surveys use a national probability sample design of voting—adults with face-to-face interviews conducted in different languages. Finally, the survey uses a complex sample design, taking into account stratification, clustering and weighting. The 24 countries included in this research are Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Suriname, Uruguay and Venezuela. Cuba is not included.

The macroeconomic indicators are defined at the higher or second level of analysis, the countries. These indicators come from the Economic Commission for Latin America and the Caribbean (ECLAC). When this information was not available or was outdated, I used information from the CIA World Factbook. I used two questions from LAPOP data to examine perceptions on the personal and national economic situation. In particular, I evaluate sociotropic and egotropic rational evaluations of the economy.

One of the most important competitive alternative explanation to account for perceptions and opinions is party identification school—or Michigan School—as discussed previously. In order to capture if the respondents feel represented by an opposition or government political party or coalition, I recoded all political parties that persons identified with. On a first step, respondents were asked if they felt represented by any political party. Those who did, were asked to report the name of

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2 I thank the Latin American Public Opinion Project (LAPOP) and its major supporters (the United States Agency for International Development, the Inter-American Development Bank, and Vanderbilt University) for making the data available.
the political party. Out of the more than 200 political parties listed each year, all of them were recoded as either opposition or government. Compared to the United States, where there are only 2 parties in Congress, Latin American tends to have multiparty systems. Thus, we need to take into consideration political coalitions and distinguish between those that are in charge (government) from those that are not (opposition). So, the Party Id variable assumes 3 values, -1 for opposition, 0 for those who do not feel represented by any political party and 1 for those who feel represented by a party from the ruling political coalition.

Female is a dichotomous variable, where 1 means female and 0 male. The years of schooling and the age are continuous variables from 0 to 18 years of schooling and from 18 to 98 years of age, respectively. The income variable is measured in deciles, calculated by the currency and the distribution of each country.

5. Descriptive data

The dataset has 64,844 observations, distributed in 24 countries for 2010 and 2012. The average presidential approval in Latin America is .39 (or 39%). The average is not a good indicator of the presidential approval since the standard deviation is .49. Table 1 shows the descriptive statistics of the individual level variables.

In general, just one third of Latin Americans feel represented by a political party. According to the economic perceptions, people have better egotropic than sociotropic perceptions. Nevertheless, all perceptions are almost neutral because they are really close to “Neither Good nor Bad” or “Same” categories of responses. Considering the socio-demographic indicators, half of the sample is women. The average respondent has 9 years of schooling, is 39 years old and has a medium level of income, while the average income is in the fourth decile.
Table 1
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pres. Approval</td>
<td>64,844</td>
<td>0.39</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(1 Approve, 0 Disapprove)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>64,844</td>
<td>0.50</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(1 Female, 0 Male)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>64,844</td>
<td>39.2</td>
<td>15.50</td>
<td>18</td>
<td>99</td>
</tr>
<tr>
<td>Education</td>
<td>64,844</td>
<td>9.33</td>
<td>4.33</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Income (Deciles)</td>
<td>64,844</td>
<td>4.11</td>
<td>2.33</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Party Id</td>
<td>64,844</td>
<td>0.33</td>
<td>0.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(0 No, 1 Yes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Party Identification</td>
<td>64,844</td>
<td>0.08</td>
<td>0.54</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>(−1 Opposition, 0 None, 1 Identifies with government party)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociotropic</td>
<td>64,586</td>
<td>-0.16</td>
<td>0.73</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>(−1 Worse, 0 Same, 1 Better)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egotropic</td>
<td>64,686</td>
<td>0.06</td>
<td>0.69</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>(−1 Worse, 0 Same, 1 Better)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPD per capita</td>
<td>48</td>
<td>6.33</td>
<td>4.06</td>
<td>678.7</td>
<td>15,946</td>
</tr>
<tr>
<td>Inflation</td>
<td>48</td>
<td>0.05</td>
<td>0.055</td>
<td>0.00910</td>
<td>0.282</td>
</tr>
<tr>
<td>Unemployment</td>
<td>48</td>
<td>0.07</td>
<td>0.026</td>
<td>0.0270</td>
<td>0.153</td>
</tr>
</tbody>
</table>

The second group of variables is related to countries’ macroeconomics indicators, such as GDP per capita, unemployment and inflation rate.

The country-wide variables are constant for each country-year. The number of observations is the individuals. However, these are just 48 different observations for each variable (2 waves of observations for 24 countries). The average GDP for the 24 countries is almost $4,000, measured in US$. There is a high range in GDP values, more than $16,000. I expect that having a high GDP have a positive effect on presidential approval. Finally, both the inflation and the unemployment have a high variance within the countries. We can tell how different are the countries when looking at the distance or range from the lowest and the highest values.
6. Methods and Results

In order to identify the determinants of presidential approval in Latin America, I use a multilevel model, because of the nature of the data. I am assuming that there are unobserved and observed characteristics on each group unit or countries. Multilevel analysis let us control these unobservable and observed differences when computing the betas and the standard errors, giving more weight to underrepresented units and under estimating those that are originally over represented. Nevertheless, because the number of observations across countries is balanced, this does not constitute a problem for my research design. The main reasons for doing this type of analysis is, following Luke (2004), that I have both theoretical and statistical reasons for using a multilevel approach. The statistical argument may be tested with Inter Class Correlation (ICC), meanwhile the theoretical reasons rely on the structure and origin of the data, both at the individual and country level, the first and second level respectively.

I combine the multilevel structure with a Maximum Likelihood Estimation (MLE) process. Since the dependent variable is dichotomous, I use a probit specification, so I can compute the expected probabilities for each value using a linear transformation, and I will also able to estimate the marginal effects over the expected probabilities for each unit of change in all the variables included in the analysis.

I also used more specifications in the analysis. I use a model that allows a varying intercept for each country, and random slopes for the three variables of interest: party identification, egotropic and sociotropic perceptions. By doing this, I am able to identify differences and similarities in the Latin American context. Assuming that it is a homogeneous region per se could be fallacious or not, but in doing this analysis I will have enough evidence to support the homogeneity or heterogeneity of the region. In the following section, I analyze the general model—or fixed effects—and then I analyze the random effects.

7. A general view: fixed effects

According to Model 1 in Table 2 women tend to have a slightly higher support for the incumbent. Age has a small positive effect. Years of education and income level marginally decreases the expected probability of approving the incumbent.
According to the ICC, which takes into consideration the estimates of both levels variances respectively, “the proportion of the variance in the dependent variable that is accounted for by groups” (Luke, 2004:18) is 15%. Put in other words, when using a pooled model we would be underestimating the effect of the variances among countries by 15%.

\[
ICC = \rho = \frac{\sigma^2_{u0}}{\sigma^2_{u0} + \sigma^2_r} = \frac{.06}{.33 + .06} \approx .15
\]

From a general perspective, the effects of education and income are different than expected, and different to the literature, as previous evidence supports the hypothesis that higher income levels and higher education are associated to higher support for the incumbent. The assumption is that if the country and I are doing well in economic terms, it is because the economy is also doing well. Following the responsibility assumption, both the economy and I are doing well because the incumbent is doing a good job. Then, the incumbent will be rewarded either with my vote or my approval. This is not exactly what happens in Latin America, according to this data. It is not the objective of this paper to find the answer to why that is the case, but the finding warrants posterior research.

The first variable of interest is party identification. It has a statistically significant positive effect. The probit coefficient .55 is not completely useful by itself if it is not transformed from the latent probit distribution to a linear space. With the transformation, we are able to compute the marginal effects for each value. The expected probability of supporting the incumbent, for those who do not feel represented by any political party, is 36%, holding all the other variables to their mean values. On the other hand, the expected probability of supporting the incumbent, for those who feel represented by a political party from the opposition, is 20%. Meanwhile, the expected probability of supporting the incumbent is 56% for those who feel represented by any ruling political party. This analysis implies that the marginal effect of feeling represented by a ruling political party respect to feeling represented by a political party of the opposition is 36 percentage points.
Changes in the evaluation of one’s personal economic situation accounts for less than half of the effect of party identification. The probit coefficient for egotropic perceptions is .22 and it’s also statistically significant. With the linear transformation, the marginal effect of having a positive perception on the personal economic situation, respect to a negative situation, is 15 percentage points. Those who think that their personal economic situation is worse than one year ago have an expected probability of 31% of approving the incumbent, while the expected probability for those who think their situation is the same is 38%, and it is 46% for those who think that it is better.

The third variable of interest is sociotropic perception. This variable has almost twice the magnitude of the egotropic variable, but it is smaller than the coefficient for party identification. The probit coefficient for the sociotropic perception is .38 and statistically significant. For those who think that the country’s economic situation is doing worse than one year ago, the variable has an expected probability of supporting the incumbent of 27%. For those who think that it is the same, the expected probability is 40%. For those who evaluate the current country economic situation as better than 12 months ago, the expected probability of supporting the incumbent is 55%. This means that the marginal effect of changing the perception from worse to better is almost 30 percentage points, six percentage points less than the marginal effect for party identification.

To make the point clearer, I present a different example, comparing two different profiles. The first profile is a person with the worse egotropic and sociotropic perceptions and who also feels represented by the opposition. For that person, the expected probability of supporting the incumbent is 8%. The opposite profile is a person with better perceptions of the personal and country’s economy and who also feels represented by the ruling political party. That person has an expected probability of supporting the incumbent of 79%. This means that there is a marginal effect differential of 70 percentage points—79% versus 8%—when switching from a negative scenario, and being self-classified as the opposition, to a positive economic scenario and feeling represented by the parties in power.
The probit coefficients of sociotropic, egotropic and party identification are positive and statistically significant. As a first approach, we have evidence to support the argument behind the vote-popularity function (V-P Function), since the effect of sociotropic perceptions is bigger than the effect of egotropic perceptions. This is a first approach in the same direction that MacKuen et al (1992) found in the United States, arguing that the electorate behaves more as a “banker” than a “peasant,” since they give more importance to the rational expectations about the country general economy rather than their personal economic situation. On the other hand, we can see that party id has a bigger value than either the egotropic or sociotropic perceptions, which implies that the electorate is partisan rather than banker. But since party id has a smaller effect than the egotropic and sociotropic perceptions together, the V-P Function explains presidential approval in Latin America better than party identification alone. Together, the 3 variables explain a variation of more than 70 percentage points when explaining the way people evaluate the incumbent.

The next set of variables is related to the second level, countries. Inflation, unemployment anf GDP per capita have negative signs, nut unemployment is not statistically significant. This is completely counterintuitive with the literature and previous evidence. This evidence help us to argue that in the Latin American case there are other characteristics, more important than the economy, that the individuals consider when evaluating the incumbent.

These results imply at least two different things. First, the Latin American electorate behaves in the same way as the electorate in the United States and other industrialized democracies, at the individual level. But Latin Americans behave or react differently than people in industrialized countries to macro-economic conditions. One plausible explanation is that, maybe, the electorate realizes that the current economy does not depend only on the capacity of the incumbent. The second consideration will also support the economic vote approach, which is that the electorate does not react directly to macroeconomic changes immediately, but late. Latin Americans assign responsibility to the incumbent in the same way as people in industrialized countries.
Table 2
Multilevel Probit coefficients

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.022**</td>
</tr>
<tr>
<td>Age</td>
<td>0.001***</td>
</tr>
<tr>
<td>Education</td>
<td>-0.004***</td>
</tr>
<tr>
<td>Income</td>
<td>-0.020***</td>
</tr>
<tr>
<td>Party Identification</td>
<td>0.552***</td>
</tr>
<tr>
<td>Egotropic perceptions</td>
<td>0.219***</td>
</tr>
<tr>
<td>Sociotropic perceptions</td>
<td>0.380***</td>
</tr>
<tr>
<td>Inflation</td>
<td>-2.880***</td>
</tr>
<tr>
<td>Unemployment</td>
<td>-1.017</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.0005***</td>
</tr>
<tr>
<td>Year</td>
<td>-0.005</td>
</tr>
<tr>
<td>Constant</td>
<td>10.441</td>
</tr>
<tr>
<td>Observations</td>
<td>64,442</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-36,399.71</td>
</tr>
<tr>
<td>Akaike Inf. Crit.</td>
<td>72,823.43</td>
</tr>
<tr>
<td>Bayesian Inf. Crit.</td>
<td>73,023.04</td>
</tr>
</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01

Source: author, with data from LAPOP 2010 and 2012.

9. Random Effects

With the multilevel structure, we can also analyze the differences and similarities between countries. To do so, I included varying intercepts and random slopes for the three variables of interest.

The first element to be analyzed is the random intercepts. A pooled model will assume a single or unique intercept for the regression model, but one of the advantages of multilevel analysis is that we can obtain random intercepts for each group or country and compare them with others.
Figure 1 shows the different intercepts computed using the multilevel analysis and their 95% confidence intervals. Interpreting the intercepts by themselves does not make sense since they are the probit coefficient when all the other variables are set to zero—something that does not actually exists in the dataset, nor even in reality. However, the figure and the distribution are useful to assess differences within Latin America when analyzing the economic vote. The lower scores are for countries that are doing relatively bad in economic and institutional terms, such as Guatemala, Bolivia, Haiti, Guyana or Beliza, with a relatively high level of income but political and social unrest is also in that group, with the exception of Peru, as an example.

![Figure 1. Varying Intercepts, coefficients and CI's](image)

Source: author, with data from LAPOP 2010 and 2012.

The second variable to be analyzed is the varying slopes for party identification. Figure 2 shows the varying slopes for each country for the party id variable. The higher effects are for Bolivia, Ecuador, Nicaragua and Venezuela. Only Paraguay presents a negative coefficient. Again, the value of the probit coefficient is not informative by itself, but these figures let me present graphically a highly diverse region.
In Chile, Guatemala, Jamaica, Peru and Suriname the coefficients are not statistically significant. Again, it is not the objective of this analysis to convert the coefficients into linear space and compute expected probabilities, but to illustrate how different the reality for each country is. Remember that the assumption is that a pooled model will generate an only and single coefficient for the whole sample. Using these figures, we can see how bad we would be doing assuming homogeneity in the region. We are able to notice and identify this difference thanks to the multilevel approach we are using.

The next varying slope is for egotropic perceptions. Figure 3 shows the random slopes coefficients of egotropic perceptions. We can see say two things, all the coefficients are statistically significant and positive. In this case in particular, we are able to see that Latin America has a homogenous effect when considering egotropic perceptions.
The last variable analyzed is the random slopes for the sociotropic perceptions. Figure 4 shows the random slopes for each country. Only one country deviate from the positive and significant coefficients, Honduras. The other countries have positive and significant coefficients. The higher coefficients are for Argentina, Bolivia, Ecuador and Venezuela, which implies that people in these countries gives more importance to the rational expectation about the future than people in countries elsewhere in Latin America.
Conclusions

We can generally say that the Latin American electorate considers both the rational expectations of the economy—egotropic and sociotropic—to make political decisions—in this particular case, presidential approval. This means that the vote-popularity function also works in Latin America. However, there are caveats. A third of the electorate feels represented by any political party. Presidential approval in this group is highly led by identification with either the ruling party or the opposition. This group behaves like partisans. The rest, the other two-thirds, behave as bankers, rather than peasants, because they take into consideration the evaluation on the economic situation of the country rather than just their particular economic situation.

In addition, the multilevel structure helps show the country-based differences in the Latin American electorate. It would be a mistake to assume homogeneity and conclude that the Latin American electorate behaves one way or another. In fact, the multilevel analysis shows that it would be a mistake to speak of a Latin American voter. Such voter does not exist. The heterogeneity of the region becomes evident in the statistical analysis. These country-based differences may be caused by multiple reasons. I will mention two plausible alternative explanations that are worth analyzing, different economic performances and, more importantly, different institutional designs.
In analyzing the data from the two LAPOP waves, 2010 and 2012, I also found results that are counterintuitive to existing research and dominant literature. The way the Latin American electorate reacts to macroeconomic performances—such as unemployment, inflation and GDP—is different than what has been observed for the United States and, mostly European, industrialized democracies. This puzzle reported here raises the question of what accounts for that difference. Again, institutional variables at the national level might be behind the difference. Also, the data we are using in this analysis also help us to describe a region with high levels of heterogeneity among countries, in term of economic performance.

Finally, it is important to highlight that researchers in general reports what happens at the observational level—describing the environment and registering an outcome as political support for the incumbent—but there is little we can say with respect to the causal mechanism working inside each individual when deciding if she or he approves of the way the president is doing her or his job. This is probably the most challenging, compelling and difficult puzzle for this line of research. Mixing experimental and qualitative research tools could offer an opportunity to explore the internal dynamics that lead Latin Americans, and people elsewhere, to approve or disapprove of the way the president is doing his or her job.

References


