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Compulsory Voting and the Decision to Vote

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Executive Summary. Does compulsory voting alter the rational calculus of voting? According to the rational choice theory of voting, turnout depends on the costs and benefits of voting, the probability of casting the decisive ballot, and individuals' sense of duty. After showing that compulsory voting boosts turnout in Latin America and the Caribbean, this *Insights* report examines the extent to which turnout is associated with the cost and benefits of voting and individuals' sense of duty in countries with voluntary versus compulsory voting laws. Contrary to expectations, the analysis reveals that the factors affecting voting are nearly identical in compulsory and non-compulsory systems. In both types of countries, the wealthy, the politically engaged, the highly educated, and those who are older are more likely to go to the polls, while retired people, housewives, students, and the unemployed are less likely to vote. Finally, the report discusses the consequences of these findings for the debate about implementing compulsory voting laws in countries with voluntary voting, or freeing citizens from the obligation to vote in countries with compulsory voting.

Is the decision to vote made differently in Latin American and Caribbean countries under compulsory laws than in ones with voluntary voting? In his presidential address to the American Political Science Association, Lijphart (1997) mentioned several benefits to compulsory voting laws. The principal one is that high turnout diminishes what can be a significant threat to representative democracy: the election of officials in competitions with low levels of voter participation, which produces weak popular mandates. He also suggested that compulsory voting levels the playing field by reducing the extent to which turnout is "unequal and socioeconomically biased" (p. 2).

Scholars have shown that electoral turnout is higher in countries with enforced compulsory voting (Norris 2004). However, the question of how compulsory voting affects the decision-making calculus of voting and inequalities in participation remains relatively under-explored. One study examines this topic at the aggregate level (Panagopoulus 2008), while more recently Singh (2011) uses a hierarchical model to examine the topic with a scattered sample of 36 countries around the world, including some Latin American ones. Research focused on Western countries shows, as suggested by Lijphart (1997) that mandatory voting decreases inequality in participation (Mackerras and McAllister 1999; Jackman 2001).

Beyond compulsory voting, Blais (2000) argues that turnout depends on four dimensions related to a rational decision: the benefits of voting, the probability of casting a decisive vote, the cost of voting, and the individual's sense of duty. In this *Insights* report[1], I propose to test whether the impact of each factor on voter turnout for countries in Latin America and the Caribbean depends on whether the country has voluntary or compulsory voting.[2] In the 2010 round of AmericasBarometer, 11 countries out of 24 surveyed have compulsory and regulated voting.[3] So, this sample offers a sort of "natural experiment" to test these claims in a particular region of the world. I divide the analysis in three sections. The first presents information about turnout in Latin America and the Caribbean. The second analyzes the impact of compulsory voting on turnout controlling for demographic variables. It also includes economic and political variables related to the dimensions described by Blais, specifically the cost and benefits of voting and the sense of duty of the voter.[4] Finally, I assess the extent to which the effect of these three factors on the decision to turnout depends on whether the system uses compulsory or voluntary voting.

To examine the role of compulsory/voluntary voting on voter turnout in Latin America and the Caribbean, I will use a question asked in the 2010 round of the AmericasBarometer:[5]

VB2. Did you vote in the last presidential / general elections?[6]

Respondents could indicate whether they voted or not. It is important to note that this question focuses on the last presidential or parliamentary election, which differs in each country. While in countries such as Chile and Uruguay elections occurred just a few months

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[1] Prior issues in the *Insights* Series can be found at: http://www.vanderbilt.edu/lapop/insights.php
The data on which they are based can be found at http://www.vanderbilt.edu/lapop/survey-data.php

[2] I consider countries that have compulsory but unenforced voting as voluntary; thus this variable is binary.

[3] I exclude the USA and Canada because the emphasis of this *Insights* series is on Latin America and the Caribbean.

[4] I do not include the probability of casting the decisive ballot into the analysis because I do not have a variable that taps this factor; this is not a large loss, as its influence is comparatively negligible.

[5] Funding for the 2010 round mainly came from the United States Agency for International Development (USAID). Important sources of support were also the Inter-American Development Bank (IADB), the United Nations Development Program (UNDP), and Vanderbilt University.

[6] The non-response rate for this question was 1.79%.

previously, in others such as Peru and Brazil, elections occurred as long ago as 2006.[7]

Figure 1 presents the average reported voter turnout in 24 countries in Latin America and the Caribbean. It shows, as expected, that turnout is higher in countries with compulsory voting, but the difference is not as great as typically thought, 5.9%.[8] However, this difference may be affected by one known limitation, namely the overreporting of turnout. Previous research has shown that people in Central America tend to overestimate their voting participation (Seligson et. al. 1995) and the same may happen in the rest of Latin America. Indeed, the average difference between actual and self-reported turnout is only 4.4% in compulsory countries, while it is 12.2% in voluntary countries. That means that the difference in turnout between compulsory and non-compulsory countries is actually higher than the self-reported data suggest.

Determinants of Turnout: Socio-Demographic Groups, Political Variables, and Compulsory Voting
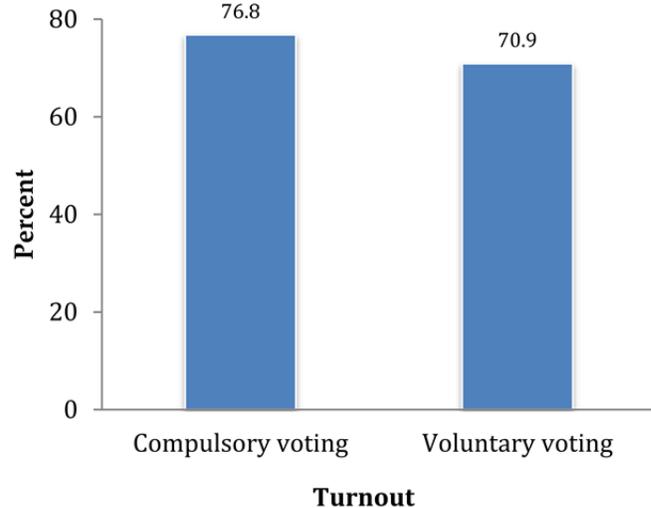
Following previous research (Powell 1986 and Blais 2000), I test the effect of selected sociodemographic variables on levels of turnout.[9] According to Blais, the cost of voting entails both information costs and the time and money spent going to the poll. So, in addition to the standard variables (gender, education, and age), Blais also includes variables that

Figure 1. Turnout in Latin American and Caribbean Countries

capture the retired[10], housewives, the unemployed, and students.[11] Here, I expect that these groups are less likely to be able to afford the cost of voting. Consequently, I anticipate these variables will have negative coefficients. Further, I also include wealth as a measure related to the cost of voting, since I consider that rich people are more able to bear the cost of getting information and of going to the poll station.

In the same fashion, sense of duty may be gauged by several measures. Here, I use a system support index.[12] I assume that when a person has higher support for the system, he or she is likely to have a more developed sense of duty in electoral terms.[13] Finally, I assess the

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[7] The time elapsed since the election might affect overreporting. I replicated the following analyses for the subset of countries with a difference between reported and official turnout lower than 10% and 5% and I find results akin to those presented here.

[8] According to IDEA data, the official turnout in Latin American and Caribbean countries with compulsory voting is 72.4% and in countries with voluntary voting it is 60.6%, giving a difference of 11.8% (www.idea.int/vt). See Appendix for details.

[9] All analyses conducted with STATA v11 and results were adjusted for the complex sample design employed.

[10] This variable includes the retired, pensioners, and people who are permanently disabled.

[11] Blais also includes married people and finds a positive and significant effect on turnout. Here, I also include this variable to replicate this analysis.

[12] This is an index based on responses, on a 1-7 scale running from strongly disagree to strongly agree, to five statements regarding support for the courts, support for the political institutions of the country, belief that basic rights are protected, pride in the political system, and support for the political system.

[13] I replicated this analysis using a support for democracy variable as a measure of individuals' sense of duty, and I get similar results.

importance of the benefits of voting by including a variable that measures whether a person works for a party.[14] I consider that those who work for a party may benefit to a greater extent if their party wins than those who do not work for a party.

Figure 2 shows the results of a multi-level logistic regression model of self-reported turnout using these variables. The impact of each variable is in the expected direction. The retired, students, housewives, and the unemployed are all less likely to vote. On the contrary, as Blais finds, married people, older people[15], and the well-educated are more likely to go to the polling station. This indicates that particular social groups face greater barriers to casting a ballot. The more educated segments of the population have more interest and knowledge about politics and probably a higher sense of citizenship that push them to go vote (Milstein and Green 2010).

Results for wealth, working for a party, and system support are statistically significant and also in the expected direction. Specifically, people with higher system support, who have worked for a party, and who are wealthier are more likely to cast a vote. So, the more the citizen is politically integrated, the more likely he or she is to vote.
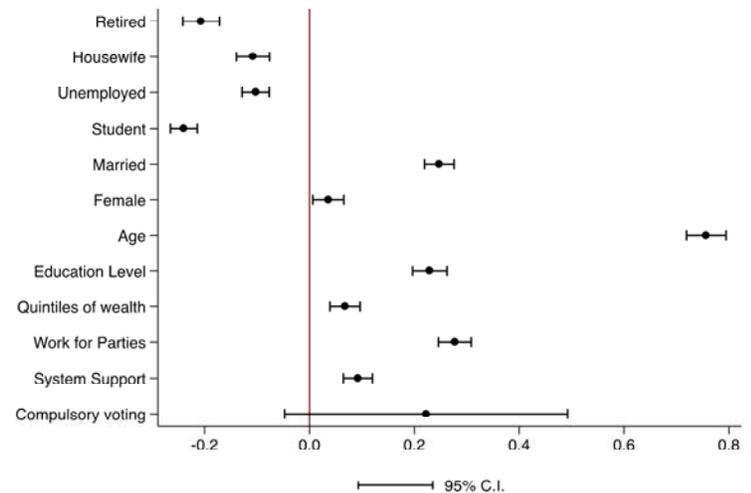
I also include an indicator for whether the country has a compulsory voting system.[16] The

Figure 2. The Impact of Socio-Demographic, Political Variables, and Compulsory Voting on Turnout, 2010

Source: AmericasBarometer by LAPOP, 2010 and ACE project
Data from 24 countries; U.S. and Canada excluded

coefficient for this variable is not statistically significant at a 95% level of confidence (p-value=0.106), but it is in the expected direction and substantively as relevant or more relevant than a number of the individual measures. Thus, people living in countries with compulsory electoral laws are more likely to vote. This result is not surprising, and it is corroborated by research at the aggregate level in Latin America (Fornos et. al. 2004).

Nonetheless, a question remains: to what extent are these opinions and attitudes different in compulsory versus voluntary countries? The next section takes up this question.

Cross-Country Variation in the Determinants of Turnout

In order to answer this question, I run separate regressions for two groups of countries: those with voluntary voting and those with

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[14] I replicated this analysis using party identification as a measure for benefits of voting, and I get parallel results.

[15] I find a curvilinear pattern that indicates that people in their forties and fifties are most likely to vote, whereas those younger and older have lower probabilities. This pattern is similar to that found by Seligson at. al. (1995) for a survey of six Central American countries. Here, I find the same configuration for a broad sample of 24 countries. Further, I also ran this model including the squared term for age and found a positive and statistically significant coefficient for age and a negative and significant one for age squared, indicating the same curvilinear pattern.

[16] This is a second-level variable, which means that it is a characteristic of a country and not a characteristic of individuals. For that reason, I run a multi-level logistic

model. See the Appendix for details about countries with compulsory vs. voluntary voting and turnout.

Figure 3. The Impact of Socio-Demographic and Political Variables by Type of Country, 2010

F=93.960
N = 18513

Source: AmericasBarometer by LAPOP, 2010

Country fixed effects and intercept included but not shown here

95% C.I. (Design-Effects Based)

Countries with Voluntary Voting

F=89.853
N = 19160

Source: AmericasBarometer by LAPOP, 2010

Country fixed effects and intercept included but not shown here

95% C.I. (Design-Effects Based)

Countries with Compulsory Voting
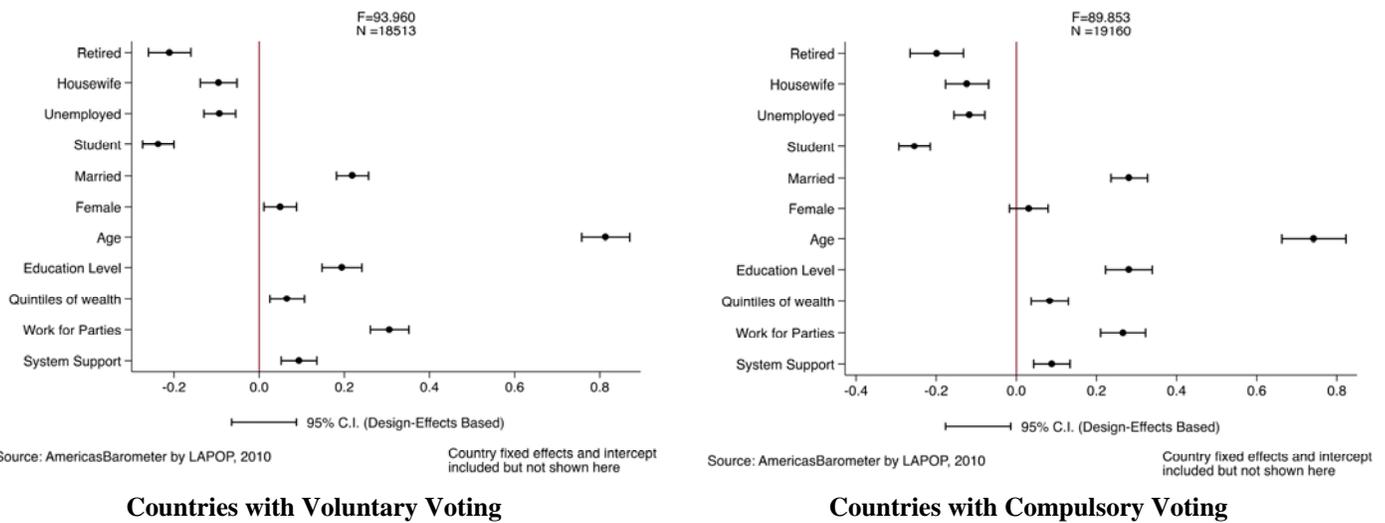
compulsory voting laws.[17] I expect that the cost of voting, measured by socio-demographic characteristics and wealth, decreases turnout in countries with compulsory voting. But this relationship should be even stronger in countries with voluntary voting. I also expect the same relationship regarding the sense of duty and the benefits of voting; a positive effect in countries with voluntary voting and a smaller effect in countries with compulsory voting.

Figure 3 shows these two logistic regressions, one for each type of country. The results indicate that there are strong similarities between the two models. In both types of countries the coefficients for the retired, housewives, the unemployed and students are negative and statistically significant. Similarly,

variables for married and age present positive and statistically significant coefficients. I expected these effects in countries with voluntary voting, but in countries with compulsory voting I had expected smaller effects than are shown here. I also find, again contrary to my expectation, that wealth is positive, statistically significant, and of relatively equal impact in both types of countries. Lastly, I find that system support is statistically significant and of very similar magnitude in both types of countries. Thus, it appears that the individual's sense of duty, measured by the respondent's support for the system, is associated with the decision to vote regardless of whether voting is voluntary or obligatory.

Discussion

The study of the effect of compulsory voting on turnout has for the most part been examined at the aggregate level. In this *Insights* report, I seek to contribute to that discussion by focusing on the individual level, examining how this feature affects the relationship between individual attributes and voting behavior. The results indicate surprisingly few

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[17] I also ran a multi-level logistic model that includes the second-level variable and interactive terms between this variable and the key independent variables to test whether there are differences in the effects of those variables across these two types of countries. In this model none of the interactive variables is statistically significant at 95% level of confidence. This means, as Figure 3 suggests, that there are no differences in the effects of these variables across countries with compulsory and voluntary voting laws. Given that I find similar results and given the scope of this short report, I do not present results from that complex model here.

differences between citizens living in countries with compulsory versus voluntary voting.

This report also helps us answer an important question: what happens if a country with compulsory voting changes to voluntary voting? Scholars and policymakers have been worried about whether this change would introduce a bias in electoral results favorable to economic and political elites (Lijphart 1997). On the other side, some scholars (Mackerras and McAllister 1999, Jakee and Sun 2006) argue that compulsory voting introduces an electoral advantage for leftist parties and increases the rate of invalid votes.

According to these results, an economic and a political bias exist equally in countries with voluntary and compulsory voting. So, changing from compulsory to voluntary or from voluntary to compulsory voting may not affect how people evaluate whether to vote or not to vote. In conclusion, these results indicate that

the rational calculus is basically the same regardless of whether a country uses compulsory or voluntary voting. Turnout decisions are based on economic calculations and political values. So, a change from compulsory to voluntary voting decreases turnout and may maintain the economic and political biases; in contrast, a change from voluntary to compulsory would theoretically increase turnout, but apparently not eliminate these biases.

Future research should examine the role played by the penalties for not voting in countries with compulsory voting. The rational calculus of voting may depend not only on socioeconomic status, but also on whether one can easily afford the penalty for not voting. It may be easier to afford a fine than the suspension of basic rights. In short, and as always, more work remains to be done but, in the meantime, this *Insights* report adds one more perspective to the literature on turnout and turnout rules.

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Appendix

Appendix Table 1. Latin American and Caribbean Countries by Official and Reported Turnout and by Type of Election

Country	LAPOP (reported turnout)	IDEA (official turnout)	Diff.	Compulsory / Voluntary
Venezuela	68.6%	76.3%	-7.7%	Compulsory and regulated
Costa Rica	58.0%	64.0%	-6.0%	Compulsory and regulated
Peru	80.0%	83.2%	-3.2%	Compulsory and regulated
Brazil	83.4%	83.6%	-0.1%	Compulsory and regulated
Argentina	75.2%	72.2%	3.0%	Compulsory and regulated
Dominican Republic	76.1%	71.6%	4.5%	Compulsory and regulated
Paraguay	66.8%	45.9%	20.9%	Compulsory and regulated
Honduras	60.9%	60.6%	0.4%	Compulsory and regulated
Uruguay	93.5%	91.8%	1.7%	Compulsory and regulated
Ecuador	92.7%	84.1%	8.6%	Compulsory and regulated
Bolivia	89.2%	63.4%	25.8%	Compulsory and regulated
Suriname	70.5%	53.0%	17.5%	Voluntary
Nicaragua	69.4%	74.2%	-4.8%	Voluntary
Guyana	71.2%	66.4%	4.8%	Voluntary
Haiti	59.4%	47.8%	11.6%	Voluntary
Colombia	60.2%	44.2%	16.1%	Voluntary
Trinidad and Tobago	68.1%	72.5%	-4.4%	Voluntary
Jamaica	57.2%	49.6%	7.6%	Voluntary
Guatemala	69.0%	45.5%	23.5%	Voluntary
Belize	76.4%	73.9%	2.6%	Voluntary
Canada	78.2%	53.6%	24.6%	Voluntary
United States	86.3%	58.2%	28.0%	Voluntary
Panama	81.8%	80.3%	1.5%	Voluntary
Chile	93.7%	63.0%	30.7%	Voluntary
Mexico	71.0%	63.3%	7.8%	Voluntary (no enforcement)
El Salvador	79.3%	63.1%	16.2%	Voluntary (no enforcement)

Appendix Table 2. Hierarchical Regression Model Predicting Voting
Turnout in Latin America and the Caribbean, 2010

	Coefficient	Standard Error
Compulsory voting	0.222	0.138
System support	0.092**	0.014
Working for party	0.278**	0.016
Wealth	0.068**	0.015
Education	0.230**	0.017
Age	0.757**	0.019
Female	0.036*	0.015
Married	0.248**	0.014
Student	-0.240**	0.013
Unemployed	-0.103**	0.013
Housewife	-0.108**	0.016
Retired	-0.207**	0.018
Number of Observations	*37,673*	
Number of Countries	*24*	
Wald Chi2	*3,744.16*	

Note: Coefficients are statistically significant at *p < .05; ** p < .01.

Appendix Table 3. Logistic Regression Model Predicting Voting Turnout for Countries with Compulsory and Voluntary Voting, 2010

	Countries with Voluntary Voting		Countries with Compulsory Voting	
	Coefficient	t-value	Coefficient	t-value
System support	0.093*	4.38	0.089*	3.83
Working for party	0.306*	13.27	0.266*	9.32
Wealth	0.066*	3.18	0.083*	3.52
Education	0.195*	8.18	0.281*	9.46
Age	0.814*	28.35	0.743*	18.24
Female	0.050*	2.53	0.031	1.26
Married	0.219*	11.40	0.282*	12.13
Student	-0.237*	-12..62	-0.254	-12.71
Unemployed	-0.093*	-4.88	-0.117*	-5.95
Housewife	-0.095*	-4.32	-0.123*	-4.49
Retired	-0.210*	-8.27	-0.199*	-5.85
Number of Observations	*18513*		*19160*	
F	*93.96*		*89.85*	

Note: Coefficients are statistically significant at *p < .05.