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VOTING AS A (MANDATORY) DUTY: CITIZEN ATTITUDES, POLITICAL ENGAGEMENT, AND PARTY OUTREACH UNDER COMPULSORY VOTING

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VOTING AS A (MANDATORY) DUTY: CITIZEN ATTITUDES, POLITICAL ENGAGEMENT, AND PARTY OUTREACH UNDER COMPULSORY VOTING

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Arts and Sciences
at the University of Kentucky

By
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2017

ABSTRACT OF DISSERTATION

VOTING AS A (MANDATORY) DUTY: CITIZEN ATTITUDES, POLITICAL ENGAGEMENT, AND PARTY OUTREACH UNDER COMPULSORY VOTING

Political participation is paramount to the well being of a democracy. Concerns over low turnout rates across the world have prompted a growing body of research on the potential for political institutions to foster electoral participation. Amongst those institutions, compulsory voting is found to have the largest and most robust impact on maximizing participation rates. Under this system, eligible citizens are required by law to go to the polls on election day, and are subject to penalties if they fail to do so. Beyond its positive impact on turnout, we know far less about what other aspects of the democratic process are influenced by compulsory voting. The main goal of this dissertation is to inform the debate on how and when the effects of compulsory voting extend beyond voter turnout. Specifically, I draw on numerous sources of survey data across the world to investigate the impact of compulsory voting (herein CV) on three distinct political aspects: citizen attitudes towards voting, political engagement, and elite campaigning.

The first step in understanding the broader effects of CV is to examine whether it influences citizens' perceptions of the democratic act of voting. In chapter two, I develop a detailed theoretical framework that highlights whether compulsory voting increases citizens' feelings of civic duty, or generates resentment amongst eligible voters. I also argue that the impact of CV on attitudes could be neutral—by devaluing the act of voting and making individuals indifferent towards the democratic process. Using a hierarchical modeling technique and survey data from Latin America, I show that voters living under CV are no more likely to report either increased feelings of civic duty or higher rates of resentment, compared to their counterparts under voluntary voting. Instead, individuals who are required to turn out by law are slightly more likely to feel indifferent towards electoral participation. Then, chapter three takes advantage of the recent abolition of compulsory voting in Chile to evaluate whether CV laws promote political engagement beyond election day. An empirical analysis of public opinion surveys over a 10-year period pre and post reform shows that rates of political engagement—specifically, watching and reading political news and discussing politics with family—are

significantly higher under compulsory than under voluntary voting, and this is especially the case for those with lower levels of education. These findings suggest that when presented with the task of turning out at the polls, citizens seem to incur the extra costs necessary to make an informed decision.

Finally, in chapter four I investigate whether mandatory voting laws alter the way political parties decide to engage in outreach during political campaigns. Using a comprehensive dataset of post-election surveys of over 40,000 individuals in 27 different countries, I find that political elites do adjust to their institutional context—when voting is mandatory, parties invest in campaign outreach at similar levels (not less) than when voting is voluntary, and that this outreach is much less skewed towards individuals of higher socioeconomic status compared to when voting is voluntary. I also show evidence that parties under CV are more likely to engage in persuasion rather than mobilization via party outreach. Taken together, this dissertation provides a comprehensive analysis of how maximizing electoral participation through a legal requirement to vote shapes individual and elite behavior, contributing to our understanding of the implications of political institutions for the quality of representative democracy worldwide.

KEYWORDS: Compulsory Voting, Mandatory Turnout, Attitudes Towards Voting, Political Engagement, Party Outreach

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April 17, 2017
Date

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Chapter 1
Introduction

The 2016 Presidential Election in the United States was a contentious one. Apart from lively debates on health care, immigration, and national security, candidate Bernie Sanders addressed an issue that has failed to garner much public attention—voter turnout. A quote posted on his twitter page touted that "if we truly believe in a vibrant democracy, then we [the U.S.] must have the highest voter turnout in the world."[1] Indeed, electoral participation is often considered an integral feature of a healthy democratic system (Dahl 1971; Franklin 2004; Norris 2002). A large body of research has examined factors that can influence participation rates. One of the most robust and consistent findings in this literature is that one political institution in particular has the potential to significantly increase participation—*Compulsory Voting* (CV hereafter) (Geys 2006). While maximizing voter turnout by mandating that all eligible voters turn out at the polls might seem like an attractive option for countries where participation rates are waning, this institution remains a controversial one. In particular, critics and proponents of compulsory voting point to many potential desirable and undesirable second-order effects that extend beyond high voter turnout. The main goal of this dissertation is to inform the debate on how and when the effects of compulsory voting extend beyond participation at the polls. In particular, I assess the impact of CV on three main aspects of the democratic process: citizen attitudes towards voting, political engagement beyond turnout, and elite campaigning via party outreach.

[1] Bernie Sanders, Twitter post, August 15, 2015, 7:58 p.m., https://twitter.com/berniesanders/status/632702839534391296

A total of 26 countries in the world employ some form of compulsory turnout law today. The adoption (or abolishment) of this institution has been debated for decades. In the U.S., for instance, the possibility of instituting a compulsory law for elections was presented as early as 1770 in the state of Georgia and later in 1910 in the state legislature of Oregon. In 1997, the issue was revived as Arend Lijphart (1997) proposed compulsory voting as the solution to the country's low and unequal turnout. Even more recently, President Barack Obama has been quoted saying that "it would be transformative if everybody voted" when asked about the fact that other countries have mandatory voting laws (Sonin 2015).

In a comparative perspective, other countries have actively engaged in the CV debate. Australia's mandatory voting laws are often met with opposition and criticism (Hill 2010), and Chile recently abolished their compulsory voting law after extensive political debate (Barnes and Rangel 2014). Both Britain and Colombia have introduced legislation to adopt compulsory voting in the past two years (Marty 2014; Padmanabhan 2015).[2] The institution has drawn even more attention as average rates of voter turnout continue to steadily decline across the world (Blais and Rubenson 2013). Although the assertion that CV produces higher turnout rates has been well investigated and empirically supported, we still know little about the effects CV has on a number of additional political factors. As Birch (2009, iv-x) summarizes:

> Approximately one-sixth of all the states in the modern world that hold elections hold them under a compulsory voting regime. This is a substantial number, in comparison to the number that employ certain other political institutions—such as

[2] In Colombia, the legislation was introduced in 2014, and is still being debated today. The bill introduced in the UK parliament in 2015 is no longer under consideration.

the single-transferable vote or the double ballot—which have received considerably more treatment in the academic literature.

This is not to say that scholars have largely ignored this institutional design. Earlier work on the topic focused largely on voter turnout as an outcome. More recently, the literature has shifted towards examining other substantive outcomes. These include, for instance, a focus on political engagement, gendered and socioeconomic patterns of participation, partisan electoral gains, economic voting, and political sophistication. A variety of quantitative techniques have been applied. Methods used to study the byproducts of CV include the use of survey data and cross-national analyses (e.g., Birch 2009; Córdova and Rangel 2017; Singh and Thorton 2013), single country studies (e.g., Bechtel, Hangartner, and Schmid 2016; Fowler 2013, Irwin 1974), and experiments (Loewen, Milner, and Hicks 2007, Shineman, forthcoming).

Despite the increase in research on this topic, much of the empirical evidence provided thus far has offered mixed results. For instance, in a comprehensive study of the impact of CV on several political outcomes, Birch (2009) finds that CV matters little beyond promoting electoral participation. A lack of consensus still exists about how CV influences political engagement (Carreras 2016). Evidence that CV benefits left-leaning parties, as typically argued, is mixed (Miller and Dassonneville 2016). This lack of consistent evidence highlights the need for a sustained effort to provide policymakers with valuable information when considering CV as a political institution. My dissertation addresses a number of shortcomings in the existing literature that will allow for a better understanding of the exact mechanisms that may (or may not) lead CV to have an influence on democratic politics, in addition to its impact on voter turnout.

The first step in understanding the broader effects of compulsory voting is to examine whether it influences citizens' perceptions of the democratic act of voting. The first empirical component in this dissertation, then, examines whether compulsory voting promotes feelings of civic duty or resentment amongst the population, while also considering a potential for CV to increase feelings of indifference towards voting. The second empirical element asks how and when compulsory voting laws influence political engagement *beyond* voting. The final research question asks how campaigns are shaped by institutional context, by analyzing patterns of party outreach in the presence and absence of compulsory voting. In the remainder of this chapter, I first provide a general discussion of compulsory voting laws across the world, followed by a short review of what we currently know about the effects of this institutional design. Then, I elaborate on the shortcomings of the existing literature and how the research presented in this dissertation helps fill those gaps. The final part provides an outline of the dissertation, which highlights some of the theoretical expectations and previews some of the main findings.

Compulsory Voting Around the World

The UK Electoral Commission defines compulsory voting as "a system of laws mandating that enfranchised citizens turn out to vote, which is usually, though not always, accompanied by a system of compulsory voter registration" (Electoral Commision 2006, 3). Similarly, Birch (2009, 2) describes the institution of compulsory voting as "the legal obligation to attend the polls at election time and perform whatever duties are required there of electors." It is common for compulsory voting to be misunderstood as a compulsion to vote for a given candidate (Keaney and Rogers 2006). However, countries with CV simply require citizens to turn out to cast a ballot, regardless

of whether it is valid or not. Individuals have the option to vote blank or spoil the ballot. Due to this misconception, compulsory voting is sometimes referred as "compulsory turnout," highlighting that it merely represents the legal obligation to *cast* a ballot and not the obligation to select a candidate against a citizens' will (Keaney and Rogers 2006).

Compulsory voting laws are not consistent across all countries. First, there is variation in how these laws are codified. Some countries explicitly state in their constitution that voting is compulsory. For instance, Article 37 of Argentina's Constitution states that "suffrage is universal, equal, secret, and *mandatory*" (Arg Const. art. 37). Compulsory laws in Australia, by contrast, are not formally written in the constitution, but are rather enforced via federal law (Birch 2009). Another variation is in terms of who is required to turn out. In some countries, like Ecuador, voting is compulsory only for those who are literate. In others, voters who reach a certain age (70 years old in Luxemburg, 75 years old in Peru) are no longer required to vote. In Argentina and Brazil, voting is compulsory once an individual turns 18, but voluntary for those between 16 and 18 years of age (IDEA 2017).

Most importantly, the extent to which CV laws are enforced and the penalties for not complying vary significantly by country. Failure to vote in Brazil can result in the inability to obtain a passport, and monetary fines (IDEA 2017). In Singapore, those who abstain are automatically removed from the registry and required to reapply with an explanation. Conversely, while voting is a legal obligation in Mexico, non-voters are not necessarily subject to any sanctions. The same is the case in Greece, which lifted once-strong sanctions in 2000 (IDEA 2017).

The International Institute for Democracy and Electoral Assistance (IDEA) is an intergovernmental organization that publishes research on democratic participation worldwide, and maintains a record of CV implementation and abolishment in different countries. Currently, it identifies 26 countries where voting is compulsory. Table 1.1 highlights the presence of CV laws, sanctions, and enforcement in each country. Figure 1.1 presents a visual representation of the spatial presence of compulsory voting across the world, according to IDEA (2017).

Compulsory voting was primarily introduced in the twentieth century around the world, as countries began to democratize or expand the franchise (Birch 2009).[3] Several explanations exist for its adoption, although reasons vary by country and context. Some countries adopted CV in order to strengthen democratic legitimacy and further engage the public (Birch 2009). Others hoped that it would reduce corruption and electoral abuse once electorates started to grow and more individuals got the right to vote (Murray 1998). Another widespread and perhaps counterintuitive explanation for implementation, especially in Europe and Latin America, was that conservative parties in the 20th century feared that mass enfranchisement of the working class would promote participation of left-leaning indiviuals. Therefore, conservative parties chose to adopt CV in order to ensure their survival by forcing citizens who would otherwise not be mobilized by the left to turn out to vote (Birch 2009; Boveda 2013; Maldonado 2015). Finally, compulsory voting is also thought to be simply a product of diffusion effects or colonial history (Massicotte, Blais, and Yoshinaka 2004). While many explanations exist, the adoption of

[3] See Birch (2009), page 36 for a detailed account of dates in which compulsory voting were adopted.

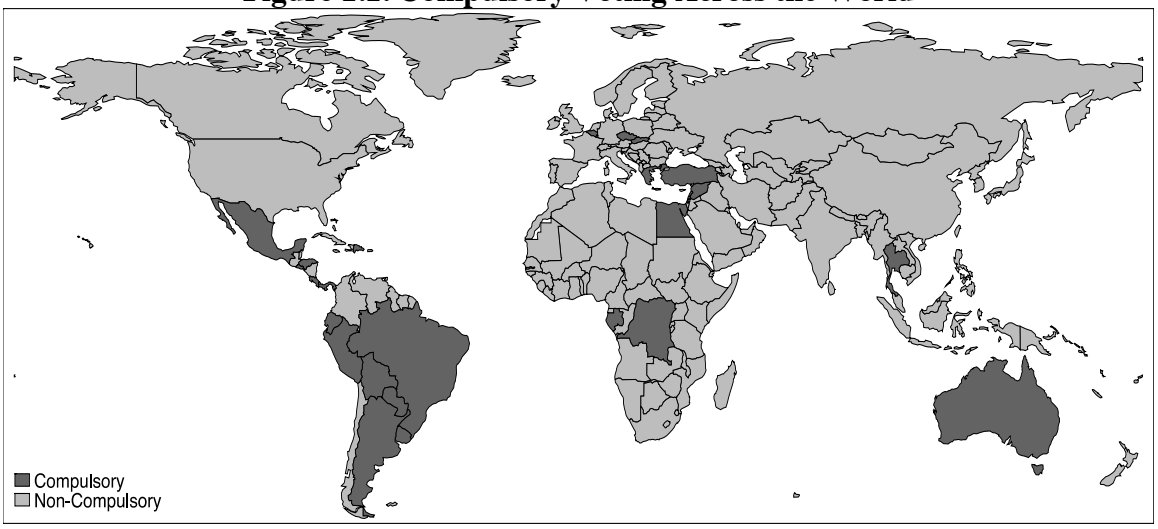
compulsory voting primarily took place very early on most countries' development into nation-states or democratization (Birch 2009).

Table 1.1. Countries with Compulsory Voting in 2017

Country with Compulsory Voting	Generally Enforced?	Sanctions			
		Explanation	Fine	Civil Rights Infringements/ Disenfranchisement	Other
Argentina	Yes	x	x	x	
Australia	Yes	x	x		
Belgium	Yes	x	**x**	x	x
Bolivia	No			x	
Brazil	Yes		x		
Costa Rica	No				
Cyprus	Yes	x	x		
D.R. Congo	n/a				
Dominican Republic	No				
Ecuador	Yes		x		
Egypt	No	x	x		
Gabon	n/a				
Greece	No				
Honduras	No				
Lebanon	n/a				
Liechtenstein	Yes	x	x		
Luxembourg	Yes	x	x		
Mexico	No				x
Nauru	Yes	x	x		
Panama	n/a				
Paraguay	No		x		
Peru	Yes	x	x	x	
Singapore	Yes			x	
Switzerland*	Yes		x		
Thailand	No				
Turkey	Yes	x	x		
Uruguay	Yes		x	x	

Notes: In Switzerland, CV is only practiced in one Canton (Schaffhausen). No sanction and enforcement information available for the D.R. Congo, Gabon, and Lebanon. *Explanation* requires non-voters to provide legitimate reason for abstaining. *Fines* vary by country. *Civil rights infringements* include inability to access certain public services if no proof of voting is provided. *Disenfranchisement* can happen in certain cases if an individual fails to vote for a number of consecutive elections within a given timeframe (varies by country). "*Other*" sanctions could include difficulty getting a job within the public sector, or social sanctions that are less formalized. *Source:* IDEA (2017).

Figure 1.1. Compulsory Voting Across the World



Notes: Figure 1.1 shows a spatial representation of countries that have compulsory voting laws across the world in 2017. *Source*: IDEA (2017)

Questions Surrounding Compulsory Voting

The benefits and consequences of compulsory voting have been debated for decades. The 1970s abolition of compulsory voting in the Netherlands, however, prompted a more scholarly discussion on the effects of the institution, and by 1996, Arend Lijphart's famous Presidential Address to the American Political Science Association advocating for the adoption of compulsory voting in the United States stimulated a new wave of discussion on mandatory voting laws (Lijphart 1997). Countries that currently have CV laws, such as Australia, have had their fair share of debates regarding its abolition (Hill 2010; Lever 2010b). Other countries with voluntary voting laws, such as Britain, Canada, Colombia, and India, have considered its introduction. Most recently in 2011, election law reform in Chile generated several rich discussions on the advantages of maintaining or abolishing CV in the country (Barnes and Rangel 2014).

The questions surrounding compulsory laws tap into several political dimensions. One aspect is normative—whether mandating that voters go to the polls is democratic or not. Here, the tension is between those who believe that voting is a civic duty and therefore should be mandated, and those who value the freedom to choose not to participate. Another leading question seeks empirical evidence of the institution's ability to promote higher turnout rates. Relatedly, scholars also contemplate whether mandatory turnout for all eligible citizens has the potential to erase inequalities in the electorate. A growing body of research has also begun to investigate whether the effects of CV extend beyond voter turnout. Scholars often deliberate on whether CV increases or decreases political engagement beyond the ballot box, and the institution's influence on levels of political knowledge. Finally, recent studies of CV focus on how it may be influential in determining electoral outcomes. I summarize the current debates surrounding compulsory voting laws in Table 1.2. [4]

Within these dimensions—particularly the ones that contemplate the effect of CV beyond voter turnout—CV is often theorized to produce opposing outcomes. For instance, while some argue that CV leads to more political education, others highlight potential explanations as to how CV could actually reduce political education. Given the rich variation in theoretical expectations, scholars have made efforts to empirically test many propositions in order to settle any existing debates or to provide policymakers with more guidance. In what follows, I discuss the theoretical arguments for each of the dimensions from Table 1.2, and provide a summary of the empirical evidence that has evaluated existing claims.

[4] Briggs and Chelis (2010) provide a similar classification of the literature on compulsory voting.

Table 1.2. Questions Surrounding Compulsory Voting Laws

	Positive Expectations	**Negative/Null Expectations**
The Normative Question	CV enhances democracy, legitimacy, voting as a civic duty	CV undermines democratic freedom, promotes resentment
The Turnout Question	CV increases voter turnout	CV has no effect on voter turnout
The Unequal Electorate Question	CV promotes equal turnout	CV does not promote a balanced electorate
The Political Engagement Question	CV increases political engagement beyond voting	CV decreases/does not affect political engagement beyond voting
The Electoral Outcomes Question	CV benefits left-leaning parties	CV has no effect on electoral outcomes

The Normative Question

Scholars and politicians have long debated whether compulsory voting is a moral institution. Those who defend CV highlight that high voter turnout is paramount for the promotion of democracy (Brennan and Hill 2014). High levels of turnout indicate stronger legitimacy as the elected government is more representative of the majority of the citizenry (Franklin 2004; Dahl 2006). Citizens who want to demand accountability from their governments should exercise their duty to vote, and this requirement essentially creates a binding contract between individuals and representatives (Jackman 1999). Back in the 1920's, a legislator in Oregon stated that "it is not just the vicious who refuse to vote, but those who do not take their franchise rights seriously, those who permit others to run the government, and then spend their spare moments protesting because it is not run to suit them… the votes of many of these people are worth getting" (Barnett 1921, 266). In other words, it is important that all citizens express their

preferences, and that government is not a mere reflection the wishes of a small section of the population.

In this normative debate, those against compulsory voting emphasize that forcing people to vote is undemocratic and might instead generate resentment among citizens (Henn and Odfield 2016; Lever 2010a; Senado 2012). It is argued that mandatory voting is a violation of the democratic freedom to choose, which is "the cornerstone of liberal democratic practices" (Briggs and Chelis 2010, 5). Just as democracy grants citizens the right *to* vote, it also grants citizens the right *not* to vote. Forcing people to vote can provoke resentment and lead citizens to question their ability to choose against participating without being subject to punishment by the state. Brennan (2014, 82) also argues that citizens can contribute to a democratic society in a number of ways, and not voting is simply a poor reason to regard those individuals as "free riders" or to claim they are not doing their civic part.

Overall, the normative question surrounding compulsory voting is a complicated one. While some of these arguments are difficult to test empirically, a couple of studies have tried to provide some evidence on whether individuals who are subject to CV laws report certain feelings that can speak to the morality or democratic value of the institution. Singh (2016) shows that compulsory voting is associated with decreased satisfaction with democracy, especially for those who view democracy negatively to begin with. He argues this is because external coercion by the state can be associated with decreased interest in its democratic status, and lower belief in the legitimacy of the system. Using the World Values survey, Lundell (2012) finds that compulsory voting has a small but positive impact on trust in political institutions, suggesting CV can actually

enhance institutional legitimacy. These findings, however, promote conflicting answers as to whether CV strengthens or harms democracy, as both sides of the normative debate claim.

The Turnout Question

Compulsory voting is most often referenced when issues of low participation are emphasized. This is because, in theory, it is difficult to argue against the contention that CV increases voter When all eligible voters are mandated by law to turn out, it is reasonable to expect that a higher number of voters will show up at the polls. Compulsory voting increases the costs of abstaining by imposing penalties on those who don't show up at the polls (Panagopoulos 2008). This expectation assumes that individuals living in countries where voting is compulsory are both aware and willing to abide by the law. Indeed, a large number of studies confirm that CV does in fact significantly increase voter turnout rates anywhere from 10 to 18 percentage points (Baek 2009; Bechtel, Hangartner, and Schmid 2015; Franklin 1999, 2004; Fornos, Power, and Garand 2004; Hirczy 1994; Hoffman, León, and Lombardi 2017; Jaitman 2013; Norris 2004; Quintelier, Hoodhe, and Marien 2011; Singh 2011).

Because in order to actually spur turnout, individuals should be both aware and compliant with the law, research also shows that the effect of CV on turnout is stronger when penalties for abstaining are strong and strictly enforced (Blais, Massicotte, and Dobrzynska 2003; León 2017; Panagopoulos 2008; Singh 2011). When stronger penalties are enforced, the cost of abstaining is higher, thus motivating compliance with the law. It is also more likely that when penalties are strongly enforced—the need to pay a fine or the inability to apply for a federal loan—individuals will be more aware of the existence of the law and the costs that non-compliance produces. Overall, the *turnout question* has

received the most attention in the CV literature, and there is overwhelming evidence to support the idea that CV works to increase voter turnout. The institution promotes high turnout rates even in institutional contexts where participation is expected to be low, such as when elections are non-competitive or district sizes are high (Barnes and Rangel 2017). In a review of aggregate-level studies of turnout, Geys (2006, 652) confirms that "the effect of compulsory voting on turnout is one of the robust findings in studies that analyze cross-national variation in voter turnout."

The Unequal Electorate Question

Another dimension of CV as an institution is its potential to promote equality in the electorate. Compulsory voting is argued to erase electoral biases, since certain groups of citizens are systematically less likely to turn out when voting is voluntary (Carreras and Castañeda-Angarita 2014; Smets and van Ham 2013; Verba et al. 1993). When voting is mandatory, however, those who are least likely to turn out under voluntary systems (marginalized citizens) are more likely to participate, because participation is now required (Gallego 2015). This was Lijphart's (1997, 2) focus when advocating for the institution—stating that "the most obvious way to make voting more equal is to maximize voter turnout." When all enfranchised citizens regardless of age, income, education, or gender are subject to non-voting penalties, the likelihood that the post-election electorate reflects a closer make up of the true citizen population is much higher than when citizens are not required to turn out.

Empirical research does find some support for this hypothesis (Carey and Horiuchi, forthcoming). Compulsory voting is found to decrease the voting gap between low and high-income voters (Fowler 2013), and it narrows the gap between highly educated and less educated individuals (Gallego 2015; Hooghe and Pelleriaux 1998). CV

also mobilizes a higher number of young voters to turn out, erasing generational differences in voting (Irwin 1974; Singh 2011). Recent work also finds a positive effect of CV in decreasing the gender gap in electoral engagement beyond voting (Córdova and Rangel 2017), and an improvement on rates of income inequality (Chong and Olivera 2008). Still, compulsory voting might not necessarily eliminate any inequalities in the electorate. In many cases, gaps in participation among disadvantaged groups still persist even when turnout is mandatory (Cepaluni and Hidalgo 2016; Power 2009). While making voting mandatory might not necessarily promote one hundred percent equal participation, it is unlikely that it would harm advances in political equality.

The Political Engagement Question

The previous debates have focused on issues of electoral participation at the ballot box under compulsory voting. More recently, scholars have considered the effects of CV beyond turnout. Although we know that CV increases voter turnout, it is unclear whether it also increases participation in other aspects of democratic politics. An important line of research examines the impact of CV on political engagement. Verba, Schlozman, and Brady (1995, 38) define political engagement as "activity that has the intent or effect of influencing government action—either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies." As this is a broad definition, there are many indicators of political engagement. These could be political (such as persuading others, making campaign contributions), acts of public voice (signing petitions or protesting), or cognitive (paying attention to the news, or levels of political knowledge) (Zukin et al. 2006). Accordingly, research investigating the effect of compulsory voting on political engagement has examined a multitude of engagement outcomes.

Theoretically, CV could influence engagement in positive, negative, or neutral ways. On the one hand, compulsory voting could motivate individuals to engage further with the polity once they turn out to vote. Compelling citizens to vote might increase citizens' interest in the political process, generate higher levels of political information and support a more engaged citizenry (Jakee and Sun 2006; Lijphart 1997; Shineman 2009). There is some cross-national evidence to support these contentions, especially when it comes to cognitive engagement. Studies show that countries with CV report slightly higher levels of political knowledge (Berggren 2001; Gordon and Segura 1997), and that this effect is stronger among low educated voters (Sheppard 2015). Experimental work also shows that incentivizing participation through penalties can motivate citizens to seek out more political information (Shineman, forthcoming). Individuals living under compulsory voting rules are also more likely to report higher rates of party attachment (Singh and Thorton 2013).

On the other hand, compulsory voting could decrease individuals' rate of political engagement because it makes citizens resent participating in politics after being coerced to vote. Given that non-voters are found to be less politically knowledgeable and informed than voters (Citrin, Schickler, and Sides 2003; Converse 1964), others argue that the inclusion of uninformed voters into the voting electorate might add noise or bias in electoral patterns (Saunders 2010). Having more uninformed voters turning out could in turn affect overall levels of political knowledge in the electorate, ultimately producing sub-optimal electoral outcomes (Ballinger 2006).

Some studies show that CV systems do indeed produce a higher number of invalid and random votes (Power and Garand 2007), especially among those who lack

literacy or language skills (McAllister and Makkai 1993; Power and Roberts 1995). No empirical evidence, however, indicates an explicit negative effect on political engagement. A number of studies find a null relationship between CV and levels of political information (Birch 2009; de Leon and Rizzi 2016; Loewen, Milner, and Hicks 2007), and other general measures of political engagement, such as attending party meetings (Carreras 2016), and contacting political leaders (Birch 2009). Answers regarding this specific question, therefore, remain unclear.

The Electoral Outcomes Question

Finally, compulsory voting can have implications for electoral outcomes. Many scholars have argued that near-universal voter turnout produced by CV laws would disproportionally benefit one type of party over the other. More liberal, left-leaning parties are among those who benefit from CV laws, since voters who are encouraged to turn out under CV are more likely to be of low income and education and thus more inclined to support liberal policies (Green and Schwam-Baird 2016; Tucker, Vedlitz, and DenNardo 1986). Empirical studies focused on how CV impacts electoral outcomes, however, have found mixed support for the proposition that higher and more equal voter turnout would benefit leftist parties, with some studies finding no effect (Ferwerda 2014; Hoffman, León, and Lombardi 2017; Jackman 1987; Miller and Dassoneville 2016), and others finding a positive effect (Bechtel, Hangartner, and Schmid 2016; Fowler 2013; Jensen and Spoon 2011).

Taken together, the voter turnout question seems to be the only dimension of the effects of compulsory voting that has found clear answers through empirical research. The additional consequences and substantive impacts of CV still remain unclear. This lack of consistent evidence only adds to the controversy surrounding this political

institution. In the next section, I identify some key ways to expand the existing literature, and discuss how this dissertation helps inform the existing questions surrounding compulsory voting.

Contributions

A review of the different questions surrounding this controversial institution suggests more research is needed to determine what kinds of democratic political processes are affected when voting is mandatory. In this dissertation, I empirically assess the impact of compulsory voting on three specific outcomes: citizen attitudes towards voting, political engagement beyond turnout, and political campaigning via party outreach. In the paragraphs that follow, I discuss how these analyses make important extensions to the previously mentioned dimensions.

At its core, the normative debate on CV taps into the notion of voting as a civic duty. It posits that countries with compulsory voting laws are fostering this civic duty to vote, while at the same time perhaps creating resentment amongst those who think mandatory turnout violates democratic freedom. While some studies have contributed to this debate by assessing CV's impact on satisfaction with democracy (Singh 2016) and trust in institutions (Lundell 2012), no study has yet to test the direct effect of compulsory voting on citizen's feelings towards going to the polls. By better understanding whether CV does (or does not) promote feelings of civic duty or resentment among individuals, we can at least understand where people who are compelled to vote stand and whether arguments that posit particular attitudinal effects of compulsory voting are empirically supported.

This part of the dissertation also speaks to existing shortcomings in the debates on political engagement and political knowledge. Specifically, parts of this literature

mention the impact of CV on individual attitudes as mechanisms through which CV influences behavioral outcomes. For instance, work that associates CV with increases in political information and engagement note that this can happen partly due to CV's potential to promote a sense of civic duty (Engelen 2007; Jackman 1999; Shineman 2009). Similarly, one of the reasons why CV is expected to decrease overall levels of political engagement is that it provokes feelings of resentment amongst individuals (Carreras 2016). These propositions, however, have largely been assumed to date. In order to understand how CV influences substantive outcomes such as political knowledge or engagement, it is critical for us to better understand how CV impacts the way citizens perceive the act of voting to begin with, as such perceptions are often posited as key mechanisms motivating behavior.

The second component of this dissertation contributes directly to the *Political Engagement Question*. Apart from a lack of consistency in the findings, existing empirical studies fail to establish a clear causal link between compulsory voting and levels of political engagement, or have used less than ideal ways to capture compulsory voting laws.[5] Further, studies in this area tend to either focus on one narrow and specific political engagement measure, or attempt to predict a large number of political outcomes that are somewhat related to political engagement in tandem. This discrepancy makes it difficult to judge under what circumstances CV actually influences political engagement.

I overcome some of these shortcomings by examining the abolition of compulsory voting in Chile, and carefully distinguishing between different types of political engagement and the theoretical mechanisms that they are associated with. Specifically, I

[5] I expand on these critiques in Chapter 3.

use survey data over the course of 11 years pre and post reform in Chile and investigate six features of political engagement. In doing so, this research provides a nuanced and in depth empirical investigation into which specific political engagement outcomes should be influenced by CV and why that should be the case.

In addition, this part of the dissertation also contributes to the *Unequal Electorate* question by examining not only whether CV increases engagement, but also whether it increases engagement differently for some groups versus others. Specifically, I look at how an individual's level of education is an important moderating factor in how CV impacts political engagement. This investigation takes the unequal electorate question—which largely focuses on turnout—and expands it to a more substantive political outcome. By doing this, I am directly contributing to a burgeoning body of literature that has tried to understand how voting institutions can impact individuals differently, depending on their level of income, education, or even gender (Carreras 2016; Córdova and Rangel 2016).

The final component of this dissertation addresses missing pieces in the *Electoral Outcomes Question*. This dimension is distinctive within the larger debate on compulsory voting because most existing literature focuses primarily on its impact on individuals, and not political elites. The electoral outcome debate shifts this dynamic and instead contemplates whether CV can influence aggregate-level electoral outcomes. It is still unclear whether CV benefits one party over another. But, this literature has yet to consider how political elites might update their electoral strategies when working under compulsory voting laws. I develop an in-depth theoretical framework that generates expectations as to how CV plays a role in elites' decisions prior to elections in terms of

party outreach, and then test these implications empirically. Specifically, I investigate how compulsory voting affects the amount of party outreach during campaigns, the potential targets of outreach, and which parties are likely to lead outreach efforts.

Dissertation Outline

This first chapter (Chapter 1) has aimed to preview the research questions motivating this project, provide an overview of the definition of compulsory voting and its manifestation across the world, and to highlight how the dissertation complements and helps inform the existing debates in the compulsory voting literature. The body of the dissertation (Chapters 2, 3, and 4) has three main empirical components. Each of these investigates the impact of CV on distinct political outcomes, and therefore each chapter has its own introduction, review of the literature, theoretical framework, research design, empirical analysis, and concluding remarks. All three empirical chapters can, thereby, be treated and read as stand-alone research projects. But, as all of these empirical pieces share a common theme, I elaborate on the overarching scholarly and policy implications of this dissertation in a concluding chapter (Chapter 5).

In more detail, *Chapter Two* develops and tests expectations of how CV influences citizens' feelings towards voting. First, I discuss why the institution of CV should have an effect on citizens' perceptions of going to the polls on election day. I propose theoretical mechanisms for how CV can foster feelings of civic duty or resentment amongst its population. I also argue that the impact of CV on attitudes could be neutral—by devaluing the act of voting and making individuals indifferent towards the turnout process. I use survey-data from the Latinobarómetro Database,[6] as Latin America is a region where compulsory voting is prevalent but not absolute, to estimate citizens'

[6] For more information on this data source, see page 36.

feelings when they go to the polls. A set of hierarchical multinomial logit models show that contrary to common arguments for and against CV, mandatory turnout does not lead citizens to feel a higher sense of civic duty, nor does it increase rates of resentment towards the process. I do, however, find that under CV, there is a higher probability that an individual will report feeling indifferent towards voting.

Chapter Three uses a unique research design to test whether compulsory voting influences political engagement beyond voter turnout. I leverage novel public opinion data from Chile[7]—a country that abandoned compulsory voting in 2011—over an eleven-year timeframe to investigate whether levels of political engagement were higher under compulsory versus voluntary voting. In doing so, I also carefully distinguish between six different aspects of political engagement, and develop nuanced theoretical expectations of how CV might influence different aspects of engagement for different reasons. I find that compulsory voting does promote higher rates of political engagement, but primarily in a private way—citizens under CV are more likely to individually absorb political information by watching and reading about the news, but not necessarily more likely to discuss politics around their friends or actively engage in political activity.

In *Chapter Four*, the focus shifts from citizens to political elites to examine how CV influences campaign behavior. I argue that compulsory voting can affect three main elements of campaign strategy: (1) how much party outreach there is; (2) who is the target of outreach; (3) who is leading the outreach. In particular, I develop expectations as to how overall levels of party outreach change when the electorate expands under CV, and why compulsory voting should encourage parties to reach out to traditionally

[7] Data comes from Chilean think thank *Centro de Estudios Públicos* (CEP). For more information on this data source, see pages 76-77.

marginalized voters. Then, I examine whether members of a specific party ideology have a higher incentive to mobilize voters under compulsory voting in comparison to if they were conducting campaigns under voluntary voting. Using data from the Comparative Study of Electoral Systems (CSES),[8] I employ a comprehensive cross-national analysis of 27 countries across the world to test my expectations. Results show that political elites do adjust to their institutional domain—when voting is mandatory, parties invest in campaign outreach at similar levels (not less) than when voting is voluntary, and that outreach is also less skewed towards individuals with higher socioeconomic status. I also show evidence that parties under CV are more likely to engage in persuasion rather than mobilization via party outreach.

Finally, *in Chapter Five*, I summarize the main results of the dissertation and discuss how they, in tandem, contribute to our overall understanding of the impacts of mandatory voting across the world. I also elaborate on this research's broader contributions to the scholarly literature on political institutions and political behavior, while also commenting on the policy implications to be drawn from the material presented here. I conclude by suggesting fruitful avenues for future research in order to address possible questions that remain.

[8] For more information on this data source, see pages 109-110.

Chapter 2

Attitudes Towards Voting: Evaluating Civic Duty, Resentment, and Indifference Under Mandatory Turnout

Elections represent one of the most important aspects of democracy (Dahl 1971). Despite the importance of electoral participation, many democratic countries have recently reported rates of voter turnout well below 50 percent.[9] Extant research has noted that certain electoral institutions can motivate citizens to participate.[10] Can electoral laws also influence *citizens' attitudes* towards the democratic process? One mobilizing institution designed to manufacture high turnout rates—compulsory voting (CV)—has been a successful tool for maximizing political participation (Baek 2009; Franklin 1999, 2002; Hoffman, León, and Lombardi 2017; Quintelier, Hoodhe, and Marien 2011). Still, the adoption or abolition of this voting system remains a controversial issue for its potential consequences beyond turnout (Brennan and Hill 2014). While many scholars have gone on to investigate the more substantive impacts of CV, this research addresses an overlooked, albeit highly contentious, argument: How does compulsory voting influence citizens' attitudes towards the democratic process of voting itself?

Existing arguments for and against this voting institution typically categorize compulsory voting into promoting either positive or negative attitudes amongst voters. On the one hand, the continuous act of voting under CV and the sense of inclusiveness it promotes may trigger a sense of civic duty, which can in turn make citizens more politically engaged (Blais 2000; Engelen 2007; Keaney and Rogers 2006). On the other

[9] For example, countries such as the United States, Colombia, and Switzerland all recorded turnout rates lower than 50 percent in their most recent legislative elections. Data available at: http://www.idea.int/vt/.
[10] See Cancela and Geys (2016) for a review of this literature.

hand, forcing individuals to vote might generate resentment among the population, by coercing voters to incur the costs of turning out and violating the premise of democratic freedom (Brennan 2014; Birch 2009; Senado 2012). In this paper, I examine empirical evidence for these arguments and also develop an alternative theoretical implication that considers how the context surrounding CV laws might increase the likelihood that citizens simply feel indifferent towards voting. I argue that the shift away from the relevance of turning out, combined with the reduced costs of turning out produced by voter-friendly institutional design, should minimize both negative connotations and positive associations with voting. Drawing on survey data from Latin America, I employ a hierarchical multinomial technique to test my theoretical expectations.

The contributions of this research are numerous. First, I unpack previous arguments for and against CV by further developing the theoretical mechanisms that can cause mandatory turnout to affect citizen attitudes towards voting, thus directly contributing to the broader institutions literature that aims to better understand the implications of voter mobilization efforts (e.g., Bedolla and Michelson 2012; Green and Gerber 2015). Additionally, I also offer an alternative theoretical expectation about a potential attitudinal effect of CV that has not been considered before. In doing so, this article also contributes to the voting literature, which has mostly focused on voter abstention as the equivalent of political indifference (e.g., Fife-Schaw and Breakwell 1990; Hastings 1956; Mayo 1959), by showing that indifferent attitudes can be also displayed in the presence of active voting behavior. Third, this research presents the first attempt to empirically test existing and new theories about the direct effects of CV on

citizen attitudes towards voting, offering new evidence and further nuance to theoretical mechanisms that have largely been assumed to date.

Finally, this research has important implications for policymakers who continue to consider the adoption or abolition of compulsory voting. The recent electoral law reform that took place in Chile in 2011, for instance, generated much debate among legislators who argued both for and against the abandonment of CV laws in the country (Barnes and Rangel 2014). Amongst these arguments, the issue of how CV affects citizen attitudes towards democracy and political participation was prominent. Other countries have recently begun to consider implementing a formal requirement to vote (Marty 2014). Although the observation of aggregate effects post-reform might provide policymakers clues as to how voting laws affect citizen behavior, such conclusions paint an incomplete picture of the psychological and intrinsic effects voting laws have on citizens' attitudes. By providing a direct theoretical and empirical account of individual attitudes towards voting, this research will better inform those who primarily evaluate support or opposition for election law reform on the basis of overall citizen perceptions and willingness to engage with the polity in a meaningful way.

Compulsory vs. Voluntary Voting: An Unsettled Debate

Although many factors explain voter turnout, compulsory voting laws are argued to be one of the only ways to ensure near-universal political participation (Gallego 2015; Geys 2006). Countries with CV laws report average turnout rates approximately 10 to 18 percentage points higher than countries with voluntary voting (Baek 2009; Blais and Aarts 2006, Fornos, Power, and Garand 2004; Jaitman 2013), and this effect is even stronger when sanctions penalizing non-voters are in place and enforced (Panagopoulos 2008, Singh 2011). This is not surprising—when voting is required by law, the cost of

abstaining is often higher than the cost of turning out, encouraging participation regardless of institutional constraints or individual resources.

Despite producing a large turnout bonus, compulsory voting remains a controversial institution. Arguments in favor of CV highlight that high voter turnout is paramount for the promotion of democracy, legitimacy, and representativeness. High levels of turnout indicate stronger legitimacy as the elected government is more representative of the majority of the citizenry, indicating signs of a healthier democracy (Ballinger 2006; Franklin 2004). Further, CV has the potential to erase electoral biases, since those who are least likely to turn out under voluntary systems (marginalized citizens) are required to participate (Córdova and Rangel 2017; Gallego 2015). Finally, compulsion should increase citizens' interest in the political process and generate higher levels of political information and more engaged citizens (Jakee and Sun 2006; Lijphart 1997; Shineman, forthcoming).

Arguments against compulsory voting emphasize that forcing people to vote can be considered undemocratic and counterproductive (Barnes and Rangel 2014; Lever 2010a). Also, given that non-voters are found to be less politically knowledgeable and informed than active voters (Citrin, Schickler, and Sides 2003; Converse 1964), the inclusion of uninformed voters into the voting electorate might add noise or bias in electoral patterns (Jakee and Sun 2006; Saunders 2010). Having more uninformed voters turning out could in turn affect overall levels of political knowledge in the electorate, ultimately producing sub-optimal electoral outcomes (Ballinger 2006; Loewen, Milner, and Hicks 2007). Relatedly, the participation of non-voters under CV might increase the

level of invalid or random votes, which can then raise questions regarding the system's legitimacy (Mackerras and McAllister 1999; Power and Garand 2007).

In an attempt to settle the existent debate, many scholars have gone on to empirically test some of the arguments for and against CV. For instance, compulsory voting is found to decrease the voting gap between low and high-income voters (Fowler 2013), and between highly educated and less educated individuals (Gallego 2015; Hooghe and Pelleriaux 1998). CV also mobilizes a higher number of young voters to turn out, erasing generational differences in voting (Irwin 1974; Singh 2011). More recent work has also found a positive effect of CV in decreasing the gender gap in electoral engagement beyond voting (Córdova and Rangel 2017). At the same time, CV is found to produce higher numbers of invalid and random votes (Power and Garand 2007, Uggla 2008). Mixed evidence still exists on whether higher and more equal voter turnout would benefit leftist parties (Bechtel, Hangartner, and Schmid 2016; Ferwerda 2014, Hoffman, León, and Lombardi 2017; Jensen and Spoon 2011) and whether CV increases or decreases levels of political knowledge and engagement (Birch 2009; Loewen, Milner, and Hicks 2007, Shineman, forthcoming, Singh and Thorton 2013).

Although most of the empirical literature on this topic focuses on aggregate patterns of behavior, there have been no attempts to empirically assess how this institutional design might individually influence citizens' attitudes. As such, this research provides the first empirical assessment of how CV influences attitudes towards the democratic process of voting itself. This research also offers a fruitful way to move the existent debate forward, given that much of the current literature highlights the influence of CV on citizens' attitudes as a mechanism leading to more substantive outcomes.

Scholarship on a potential positive effect of CV on political sophistication, for instance, often incorporates the mechanism of increased civic duty as part of the main theoretical framework (Engelen 2007; Gordon and Segura 1997; Jackman 1999). For example, when summarizing the arguments in the literature, Shineman (2009, 3) notes that "simply requiring people to vote will awaken in them a stronger sense of civic duty, a deeper political interest, and it will lead to a more politically aware society." The actual proposition that CV instigates a sense of civic duty among voters, however, has not been systematically and empirically tested to date. In the next section, I develop expectations about how mandatory voting laws changes citizens' perceptions of the act of voting, which could consequently influence voting behavior and other political outcomes.

Mandatory Turnout and Citizen Attitudes Towards Voting

In his seminal book, Downs (1957) argued that voting can be explained as a rational decision calculus. The likelihood that an individual will vote depends on the probability that their vote will make a difference *(p)*, the individual's utility of voting *(B)*, and the costs of turning out *(C)*. Voters should only turn out when they believe that the benefits outweigh the costs *($pB > C$)*. Accordingly, scholars have identified several factors that either increase the probability of votes mattering *(p)*, or decrease the costs of voting *(c)*, and thus encourage turnout. Given that the probability of benefits outweighing the costs of turning out is extremely low, a main conclusion established by Downs (1957) is that voting should be considered irrational. And yet, we still see people turn out to vote in relatively large numbers. Scholars have argued that in addition to rational calculations, voters also tend to consider the psychological benefits of turning out—citizens might vote because it "makes them feel good" or because they think is what good citizens ought to

do (Riker and Ordeshook 1968). Essentially, it means adding another term to Downs' equation, *(D),* that represents the psychological benefits of turning out *($pB+D > C$)*

Indeed, research shows that individuals are largely driven by these psychological benefits when going to the polls. Riker and Ordeshook (1968) find that turnout is 70 percentage points higher for those who indicate having a strong sense of civic duty in comparison to those who do not. Other research shows that civic duty is one of the most important motivations driving the willingness to vote (Blais 2000; Clarke et al. 2004; Verba, Schlozman, and Brady 1995). Even though a great deal of research examines how big a role the "D" term plays in motivating electoral participation, fewer studies have focused on predicting the "D" term in the rational voting calculus.

On average, a substantial number of individuals believe voting is a civic duty. Blais (2000) reports that in the United States, 84 percent of surveyed university students indicate support for the statement that voting is a citizen's duty. The number is even higher for a sample of Canadian students—99 percent for those in Quebec and 92 percent in British Columbia. Individuals with higher levels of political interest tend to feel a higher sense of civic duty, which is not surprising. Blais (2000) also finds that women, older individuals, and those with higher degrees of religiosity also report higher rates of civic duty. With a focus on individual level determinants, the study does not, however, consider institutional design as a predictor of civic duty.

What remains to be studied is how certain election laws—such as compulsory voting—can change or influence the psychological or intrinsic value of voting, which could ultimately determine a citizens' willingness to engage with the democratic system as a whole. While we often associate the "D" term with a sense of civic duty, other

psychological attitudes could change one's calculation regarding voting. In particular to compulsory voting, the two main factors mentioned in most normative discussions relate to positive (civic duty) or negative (resentment) emotions. In the next section, I discuss theoretical mechanisms behind these two commonly cited attitudes, and also propose an alternative expectation for how CV should influence individual attitudes. I highlight the importance of taking into account contextual factors and argue that CV may also yield a more indifferent electorate.

Compulsory Voting and Civic Duty

A relatively common argument in the compulsory voting literature is that CV has a positive impact on individual's attitudes. Some existing literature suggests that CV can increase rates of political engagement and knowledge because it increases one's sense of civic duty (Engelen 2007; Lijphart 1997). The theoretical mechanism promoting that claim, however, remains underdeveloped. I contend that there are several reasons to expect CV laws to positively affect individuals' feelings towards the act of voting.

First, mandating that all eligible citizens turn out in every election consequently creates a habit of voting, directly influencing citizen behavior. Previous works show that in CV systems, voting is likely to become a habit even for those who would be considered non-voters under voluntary systems (Blais and Achen 2010; Gerber, Green, and Schachar 2003). Once voting becomes a habit, participation patterns are likely to spill over into other types of political involvement, and politics becomes a more significant part of citizens' lives (Lijphart 1997; Verba, Nie, and Kim 1995; Wertheimer 1975). As Jakee and Sun (2006, 64) put it, "the more people vote, the more they become civic and politically minded." Thus, having to vote election after election, an individual living under CV is likely to develop a stronger sense of civic duty.

Additionally, one of the main concerns involving low voter turnout rates is that young voters are increasingly less interested and involved in politics (Engelen 2007; Keaney and Rogers 2006). Research shows, however, that young people's participation is significantly influenced by the presence of active voters in the household (i.e., parents) (Fieldhouse and Cutts 2012). When children are exposed to political participation from a young age as they observe their parents and other relatives going to the polls, they are more likely to perceive it as an important act and a civic duty. Plutzer (2002, 43) also argues that "parental political involvement can provide both behavior to model and campaign-relevant information that children rarely get from formal schooling." When voting is compulsory, the likelihood that a young individual will also observe their parents participating often is much higher, which in turn makes them better able to internalize the norm to vote, ultimately increasing the likelihood that the act of voting is perceived as a civic duty from a younger age (Engelen 2007).

Compulsory voting can also incite feelings of civic duty via a more symbolic mechanism. Making voting a requirement can send a signal that the government values every citizen's participation, and is committed to incorporating as many individuals into the electorate as possible. An Australian politician explains that "Compulsory voting allows the entire electorate to feel that they have a degree of ownership in government and its decisions. People feel they are part of the loop and matter. It avoids the marginalization, hostility and sense of remoteness found in the US" (Australia 1997, 124).

Thus, compulsory voting can be perceived as an inclusive institution rather than an alienating one. This can, in turn, foster an individuals' sense of civic duty and

likelihood that one perceives voting as a positive civic obligation. Taken together, the voting habit created by CV laws, the early exposure to participation in the household, and the symbolic effects that make citizens feel included lead to my first general hypothesis:

H_1: Compared to those living under voluntary voting, voters living under compulsory voting are more likely to perceive voting as a civic duty.

Compulsory Voting and Resentment

The counter argument to the belief that CV increases feelings of civic duty is that coercing people to turn out generates resentment. This could be the case for a variety of reasons. First, it is well established that turning out to vote is costly, especially for low-income or disadvantaged voters (e.g., Verba and Nie 1972; Verba, Nie, and Kim 1978; Wolfinger and Rosenstone 1980). Requiring citizens to turn out by law virtually forces voters to incur the costs of going to the polls against their will. The disregard for individuals' own resources can generate resentment and cause voters to feel negatively about the act of voting itself. Going back to the rational theory of voting, compelling citizens to incur the costs of voting (C) can decrease one's psychological and intrinsic value ("D" term) attached to the process, instead generating more resentment and decreasing the chances a potential voter would turn out if not required by law.

Indeed, Hooghe and Pelleriaux (1998) asked respondents in Belgium whether they would still go vote if CV were abolished in the country. They find that about 30 percent of respondents indicated they would never vote again if CV laws were eliminated. A similar study of Brazil also finds that a large proportion of voters indicated a wish to abstain if CV laws were no longer in place (Elkins 2000). Significant declines in aggregate turnout in countries that have actually abolished compulsory voting in practice (i.e., Venezuela and Chile) corroborate these hypothetical outcomes (Barnes and

Rangel 2014; Birch 2009), suggesting that it is possible for CV laws to negatively influence citizens' attitudes towards voting.

Symbolically, a particular argument supporting the fact that CV laws create negative attitudes is that people living under democratic institutions should have the freedom and right to choose not to vote. As emphasized by an Australian policymaker, "the assertion that voting is a 'right' means little if one can be imprisoned for conscientiously choosing not to exercise that right" (Jackman 1999, 31). Similarly, Hill (2010) explains that in Australia, many individuals who abstain invoke the principle of democratic choice and freedom of expression as objections to compulsion. When Chilean lawmakers were debating whether to abolish compulsory voting in 2011, for example, political opponents of CV specifically argued that forcing citizens to participate against their will could provoke resentment, consequently discouraging political education (Barnes and Rangel 2014). As Birch (2009, 63) puts it, "obliging people to vote may alienate the unengaged even further… for this reason the introduction of compulsory voting may be counter-productive." Overall, forcing individuals to incur costs and disregarding one's democratic freedom to abstain can nurture feelings of resentment towards voting. Based on the combination of these arguments, my second general expectation is:

> *H_2: Compared to those living under voluntary voting, voters living under compulsory voting are more likely to report feelings of resentment towards the act of voting.*

Compulsory Voting and Indifference

Although most existing arguments for how CV influences citizen attitudes highlight clear positive and negative consequences, I also argue that mandatory voting

laws can promote feeling of indifference for voters. The two previous attitudinal outcomes cite convincing arguments as to why we should expect either strong positive or negative feelings amongst voters.

But, I argue that important contextual features of compulsory voting may mitigate some of these positive and negative effects, fostering instead more neutral feelings. First, even though voting is costly and CV drives citizens to incur the costs, one overlooked aspect of this institutional design is that it is typically coupled with other institutions that are designed to decrease the cost of voting, such as concurrent elections, automatic registration, and voting on weekends. The vast majority of countries in Latin America with CV laws, for instance, hold concurrent elections. Every Latin American country that requires citizens to turn out to vote holds their elections on a Sunday in order to maximize turnout and minimize the likelihood that voters would have to abandon work or personal duties to go the polls. The result is that voters do not incur extremely high costs of voting that are typically associated with voluntary voting systems, which would subsequently minimize fears that CV might lead to negative attitudes. Instead, it can contribute to feelings of indifference towards an institution that might be a burden but not as costly as typically imagined.

Second, elite behavior related to voter turnout can mitigate the positive effects associated with CV laws. Under voluntary systems, candidates often highlight the importance of turning out, and engage in multiple "Get out the Vote" (GOTV) campaigns. In these countries, voting is regarded as an important and crucial act, and this message is constantly displayed and circulated. Indeed, it is not uncommon for political parties and donors to allocate significant funds towards GOTV efforts (e.g., Green and

Gerber 2015, Stone 2012). Meanwhile, CV should, in theory, minimize mobilization efforts and shift attention away from simply turning out and towards policy issues or voter persuasion. Therefore, a lack of focus on intensive mobilization fails to invoke the kind of excitement or sense of fulfillment that occurs under voluntary voting rules.

Additionally, the novelty of voting is minimized under compulsory voting. Take the United States, for example. During elections, voters often receive an "I voted" sticker which publicizes their participation. Because voting is voluntary and a large percentage of the population does not participate, receiving this sticker makes individuals feel as if they have partaken in an important act that should be publicized. But, once voting is a mandatory requirement in which all citizens are required to partake in, voting loses its novelty. Individuals no longer feel as if they are performing an extraordinary act, rather they are simply complying with the law and doing something all other individuals are required to do as well, contributing to feelings of indifference. Taken together, the presence of institutions that reduce the costs of turning out and the lack of emphasis on the importance of going to the polls combine to create an image of voting as not terribly costly but also not terribly novel, lead individuals to feel indifferent towards voting.

H_{3a}: Compared to those living under voluntary voting, voters living under compulsory voting are more likely to feel indifferent or apathetic about voting.

Similarly, the shift away from highlighting the importance of voting and the lack of novelty drawn from something that the whole population is required to do should decrease individuals' satisfaction when going to the polls. Gans (2001) argues that those who suffer from political indifference are less likely to draw satisfaction from political acts, suggesting that the same mechanisms proposed above to produce feelings of

indifference can also be displayed as lower feelings of satisfaction instead. Therefore, I include a complimentary hypothesis:

H_{3b}: Voters living under compulsory voting are less likely to draw satisfaction from voting, when compared to those living under voluntary voting.

Data and Methods

To evaluate individual attitudes towards voting, I use a hierarchical modeling strategy with a survey question available in the 2010 Round of the Latinobarometro Project Survey fielded in 18 Latin American countries. The Latin American region is an excellent setting in which to examine the question of CV's impact on attitudes toward voting, since it holds the majority of countries with compulsory voting. Although compulsory voting is prevalent in the region, 5 out of 18 countries have voluntary voting systems, offering adequate variation for comparing attitudes in compulsory systems to voluntary systems. Further, focusing on a single region allows me to obtain interesting variation on the main independent variable, while at the same time holding constant a number of cultural and historical factors that might potentially confound citizen attitude formation (Inglehart 1988; Lijphart 1975). In this section, I describe the variables used to test my hypotheses and the methods applied.

Dependent and Independent Variables of Interest

To evaluate citizens' attitudes towards voting, respondents were asked the following question: *"Which of the following statements is the closest to your feelings, when you go to vote?"* Respondents could select one of the following answers: *(a) I have a feeling of satisfaction…*(coded as *satisfaction*); *(b) I do it only because it is my duty…*(coded as *civic duty*); *(c) I feel upset, it is just a waste of time…* (coded as

resentment); *(d) I don't feel anything in particular…*(coded as *indifference*); *(e) I don't vote*.[11]

The format of this question is not the traditional way in which civic duty is typically captured. But, using this questions allows for a much more nuanced investigation of citizens' attitudes towards voting. Most measures of civic duty simply ask respondents whether they think voting is a civic duty, or whether voting is important to be considered a good citizen (Blais and Galais 2016). More recently, Blais and Galais (2016) have proposed a battery of questions related to voting and citizens' responsibilities to measure civic duty. However, none of these measures capture alternative (and particularly negative) psychological responses to the act of voting. Hence, in order to test which side of the normative debate on the positive or negative attitudinal impacts of compulsory voting, a direct question offering a variety of possible outcomes is needed. Thus, this measure allows me to capture whether CV has a positive, negative, or neutral impact on voters.

The main explanatory variable is compulsory voting, which I code in two different ways. First, a dichotomous measure of *compulsory voting* is coded as a 1 if voting is compulsory in a particular country and a 0 if voting is non-compulsory. A second categorical measure, *enforced CV* takes into account the presence of enforcement mechanisms, and countries where voting is compulsory and enforced receive a (2), countries where voting is compulsory but unenforced receive a (1), and countries where voting is voluntary receive a 0. These data were drawn from the International Institute for Democratic and Electoral Assistance (IDEA), which identifies which countries around

[11] See Table A1 in Appendix A for the Spanish translation of the question and answer options.

the world practice compulsory voting. In the sample, Guatemala, Venezuela, Colombia, El Salvador, and Nicaragua do not have compulsory voting rules.[12] Seven other countries have relatively unenforced compulsory voting laws, and 6 other have enforced CV rules.[13]

Control Variables

I control for several variables that might affect how citizens perceive the act of voting. At the individual level, age can be an important factor influencing attitudes, as older individuals are found to report higher feelings of civic duty (Blais 2000) as well as overall rates of political engagement (Verba and Nie 1972). Additionally, socioeconomic status is known to affect citizen political participation (Verba, Nie, and Kim 1978, Verba, Schlozman, and Brady 1995). Thus, I control for *education* and *income*. I also control for *political interest, satisfaction with democracy*, and *minority*. Finally I also take into account whether the individual indicated a willingness to vote in an upcoming election (*voter*).[14] All individual-level variables were drawn from the same Latinobarometro Survey (2010) from which the dependent variables were drawn.[15]

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[12] See Table A2 in Appendix A for a complete list of all countries included in the analysis and their respective compulsory voting coding.

[13] Bolivia, Costa Rica, Dominican Republic, Honduras, Mexico, Panama, and Paraguay are considered to have weak enforcement of CV laws. Argentina, Brazil, Chile, Ecuador, Peru, and Uruguay have enforced CV laws.

[14] This variable is different from the dependent variable's option to select "I Don't Vote." This is because selecting "I Don't Vote" implies the individual has little to no experience with voting, or is not able to express how they feel towards voting. Instead, the independent (control) variable *voter* is based on a question that asks individuals whether who would they vote for if an election took place on Sunday. If individual expressed a vote choice, they are coded as being a voter, and those who expressed not voting if an election would take place are coded as a non-voter.

[15] See Table A3 in the Appendix A for a complete description of each control variable, and Table A4 for descriptive statistics for all control variables.

At the country level, I control for the level of *democracy* and *economic development* for each country. Data on *democracy* comes from the Freedom House's civil liberties and political rights ratings (Freedom House 2014). This variable was transformed in order to report states with higher scores in the freedom house scale as more democratic, while lower scores reflect less democratic states.[16] Economic development is measured as Gross Domestic Product GDP per capita from the World Development Indicators (World Bank 2014), with higher levels indicating more developed countries.[17]

Methodology

One important feature of the data in this study is that observations are clustered at different levels of analysis. Specifically, the data are clustered at two levels: individual respondents i (level 1) nested within countries j (level 2). The main explanatory variable is compulsory voting, which is recorded at the country level. The outcome variable, citizen attitudes, is measured at the individual level through public opinion data. To account for the nested nature of the data, I estimate a hierarchical model across two levels of analysis: respondents nested within countries (Raudenbush and Bryk 2002). In addition, the outcome variable is based on a survey question that allows individuals to select one of many categorical outcomes. That is, a respondent will select an answer in comparison to all other answer choices they were provided with. Given that these answer options are categorical and not structured as an ordinal scale, I employ a hierarchical multinomial logit model, which predicts the likelihood of selecting a specific answer in

[16] Democracy data comes from the 2011 Freedom House Report, which includes information from the year 2010.
[17] This variable is introduced in the models by taking the logarithm of the GDP values recorded.

comparison to a specific baseline. The model specification for testing the main hypotheses is as follows: [18]

$$Y_{ij} = \gamma_{00} + \gamma_{01} Compulsory\ Voting_{1j} + \gamma_{10}\, Age_{1ij} + \gamma_{20}\, Female_{2ij} + \gamma_{30}\, Education_{3ij} + \gamma_{40}\, Political\ Interest_{4ij} + \gamma_{50} Satisfaction\ with\ Democracy_{5ij} + \gamma_{60}\, Voter_{6ij} + \gamma_{70}\, Income_{7ij} + \gamma_{80} Minority_{8ij} + \gamma_{02} GDP\ per\ capita_{2j} + \gamma_{03} Democracy\ Level_{3j} + U_{0j} + R_{ij}$$

where U_{0j} represents the random effects for the intercept across countries, and R_{ij} are errors at the individual level.

Cross-Country Variation

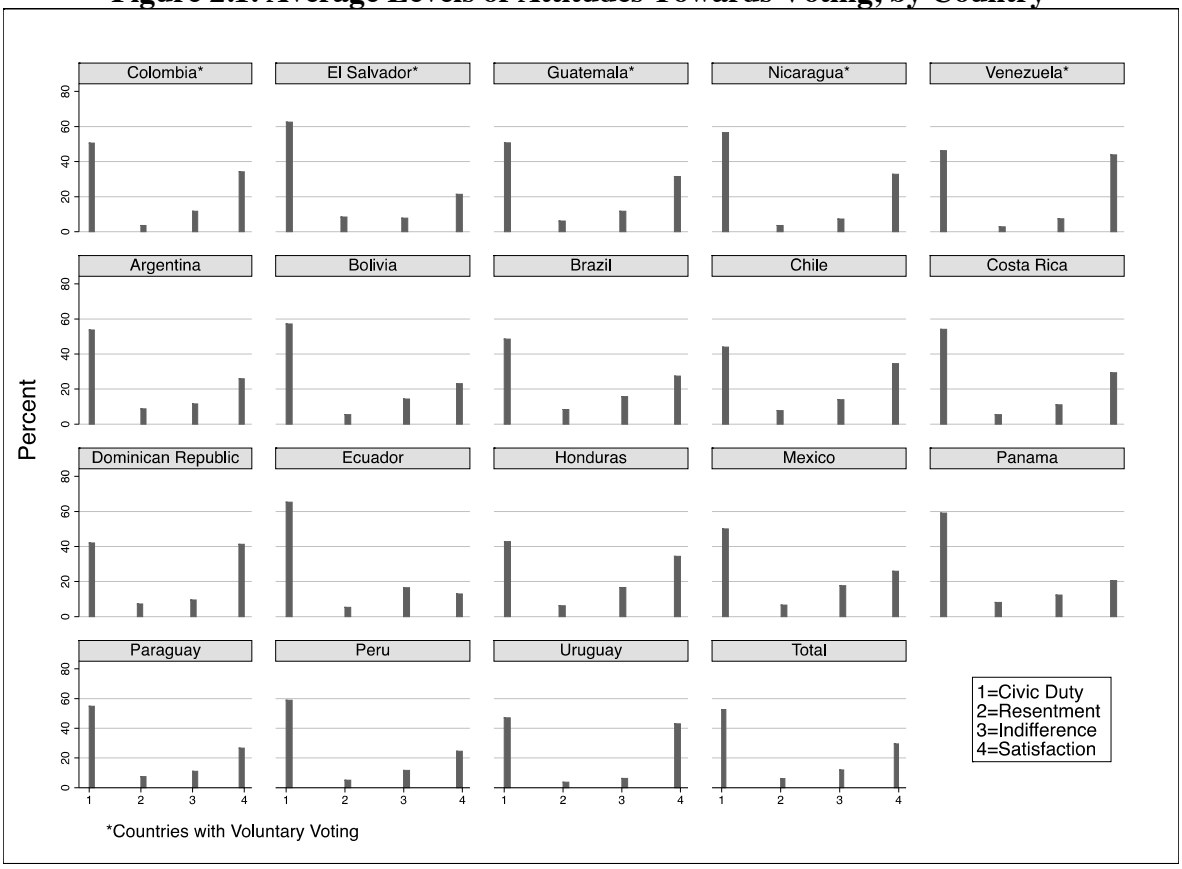
The question on citizens' feelings towards voting contains a lot of information. Individuals are able to select one out of many responses. To better visualize the distributions, Figure 2.1 graphs the percentage of respondents in each country selecting each possible answer. One preliminary observation that can be drawn from these descriptive stats is that a plurality of voters in every single country identifies feelings of civic duty as the defining sentiment when they vote. In many countries, a large majority of voters report a sense of civic duty. Thus, regardless of the voting system, a great number of voters in the Latin American region recognize voting as a civic obligation. This is consistent with previous work that shows most people, in general, agree that voting represents an act of civic duty (Blais 2000; Blais and Galais 2016).

While it is apparent that individuals in most countries report high rates of feelings of civic duty, much more variation exists for the selection of other responses, such as resentment, or feelings of indifference. For instance, Ecuador, reports the highest

[18] This model only assumes random effects for the intercept.

percentage of citizens identifying civic duty as the reason why they vote (over 60 percent) amongst countries. At the same time, Ecuador reports one of the highest rates of voter indifference in comparison to other countries (approximately 20 percent). Uruguay and Venezuela, by contrast, have much more similar rates of citizens reporting both civic duty and satisfaction. Rates of resentment, overall, seem to be pretty low across most countries, while satisfaction varies considerably. In sum, a great deal of variation is reported within and across countries. It is difficult however, to observe any systematic patterns across the set of responses based off of each country's voting laws. In the next section, I conduct an empirical investigation into which attitudes are more likely to take shape when voting is mandatory or voluntary.

Figure 2.1. Average Levels of Attitudes Towards Voting, by Country



Empirical Findings

I begin by first examining how, on average, compulsory voting influences a citizen's feeling towards the act of voting. Results from a hierarchical multinomial logit regression analysis appear in Table 2.1. This model estimates the probability of individuals selecting any one of the possible answers to the attitudinal question, compared to a baseline category. Because it was the most common choice across the sample, civic duty is used here as the baseline.[19]

Notably, we see that citizens living under CV rules are no more likely to report feeling resentment, in comparison to a sense of civic duty. The same is the case for reporting satisfaction. But, the coefficient for indifference is positive and statistically significant, meaning that those living under CV are significantly more likely to report feeling indifferent about voting in comparison to civic duty.

Because the significance of the results might change depending on the baseline, I graph the marginal effects for a change in the dependent variable in order to estimate the change in predicted probability of selecting each option. Figure 2.2 shows the change in predicted probability of reporting a specific feeling (compared to all other possibilities) when voting laws when going from a zero (voluntary voting) to a one (compulsory voting). The confidence intervals indicate statistical significant differences at the 95%

[19] Tables A5-A7 in Appendix A include the results when the baselines are abstention, resentment, and satisfaction. The model with indifference as the baseline did not converge in the statistical software used. But, one way to compare the statistical significance of compulsory voting among all attitudes is to independently create dichotomous variables for each (did respondent select, for instance, feeling resentment or anything else). When disaggregating each outcome, indifference is the only attitude that is predicted by compulsory voting (i.e., statistically significant at $p<.001$). These results can be found in Table A8 in Appendix A.

confidence level. If the confidence intervals cross the zero line, the change is not statistically significant.

Table 2.1. The Impact of CV on Individual Attitudes Towards Voting (*Civic Duty* as the Baseline)

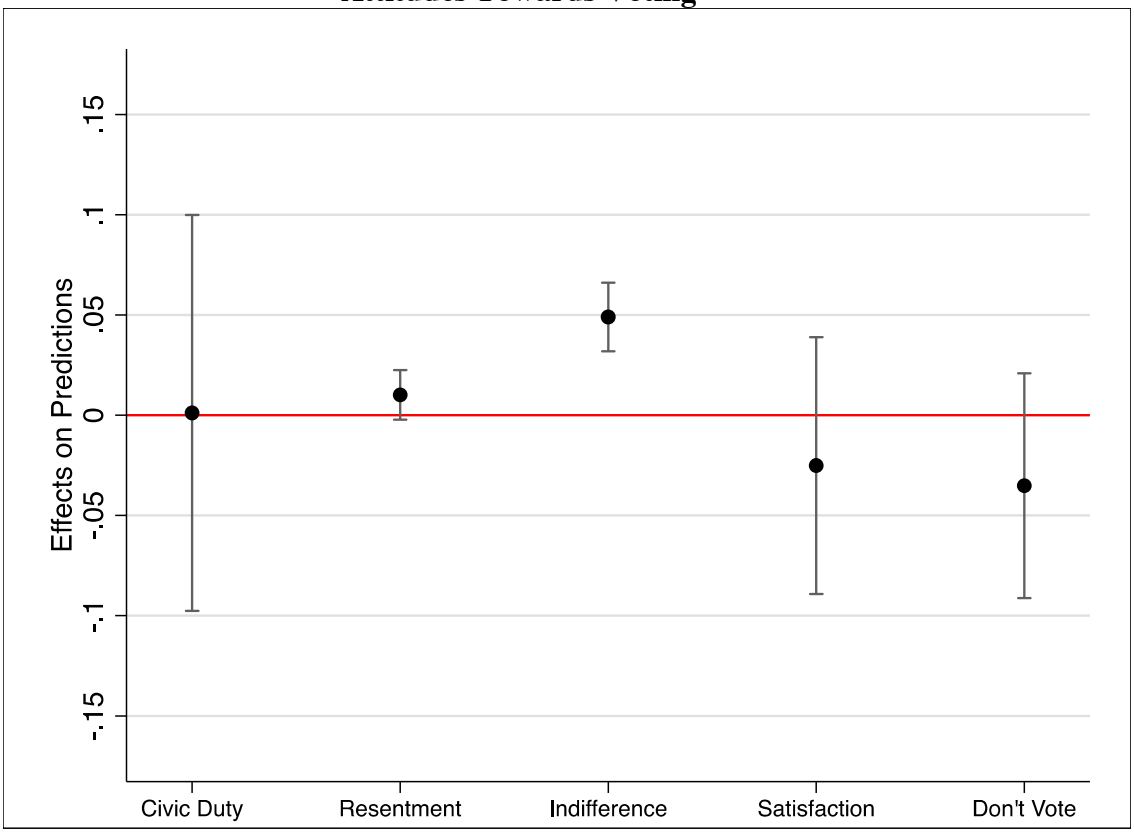
	Resentment	Indifference	Satisfaction	Don't Vote
Compulsory Voting	0.175	0.489***	-0.091	-0.771
	(0.114)	(0.087)	(0.211)	(0.616)
Age	-0.002	-0.004	0.004***	-0.037***
	(0.002)	(0.052)	(0.001)	(0.003)
Female	0.045	-0.105**	-0.008	0.004
	(0.068)	(0.035)	(0.038)	(0.079)
Education	-0.086	-0.108***	-0.004	-0.254***
	(0.046)	(0.031)	(0.025)	(0.058)
Political Interest	-0.052	-0.145***	0.413***	-0.279***
	(0.040)	(0.031)	(0.020)	(0.051)
Satisfaction with Democracy	-0.316***	-0.388***	0.196***	-0.121*
	(0.042)	(0.058)	(0.022)	(0.047)
Voter	-0.619***	0.011	0.635***	-1.684***
	(0.074)	(0.020)	(0.056)	(0.081)
Income	0.026	0.061	0.075***	-0.062*
	(0.026)	(0.062)	(0.015)	(0.031)
Minority	-0.209**	0.136**	0.025	-0.062
	(0.079)	(0.051)	(0.045)	(0.093)
GDP per capita	0.036	-0.117**	0.135	0.096
	(0.071)	(0.038)	(0.125)	(0.365)
Democracy Level	0.119*	-0.012***	-0.069	0.144
	(0.051)	(0.002)	(0.092)	(0.270)
Constant	-1.637**	-0.957*	-3.570***	0.341
	(0.564)	(0.420)	(0.965)	(2.789)
# of Individuals	17,020			
# of Countries	18			

Note: Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline response of Civic Duty. Coefficients are statistically significant at *p<.05; **p<.01; ***p<.001. Standard errors in parentheses.

Figure 2.2 shows that a change from voluntary to compulsory voting leaves the predicted probability of an individual selecting "civic duty" as their closest feeling when turning out essentially unchanged, and not statistically different from zero. Contrary to

Hypothesis 1, then, it does not appear that compulsory voting leads to higher levels of civic duty amongst its citizenry. This null finding represents a significant departure for the literature that has largely assumed a relationship between compulsory voting and civic duty (Gordon and Segura 1997; Lijphart 1997). If compulsory voting has any effects beyond increased turnout, it is likely not because it makes citizens feel more civically minded and consider voting to be a duty.

Figure 2.2. Marginal Effect of Compulsory Voting on Individual Attitudes Towards Voting



Notes: Figure 2.2 shows the change in predicted probability of reporting a specific feeling (compared to all other possibilities) when the voting law goes from zero (voluntary voting) to one (compulsory voting) with 95% confidence intervals. If confidence intervals cross the zero line, the effect is not statistically significant. Estimates were calculated from results in Models 1-4 in Table 2.1.

Hypothesis 2 posited that CV should instead lead to higher feelings of resentment towards voting. If it is clear that CV does not increase civic duty, then critics of this

institution would likely expect this to be the case. But, as Figure 2.2 shows, there is a slight increase in the predicted probability of selecting "resentment" when voting is compulsory, but that change is incredibly small and not statistically significant (i.e., confidence interval crosses the zero line). This null finding is perhaps even more surprising, given that the chances someone living under voluntary voting would indicate feeling resentment when voting is likely really low (rather than just abstaining). But, even when coercing a much larger amount of individuals into the electorate, it does not seem like the average level of resentment increases. While this finding does not provide support for Hypothesis 2, it does show that CV does not negatively impact citizens' attitudes significantly.

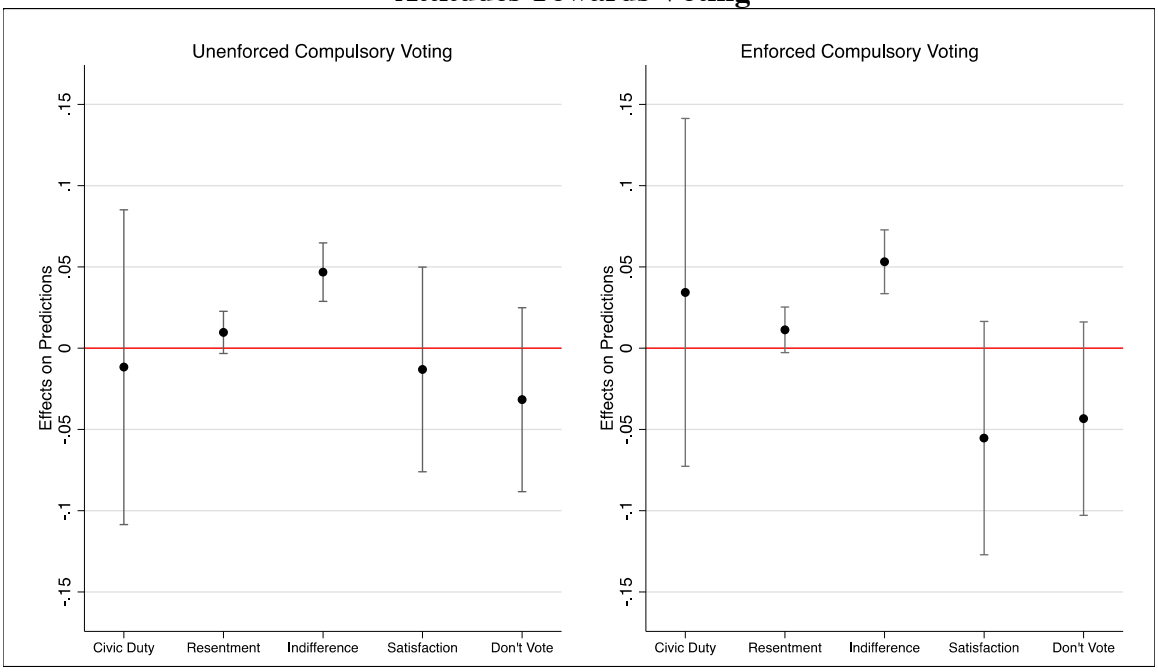
Figure 2.2 also shows that one specific outcome is statistically significant: having a compulsory voting system increases the probability that an individual will report feeling indifferent towards voting. Specifically, individuals that are subject to compulsory voting laws are about 5 percent more likely to report feeling indifferent when turning out at the polls. While this effect is not huge, it does provide support for Hypothesis 3_a. By contrast, Hypothesis 3_b is not supported—CV does not significantly affect the probability that one feels "satisfied" when going to the polls. The findings are also similar when we take into account the level of enforcement of compulsory voting laws, as shown in Figure 2.3.[20] This likely suggests that when it comes to attitudes, CV has more of a symbolic effect, and does not necessarily need to be enforced to produce a specific pattern.

In tandem, the findings reported in Figures 2.2 and 2.3 show that compulsory voting laws do not have the attitudinal impact that is often argued and discussed. When

[20] Marginal Effects were calculated from results shown in Table A9 in Appendix A.

subjected to mandatory voting laws, individuals are no more likely to feel a higher sense of civic duty or resentment. Instead, they are slightly more likely to feel neutral towards the act of voting. This supports the notion that CV minimizes the novelty associated with voting, and voting appears to be a rather routine chore that all individuals take part in, such as paying taxes or jury duty, for instance.

Figure 2.3. Marginal Effect of Enforced Compulsory Voting on Individual Attitudes Towards Voting



Notes: Panel A in Figure 2.3 shows the change in predicted probability of reporting a specific feeling (compared to all other possibilities) when the voting law goes from zero (voluntary voting) to one (unenforced compulsory voting) with 95% confidence intervals. Panel B in Figure 2.3 shows the change in predicted probability of reporting a specific feeling (compared to all other possibilities) when the voting law goes from zero (voluntary voting) to two (enforced compulsory voting) with 95% confidence intervals. If confidence intervals cross the zero line, the effect is not statistically significant. Estimates were calculated from results presented in Table A9 in Appendix A.

Additional Analyses

As previously discussed, the question used in this study is not the traditional way to measure attitudes towards voting, but offers the benefit of exploring a variety of feelings and attitudes simultaneously. One critique may be that the wording of the

question used to estimate the dependent variable—feelings towards voting—assumes that an individual has had some type of experience with voting before. However, one answer option is to select "I don't vote," which implies that the individual does not have sufficient experience with voting and therefore has no ability to answer the question properly. This category is important to have because it works as a form of quality control, by offering an alternative for individuals who may otherwise randomly select an answer (as it often happens with attitudinal questions) (Converse and Presser 1986). In this sense, having this option increases the confidence that individuals are sincerely selecting a feeling towards voting—especially the ones expressing indifference. Yet, the percentage of individuals selecting that they don't vote is incredibly small (6.32 percent in countries with VV; 4.73 in CV).

We know from aggregate reported levels of voter turnout that the percentage of abstainers in any given election tends to be larger than that. Even in compulsory voting countries, turn out is not completely universal. Thus, a better way to capture whether reported attitudes correspond to how people actually feel when they vote is to consider actual voting behavior in tandem with reported attitudes.

In order to ensure that I am mostly capturing those who actually vote under both systems, I take two approaches. In the main analysis presented in Table 2.1, I control for whether an individual indicated that they would vote if an election was held this Sunday.[21] Note that the *voter* variable works as expected for the resentment, satisfaction

[21] This is based on a question that asks, "*If elections were being held this Sunday, which party would you vote for?"* If the respondent identified a specific party or reported they would vote blank, the *voter* variable is coded as a 1. If they responded that they would not vote, the variable is coded as a 0. The 2010 Latinobarometro does not directly ask

and abstain outcome. Individuals who reported willingness to vote in an upcoming election were significantly less likely to report feeling resentment when voting, and also less likely to say they just don't vote in general. Voters were also significantly more likely to feel satisfaction when voting. But, being a *voter* does not matter for reporting indifference.

In order to assess whether being a voter matters depending on the institutional design, I also conduct an analysis where *voter* is interacted with *compulsory voting*.[22] I then graph the predicted probabilities for each attitudinal outcome based on the system and whether individual was a *voter* or not (see Figure 2.4). The top right graph of Figure 2.4 shows that while both voters and non-voters in CV systems report slightly higher average levels of resentment in comparison to voters and nonvoters in VV systems, these differences are not statistically significant (i.e., confidence intervals overlap). Statistically significant differences exist between voters and non-voters *within* each system. This is intuitive; non-voters in each system are much more likely to report feelings of resentment in comparison to those who identify themselves as voters.

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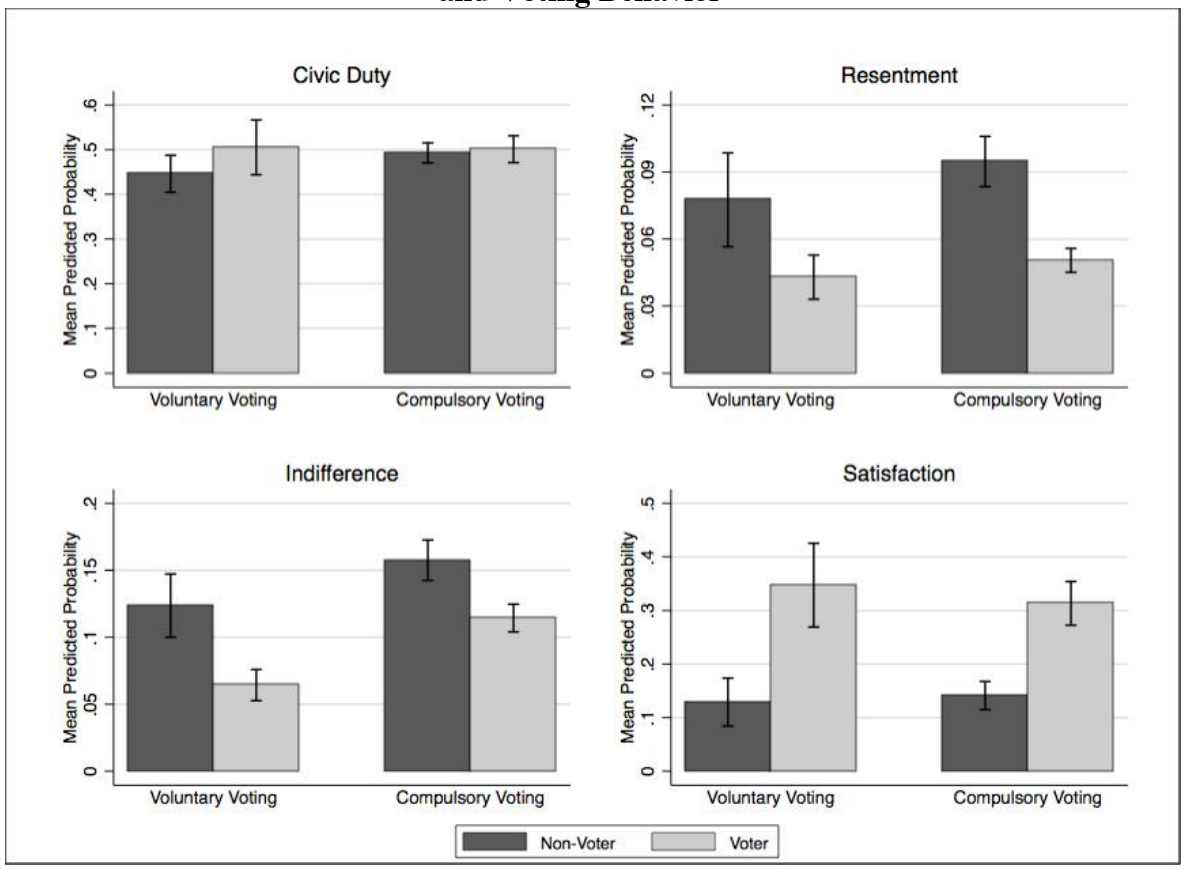
individuals if they actually voted in the previous election, as many other surveys do. Therefore, this is the best way to approximate reported voting behavior.

[22] See Table A10 in Appendix A.

Figure 2.4. Predicted Probabilities of Individual Attitudes by Voting System and Voting Behavior



Notes: Figure 2.4 shows the predicted probability of selecting a specific feeling, conditioned by being a voter or not. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated from results presented in Table A10 in Appendix A.

In regards to civic duty, the top left graph in Figure 2.4 shows that voters and non-voters in both types of systems report feeling like voting is a civic duty. Here, it is interesting to note that when it comes to perceiving voting as a civic obligation, voters and non-voters report virtually the same patterns—meaning, nonvoters are just as likely to report feelings of civic duty towards voting, but that does not ensure that they will actually turn out. The bottom right graph in Figure 2.4 shows that, similar to feelings of resentment, but in an inverse direction, voters in both VV and CV systems tend to report significantly higher levels of satisfaction in comparison to non-voters, but that the

differences between compulsory and voluntary voting per se are not statistically significant.

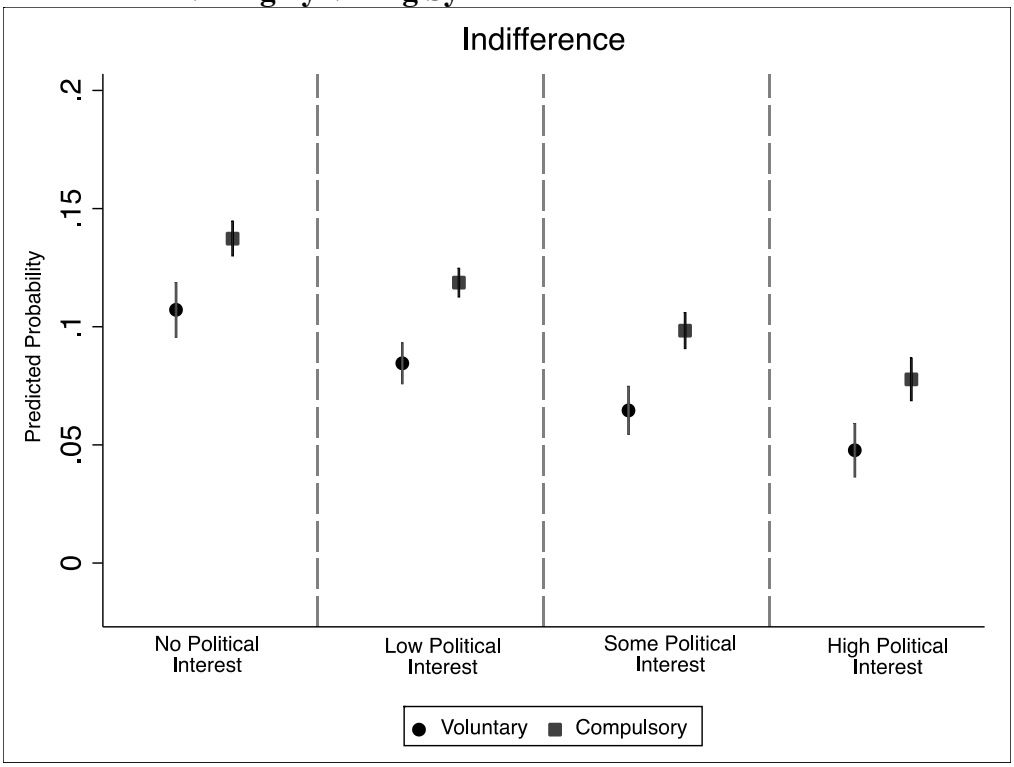
Most importantly, however, the bottom left graph of Figure 2.4 suggests that (1) non-voters are significantly more likely to report feelings of indifference towards voting than voters in both systems, and (2) voters in CV are significantly more likely to report indifference relative to voters in VV systems. Non-voters under CV are also slightly more likely to report feeling indifferent than non-voters in VV, and this different is close to being statistically significant. This suggests that even when you take away the most indifferent people under compulsory voting (those who would likely by non-voters), there is still a significant difference between voters in both systems. This provides evidence that this effect is not *only* being driven by unlikely voters.

I also graph the interaction between voters/nonvoters under both systems as an predictor of selecting the option "don't vote" in Figure A1 in Appendix A in order to show how selecting "don't vote" and as attitude towards voting differs from whether the respondent indicated voting in an upcoming election. The figure shows that both non-voters and voters under compulsory voting system are less likely to select the "don't vote" category, since they are more likely to turn out due to the requirement to vote. It also shows that non-voters in both systems are significantly more likely to say that they "don't vote," consistent with the expectation that it is only people who have had less or no experience with voting that are more likely to chose that answer to the attitudinal question.

A second concern is that the statistically significant result that individuals living under CV laws are more likely to report feeling indifferent might simply be a product of a

higher number of politically uninterested voters being coerced to the polls under CV. In other words—it is not that CV is affecting a change in attitudes, but simply that it is including voters to its electorate that are not interested in politics and would otherwise abstain if voting weren't mandatory. If that is the case, we should expect that the statistically significant effect of CV on indifference is restricted to those who are not that interested in politics. That gap should then essentially close for those with higher levels of political interest. In order to see if that is the case, I estimate a model that predicts citizen attitudes using levels of *political interest* conditioned by the voting system.[23] I then graph the predicted probabilities to ease interpretation in Figure 2.5.

Figure 2.5. Predicted Probabilities of Indifferent Attitudes Towards Voting by Voting System and Political Interest



Notes: Figure 2.5 shows the predicted probability of selecting feelings of indifference, conditioned by an individuals' level of political interest. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated from results presented in Table A11 in Appendix A.

[23] See Table A11 in Appendix A for the results.

Figure 2.5 shows levels of indifference towards voting for each level of political interest, and by voting system.[24] The figures show that while it is clear that the more interested an individual is, the less likely they are to feel indifferent towards voting regardless of the voting system. Most important for my argument, however, individuals under CV are still significantly more likely to feel indifferent than their counterparts living under voluntary voting at every level of political interest, including those who report "some" or "high" interest in politics. Admittedly, these statistically significant differences are not particularly large. It does still show that indifference is not only a product of more uninterested voters being driven to the polls under CV. Instead, it appears compulsory voting does influence individual attitudes—even amongst those who are particularly interested in politics.

Taken together, these findings show that while most scholars and political figures tend to perceive the impact of compulsory voting on individual attitudes as either positive or negative, evidence shows that the impact of CV on individual attitudes towards voting is not as clear as expected. Unlike certain proponents of CV argue, mandatory turn out does not inspire citizens to become more civically minded. At the same times, it appears that concerns over CV instigating negative feelings amongst citizens have been overstated. Instead, there is evidence that CV increases the likelihood that individuals feel indifferent towards voting, although the magnitude of this effect is still small.

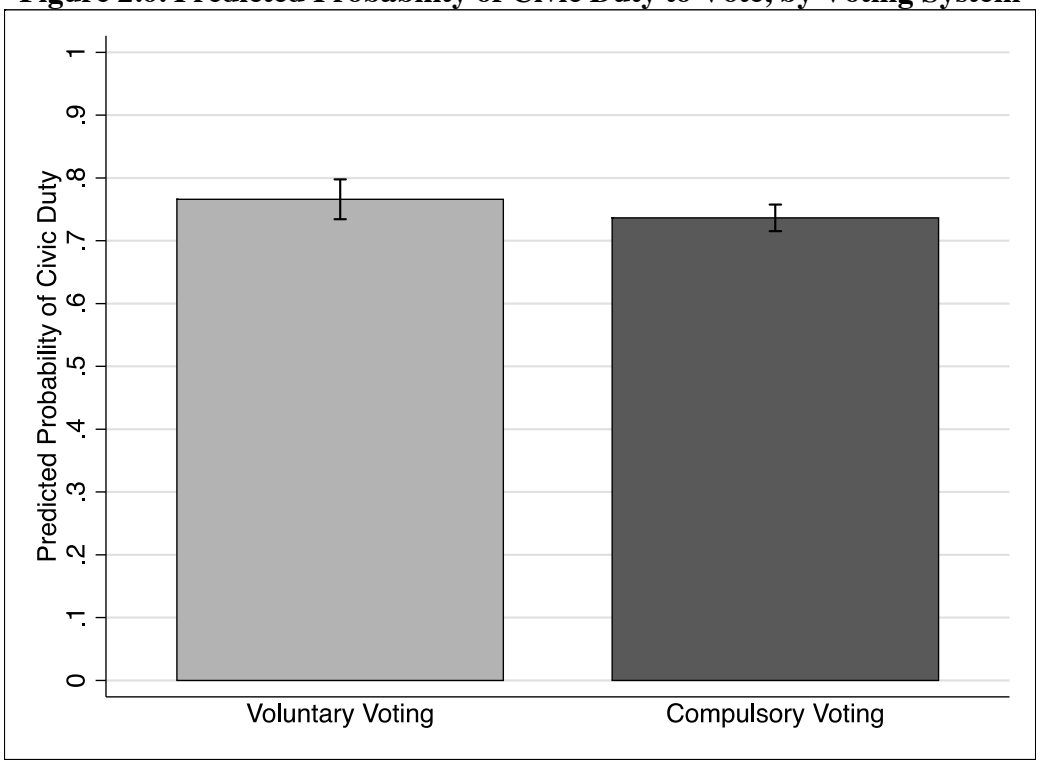
[24] *Political Interest* is measured via the following question: "*How interested are you in politics?*" The variable was recoded so that a 1 equals not at all interested, 2 low interest, 3 some interest, and 4 high interest.

Confirming the Null Effects on Civic Duty

The main dependent variable in this study is a useful way to capture variations in individual's feelings towards the democratic process because it allows for individuals to select a variety of attitudes that provide important information about how institutional design changes citizens perceptions. At the same time, it does not provide a conventional way to capture civic duty. The main analyses of this study suggest that compulsory voting does not influence an individuals' sense of civic duty. Because this null finding contrasts with other literature arguing the CV could positively influence individuals' attitudes towards the political process, I conduct an additional analysis to confirm that this is the case using more conventional measures of civic duty.

As previously discussed, one of the most common way to capture civic duty is to ask whether an individual perceives voting as an important feature of being a good citizen (Blais and Galais 2016). Consistent with a number of additional surveys, the 2010 round of the Latinobarometro asks the following question: *"which of the following things do you believe you should do in order to be considered a good citizen?"* Among several potential options, if the respondent selected "you should vote," I recorded that as indicating a civic duty to vote. Table A12 in Appendix A indicates that compulsory voting is not a statistically significant predictor of recognizing voting as a civic duty. Below in Figure 2.6, I report the results graphically in order to ease interpretation.

Figure 2.6. Predicted Probability of Civic Duty to Vote, by Voting System



Notes: Figure 2.6 shows the predicted probability of selecting voting as important for being a good citizen. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated from results presented in Table A12 in Appendix A.

In the figure, we first note that the predicted probabilities of an individual in Latin America identifying voting as a civic duty is relatively high, somewhere between 70 and 80 percent. This is again consistent with previous literature on individuals in the United States and Canada (Blais 2000), and with the high levels shown earlier in Figure 2.1. But, there are no apparent differences depending on the voting system. Individuals under both compulsory and voluntary voting are equally as likely to report feelings of civic duty (i.e. confidence intervals overlap). This provides strong face validity to the an important finding of this study—compulsory voting does not fundamentally change how much individuals perceive voting to be a civic duty.

Conclusion

Overall, the results provided in this research suggest that on average, citizens living under compulsory voting systems tend to feel slightly more indifferent towards the act of voting when compared to their counterparts in voluntary systems. Contrary to a variety of scholars who argue CV laws should awaken a sense of civic duty amongst its citizenry, individuals living under these systems are no more likely to perceive voting as a civic duty than those living under voluntary voting. It also provides empirical evidence against the claim that CV creates more resentful citizens. The findings also suggest that CV can change the amount of value citizens see in actually going to the polls. This is an important piece of evidence to be invoked when scholars, practitioners, and policymakers highlight the potential harming or beneficial effects of voting system reform.

While this research provides empirical evidence for how mandatory voting influences citizen attitudes, further research is necessary to unpack the mechanisms that lead individuals to feel indifferent towards voting. Specifically, the contextual effect of institutions that are coupled with compulsory voting in order to make turning out less costly cannot be empirically tested in the Latin American region due to the widespread similarity in institutional design among countries with both voluntary and compulsory laws. We could, however, gain useful insight as to how such voter-friendly institutional design works to influence citizen attitudes by expanding the analysis to other regions or countries in which more significant variation exists.

Also, future research should investigate voter mobilization efforts under compulsory voting in order to better understand why CV can lead certain individuals to devalue their votes. A careful investigation of how individuals perceive the value of their vote given the institutional environment they are presented with could offer scholars and

practioners more insights as to how to engage the population as a whole. Although this article focuses on attitudes and not political behavior, it is possible that indifferent attitudes under CV can be behaviorally displayed as patterns of invalid or blank voting—what some consider as the equivalent of abstention when voting is mandatory (Lavareda 1991). While the investigation of whether apathetic attitudes correspond to higher rates of invalid voting (or less political activism) is beyond the scope of this study, a further look into the behavioral manifestation of feelings of indifference would represent a fruitful avenue for future research.

The effects (or lack thereof) of CV laws on individual attitudes presented in this paper are likely the first step in a chain of events that explains how mandatory voting influences overall political behavior and electoral outcomes, relationships that have been vastly explored in the literature to date. While this primary link was largely unexplored to date, it can help explain the existing lack of consensus that exists in terms of the byproducts of CV (i.e. its impact on political sophistication or political engagement), add nuance and empirical evidence to specific untested mechanisms assumed to be present in driving aggregate outcomes in the presence or absence of compulsory voting. Overall, this research contributes to our broader understanding of the psychological and intrinsic effects of maximizing turnout via mandatory voting laws.

Chapter 3

Political Engagement When Voting is Mandatory: Evidence From Election Law Reform in Chile

Electoral participation is a core element of democracy (Dahl 1971). Political participation on election day is crucial for establishing democratic legitimacy, as election outcomes are perceived as more representative when a large part of the population turns out to vote (Dalton 2004). Broader civic engagement also strengthens democracy (Almond and Verba 1963; Putnam 1993). While a considerable amount of research has aimed to explain what cultural and institutional factors influence voter turnout and political engagement as a whole, what do we know about political engagement when turnout is a given? Under a system of compulsory voting, all eligible citizens are required by law to turn out at the polls, causing turnout rates to be much higher (Bechtel, Hangartner, and Schmid 2016; Fornos, Power, and Garand 2004; Hoffman, León, and Lombardi 2017; Singh 2011). Our knowledge of how compulsory voting (herein CV) influences citizens' political behavior beyond election day remains unclear.

A burgeoning body of research has started to investigate this question, but empirical findings are mixed. For instance, experimental designs simulating mandatory requirements to vote have found both positive (Shineman, forthcoming) and null (Loewen, Milner, and Hicks 2007) effects. Single country studies, often using counterfactual scenarios of institutional reform, also raise doubts as to whether CV has any potential effects beyond voting (De Leon and Rizzi 2014; Singh, Roy, and Fournier 2017). More comprehensive cross-national studies of political engagement under CV conclude that little to no relationship exists in the aggregate (Birch 2009; Carreras 2016), but that enforced mandatory voting laws do help decrease engagement gaps of certain

marginalized groups (Córdova and Rangel 2017; Dassonneville, Hooghe, and Miller, forthcoming). This growing mixed evidence suggests we do not yet fully understand the second-order effects of mandatory voting laws. Existing inconsistencies may be due to variation in research designs in this literature, which at times are lacking in internal validity or fail to capture the causal relationship between CV and engagement, or also due to the variety of engagement outcomes examined.

This study overcomes these issues by leveraging novel public opinion data from Chile over an eleven-year timeframe that captures a change in CV laws. The abolition of compulsory voting in Chile in 2011 provides a unique opportunity to estimate the effects of CV on political engagement beyond the ballot box. Apart from this type of reform being extremely rare, the lack of quality individual survey data before and after reform has prevented scholars from pursuing a thorough quantitative analysis of the effects of compulsory voting beyond turnout (Selb and Lachat 2009).[25] The empirical approach used in this study allows us to more accurately capture the effect of compulsory voting on engagement by taking advantage of an exogenous institutional change while holding constant many other contextual and cultural factors that are difficult to isolate in cross-national analyses.

This study also makes an important theoretical contribution by carefully distinguishing between different aspects of political engagement, and by drawing specific connections between the many theoretical mechanisms and outcomes to be observed. I examine the impact of compulsory voting on six distinct aspects of political engagement

[25] Apart from Chile, the only other countries to ever formally abandon compulsory voting are the Netherlands (in 1970) and Venezuela and Italy (in 1993) (Gratschew 2004; Lijphart 1997).

related to information seeking, the information environment, and political activism—which all rely on distinct theoretical mechanisms. In doing so, this study provides a more nuanced picture of the ways in which a mandatory requirement to vote might affect overall political engagement. I find that CV does increase political engagement, but in a rather private form—citizens are more likely to individually absorb political information by watching and reading about the news, but not necessarily more likely to discuss politics around their friends or actively engage in political activity. All in all, this research contributes directly to our understanding of how attempts to maximize turnout via institutional change can affect not only electoral participation, but also broader aspects of political engagement.

Determinants of Engagement and the Mixed Evidence on Compulsory Voting

Concerns over low turnout are prominent among scholars and political elites across the world. High levels of turnout indicate stronger legitimacy as the elected government depicts a more direct representation of the will of the majority (Dalton 2004; Scully, Jones, and Trystan 2004). Higher turnout also increases the chances that the voting electorate is more representative, suggesting that elected officials and subsequent policies are more reflective of a wider and more diverse set of the population (Dahl 2006; Hill and Leighley 1994; Lijphart 1999). Given the established importance of electoral participation for the functioning of democracy, an extensive body of research investigates what factors best predict voter turnout rates. We know, for example, that individuals of higher socioeconomic status are more likely to turn out to vote (Smets and van Ham 2013; Verba, Nie, and Kim 1995). Older individuals tend to vote at higher rates (Leighley 1995), and in some countries, women go to the polls at lower rates than men (Córdova and Rangel 2017; Kittilson and Schwindt-Bayer 2014).

Research also shows that political institutions have a particularly strong impact on an individuals' likelihood to go to the polls (Cancela and Geys 2016; Geys 2006). Institutions that reduce the costs of voting, such as inexpensive registration laws (Ansolabehere and Konisky 2006; Vonnahme 2012) or concurrent elections (Hajnal and Lewis 2003; Lijphart 1997), encourage voters to turn out at the polls. Additionally, lowering the cost of getting to the polls by holding elections on weekends can promote electoral participation (Franklin 2002). Institutions can also foster political participation by increasing the value of one's vote, sending a signal that an individual's vote might make a difference (Abramson and Aldrich 1982; Levine and Palfrey 2007). Proportional electoral systems (Blais and Aarts 2006; Karp and Banducci 1999), high district magnitudes (Blais and Carty 1990; Geys 2006), and strong electoral competition (Blais and Rubenson 2013; Engstrom 2012) all motivate electoral participation by making an individual vote more valuable.

Yet, the strongest and most robust predictor of turnout is the presence of compulsory voting laws (Cancela and Geys 2016). This institution encourages participation by raising the cost of *not voting*, as the government is allowed to impose sanctions or fines on those who choose to abstain altogether (Panagopoulos 2008). When sanctions are enforced, compulsory voting is especially efficient in mobilizing participation (Blais, Massicotte, and Dobrzynska 2003; Singh 2011). Countries with mandatory voting requirements display turnout rates anywhere from 10 to 18 percentage points higher than countries with no formal requirement to turn out (Baek 2009; Fornos, Power, and Garand 2004; Jaitman 2013). Where compulsory voting was abolished, turnout rates severely declined, such as in the Netherlands in 1970 (from 94.9 percent to

79.1 percent within one election cycle) Venezuela in 1993 (from 81.7 percent to 60 percent) and most recently Chile in 2011 (from 86 percent to 50 percent) (Barnes and Rangel 2014; Birch 2009; Irwin 1974).[26]

As certain as we are about compulsory voting increasing turnout, much debate still exists in regards to the additional effects of compulsory voting laws. Aside from an ongoing philosophical debate on the legality and suitability of mandatory turnout,[27] scholars have recently turned their attention to studying the second-order effects of CV that expand beyond voter election day. A burgeoning body of literature investigates whether CV promotes engagement in other aspects of the political realm beyond the ballot box.

Political engagement can be a rather broad term. Verba, Schlozman, and Brady (1995, 38) define political engagement as "activity that has the intent or effect of influencing government action—either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies." Zukin et al (2006, 7) note that this is different than *civic* engagement, which they define as "organized voluntary activity focused on problem solving and helping others." Political engagement can take on many forms. Typical *political* indicators of engagement include not just voting but also persuading others, volunteering for a campaign, or making campaign contributions. Cognitive engagement is often related to actions such as discussing politics, attention to the news, and also overall levels of political knowledge.

[26] Here, turnout is calculated as the proportion of registered electors who participated.
[27] See Brennan and Hill (2014) for a comprehensive discussion of this debate.

While the factors that influence political engagement are often similar to the ones that predict voter turnout (which in and of itself is a political form of engagement), it is still unclear whether the positive impact compulsory voting has on voter turnout translates into other engagement outcomes. The empirical evidence on this relationship is far from conclusive, with some studies showing a positive effect (e.g., Gordon and Segura 1997; Shineman, forthcoming, Singh and Thorton 2013), moderate effects (e.g., Birch 2009), or little to no effect (e.g., Carreras 2016; Loewen, Milner, and Hicks 2007). These discrepancies may in part be due to the different research designs used to investigate the question, and the types of engagement outcomes they examine. Existing studies of CV and political engagement have used multiple empirical strategies: cross-national, large-N approaches; single-case and subnational studies; and experimental designs.

Cross-National Designs

The most comprehensive studies of CV use cross-national data to investigate whether levels of political engagement are higher in countries with compulsory voting laws versus those where voting is voluntary. What is meant by political engagement, however, varies. A few studies focus on political sophistication as the outcome—with the theoretical assumption that CV promotes higher overall engagement with politics, thereby raising the amount of knowledge for a given individual. These studies find small but positive increases in the level of knowledge for those living in CV countries (Berggren 2001; Gordon and Segura 1997), and stronger evidence that it makes political knowledge more evenly distributed among the population (Dassoneville, Hooghe, and Miller, forthcoming; Sheppard 2015). Focusing specifically on partisan attachment as an aspect of engagement, Singh and Thorton (2013) argue that the higher presence of non-

sophisticated voters in the electorate of CV countries prompts individuals to make use of shortcuts for deciding who to vote for. The authors find that rates of party attachment are indeed higher in countries where voting is compulsory. Additionally, studies focusing on the engagement of specific groups of the population, such as women, find that CV works to close the gender gap in election-related forms of political engagement (Córdova and Rangel 2017).

Other studies focusing on a more wide-ranging list of political engagement outcomes start to cast uncertainty upon the positive findings discussed above. Birch (2009) shows that CV has little to no impact on political knowledge, levels of political conversation, and certain measures of political participation. In a recent and comprehensive analysis of 21 Latin American and Caribbean countries over a period of ten years, Carreras (2016, 155) examines the impact of CV on both cognitive (i.e., political interest, attention to news) and active (i.e., attendance in party meetings or community events) forms of engagement, concluding that "compulsory voting has a negligible effect on political engagement."

While these studies add valuable information to our understanding of the impacts of CV laws, cross-national designs raise doubts about the causality of the relationship between CV and political engagement. Cross-national designs allow us to observe the existence of a *correlation*, but make it difficult to establish whether CV as a single institution is *causing* levels of engagement to change given that they are examining average levels across different states at the same point in time. Although these studies make strong efforts to control for as many confounding factors as possible, they still investigate different individuals under a diverse set of institutions, election dynamics, and

cultural or social elements. Cultural factors, which are possible determinants of behavior, are especially difficult to control for in cross-national studies (Fowler and Kam 2007; Rolfe 2012). For instance, Norris' (2004) finding that CV matters more for turnout in established democracies versus emerging ones is often attributed to the fact that mandatory laws depend on broader social norms about adherence to law and authority. These aspects can be difficult to capture with existing cross-national survey data. Such research designs, therefore, are believed to be more error-prone (Hirczy 1994; Selb and Lachat 2009).

Single Country Studies

Another empirical approach is to evaluate some of the patterns in political engagement in countries where compulsory voting already exists. One option is to take advantage of subnational variation in compulsory voting laws. Switzerland and Austria are the only countries that have had, at some point in time, subnational variation in where voting is compulsory. All other countries employ compulsory voting at the national level. Shineman (2009) takes advantage of the Austrian case, and using survey data from 1999 (in which two provinces still maintained CV), she finds that citizens living under CV laws were more politically interested and engaged with politics.

A second option in single country studies of CV is to hypothetically estimate whether an individual would still vote if voting were no longer compulsory. Multiple studies have used this approach primarily to estimate the direct impact of CV on voter turnout—by asking citizens of Belgium or Brazil whether they would still turn out to vote if voting was no longer compulsory (Elkins 2000; Hooghe and Pelleriaux 1998). Specific to political engagement, however, Singh, Roy, and Fournier (2017) use an experiment in Australia to show that individuals who identified as not being willing to vote if voting

was no longer compulsory were also less likely to spend time searching for additional information for a simulated election. They conclude, therefore, that those who do not turn out to vote voluntary "spend less time arriving at their vote choices, and engage with less political information when doing so" (Singh, Roy, and Fournier 2017, 2).

While designs of this nature are compelling and considered superior to cross-national studies for drawing causal inferences (Selb and Lachat 2009), it is still not ideal to estimate the legal requirement to vote by using a counterfactual estimate of whether an individual would vote under a different system. This measure raises doubts regarding the construct validity of the study—is this hypothetical estimate a proper operationalization of the presence/absence of compulsory voting laws? As Singh, Roy, and Fournier (2017) recognize, this counterfactual approach can be subject to a social desirability bias. Respondents in the study may be hesitant to identify not being willing to vote in fear of being perceived as a non-law abiding citizen. We know, for instance, that respect for compulsory voting laws relies not solely on a monetary penalty, but also partially on social norms and the wish to be perceived as a good citizen (Funk 2007). We also know that when confronted with questions about voter turnout, individuals in general tend to over-report positive voting behavior (Karp and Brockington 2005; Silver, Anderson, and Abramson 1986).[28] Therefore, such research design might underreport the number of people who are most likely driven by the simple requirement to vote. It might, in turn, be capturing only those who are especially against the compulsory voting law or politics in general, which could explain the negative results.

[28] Research also shows that individuals tend to underreport undesirable behavior. For instance, in a study of vote buying in Nicaragua, Gonzales-Ocantos et al. (2012) show that while 24% of registered voters were offered something for their vote, only 2% of respondents reported the behavior when asked about it.

A more recent approach in single-case studies has been to take advantage of instances where the law actually varies within the population. In Brazil, for instance, voting is initially voluntary for those between 16-18 years old, and then becomes compulsory when the individual turns 18. De Leon and Rizzi (2014) employ a regression discontinuity approach to estimate whether individuals react to the introduction of CV at 18 years old by acquiring more information and consequently becoming more knowledgeable about politics. They find no significant differences in levels of political knowledge or information consumption. A similar statistical approach used by Holbein and Rangel (2016) also reports that CV has no impact on a wider range of engagement variables.[29] This approach, however, does not consider that many other exogenous shocks happen at the exact time when voting becomes compulsory (such as starting college, leaving the home, etc.), which could obfuscate the causal effect of CV. Also, restricting the sample to those individuals around the age of 18 may not be representative of the effect of CV on the broader population. This is important because studies show that young people vote less often than older individuals (Leighley 1995) and even when voting is compulsory, young individuals are still less likely to vote and engage with politics (Singh 2011). This implies that any byproducts of CV might not immediately apply at voting age, and instead be part of a longer learning process.

Experimental Designs

In order to better establish causality, some scholars have used experiments to estimate the impact of a legal requirement to vote on political engagement. Loewen, Milner, and Hicks (2007) place a sample of students in Quebec, Canada into two groups,

[29] Such as political interest, participating in civic associations (such as unions or political parties), and political knowledge

and all participants are asked to complete two surveys—one prior and one following the 2007 provincial election. All individuals are then offered a $25 gift card for completing both surveys. One of the two groups, however, was told that in order to get the gift card, the individual must also vote in the election. This was a way to simulate coercion by saying that if the individual did not vote, they would have incurred the cost of not receiving the promised gift card. When comparing the treatment group to the control group that was not required to vote, the authors found no significant effect in the amount of knowledge, news consumption, and political discussion between the groups. A very similar experiment done by Shineman (forthcoming) in San Francisco's 2011 municipal elections, however, does find a positive effect on individuals' investment in information when compelled to vote.

Although experiments are better at estimating causal effects, it is debatable whether the treatment conditions used in such studies accurately approximate compulsory voting as an institution. Even by subjecting individuals to a future penalty for not having voted, the financial burden still constitutes an additional amount that they simply forgo by not following the voting requirement. Under compulsory voting systems, the financial burden is more direct in the sense that it is actually removing existing resources from people's pockets, which could represent stronger incentives to comply with the law. This calculation resonates with prospect theory, which argues that individuals are more loss averse, and that "losses loom larger than gains" (Kahneman and Tversky 1979, 279; Vis 2011). Further, as previously discussed, research has also shown that adhering to the voting law under CV may be a function of not only fines or financial burdens that are implemented, but also social desirability and the wish to be perceived as a law-abiding

citizen (Funk 2007; Geys 2006). Therefore, the treatments simulating financial burdens fail to capture adherence to CV due to social pressure that is prevalent when all individuals are bound by the law, which could in turn also affect these second-order effects.

In order to circumvent some of the shortcomings in existing studies, I take advantage of a rare instance where compulsory voting has been abolished: Chile. This design would account for any variation at the aggregate or country-level that cannot be captured in cross-national studies, minimize the possibility that additional exogenous shocks might be taking place, and provide a direct and explicit measure of what happens in the presence and absence of compulsory voting that is representative of the broader population. Indeed, Selb and Lachat (2009) suggest that such design would be preferable over other approaches. They note, however, that apart from the rare instances of election law reform, survey data expanding a sufficient time frame before and after reform are nonexistent, making this task a difficult if not impossible one. Fortunately, in the case of Chile, detailed individual-level survey data capturing several aspects of political engagement are available from 2005 to 2016. Given that the election law reform took place in 2011, these data demonstrate enough variation before and after the reform in which to uncover any potential effects. This feature presents a major contribution of this study, especially for those aiming to establish the benefits or shortcomings of introducing and abolishing compulsory voting.

Another existing gap in this literature, however, concerns the link between theoretical expectations and observed outcomes. Many theories as to why CV would influence engagement exist, but often scholars will simply list the distinct theoretical

mechanisms, and combine them to arrive at one expectation in regards to political engagement. By aggregating all different expectations and outcomes, scholars have made inferences as to how CV influences overall political engagement (which can mean several different things), but ignore that CV may influence certain aspects of engagement and not others. This approach hinders our ability to truly understand how and when CV may or may not affect political outcomes beyond voter turnout. In this paper, I draw careful distinctions as to how certain measures of political engagement are qualitatively different, and thus correspond to different theoretical mechanisms. This discussion helps clarify when we should expect CV to have second-order effects and why that should be the case. In the section below, I engage in an in-depth discussion of the proposed theoretical mechanisms. Following the theoretical discussion, I explain how the case of Chile allows me to text my expectations, covering the particular characteristics of the data and research design.

Compulsory Voting and Political Engagement: Theoretical Mechanisms

Mandatory voting rules should affect political engagement beyond the ballot box for several reasons. These mechanisms include (1) personal investment in information, (2) a change in the information environment, and (3) spill-over effects from turnout behavior. Few studies have made distinctions in regards to which specific outcomes are expected to arise from each potential mechanism. For instance, when studies test the impact of CV on multiple aspects of political engagement and find significant effects for one but not six other outcomes, their conclusion is that CV has a negligible effect on engagement (e.g., Carreras 2016; Loewen, Milner, and Hicks 2007). But, it could be that CV affects one aspect of engagement and not another, and that can be better understood if

we link theoretical expectations with specific proposed outcomes. I discuss each of the mechanisms in turn.

Compulsory Voting and Information Seeking

The first reason why one might expect CV to increase political engagement originates from the idea that once an individual is required to vote by law, they will likely seek out information in order to make an informed decision (Córdova and Rangel 2017; Shineman, forthcoming). In other words, when individuals are required to show up to the polls and cast a ballot (either valid or blank/null) regardless of their willingness to do so, they will likely want to learn something about the candidates or the election (Birch 2009; Engelen 2007). This is because individuals have an incentive to cast an informed vote. By seeking information on how to maximize their vote at the polls, individuals are provided with increased marginal benefits as the chances of an optimal outcome taking place increases. Making an informed vote may also increase an individuals' utility of voting and provide some psychological benefit.

Although this argument may not seem plausible since acquiring information itself is a costly act, this decision can be represented as a rational one. Just as individuals under voluntary voting laws calculate the costs and benefits associated with turning out to vote (Downs 1957; Riker and Ordeshook 1968b), individuals that are compelled to vote via CV also consider the cost-benefit structure associated with voting. When voting is voluntary, individuals are essentially subject to two costs: the costs of going to the polls and of acquiring the information to do so. Under compulsory voting, however, the cost of voting is much lower, because instead, abstention is the costlier action. Therefore, the costs of voting under CV are perceived as non-recoverable (i.e., sunk cost), which in turn incentivizes individuals to then invest resources to gather information in order to avoid

wasting their vote (Arkes and Blumer 1985; Córdova and Rangel 2017; Shineman, forthcoming). In sum, when the combined costs of voting and information seeking decrease under compulsory voting, individuals may find it rational and worthwhile to spend resources on acquiring information.

If the implication of this mechanism is that additional political engagement beyond turning out to vote will come from individuals actively seeking out information and investing additional resources to make an informed choice, we should observe CV affecting measures of engagement that particularly relate to the private behavior of acquiring information. The easiest way to gather such information would be to read about politics or watch political news. This represents a private and direct initiative from the individual, consistent with the idea that such initiative is a response to a personal and independent calculation of the costs and benefits described above. As such, my first expectation to test this specific mechanism is as follows:

> *H_1 (Information Seeking Hypothesis): Compulsory voting laws should increase individuals' propensity to watch or read news about politics.*

Compulsory Voting and the Information Environment

A second argument for how CV might increase political engagement focuses on the information environment under both systems. When all eligible citizens are required to turn out to vote, the saliency of political discussion increases, and there is a higher probability that an individual will be exposed to political discussion (Birch 2009; Shineman 2012). When simply increasing the total number of people that are required to vote, there is a higher chance that an individual gets exposed to political information and discussion. Electoral information is especially likely to disseminate through informal conversations. This should be the case even for those who are not typically associated

with civic groups or networks that facilitate political discussion (Huckfeldt and Sprague 1995). In a setting where all individuals are required to turn out, political discussion can disseminate not only in settings where we may typically expect them to (such as union meetings or even religious groups), but also in more informal settings, such as a conversation with neighbors.

Political discussion may also increase due to the fact that compulsory voting may eliminate a taboo associated with the discussion of politics. When all individuals are required to vote and one can assume that the other is likely to do so, it may decrease the chance that someone may feel uncomfortable when confronted with a political conversation. Finally, political parties are likely to contribute to the dissemination of information by reaching out to a larger and wider set of voters under compulsory voting (Lijphart 1997). As such, political parties contribute to the change in the information environment and the salience of political conversation. In order to capture this phenomenon, one must be able to observe whether political discussion is indeed heightened under compulsory voting system. This logic leads be to the following hypothesis:

> *H_2 (Information Environment Hypothesis): Compulsory voting laws should increase levels of political discussion*.

Compulsory Voting and Spill Over Effects from Turnout

The most cited mechanism through which CV should increase political engagement is the simple fact that taking part in one political activity may spur activism in other areas of politics (Lijphart 1997; Verba, Nie, and Kim 1995). The legal requirement to turn out to vote in every election consequently creates a habit of voting, directly influencing individual political behavior (Blais and Achen 2010; Gerber, Green,

and Schachar 2003). Once voting becomes a habit, participation patterns are likely to spill over into other types of political involvement, and politics becomes a more significant part of citizens' lives (Jakee and Sun 2006; Wertheimer 1975). For instance, voting in an election may spur political interest, and subsequently encourage individuals to remain active in politics, perhaps in order to try to hold politicians accountable, or to check on their progress. Requiring all eligible citizens to turn out to vote should also boost higher levels of political efficacy, which would then translate into greater political participation (Birch 2009; Hill 2006, 2014). By actively showing up at the voting booth, individuals feel that they matter and are part of the political system, therefore encouraging them to continue to play a role in the political domain.

This mechanism specifically focuses on the potential for CV to spur political activities beyond the ballot box. Hence, these effects should translate into political engagement in the form of direct political activism. This logic leads to my next hypothesis:

H_3 (Spill Over Hypothesis): Compulsory voting laws should increase an individual's likelihood of participating in political acts.

Compulsory Voting and the Engagement of Low Probability Voters

A crucial argument against the idea that compulsory voting promotes political engagement is that compelling citizens to turn out by law would only force uninformed individuals to go to the polls without making them more engaged (Brennan and Hill 2014; Briggs and Chelis 2010; Denemark 2015). In other words, individuals who are unlikely to turn out when voting is voluntary would simply show up at the polls and either cast a blank ballot or choose at random. Indeed, research has found that rates of invalid voting are higher under compulsory voting than when voting is voluntary (Hill

and Young 2007; Uggla 2008). But, this argument simply assumes that an actor's level of political information is fixed and would not change based on institutional design. This assumption is problematic because, as Shineman (forthcoming, 4) puts it, "it neglects to account for information acquisition to be endogenous to participation."

In fact, it could be the case that under compulsory voting, less sophisticated voters would be particularly likely to become politically engaged, since they require more information and are more subject to consuming information via informal discussions (Karp, Banducci, and Bowler 2008; Sheppard 2015). It would be reasonable to expect, then, that although compulsory voting should increase overall levels of political engagement, this effect should be particularly strong for those that are typically unlikely to engage with politics. Research has established that individuals with lower socioeconomic status (SES) are less likely to engage with politics (Smets and van Ham 2013; Verba, Nie, and Kim 1995), and would thus be particularly likely to need to engage with politics further. This logic leads to the final hypothesis:

> *H_4 (Socioeconomic Impact Hypothesis): The impact of compulsory voting on political engagement should be particularly strong for those of lower socioeconomic status*.

The Case of Chile

As previously discussed, election law reform is rare, and countries have very seldom decided to abandon compulsory voting all together. The Netherlands abolished CV in 1970, as did Italy and Venezuela in 1994. The most recent reform, however, took place in Chile in 2011. Previously, Chile had a system of compulsory voting for those registered to vote—although registration was voluntary. Still, when Chile transitioned to democracy in the early 1990's, an astounding 92 percent of the population was registered

to vote and thus subject to compulsory voting laws (Barnes and Rangel 2014). Although registration rates decreased gradually over time, Chile was still generally considered to have a mandatory voting law.[30] In most datasets of compulsory voting, Chile is considered to have an enforced compulsory voting system prior to 2011 (Electoral Commision 2006; IDEA 2017; Singh 2011). Even though the registration requirement under the old system is not a common characteristic of most compulsory systems, Chile's electoral reform provides a rare and unique opportunity to evaluate patterns of political behavior prior to and after the abolition of CV.

In 2010, Chile's Senate voted to formally remove the existing compulsory voting laws. Now, the system consists of voluntary voting, but also automatic registration. The change to automatic registration in particular was expected to mobilize large amounts of voters to the polls. However, in the 2012 municipal elections—the first election following the reform—turnout declined by about 20 percent (Barnes and Rangel 2014). The following presidential election also saw the lowest voter turnout rate of any presidential election held in almost 20 years. Overall, it is clear that the election reform had a profound impact on patterns of participation.

The reform in Chile presents a great opportunity to improve our understanding of how compulsory voting laws shape political behavior. First, the availability of survey data over a number of years increases the chances of observing any causal effects. It can be argued, for instance, that a change in behavior might not be immediate after electoral

[30] While this aspect of Chile's compulsory voting is unique, the reform that took place in Chile still presents a rare opportunity to examine patterns of behavior under voluntary and compulsory voting. I also conduct robustness checks in order to account for some of the unique features of Chile's compulsory voting system in a later section titled "Robustness Checks."

reform, and therefore enough information needs to be gathered following an institutional change. In this study, data are available for 6 years prior to and 5 years following the reform, increasing the chances that any patterns will be captured. Second, data are available on a number of factors related to political engagement. This variety of possible outcomes allows us to parse out which aspects of political engagement are particularly affected by CV, and to determine which mechanisms are actually driving this relationship.

Most importantly, these analyses allow for many contextual, historical, and cultural variables to be accounted for given that the institutional reform is taking place in the same country and over time. During the time frame of the study, few things changed in Chile's political system—there were no other major institutional reforms, and whatever major changes occurred (i.e. economic downturns) can be controlled for. Therefore, this design better captures the impact of compulsory voting itself, unlike aggregate cross-national studies, which can only compare average patterns of behavior at one moment in time (Selb and Lachat 2009).

Data and Methods

The survey data come from the *Centro De Estudios Públicos* (CEP) in Chile—a private academic think tank. The organization conducts several individual surveys throughout the years on topics related to politics, the economy, and elections. Data is available starting in 2005, and the most recent published survey took place in November of 2016. Not all surveys include the variables of interest to this study, however. The items related to political engagement were available in 11 different surveys, each containing

approximately 1,500 individual respondents.[31] Six surveys were conducted prior to Election Reform in 2011, while five were conducted afterwards. This totals to approximately 11,000 individuals over the 11-year period.

Dependent and Independent Variables of Interest

Political engagement can be captured in many ways. As discussed in the theoretical framework, different mechanisms can influence different types of political engagement. The CEP survey data allow me to capture six different indicators of engagement, and two of each combine to represent a specific concept.[32] First, in order to capture individuals seeking information, I use variables related to reading or watching of political news. The CEP surveys ask the following questions: "*Please indicate whether you…. Watch political shows on television? … Read news about politics?"* I create two variables: *Watch Politics* and *Read Politics*, which are both ordinal variables that take the value of (1) if respondent indicated *never* partaking in such activity, (2) if respondent indicates *sometimes* partaking in such activity; and (3) if the respondent indicated *frequently* partaking in such activity. While these variables are good indicators of an individual's own willingness to engage in politics, another advantage is that the question specifically refers to *political* news. The majority of previous research that has used "attention to news" as an indicator of political engagement typically relies on questions that simply ask whether individuals watch the news (Birch 2009; Carreras 2016; Holbein and Rangel 2016). Even though this is a close indicator of the gathering of political information, my measure explicitly captures the political aspect, whereas other more general measures of newsgathering could pertain to a diverse set of information.

[31] Table B1 in Appendix B includes a list of each of the surveys and when they were carried out.
[32] See Table B2 in Appendix B for a Spanish translation of all outcome variables.

Second, in order to capture political discussion as a change in the information environment, I use two variables that relate to the discussion of politics. The CEP survey asks: *"Please indicate whether you… Talk to family about politics?... Talk to friends about politics?"* Both *Talk Politics with Family* and *Talk Politics with Friends* are coded in the same way as the information seeking variables—a value of 1 indicates never doing it, and a 3 frequently doing it.

Finally, in order to capture engagement in direct political activity, I use the following questions: *"Please indicate whether you… try to persuade someone of what you believe politically?.... Work or have worked for a political party or candidate?"* These variables are also coded in the same way as previous ones. In order to test my expectations, the main explanatory variable is *compulsory voting*, which is a simple dichotomous variable coded as a 1 prior to 2011, and a 0 after 2011. I also interact *compulsory voting* with an *education* variable in order to test hypothesis 4, which argues that patterns of engagement under both systems may also change given a respondent's socioeconomic status. *Education* ranges from 0 to 9, where high levels indicate higher levels of degree completion.

Control Variables

In addition to the change in voting system, I control for several variables that might influence an individual's level of political engagement. At the individual level, socioeconomic status is known to affect citizen political participation (Verba, Nie, and Kim 1978; Verba, Schlozman, and Brady 1995). Thus, I control for education and income. Even though women have made gains in terms of voter turnout, they are still found to be less politically engaged in many types of political activities (Kittilson and Schwindt-Bayer 2014), which leads to me to include a control variable labeled *female*.

Age is also a factor in predicting political engagement—older individuals are much more likely to read or watch politics, and also to participate in political activity (Smets and van Ham 2013). Lastly, those living in rural locations may have a harder time reaching information or participating in political activities, so I include a *rural* term in the model. All individual-level control variables come from the same CEP survey as the dependent variables.[33]

At the country level, I control for three important factors. It is expected that any type of political engagement may be heightened during election years. Thus, I control for both *presidential* and *municipal* elections since they do not take place concurrently. Although I expect presidential elections to have a stronger impact on political engagement, local campaign efforts during municipal elections might also prompt individuals to further engage in politics. Another factor that could influence political engagement is the economy. Research finds that when the economy is doing well, citizens are more likely to be politically engaged (Norris 2004). This consideration is especially important since Chile's economic growth took a negative turn due to the financial crisis in 2009, and has gradually improved since. Because this shock took place at a similar time as the election reform, it is important to account for any potential confounding effects.[34] Table B4 in the Appendix reports the descriptive statistics for all variables of interest.

Methodology

To empirically test my expectations, an estimation technique that takes into account both the individual-level respondents and the country-level factors is needed. As

[33] See Table B3 in the Appendix for a description of all control variables.
[34] The variable *GDP growth* is lagged by a year.

such, I employ a series of hierarchical models (Steenbergen and Jones 2002). One aspect of this analysis is somewhat unique given that hierarchical models used to evaluate the effect of contextual variables on individual behavior are usually applied in spatial analyses (either via cross-national, regional, or state analyses). This study, however, has a temporal component—individuals i are nested within surveys j that were carried out at different points in time. Therefore, given my interest in estimating the main impact of a country-level variable (compulsory voting) on individual level behavior (political engagement) and their interaction with individual SES that vary both within and across surveys, a hierarchical modeling technique is the most appropriate (Peffley, Hutchison, and Shamir 2015; Raudenbush and Bryk 2002). I use a multilevel ordered logit model to account for the ordered structure of the dependent variables.[35] Below, the first model specification (1) is used to test *Hypotheses 1-3*, while the second model specification (2) is used to test *Hypothesis 4*:

$$(1)\ Y_{ij} = \gamma_{00} + \gamma_{01} Compulsory\ Voting_{1j} + \gamma_{10}\ Education_{1ij} + \gamma_{20}\ Age_{2ij} + \gamma_{30}\ Female_{3ij} + \gamma_{40}\ Income_{4ij} + \gamma_{50} Rural_{5ij} + \gamma_{02} Presidential\ Election_{2j} + \gamma_{03} Municipal\ Election_{3j} + \gamma_{04} GDP\ growth_{4j} + U_{0j} + R_{ij}$$

$$(2)\ Y_{ij} = \gamma_{00} + \gamma_{01} Compulsory\ Voting_{1j} + \gamma_{10}\ Education_{1ij} + \gamma_{11}\ Education_{1ij}\ Compulsory\ Voting_{1j} + \gamma_{20}\ Age_{2ij} + \gamma_{30}\ Female_{3ij} + \gamma_{40}\ Income_{4ij} + \gamma_{50} Rural_{5ij} + \gamma_{02} Presidential\ Election_{2j} + \gamma_{03} Municipal\ Election_{3j} + \gamma_{04} GDP\ growth_{4j} + U_{0j} + R_{ij}$$

[35] The second model specification to test hypotheses 4 posits a cross-level effect (between education and compulsory voting). I test its statistical significant without assuming a random slope for the education variable. As such, the models only assume random effects for the intercept. Snijders and Bosker (2012, 106) explain that cross-level interaction effects can be tested through an interaction regardless of whether the individual-level variable has a random slope or not.

where U_{0j} represents the random effects for the intercept across countries, and R_{ij} are errors at the individual level.

Does Compulsory Voting Promote Engagement? Empirical Evidence

The results from a series of hierarchical models are presented in Table 3.1. The coefficients for compulsory voting are positive for all forms of political engagement. But, they are only statistically significant ($p<.05$) in 3 out of the 6 measures—*read politics, watch politics,* and *talk politics with family*. Altogether, the results observed in the table suggest that compulsory voting does exert some influence on political engagement.

A better way to evaluate the individual hypotheses and interpret the results is to graph the predicted probabilities of an individual selecting a certain level of political engagement in each of the categories they have been presented with. Figures 3.1 through 3.3 show the predicted probabilities of political engagement under both compulsory and voluntary voting while holding all other control variables at their means. The confidence intervals surrounding the means indicate whether the differences between groups are statistically significant at the 95% confidence level.[36] Focusing on information seeking variables in Figure 3.1, the probability of never watching politics when voting is voluntary reaches almost 50 percent. By contrast, individuals living under compulsory voting are much less likely to identify never watching politics. Instead, they are significantly more likely to "sometimes" watch politics, and also 4 percentage points more likely to frequently watch politics than those under voluntary systems.

[36] Research indicates that graphing 84% confidence intervals allow one to determine whether the differences between groups are statistically significant at the 95% confidence level. Thereby, a statistically significant difference can be inferred if the confidence intervals in the figure do not overlap (Julious 2004).

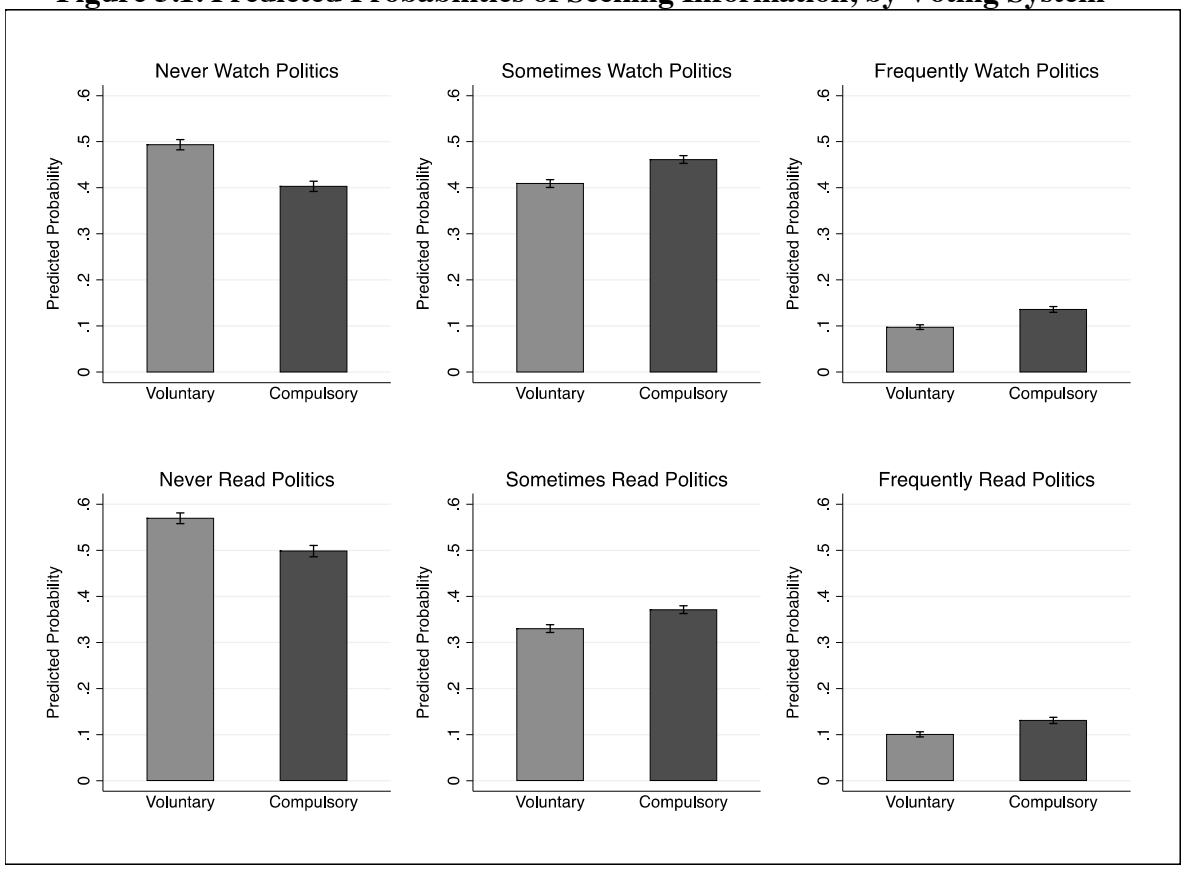
Table 3.1. The Effect of Compulsory Voting on Political Engagement

	Read Politics	Watch Politics	Talk Politics w/ Family	Talk Politics w/ Friends	Persuade Others	Work w/ Party
Compulsory Voting	0.387*	0.408*	0.142*	0.066	0.027	0.072
	(0.061)	(0.051)	(0.043)	(0.065)	(0.085)	(0.126)
Female	-0.375*	-0.402*	0.022	-0.508*	-0.236*	-0.166*
	(0.041)	(0.039)	(0.041)	(0.042)	(0.054)	(0.074)
Age	0.005*	0.011*	-0.001	-0.004*	-0.007*	0.012*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Education	0.332*	0.233*	0.272*	0.283*	0.110*	0.190*
	(0.011)	(0.011)	(0.011)	(0.011)	(0.014)	(0.018)
Income	0.055*	0.034*	0.044*	0.055*	0.014	0.030*
	(0.007)	(0.007)	(0.007)	(0.008)	(0.010)	(0.014)
Rural	-0.471*	-0.184*	-0.187*	-0.235*	-0.275*	-0.267*
	(0.059)	(0.052)	(0.056)	(0.060)	(0.080)	(0.117)
Presidential Election	0.130	0.175*	0.180*	0.264*	0.289*	0.088
	(0.084)	(0.071)	(0.058)	(0.091)	(0.119)	(0.175)
Municipal Election	-0.037	-0.138*	0.076	0.170*	0.197	-0.061
	(0.073)	(0.062)	(0.051)	(0.078)	(0.103)	(0.152)
GDP growth	0.045*	0.037*	0.028*	0.031	0.012	0.037
	(0.017)	(0.015)	(0.012)	(0.019)	(0.025)	(0.037)
Constant	2.009*	1.399*	1.702*	1.613*	1.865*	4.010*
	(0.114)	(0.105)	(0.104)	(0.118)	(0.151)	(0.217)
# of Observations	11,014	11,023	11,012	11,011	11,010	10,997
# of Surveys	11	11	11	11	11	11

Note: Hierarchical Ordered Logit Models. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

The pattern is remarkably similar for reading about politics—individuals under compulsory voting are significantly less likely to never read about politics, but instead more likely to sometimes or frequently engage in such activities. Overall, the findings presented in Figure 3.1 lend strong support for the *Information Seeking Hypothesis (H_1)*—when voting is compulsory, individuals are much more prone to seek out additional political information, likely in order to make an informed decision when at the polls.

Figure 3.1. Predicted Probabilities of Seeking Information, by Voting System

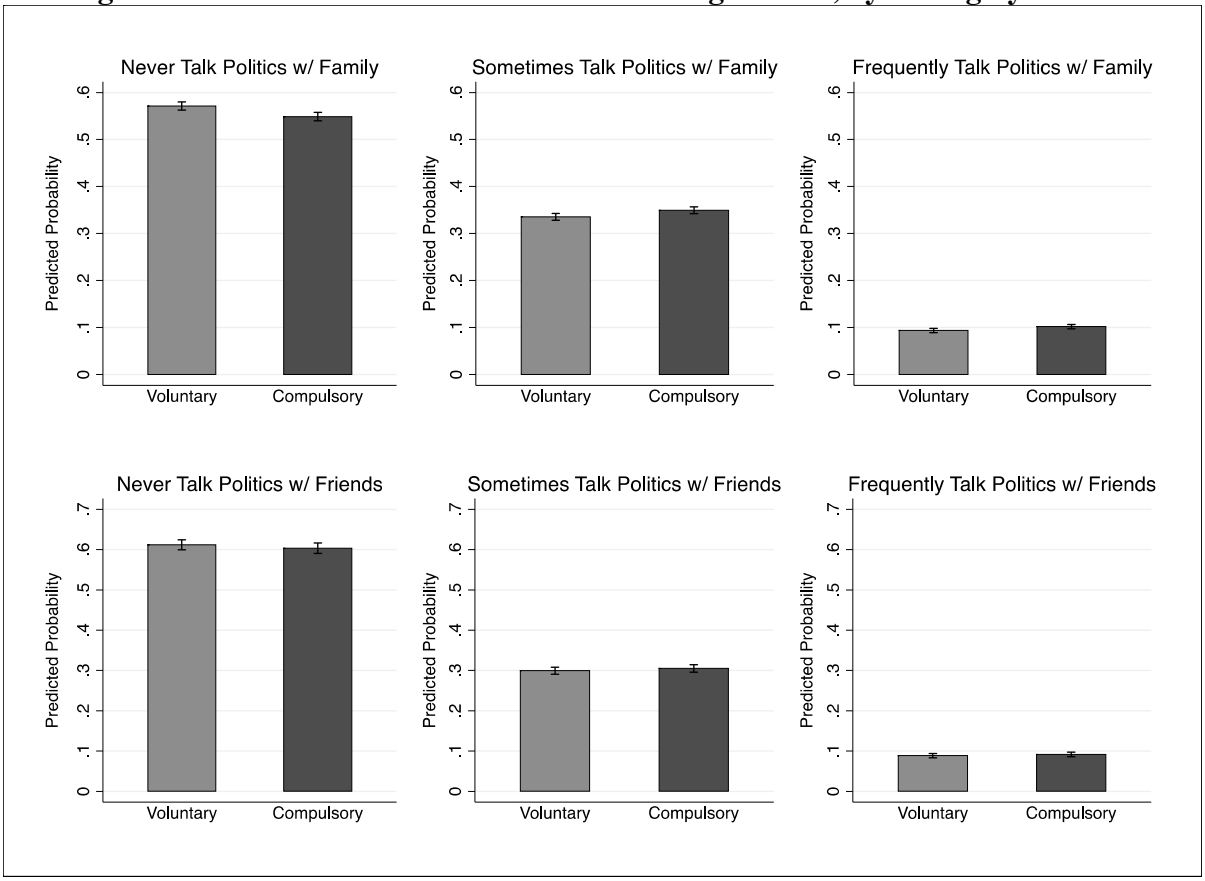


Notes: Figure 3.1 shows the predicted probability of never, sometimes, or frequently watching/reading politics, based on whether individual is subject to voluntary or compulsory voting. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on Models 1-2 presented in Table 3.1.

Turning to the second theoretical expectation, Figure 3.2 displays levels of political discussion under both types of systems. Individuals living under the compulsory system appear to be slightly less likely to identify never discussing politics with their family, and slightly more likely to sometimes discuss politics. For discussing politics with friends, however, the differences are not statistically signficant, as the confidence intervals overlap. This evidence lends partial support to the *Information Environment Hypothesis (H_2)*. If political discussion is heigthened under compulsory voting, it is likely

because family members are discussing politics slightly more often, and not through more informal channel like conversations with friends.

Figure 3.2. Predicted Probabilities of Discussing Politics, by Voting System

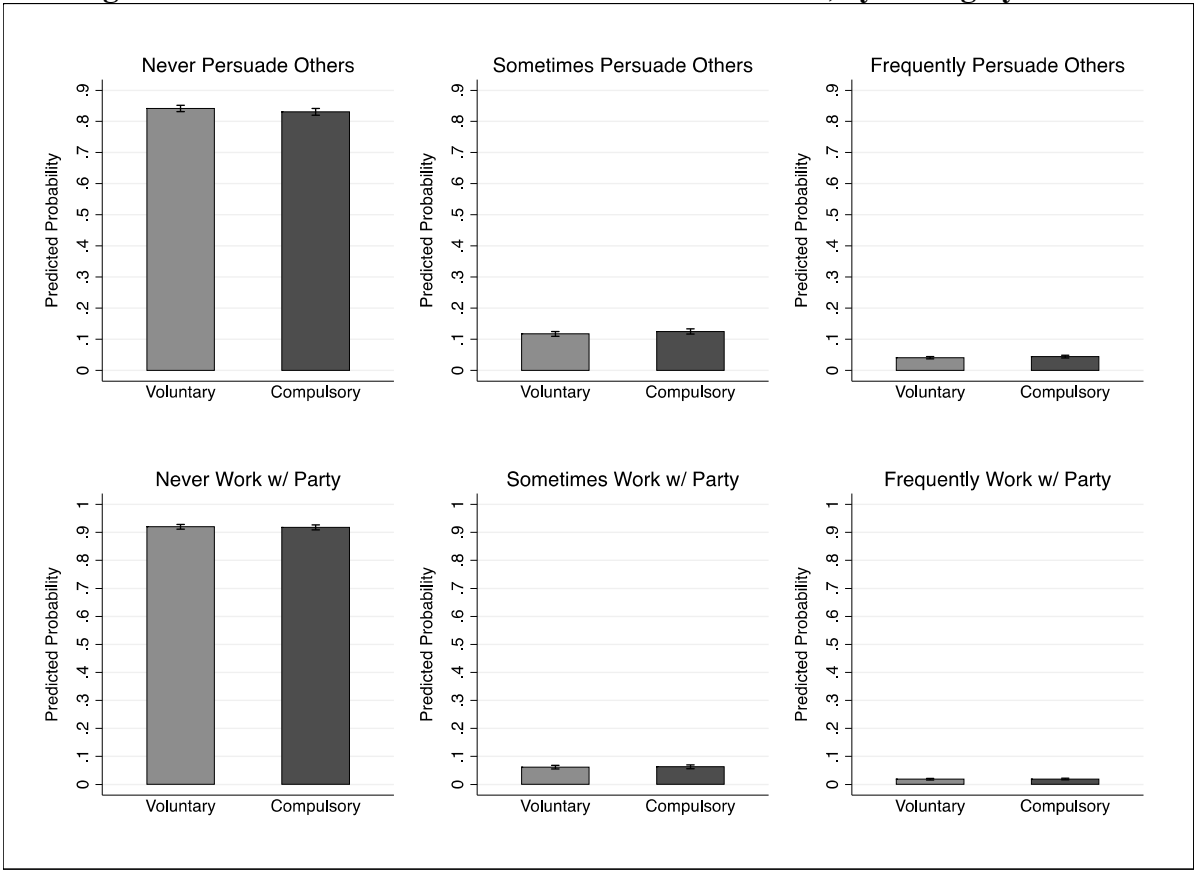


Notes: Figure 3.2 shows the predicted probability of never, sometimes, or frequently discussing politics with family and friends, based on whether individual is subject to voluntary or compulsory voting. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on Models 3-4 presented in Table 3.1.

The third expectation highlights the dissemination of political engagement through the act of voting. I capture this aspect of engagement by estimating whether CV increases the probability that individuals will act to persuade someone on their political views, and whether they are likely to work for a political party or candidate. Figure 3.3 shows that the probability that anyone will act to persuade others and work with parties at any level is extremely small. This is consistent with other literature that notes these types

of political activities are rare (Birch 2009). Nonetheless, there are no apparent patterns in relation to the impact of CV on these political activities. Predicted probabilities for persuasion and working for a party are essentially the same under both systems, and confidence intervals. This provides no support for the *Spill Over Hypothesis (H_3)*, suggesting that compulsory voting does not necessarily increase overall levels of political activism.

Figure 3.3. Predicted Probabilities of Political Activism, by Voting System



Notes: Figure 3.3 shows the predicted probability of never, sometimes, or frequently persuading others or working with a party, based on whether individual is subject to voluntary or compulsory voting. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on Models 5-6 presented in Table 3.1.

Taken together, the results show that compulsory voting does have an impact on political engagement—primarily in aspects that capture an individual's own action to

acquire political information, and their decisison to share their political thoughts with family members. This suggests that the impacts of CV promote more private forms of political engagement, and do not spill over into more public forms, such as open discussions with friends or active political work. In other words, it seems that CV enhances personal political development, but does not necessarily contribute to an enhanced politically engaged society.

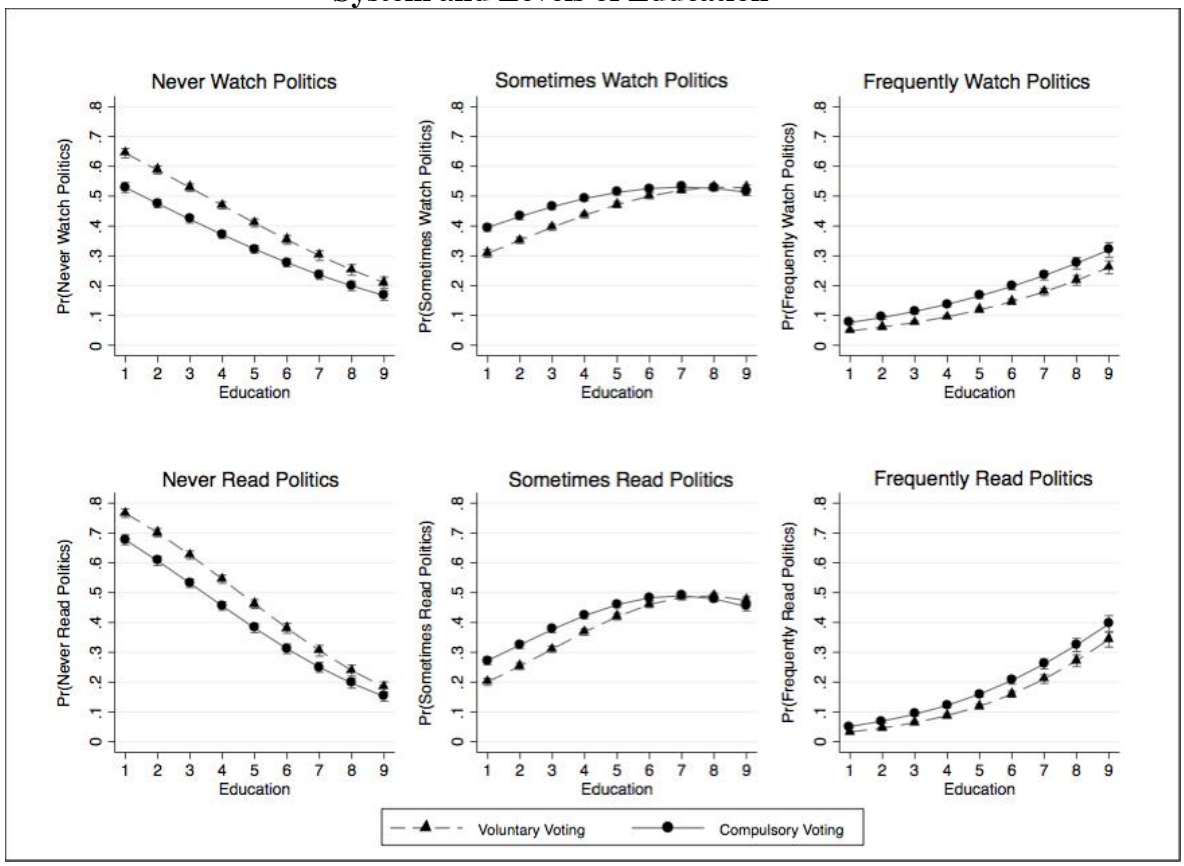
Next, I investigate whether the higher levels of information seeking associated with compulsory voting are a product of a larger amount of uninformed voters entering the electorate, who need to acquire more information about politics.[37] Figure 3.4 displays the predicted probabilities of reading and watching politics by voting system and levels of education. The patterns indicate that the increased propensity in seeking information is not simply amongst those with lower levels of education. Under both systems, those with higher levels of education are more likely to engage with political information. But, when considering the likelihood that one "sometimes" discusses politics, it appears that while at low levels of education, individuals in compulsory voting are more likely to seek information, that gap disappears at the highest levels of education.

This suggests that individuals with high levels of education will engage with political information regardless of whether voting is mandatory or not. But, when voting is compulsory, there is a higher probability that even the non-educated will attempt to gather information. This difference is robust, as someone with no formal education is almost 10 percentage points more likely to sometimes watch politics. Still, that is not to say that any gaps in political engagement are erased when voting is compulsory—there is

[37] Table B5 in Appendix B includes an interaction term between compulsory voting and education to predict political engagement.

still a clear disproportional probability that education increases one's likelihood of engaging with politics even under compulsory voting countries. Also, it seems that the differences between socioeconomic status are only present for the "sometimes" category, and not frequently. Meaning, compulsory voting encourages individuals of lower socioeconomic status to superficially attain information about politics, but does not prompt them to frequenly engage with such information.

Figure 3.4. Predicted Probabilities of Seeking Information, by Voting System and Levels of Education



Notes: Figure 3.4 shows the predicted probability of never, sometimes, or frequently watching/reading politics, based on whether individual is subject to voluntary or compulsory voting and conditioned by the level of education. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on results presented in Table B5 in Appendix B.

While this indicates that CV does not encourage frequent political engagement, this is consistent with the expectation that individuals are likely to seek additional information in order to make an informed vote. Due to the existance of political parties and campaigns, it may be easy for a voter to quickly identify a vote choice when watching or reading about politics. If the goal of engaging in order to not waste a vote, then we should not expect abundant engagement, but rather superficial. Also consistent with the fact that CV appears to motivate engagement in more prviate forms of information acquisition and discussion, it is unlikely that the mechanisms through which CV increases engagement is a simple wish to further engage with the polity in a meaningful way. Rather, it is a more pragmatic, superficial, and personal investment that likely voters are making, and it does not carry over to more frequent or active forms of engagment.

Robustness Checks

One of the main contributions of this study is its novel research design and the ability to observe the effects of institutional change on public opinion within the same country, while holding constant a variety of confounding factors. This is only possible due to an extremely rare institutional reform in Chile and the unique availability of appropriate survey data over time. Prior to election law reform, however, Chile's compulsory voting system was rather unique in the sense that it was voluntary to register, but compulsory to vote once registered. For this reason, there is criticism that Chile's CV system is not an ideal representation of typical mandatory voting laws. In order to attenuate this concern, I have conducted some additional analyses that confirm the robustness of my results even when considering Chile's CV system in particular.

If simply looking at overall effects prior to and after reform in the case of Chile does not accurately represent individuals who were subject/not subject to mandatory voting laws, one must find ways to capture specifically the individuals who are likely to have been subject by the compulsory voting law in the first place. To do so, I take three separate approaches. First, I simply control for whether the individual identified as having been registered to vote prior to 2011 when voting was compulsory. All individuals after 2011 were automatically registered to vote under the voluntary voting system. Table B6 in Appendix B shows that when accounting for whether individuals were registered to vote or not prior to reform, we get the same effects—compulsory voting increases information seeking, and also discussion of politics. Second, I restrict the analyses to only those who are registered to vote, both prior and after reform. Table B7 in Appendix B shows that the main results are robust to this specification.

Still, it may not be surprising that engagement declines after the abolishment of CV even when only considering those who were registered before, because once voting becomes voluntary everyone is automatically registered. When voting was compulsory for those registered, it was likely that only those who actually were interested in politics registered to vote, and once all individuals were incorporated into the voter registries upon abolition of CV, it is likely that overall levels of engagement would decrease. Therefore, I take a different approach to examining this effect under Chile's unique system. Previous research shows that while overall registration rates had been steadily declining since democratization in Chile, it was largely a product of younger voters entering the electorate and failing to register. Registration rates actually remained fairly steady for those in the 40 and above age cohort (Barnes and Rangel 2014).

Table B8 in Appendix B show the results when restricting the analyses to only those of age 40 or above, and the results remain robust. Meaning, even when we compare only those who, under CV, were most likely to have been subject to compulsory voting laws to those of that same age cohort after voting becomes voluntary, we get the same patterns. These analyses add confidence that the case of Chile is an accurate way to understand the effects of mandatory voting, and that the effects of CV on political engagement presented in this research are robust.

Conclusion

Currently, approximately 26 countries in the world hold elections under compulsory voting. The institution has particularly gained attention in countries considering its introduction, such as Canada, Colombia, and India. Other countries have started to contemplate its abolition. Unfortunately, our understanding of the second order effects of compulsory voting is still unclear, making it difficult for scholars and practioners to evaluate the benefits of a legal requirement to vote. The lack of consistent empirical evidence only fuels the existing debate on the implications of compulsory voting. This research helps inform this existing debate by providing convincing evidence of the effects of compulsory voting on several forms of political engagement. By taking advantage of a rare election law reform and unique individual survey data, I show that CV does indeed increase political engagement, but only for certain aspects of political engagement.

Specifically, the impact of CV on engagement works through a personal channel in which individuals are encouraged to seek additional political information, likely in order to make an informed vote once at the polls. This is particularly the case for less-educated individuals, who require more information in order to cast an informed ballot.

These findings suggest that compulsory voting does not necessarily lead to a more politically active society overall, but does promote individual engagement with information and close-knit discussions.

The data limitations in this study do not allow for a deeper investigation of how the increases in information seeking translate into levels of political sophistication. While political knowledge can be considered a form of cognitive political engagement (Carreras 2016; Zukin et al. 2006), political sophistication often refers to factual knowledge about the political system and political issues (Delli Carpini and Keeter 1996). We could assume that when individuals devote more attention to watching or reading political news, they will inherently become more knowledgeable about these factual outcomes. But, in doing so, we would also be making assumptions as to what kind of content was promoted, and an individual's ability to absorb such information and translate it into factual knowledge. As shown, levels of *frequently* engaging in any of the forms of political engagement studied here are relatively small, and most of the differences between the different systems occur in the middle category, in which individuals identify as "sometimes" engaging in politics. This is certainly better than no engagement at all, but it could suggest that the higher level of engagement under CV is superficial and does not translate into major changes in citizens' knowledge of the political domain. Still, the increase in information seeking (however superficial)—especially among low-educated voters—could significantly affect an individuals' vote choice, and has implications for how political parties and elite might choose to engage with the electorate.

Relatedly, the theory and analyses presented in this research speak directly to one of the main objections to compulsory voting—that the introduction of millions of

"uninformed" voters to the electorate would have a negative impact on election outcomes. Consistent with Shineman (forthcoming), I show that political information is not fixed and can change once the turnout calculus shifts. In fact, it is under voluntary voting that citizens are less likely to seek political information. Shineman's (forthcoming) experiment allows for a further investigation on whether that political information translates into higher levels of political knowledge, and the findings indicate that it does. Future research could benefit from a further analysis of whether this next step holds in a naturally occurring scenario, such as the case of Chile.

One possible concern in interpreting the findings presented in this chapter is that higher rates of reported political engagement under the compulsory voting system were a product of a social disability bias towards reporting higher rates of political involvement. In other words, when voting is compulsory people may feel pressured to report that they are indeed paying attention to politics since we know they are required to vote. While this could be the case, we would need to see convincing evidence that it is indeed more socially desirable to be politically engaged under CV than under VV, and most importantly in this case that the election reform changed the perceived desirability of reporting attentiveness to politics in a significant way. While data limitations in this study constrain the ability to conduct a nuanced investigation on the social desirability of such political activities, future research should assess any changes in public opinion regarding what individuals believe to be a socially acceptable level of political engagement and how important they believe engaging in politics is to being considered a good citizen, for instance.

It is interesting to note that in the case of Chile, support for compulsory voting had dropped to incredibly low levels prior to reform. For instance, in 2010, only 22 percent of the population supported CV, while almost 78 percent opposed it (CEP 2016). The most recent survey in 2016, however, reported that support for CV has surged back up again to almost 50 percent, suggesting that Chile's own population might be starting to regret the reform. Other countries in the process of debating the merits of CV can look to Chile to draw more insights as to what kinds of changes to expect. This paper provides answers to one part of this puzzle.

Chapter 4

Campaigning Under Compulsory Voting: A Multilevel Analysis of Party Outreach

Political campaigns are crucial components of the political process. It has been argued that the main goal of political parties and candidates is to win elections (Kollman, Miller, and Page 1992; Wittman 1973), and to do so they must ensure that individuals turn out at the polls and cast favorable ballots while there. Research shows that political elites spend significant amounts of time and money on mobilization efforts (Farrell and Schmitt-Beck 2002; Holbrook and McClurg 2005; Overton 2004). Current literature tends to focus on the impacts of party outreach efforts on getting people to turn out to vote (e.g., Arcenaux and Nickerson 2009; Gerber and Green 2000; Green and Gerber 2015; Green and Schwam-Baird 2016). More recent efforts have been aimed at understanding more about the strategic component of party outreach and when parties engage in campaign activity (Enos and Hersh 2015; Enos, Fowler, and Vavrek 2014; Karp and Banducci 2007; Karp, Banducci, and Bowler 2008).

An important component underplayed in this research is how institutional design shapes parties' outreach decisions. Research has investigated how overall levels of party outreach change based on democratic experience (Karp and Banducci 2007) and electoral system (Karp, Banducci, and Bowler 2008), but one institutional design that presents a particular puzzle as to partisan strategy is compulsory voting. How do political elites modify their campaign strategies when turnout is already amplified due to the legal mandate to vote?

I argue that compulsory voting (CV hereafter) can affect three main elements of campaign strategy: (1) how much party outreach there is; (2) who is the target of

outreach; (3) who is leading the outreach. Thus, this study makes several contributions, as existing research on how institutions condition party outreach strategies focuses primarily on overall levels of party outreach. Here, I consider not only how overall levels should change, but also how differences may arise in who the targets or leaders of outreach efforts are. I thus develop nuanced theoretical expectations for how compulsory voting can affect several aspects of elite strategic behavior in the context of election campaigns.

The argument that mandatory voting laws should alter the ways political parties campaign and promote their policies has appeared in previous works, but has received little theoretical and empirical attention thus far (Birch 2009; Keaney and Rogers 2006; Lever 2010a; Lijphart 1997). Most studies focused on the impact of CV on elite behavior examine whether mandatory voting laws benefit Left-leaning parties over conservative ones. Even in this aspect, empirical research presents mixed results (e.g., Fowler 2013; Jackman 1999; Jensen and Spoon 2011; Miller and Dassonneville 2016). What has not received as much attention are the ways in which political parties might update their campaigning strategies, given the knowledge that turnout is likely to be higher and more equal under compulsory voting. This could help explain why we have yet to reach a consensus on whether compulsory voting benefits the left. Thus, this study contributes to our understanding of how and why certain political parties may benefit from compulsory voting rules.

I develop several theoretical expectations. First, an intuitive expectation is that the lack of need for turnout mobilization under CV will significantly decrease the overall level of partisan outreach in a given country. This expectation overlooks the fact that the goal of party outreach may not only be mobilization, but also persuasion. When voting is

mandatory, it is possible that parties will simply shift from mobilization to persuasion tactics, leaving outreach levels unchanged. It is also conceivable that when the pool of likely voters expands under CV, parties will need to invest additional resources towards outreach, thereby increasing overall levels of campaign contact. While these expectations are theoretically possible, I empirically investigate which outcome is likely to take shape under compulsory voting rules. I find that overall levels of party outreach are not significantly different under voluntary and compulsory voting rules, failing to support the view that perhaps campaigns should be less costly under CV when parties feel no need to mobilize. I also show evidence that when voting is mandatory, parties are likely to shift their outreach strategy from mobilization to persuasion, by reaching out to voters that are less partisan and thus can be more easily persuaded.

Second, because turnout is not only higher but also more equal under CV, parties are encouraged to reach out to a wider net of voters in order to secure their votes (Lever 2010a; Plutzer 2002; Singh and Thorton 2013), and we should expect outreach to be less skewed towards high-probability voters. Individuals with lower levels of education may also be easier to be persuaded, encouraging parties under compulsory voting to target them more than when voting is voluntary. I find that there is a clear, skewed pattern to which voters get targeted under voluntary voting, but not under compulsory voting.

Finally, CV can also change which parties engage in outreach. Because CV encourages marginalized groups to turn out at the polls at significantly higher levels, right-leaning parties may step up campaign outreach in order to offset any gains from a traditionally more liberal electorate, and reach out to more moderate voters to win their votes. Using individual-level survey data across 27 countries, I find that overall levels of

party outreach are similar under compulsory and voluntary voting countries, and that under CV parties tend to reach out to individuals with lower socioeconomic status at higher rates than their counterparts. A further analysis of whether parties are targeting individuals with strong party attachments provides evidence that parties under CV are more likely to engage in persuasion rather than mobilization via party outreach. When considering the different types of parties, however, it does not appear that right-leaning parties are substantially changing their strategy in order to offset potential gains by the left.

Although the empirical evidence presented here contributes directly to our understanding of how compulsory voting laws have effects that extend beyond voter turnout, this research also speaks to the potential of institutions to effectively transform the political realm. Scholars have often focused on examining how institutions influence individual patterns of political participation, but a burgeoning body of research shows that institutions can also constrain or motivate elite behavior (e.g., Bugarin and Portugal 2015; Taylor-Robinson 2010). Only by considering both types of outcomes, which could be occurring simultaneously, do we have a better understanding of the overall impact of institutional design. In the case of compulsory voting, thorough knowledge of how parties update their strategies can help us better predict electoral outcomes and patterns of political engagement under this institutional variation.

This research also alludes to issues of political inequality across the world. The exclusion of certain groups as targets of parties can exacerbate the marginalization of some from political involvement (Enos, Fowler, and Vavrek 2014). If parties lessen efforts to mobilize or appeal to a particular group, such group might suffer from a lack of

representation (Andrews, Fry, and Jakee 2005; Ballinger 2006). Also, systematic lack of contact with political parties may decrease individuals' feelings of efficacy towards the political system, and also lower political knowledge and engagement overall (Keaney and Rogers 2006; Wielhouwer and Lockerbie 1994). When all citizens are required by law to turn out—regardless of race, socioeconomic status, or age—parties are incentivized to reach out to a wider net of potential voters, ultimately improving the quality of representative democracy (Dahl 2006).

Political Mobilization and Institutional Context

As rational actors, a political party's main goal is to win elections (Kollman, Miller, and Page 1992; Wittman 1973). In order to do so, political elites are tasked with two challenges: (1) mobilizing voters to turn out at the polls (referred to as mobilization), and (2) convincing voters to choose their party when they go to the polls (referred to as persuasion) (Schmitt-Beck 2007). First, getting people to show up to the polls can be a difficult task. Turning out to vote is a costly action (Downs 1957; Riker and Ordeshook 1968), and previous research has argued that individuals make rational calculations in deciding whether their vote will make enough of a difference to warrant such cost (Geys 2006). Therefore, it is important that parties invest in "Get Out the Vote" (GOTV) campaigns—specific efforts to "transform nonvoters into voters" (Green and Gerber 2008, 7). When doing so, parties decrease the costs of voting for individuals by providing them with informational shortcuts (Lupia 1994; Rosenstone and Hansen 1993) and also influence the intrinsic value citizens attach to voting as voters feel more wanted when they are contacted by parties (Green and Gerber 2008).

GOTV efforts are fairly successful in mobilizing turnout (Enos, Fowler, and Vavreck 2014; Green, Macgrath, and Aronow 2013). Certain tactics are more efficacious

than others, however. The more personal the contact is, the more likely it is to have a mobilizing effect. Door to door canvassing, for instance, is found to significantly increase turnout rates (Arcenaux and Nickerson 2009; Green, Gerber, and Nickerson 2003). Campaign phone calls that do not include a prepared transcript also motivate turnout (Green and Gerber 2015; Ha and Karlan 2009). Impersonal emails or TV ads, however, do not have much of an effect. All in all, research finds that parties do indeed invest significant amounts of resources on GOTV efforts (Farrell and Schmitt-Beck 2002; John and Brannan 2008; Holbrook and McClurg 2005).

A second dimension of political campaigning is voter persuasion. Persuasion involves any attempt to convert opposing voters into supporting one's own party, or most importantly, attracting undecided or independent voters to become one's supporters (Green and Gerber 2015). While mobilization efforts used to be the focus of campaigns in the past, persuasion has become increasingly important in modern elections (Harmel and Janda 1994, Rohrschneider 2002). How effective persuasion efforts are, however, is difficult to measure. The impact of mobilization can be clearly observed as rates of voter turnout. It is harder to capture whether someone was convinced to vote a certain way due to partisan persuasion. Furthermore, while persuasion may be productive when targeting undecided voters, research argues that on average, political campaigns hardly work to change people's views, but rather reinforce them (Berelson, Lazarsfeld, McPhee 1954). Because of these concerns, comparative studies of partisan outreach rarely distinguish between mobilization and persuasion (Karp and Banducci 2007; Karp, Banducci, and Bowler 2008).

Although most of the existing literature focuses on the *byproducts* of party mobilization, scholars have begun to empirically explore more of what factors *shape* campaigning strategies (Enos, Fowler, and Vavrek 2014; Enos and Hersh 2015). Because parties have limited time and funds during political campaigns, they must allocate their resources strategically (Rosenstone and Hansen 1993; Green and Schwam-Baird 2016). Parties are likely to focus their resources on strategies that will maximize their gains and generate the most benefit. According to Rosenstone and Hansen (1993), these include strategies that target individuals who are already familiar to parties, who have strong social networks, who are influential, and who have resources. In general, individuals that fit these characteristics are typically the wealthy and educated, who are much more likely to be responsive to campaign measures and turn out to vote. Indeed, an abundance of empirical research finds support for the proposition that individuals with higher socioeconomic status are more likely to participate (Leighley 1995; Smets and van Ham 2013).

Given the existing knowledge that individuals with higher SES are those most willing to turn out, parties likely shift their resources and outreach to groups that exhibit higher socioeconomic status. In turn, individuals of lower status will likely be excluded or receive less attention from partisan outreach efforts. Plutzer (2002) argues that individuals with little disposable income are not attractive to parties, who doubt their ability to actively engage with the political process. This problem may be even more exacerbated in more recent years, as developing technology allows for parties to gather detailed data on likely voters. As parties become more sophisticated at identifying potential voters, they are able to narrow their range of partisan outreach (Ballinger 2006).

This biased pattern of mobilization can cause meaningful problems for the representation and advocacy of marginalized individuals (Rogers 2006).

Beyond what we can infer regarding which individual characteristics may motivate partisan outreach, we still lack detailed knowledge of how political institutions change partisan strategies of campaigning. Taylor-Robinson (2010) notes that elites' choices are largely shaped by institutional context. In the United States, Huckfeldt and Sprague (1992) note that parties are faced with legal and institutional constraints, and that this varies by state. For instance, the presence of primaries in a given state may alter how much or when parties choose to allocate their resources for partisan outreach.

Unfortunately, few studies have considered the impact of institutional design on party outreach in a comparative perspective outside the United States. In a comprehensive study of 24 countries, Karp and Banducci (2007) find that rates of party outreach are significantly lower in new democracies than old democracies, partly due to lower rates of party institutionalization. Other research shows that rates of party contact are significantly higher in candidate-based electoral systems as opposed to proportional representation systems (Karp, Banducci, and Bowler 2008). The authors argue that this is because under PR systems, candidates have less of an incentive to campaign on a personal level given the larger district magnitude. But, under single-member-districts, candidates have an incentive to cultivate a more personal relationship and, therefore, should be more likely to contact potential voters.

Aside from a few studies, we still lack detailed knowledge of how institutional context shapes campaigning behavior. One institution in particular presents us with a puzzle when it comes to party outreach. If a crucial part of political party campaigns is to

mobilize voters to turn out at the polls, what happens when turnout is already high? Under compulsory voting, all eligible citizens are required by law to show up at the polls. Although turnout is not universal under these systems, a plethora of research has found that CV laws considerably boost turnout rates anywhere from 10 to 18 percentage points (Baek 2009; Jaitman 2013; Singh 2011). This could yield a substantial shift in partisan strategies when it comes to partisan outreach.

The overwhelming majority of studies of compulsory voting examine how mandating turnout affects voter turnout. More recently, scholars have begun to study the more substantive effects of CV for overall individual political behavior (e.g., Córdova and Rangel 2017; Hooghe and Stiers, forthcoming). Few studies, however, focus on CV's impact on *elite* behavior. The focus of this existing research is primarily on how near-universal voter turnout produced by CV laws may disproportionally benefit one party over the other in terms of electoral outcomes. Liberal parties, who are more likely to draw support from citizens of low income and education (Anderson and Beramendi 2012; Pontusson and Rueda 2010), are thought to benefit from mandatory voting laws, as marginalized voters are encouraged to turnout at higher rates (Lijphart 1997). Empirical studies, however, have found mixed support for the proposition that higher and more equal voter turnout would benefit left-leaning parties.

Bechtel, Hangartner, and Schmid (2016) show that support for leftist policies in a Swiss canton was greater during times where individuals were subject to compulsory voting laws. In the context of Australia, Fowler (2013) finds that the gradual adoption of compulsory voting in different states boosted the seat shares of the left-leaning Labor Party by 7-10 percent. Jensen and Spoon (2011), however, find that leftist parties are

benefitted only when CV is coupled with high turnout. By contrast, other studies fail to find any political gains from the left under compulsory voting. Jackman (1999) shows that if Australia were to abolish compulsory voting, the Liberal Party would still report small political gains. A subnational study of Austria shows that no substantial gains are made by the right in the absence of compulsory voting (Ferwerda 2014). Most recently, Miller and Dassonneville (2016) find that the vote share of left-leaning parties actually increased when CV was abolished in the Netherlands in 1970. The authors, then, suggest that "the logic underlying the conventional wisdom is in need of reevaluation" (p. 132).

One of the problems might be that this research assumes a kind of mechanical relationship between increased voter turnout and more votes for left-leaning parties, with little attention to how political elites may strategically adjust to the legal requirement to vote. A shift in campaigning strategy could potentially influence electoral outcomes, which may be a reason for the lack of consistent evidence of which parties benefit from maximized turnout. In other words, scholars have not yet considered the in-depth dynamics on how a voting law affects the strategies employed by political parties. In the next section, I discuss how party elites are expected to shift their campaigning strategies under compulsory voting, and develop expectations for the patterns of party outreach observed under different voting systems.

Compulsory Voting and Partisan Outreach: Theoretical Mechanisms

Many different elements of partisan outreach can be expected to change when countries require voter turnout by law. The existing comparative studies of political campaigning focus primarily on overall levels of party contact, and what explains those patterns (Karp and Banducci 2007; Karp, Banducci, and Bowler 2008). In this research, I provide a much more detailed account of partisan outreach by focusing on three distinct

aspects: (1) how much outreach there is; (2) who is the target of outreach; and (3) who is leading the outreach. By investigating all three elements of party contact, I am able to provide a more nuanced picture of how compulsory voting affects campaign behavior.

How much outreach is there?

As previously discussed, political parties whose goal is to win elections have two specific tasks: to mobilize individuals and to persuade voters. In considering overall levels of partisan outreach, we first must understand how compulsory voting can alter a party's incentive to devote money and resources to campaign efforts. One line of thought is intuitive: when voting is compulsory, the need for mobilization essentially disappears. Because turning out at the polls is mandatory by law, political elites no longer have to devote efforts to mobilization via GOTV campaigns (Karp, Banducci, and Bowler 2008; Lever 2010a). Norris (2004) suggests that parties under CV should invest less on mobilizing efforts. Lijphart (1997) and Lever (2010) both suggest that because the need for mobilization is lacking, CV laws would significantly decrease levels of campaign spending. This logic suggests that those living under compulsory voting laws are significantly less likely to report having been contact by a party during electoral campaigns.

This view focuses solely on mobilization as a goal of parties, assuming that the mere fact that voting is mandatory will discourage parties from contacting voters at all. Assuming that mobilization is the leading motivation for party outreach, we should expect that when a country makes mobilization a legal or constitutional requirement, parties no longer have an incentive to invest their resources on party outreach. This leads to my first hypothesis:

H_{1a}: Overall levels of partisan outreach in countries with compulsory voting laws should be lower than in countries with voluntary voting.

At the same time, it may not be the case that political parties simply forego spending their resources when the need for mobilization disappears. Mobilization is only one part of the campaign equation—parties may also engage in persuasion tactics. Therefore, political elites are likely to divert their resources into convincing potential voters to choose them at the polls. Lever (2010, 902) describes this process as a shift in parties' goals, stating that "compulsion means that the battle is not, any more, to make sure that your supporters actually get to the polls, or to deter those of your opponents from doing so… but to ensure that of those who turn out, as many vote for you as possible." Therefore, rather than decreasing overall levels of party outreach, compulsory voting can simply encourage parties to divert their resources from mobilization to persuasion, leaving average rates of party contact unchanged (Hooghe and Pelleriaux 1998; Karp, Banducci, and Bowler 2008). This logic leads to the following hypothesis:

H_{1b}: Overall levels of partisan outreach in countries with compulsory voting laws should be similar to levels in countries with voluntary voting.

At the same time, we know that when voting is voluntary only a fraction of the electorate turns out to vote. In this case, parties only have to target a small set of the population that they know is likely to turn out. When voting is mandatory, however, the pool of potential voters increases significantly, increasing the need for partisan outreach as parties are tasked with winning over a much larger electorate. In arguing why rates of party attachment might be higher under compulsory voting, Singh and Thorton (2012, 193) highlight that parties have much more to gain from reaching out in instances where

the probability that one will vote is high, thus encouraging parties to "step up their efforts to promote their brand." Under voluntary voting rules, even amongst individuals with the characteristic of those who should be more likely to turn out (higher SES), there is still much uncertainty whether one will actually go to the polls, which makes the marginal benefit of partisan outreach more uncertain. Under CV, however, the probability that an individual will go to the polls is substantially higher, making outreach a "good investment" for parties. In the aggregate, the certainty associated with the pool of potential voters is much higher under CV, encouraging higher levels of partisan outreach.

In other words, under voluntary voting where turnout is not mandatory, parties target a smaller and more specific sector of the population. Therefore, even if parties under this system need to persuade voters to both turnout and vote for their platform, the lack of necessity to reach out to a broader sector of the population generates a modest need for partisan outreach. Under compulsory voting, the pool of potential voters increases significantly as all citizens are required to turn out by law, and the certainty attached to their probability of turning out makes partisan outreach a good investment for parties attempting to win over votes. An alternative expectation, then is the following:

H_{1c}: Overall levels of partisan outreach in countries with compulsory voting laws should be higher than in countries with voluntary voting.

Who is the target of outreach?

Apart from changing the overall rate of party outreach, institutional design may also affect *whom* parties target. Compulsory voting has been proposed as a strategy to reduce patterns of unequal participation based on socioeconomic status (Lijphart 1997). This is because when all individuals are required by law to turn out, regardless of age, gender, income, or education level, turn out is expected to be less biased. Empirical

evidence shows that mandatory turnout decreases participation gaps in socioeconomic status (Fowler 2013; Gallego 2015), age (Singh 2011) and gender (Córdova and Rangel 2017). Amongst these studies, a common theoretical expectation is that under compulsory voting, parties are encouraged to reach out to marginalized citizens, since there is a higher likelihood that they will turn out to vote.

The logic is as follows. As the pool of potential voters increases under compulsory voting, individuals who are typically not likely to turnout under VV are now more likely to do so. Because all eligible citizens are required to turn out by law, parties do not have an incentive to only focus on one specific sector of the population (Ballinger 2006; Hill 2014; Lijphart 1997). Rogers (2006, 24) summarizes that "where turnout can be taken more or less for granted, the political parties will have an incentive to attempt to win over undecided or less engaged groups." Therefore, parties are required to reach out to all potential voters, regardless of socioeconomic status. This means that partisan outreach should be more consistent across all socioeconomic groups under compulsory voting. By contrast, when voting is voluntary, parties would divert their efforts to those more likely to turn out (i.e. higher socioeconomic status) (Hooghe and Pelleriaux 1998). When analyzing GOTV efforts in a number of experiments, Enos, Fowler, and Vavrek (2014) conclude that mobilization efforts in the United States tend to widen the disparities between low and high propensity voters.

This is not to say, however, that partisan outreach should be completely equal under CV laws—indeed, some research does find that certain electoral inequalities still persist when voting is mandatory (Power 2009; Quintelier, Hoodhe, and Marien 2011). But, given the heightened probability that marginalized voters will turn out at the polls if

required to by law when compared to the counterparts when voting is voluntary, we should expect partisan outreach to be significantly less skewed under CV systems. This logic leads me to the following hypothesis:

> *H_2: Levels of partisan outreach in countries with compulsory voting laws should be significantly less skewed towards individuals with higher socioeconomic status than in countries with voluntary voting laws.*

Who is leading the outreach?

It is important to consider that although all parties may have incentives to adapt their campaigning strategies when subjected to compulsory voting laws, different *types* of parties may adapt differently. Given that certain ideologies appeal more to specific sectors of the population, it is important to consider how those distinctions may matter. As previously discussed, research shows that especially under voluntary voting, individuals with higher socioeconomic status are more likely to turn out, and thus more likely to get targeted by parties. Individuals with higher socioeconomic status tend to be more conservative (Tucker, Vedlitz, and DenNardo 1986). Because higher SES individuals are already more likely to turn out under voluntary voting, right-leaning parties are less likely to need strong mobilization efforts.

But, when voting is compulsory, the introduction of many more marginalized citizens may shift the balance in the electorate. Low propensity voters under voluntary voting are much more likely to turn out under compulsory voting given that they are now faced with penalties. These low-propensity voters, however, are likely to support more left-leaning parties, creating problems for conservative parties. This is essentially why some studies of electoral outcomes under CV posit that left-leaning parties should benefit from mandatory voting laws (Jackman 1999; Hoffman, León, and Lombardi 2017). But,

this expectation does not consider that right-leaning parties could then adapt their strategies in order to account for the introduction of left-leaning voters into the electorate.

Right-leaning parties should adapt in two ways. In terms of mobilization, right-leaning parties have an incentive to amplify their partisan outreach in order to ensure that each and every one of their strong supporters will turn out to vote. In terms of persuasion, right-leaning parties under CV have a higher incentive to go after moderate or independent voters in order to win their vote. In other words, right-leaning parties will need to make sure they can count on a large percentage of their voters to turn out, while simultaneously trying to persuade undecided or moderate voters. We should expect that mobilization from the right to be higher when turnout is required by law in order to offset the gains made by the left when a larger and more equal electorate is expected under compulsory voting. My final hypotheses are as follows:

H_{3a}: Overall levels of right-leaning partisan outreach in countries with compulsory voting laws should be higher than in countries with voluntary voting.

H_{3b}: Right-leaning parties in countries with compulsory voting should be more likely to reach out to moderate potential voters than right-leaning parties in countries with voluntary voting.

Data & Methods

To evaluate partisan outreach to potential voters, I use survey data from the most recent module of the Comparative Study of Electoral Systems (CSES) project. The fourth module of the post-election survey has thus far been conducted in 28 different countries

between 2011 and 2015.[38] The decision to focus on the fourth wave is based primarily on the availability of a survey question that approximates party outreach. One way to measure party contact would be to survey political parties and gather their own data on campaign efforts. But, because detailed data in a comparative perspective on this matter are not available, the best way to capture party outreach is to record whether an individual reports being contacted by a political party during a campaign. Note that this does not involve an individual's own willingness to initiate a contact with a political party member (a question that is often asked in political surveys), but whether a member of a political party contacted the individual in any form.

The dependent variable, *party outreach*, is based on the following question: *"during the campaign, did a party or candidate contact you in person or by any other means?"* The respondent had the option to select yes, no, or to abstain from answering (missing). This question is used to create my dependent variable, *party outreach*, which takes the value of 1 when the respondent indicated having been contacted by a party or candidate during the campaign, and 0 otherwise.

I am also interested in which political party in particular contacted an individual in order to be able to test Hypotheses 3_a and 3_b. As a follow-up to the general question of whether an individual was contacted by a party, the next question asks individuals to identify *which parties* contacted them. Individuals can list up to 10 different parties that

[38] While the survey has been conducted in 28 different locations, one of those in particular lacks a variety of data in other dimensions (Taiwan). Thus, empirical analyses for $H_{1a\text{-}c}$ and H_2 in this chapter exclude Taiwan, bringing the total number of countries to 27. Due to missing data in some countries, the empirical analyses for $H_{3a\text{-}b}$ include 24 countries.

may have contacted them during the campaign.[39] In order to identify whether a specific party was left-leaning or right-leaning, I followed the following steps: First, I used the Manifesto Project, which identifies the policy positions of political parties across the world. The project rates each political party on a left-right scale ranging from -100 (very liberal) to 100 (very conservative). But, it might not be accurate to simply choose a cutoff point (i.e. 0), to indicate that anything positive should be considered a right-leaning party, and anything negative a left-leaning party. For instance, in the context of the United States, both of the Democratic and Republican parties scored positive numbers in the left-right scale (7 for the democrats and 24 for republicans). If that were the case, both parties would be considered "right-leaning."

Instead, I am more interested in understanding where the parties stand relative to one another in the context of their own country. Therefore, I created an average of the scores for each political party for each country within the MP dataset, and then identified whether each party was to the right of the average (right-leaning), or to the left of that average (left-leaning). I then merged these data to the specific parties that were mentioned by each individual in the CSES survey as having contacted them. Two dependent variables were created—*right-leaning contact* received a 1 if any party that had a more conservative policy agenda within that country had contacted that individual (and zero otherwise), and *left-leaning contact* received a 1 if any party that had a more liberal policy agenda within that country had contacted that individual (and zero otherwise). Individuals who did not report having been contacted by a right or left

[39] Although individuals can name up to 10 different parties, I only considered whether the respondent identified having been contacted by one of the 5 major parties in their given country. The CSES classifies the 5 major parties based on their seat share in the current legislature.

leaning party, or contacted by a party at all, were coded as zeroes for each of these dependent variables.[40]

The main independent variable indicates whether a country has a compulsory voting system. *Compulsory Voting* is a dichotomous measure coded 1 if voting is compulsory in a particular country and a 0 if voting is voluntary. These data were drawn from the International Institute for Democratic and Electoral Assistance (IDEA), which identifies which countries around the world practice compulsory voting. In my sample, 6 out of the 27 countries have compulsory voting laws, and 7 post-election surveys have been carried out under compulsory voting laws.[41]

Because I am interested in how the institution of compulsory voting conditions the relationship between partisan outreach and marginalized voters, I use a measure of socioeconomic status in order to test *Hypothesis 2*. Specifically, I use levels of education as a representation of socioeconomic status (Verba, Nie, and Kim 1995). *Education* ranges from 1 to 4 and records whether the individual reported having: (1) none or less than primary schooling; (2) completed primary or incomplete secondary schooling; (3) completed secondary and some tertiary schooling; (4) completed college or more. In order to account for the conditional effect of compulsory voting on SES and partisan outreach, I include an interaction term between the *compulsory voting* variable and the *education* variable in the model.

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[40] The follow-up question asking about which parties contacted the individual were not asked in Canada, and Ireland. The MPD data did not have information for Thailand. This brings the total number of countries in this analysis to 24.

[41] In the sample, the countries of Mexico, Greece, Australia, Brazil, Thailand, and Turkey all have compulsory voting laws. See Table C1 in Appendix C for a full description of the surveys and countries included in the data.

Control Variables

I control for several variables that might affect an individuals' propensity to be contacted by a political party. At the individual level, *age* can be an important factor, as older individuals are found to turn out to vote at higher levels and thus be targeted by parties (Blais 2000). It has also been argued that gender may play a role in political activism, and that women are less likely to engage with politics (Verba, Burns, and Schlozman 1997). Therefore, I include a variable that identifies whether the respondent was *female*. Finally, in order to account for the fact that those being targeted by parties are merely the ones that have closer partisan ties, I control for whether a respondent identified being close to a political party (*party attachment*) (Singh and Thorton 2012). All individual-level variables were drawn from the same CSES post-election survey from which the dependent variable was drawn.[42]

At the country level, I control for several other factors that are thought to alter partisan strategies. I control for whether the election was a *presidential*, and whether the country employed a *proportional representation* system—which could encourage the targeting of marginalized citizens. I also control for the level of democracy and economic development for each country. Data on democracy come from the Freedom House's civil liberties and political rights ratings (Freedom House 2016). This variable was transformed in order to report states with higher scores in the freedom house scale as more democratic, while lower scores reflect less democratic states. Economic development is measured as Gross Domestic Product GDP per capita from the World Development Indicators (World Bank 2016), with higher levels indicating more

[42] See Table C2 in Appendix C for a full description of the control variables.

developed countries. Descriptive Statistics of all variables are available in Table C3 of Appendix C.

Methodology

One important feature of the data in this study is that observations are clustered at different levels of analysis. The data are clustered at two levels: individual respondents (level 1) within post-election surveys within countries (level 2). The main variable of interest, compulsory voting, is recorded at the country level. The outcome variables, however, are drawn from public opinion data and are thus recorded at the individual level. To account for the nested nature of the data, I estimate a hierarchical model across two levels of analysis: respondents i nested within countries j (Raudenbush and Bryk 2002). Because the analyses use a dependent variable that is dichotomous (whether one was contacted by a party or not), I employ a hierarchical *logit* model to test my expectations. Below, the first model specification (1) is used to test *Hypotheses* 1_a, 1_b, 1_c, and 3_a, the second model specification (2) is used to test *Hypothesis 2*, and the third model specification is used to test *Hypothesis* 3_b:[43]

$$
\begin{aligned}
(1)\ Y_{ij} = {} & \gamma_{01} + \gamma_{01} Compulsory\ Voting_{1j} + \gamma_{10}\, Education_{1ij} + \gamma_{20}\, Age_{2ij} + \gamma_{30}\, Female_{3ij} \\
& + \gamma_{40} Party\ Attachment_{4ij} + \gamma_{02} Presidential\ Election_{2j} \\
& + \gamma_{03} Proportional\ Representation_{3j} + \gamma_{04} Effective\ Number\ of\ Parties_{4j} \\
& + \gamma_{05} Democracy\ Level_{5j} + \gamma_{06} GDP\ per\ capita_{6j} + U_{0j} + R_{ij}
\end{aligned}
$$

[43] The second and third model specifications to test hypotheses 2 and 3_b posit a cross-level effect (between education and compulsory voting and between ideology and compulsory voting). I test its statistical significant without assuming a random slope for the education variable. As such, the models only assume random effects for the intercept. Snijders and Bosker (2012, 106) explain that cross-level interaction effects can be tested through an interaction regardless of whether the individual-level variable has a random slope or not.

$$(2)\ Y_{ij} = \gamma_{01} + \gamma_{01} Compulsory\ Voting_{1j} + \gamma_{10}\ Education_{1ij} + \gamma_{11}\ Education_{1ij}\ Compulsory\ Voting_{1j} + \gamma_{20}\ Age_{2ij} + \gamma_{30}\ Female_{3ij} + \gamma_{40} Party\ Attachment_{4ij} + \gamma_{02} Presidential\ Election_{2j} + \gamma_{03} Proportional\ Representation_{3j} + \gamma_{04} Effective\ Number\ of\ Parties_{4j} + \gamma_{05} Democracy\ Level_{5j} + \gamma_{06} GDP\ per\ capita_{6j} + U_{0j} + R_{ij}$$

$$(3)\ Y_{ij} = \gamma_{01} + \gamma_{01} Compulsory\ Voting_{1j} + \gamma_{10}\ Ideology_{1ij} + \gamma_{11}\ Ideology_{1ij}\ Compulsory\ Voting_{1j} + \gamma_{20}\ Age_{2ij} + \gamma_{30}\ Female_{3ij} + \gamma_{40} Party\ Attachment_{4ij} + \gamma_{50} Education_{5ij} + \gamma_{02} Presidential\ Election_{2j} + \gamma_{03} Proportional\ Representation_{3j} + \gamma_{04} Effective\ Number\ of\ Parties_{4j} + \gamma_{05} Democracy\ Level_{5j} + \gamma_{06} GDP\ per\ capita_{6j} + U_{0j} + R_{ij}$$

where U_{0j} represents the random effects for the intercept across countries, and R_{ij} are errors at the individual level.

Descriptive Statistics

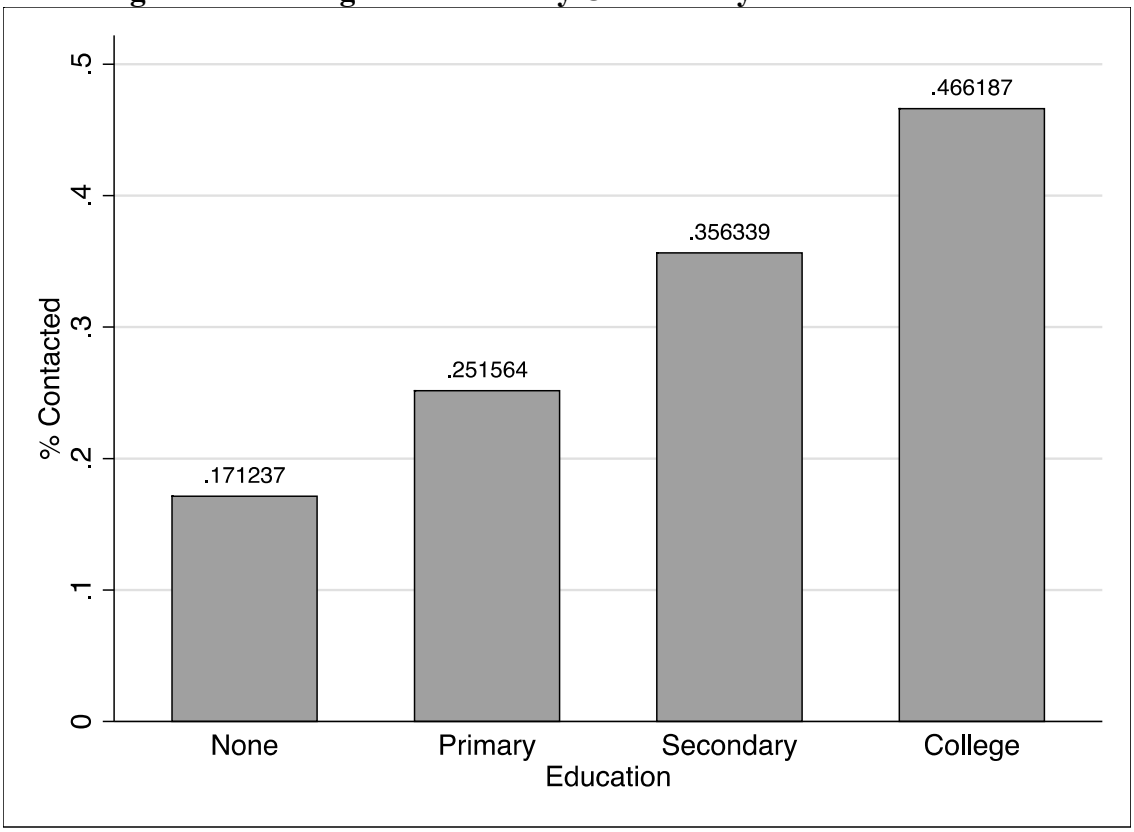
A descriptive look at the data shows some of the expected patterns previously discussed. Table 4.1 shows descriptive statistics of overall levels of party contact by compulsory and voluntary voting. Overall average levels of party contact are very similar for both systems, around 33 and 35 percent. This could be an initial indication that party outreach may not be significantly lower or higher in countries with compulsory voting.

Table 4.1. Descriptive Statistics of Overall Levels of Party Contact by Voting Law

Voting Law	Observations	Mean	Std. Dev.	Min	Max
Voluntary	30,078	.331	.471	0	1
Compulsory	14,094	.358	.479	0	1

Figure 4.1 graphs the average rate of party contact by level of education without taking into account different voting systems. For those who have none or less than primary education, the rate of partisan outreach is at around 17 percent. For those with primary education, approximately 25 percent report being contacted by a party. Once the respondent's education level reaches a complete secondary degree, the rate increases to 35.6 percent. Finally, the biggest jump is seen for those who have complete college, almost 11 points higher than the previous level of education (46.6 percent).

Figure 4.1. Average Rates of Party Outreach by Levels of Education



Notes: Figure 4.1 shows overall average levels of party outreach by education in the 27 countries included in the sample.

Table 4.2 breaks down the percentage of contacted individuals by education level in each voting system. For instance, out of all individuals that were contacted by a political party under voluntary voting, 10.59 percent had no education, 20.59 percent had

primary education, 35.6 percent had secondary education, and 42.25 percent had a college education. In the case of compulsory voting, there is a lot more parity at the middle levels of education, but still large gaps in terms of those with low and high levels of education (no education and college). These descriptive statistics show that while under voluntary voting, patterns of outreach follow a linear increase based on levels of education (similar to what we see in Figure 4.1), compulsory voting patterns are less linear and more varied.

Table 4.2. Percentage of Contacted Individuals, by Education Level

	Education Levels			
	No Education	**Primary**	**Secondary**	**College**
Voluntary	10.59%	20.59%	35.6%	42.25%
Compulsory	3.9%	29.17%	22.45%	44.48%

When taking into account outreach by the left and the right separately, we see that levels of outreach are slightly higher for both types of parties under compulsory voting than under voluntary voting (see Table 4.3). Also, there are no apparent differences when comparing left-leaning and right-leaning contact under both systems. This could suggest that different types of parties are not behaving significantly difference than one another under compulsory voting. While these data distributions hint at some possible relationships, these descriptive statistics do not account for any other factors known to influence partisan outreach, so it is more appropriate to examine these effects in a fully specified model. In the next section I discuss in detail the results from the hierarchical models.

Table 4.3. Percentage of Individuals Contacted by Left-Leaning or Right-Leaning Parties

	Left-Leaning Contact	Right-Leaning Contact
Voluntary	17.68%	18.06%
Compulsory	25.81%	26.88%

Empirical Results

I first evaluate whether compulsory voting changes overall political party behavior, by empirically testing *Hypotheses* 1_a-1_c and *Hypothesis 2*. The results are presented in Table 4.4. The first element to be investigated is whether overall levels of party outreach are different under compulsory or voluntary voting. Turning to Model 1, we see that the coefficient for CV is negative, but not statistically significant. This indicates support for *Hypothesis* 1_b—while compulsory voting laws lower the need for mobilization, it does not mean political parties will simply decrease their outreach efforts. Instead, it is likely they will divert their resources to persuasion, leaving overall levels of outreach unchanged. It is also possible that CV does not necessarily erase the need for mobilization. Given that CV does not generate universal turnout, there is still room for mobilization. Gerber and Green (2008) note that "even when turnout is high… the capacity to mobilize large numbers of voters can be decisive." I provide an additional empirical investigation into whether we can establish the trade-off between mobilization and persuading taking place under compulsory voting in the next section.

This finding may cast doubt on claims that compulsory voting has the potential to significantly decrease campaign costs (Keaney and Rodgers 2006; Lijphart 1997). In 2015, former President Barack Obama was asked to comment on the idea of compulsory voting. His initial response was that "It would be transformative if everybody voted—that

would counteract money more than anything" (Somin 2015). These results suggest that although it is possible that compulsory voting decreases campaign spending in several other dimensions, it is unlikely that efforts and resources directed to party outreach would be substantially different given a mandatory voting law.

Table 4.4. The Influence of Compulsory Voting on Party Outreach

	(1) Overall Party Outreach	(2) Overall Party Outreach
Compulsory Voting	-0.452	-0.111
	(0.616)	(0.628)
Education	0.292***	0.334***
	(0.017)	(0.021)
*CV *Education*		-0.106**
		(0.033)
Female	0.011	0.009
	(0.023)	(0.023)
Age	0.004***	0.004***
	(0.001)	(0.001)
Party Attachment	0.558***	0.557***
	(0.025)	(0.025)
Presidential Election	-1.194***	-1.202***
	(0.135)	(0.136)
PR System	-1.158**	-1.148**
	(0.376)	(0.378)
Effective # of Parties	0.176*	0.174*
	(0.074)	(0.075)
Democracy Level	-0.659	-0.629
	(0.443)	(0.445)
GDP per capita	0.801*	0.788*
	(0.353)	(0.355)
Constant	-5.952**	-6.135**
	(2.308)	(2.318)
Num. Individuals	42,308	42,308
Num. Countries	27	27

Note: Hierarchical logit models. Coefficients are statistically significant at *p<.05; **p<.01; ***p<.001. Standard errors in parentheses.

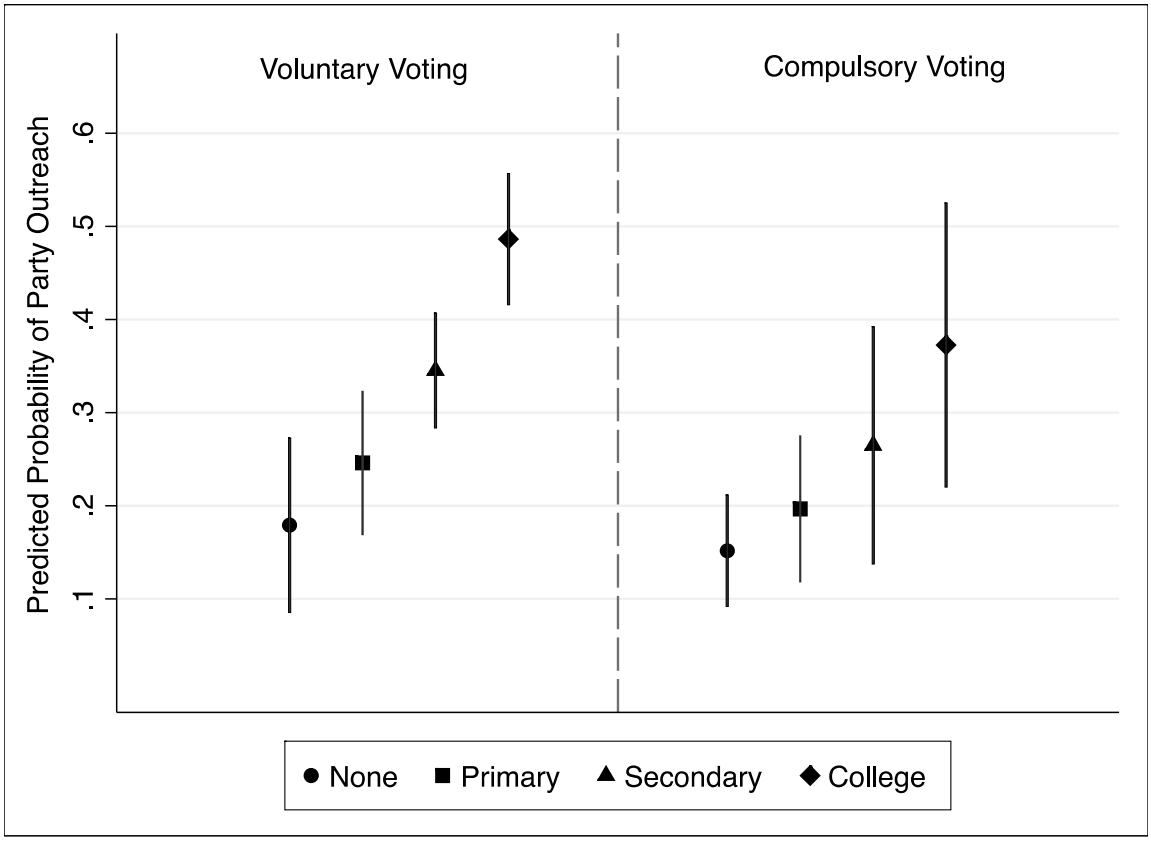
The second element focuses on explaining who is the target of campaigns given the institutional context. The expectation (H_2) is that rates of party outreach will be less

skewed towards those with higher SES under compulsory voting than under voluntary voting. In other words, we should expect that all individuals under compulsory voting rules—regardless of level of education—will be contacted at similar rates given that there is higher probability that they are potential voters. Model 2 in Table 4.4 takes into account an interactive effect between compulsory voting and education levels. Because the significance of interactions are difficult to interpret from the table, Figure 4.2 graphs the mean predicted probability of being contacted by a political party given your level of education and whether the system is compulsory or not. The confidence intervals surrounding the means indicate whether the differences between groups are statistically significant at the 95% confidence level.[44]

While it does appear that under both systems, there is an increasing trend in terms of the probability that an individual with higher levels of education will get contacted by a party, this rate is not statistically significant under compulsory voting when discerning between the first three levels of education. In other words, there is not apparent difference in the probability of being contacted by a party under CV if an individual has no education, primary education, or secondary education. College graduates do appear to have a slightly statistically significant higher chance to be contacted when compared to those with no education, but not in comparison to other levels.

[44] Research indicates that graphing 84% confidence intervals allow one to determine whether the differences between groups are statistically significant at the 95% confidence level. Thereby, a statistically significant difference can be inferred if the confidence intervals in the figure do not overlap (Julious 2004).

Figure 4.2. Predicted Probability of Party Outreach by Voting Law and Levels of Education



Notes: Figure 4.2 shows the predicted probability of having been contacted by a party during the campaign, based on whether individual is subject to voluntary or compulsory voting and conditioned by the level of education. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on results presented in Model 2 in Table 4.4.

When voting is voluntary, by contrast, there is a clear statistically significant increasing trend in the probability an individual will be contacted based on their education level. Individuals with a college degree are significantly more likely to be contacted than any other individual with a lower level of education. For someone with low levels of education (none or less than primary), the probability that they will get contacted is relatively small (approximately 18 percent). For someone with a college degree, that probability increases to around 49 percent. These patterns lend support for

Hypothesis 2—the bias in partisan contact by socioeconomic levels is clearly present under voluntary voting, but much less apparent under compulsory voting.

The results presented so far do not take into account any characteristics of parties, instead treating them all as similar in their strategic behavior. But, it is important to consider that the introduction of a larger and more equal electorate under compulsory voting may be more troublesome for right-leaning parties—who theoretically should benefit from low and skewed turnout. Table 4.5 presents the results of hierarchical models predicting left-leaning outreach and right-leaning outreach separately.[45]

Hypothesis 3$_a$ posits that right-leaning parties have a stronger interest to mobilize under compulsory voting in order to offset the inclusion of typically marginalized voters into the electorate. Models 3 and 4 in Table 4.5 present the results focusing on left-leaning outreach and right-leaning outreach, respectively. As observed in Model 3, compulsory voting is not a statistically significant predictor of left-leaning outreach. The same is the case in Model 4 for right-leaning parties. Meaning, right-leaning parties are no more likely to significantly increase their party outreach efforts when voting is compulsory. This does not provide support for *Hypothesis 3$_a$*. In other words, it is not the

[45] The dependent variables here indicate whether an individual reported being contacted by a party on the left (Model 3) or the right (Model 4). In a small number of cases, individuals reported being contacted by both parties. These individuals receive the value of 1 on both dependent variables. Because there is a possibility that the errors in both equations are correlated, a statistical technique such as seemingly unrelated regression may be appropriate to account for the cross-equation error correlation. This is not possible, however, considering the multilevel structure of the data. In order to circumvent this issue, I run the same analyses excluding those individuals that reported being contacted by both parties and present the results in Table C4 in Appendix C. The results are similar to the ones presented in Table 4.5.

case that right-leaning parties (or left-leaning parties) behave significantly different under CV than VV. [46]

Table 4.5. The Influence of Compulsory Voting on Left-Leaning and Right-Leaning Party Outreach

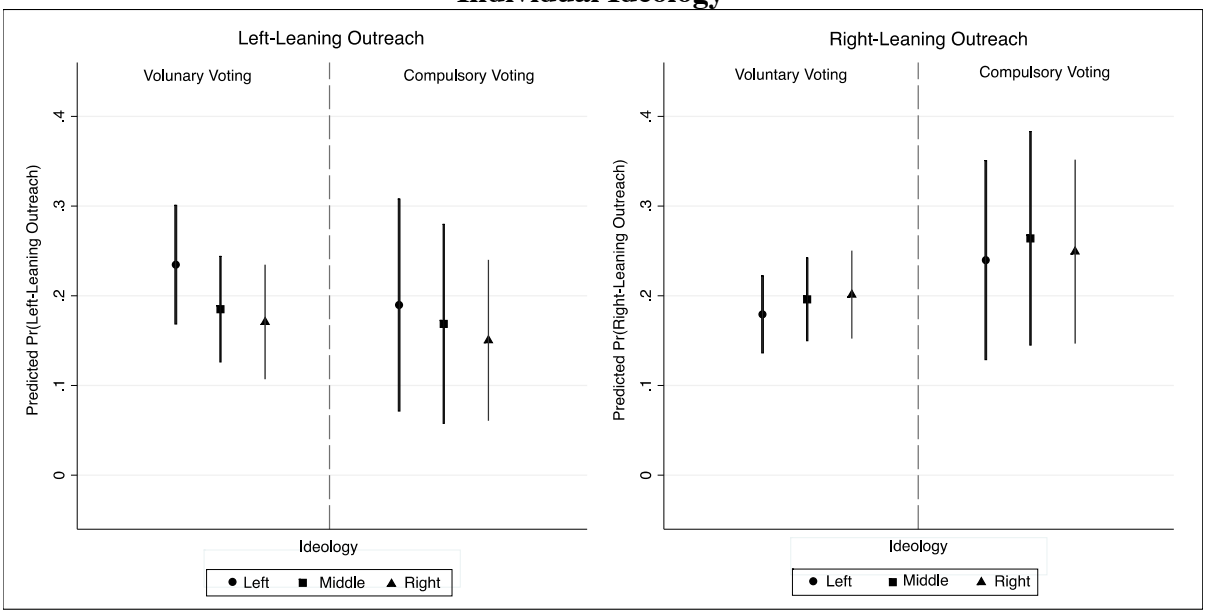
	(3) Left-Leaning Outreach	(4) Right-Leaning Outreach
Compulsory Voting	-0.186	0.400
	(0.740)	(0.596)
Education	0.246***	0.263***
	(0.022)	(0.022)
Female	-0.025	-0.029
	(0.030)	(0.029)
Age	0.003**	0.003**
	(0.001)	(0.001)
Party Attachment	0.444***	0.354***
	(0.033)	(0.032)
Ideology	-0.047***	0.049***
	(0.006)	(0.006)
Presidential Election	-0.946***	-1.359***
	(0.161)	(0.141)
PR System	-1.613***	-1.163**
	(0.485)	(0.388)
Effective # of Parties	0.131	0.117
	(0.090)	(0.073)
Democracy Level	-0.408	-0.457
	(0.572)	(0.459)
GDP per capita	0.375	0.913**
	(0.426)	(0.341)
Constant	-3.260	-9.131***
	(3.101)	(2.533)
Num. Individuals	31,753	31,753
Num. Countries	24	24

Note: Hierarchical logit models. Coefficients are statistically significant at *p<.05; **p<.01; ***p<.001. Standard errors in parentheses.

[46] These analyses consider whether parties on the right under CV behave different than parties on the right under CV (and vice-versa for left-leaning parties). This is because my theoretical expectations suggest that parties on the right will need to change their behavior under CV compared to what they were doing in the absence of CV. It does not consider whether right-leaning parties behave differently than left-leaning parties under each system. In a separate analysis presented in Table C5 in Appendix C, I consider this possibility by conducting a multinomial analysis using type of contact as the dependent variable. This analysis shows that it is also not the case that right-leaning parties behave significantly different than left-leaning parties under compulsory voting.

It could be the case that while overall levels of party outreach for each given type of party are similar under both systems, the strategy behind outreach changes when voting is mandatory. *Hypothesis 3$_b$* posits that right-leaning parties should make stronger efforts to reach out to more moderate voters in order to persuade them to vote compared to their efforts under voluntary voting. Table C6 in Appendix C presents the results when taking into account the individuals' reported party ideology and the likelihood they will be contacted by a party on either side of the political spectrum. In order to better represent the results, I graph the predicted probabilities on being contacted by a Left-leaning or Right-leaning party when considering the individual's ideology and the voting system in Figure 4.3.

Figure 4.3. Predicted Probability of Party Outreach by Voting Law and Individual Ideology



Notes: Figure 4.3 shows the predicted probability of having been contacted by a left-leaning or right-leaning party during the campaign, based on whether individual is subject to voluntary or compulsory voting and conditioned by the individual's ideology. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on results presented in Table C6 in Appendix C.

Figure 4.3. shows no apparent differences between the targets of outreach for both parties under different systems. This does not provide support *Hypothesis* 3_b. The results presented indicate that right-leaning parties do not appear to be behaving differently under CV when it comes to party outreach. One reason for this may be that while right-leaning parties may not be updating their outreach strategies when it comes to compulsory voting, they could still be engaging in strategic behavior in other forms of campaigning. For instance, it is possible that instead of changing their mobilization or targeting strategy, right-leaning parties are changing their policy agenda and position in order to appeal to this new electorate under CV. While this type of investigation is beyond the scope of this paper, further investigation into other campaigning strategies based on ideological party differences may be a fruitful avenue for future research.

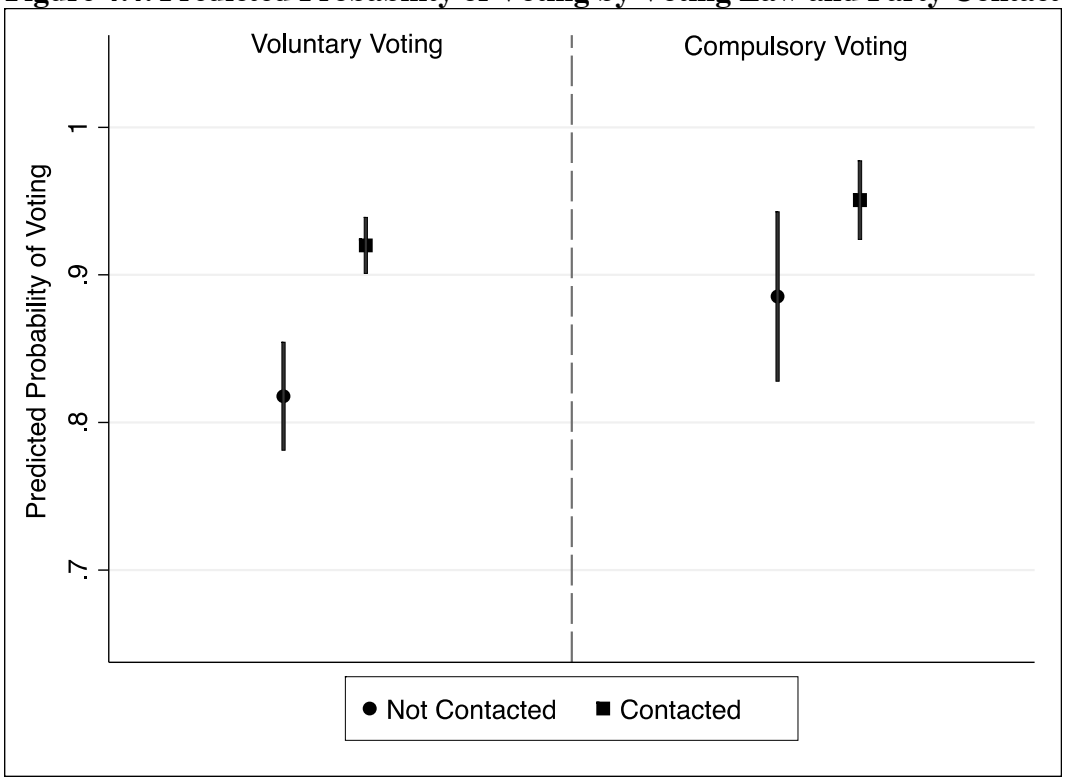
Mobilization Versus Persuasion

They hypotheses and empirical tests presented so far make it difficult to discern whether parties are engaging in more mobilization or persuasion. The null finding that party outreach does not seem to be lower or higher under CV suggests that parties under CV are simply shifting resources from mobilization to persuasion, because in theory, mobilization is no longer needed when voting is compulsory. In this section, I provide additional evidence supporting the notion that under CV, party outreach is mostly in the form of persuasion, and that campaigns might not necessarily be cheaper when voting is mandatory because parties continue to invest resources in contacting individuals—albeit having a different goal in mind.

First, in order to see whether mobilization via outreach is indeed a successful mobilizer of voters, I predict whether being contacted by a political party increases the chances that someone will turn out to vote. This should matter primarily when voting is

voluntary, and should have no significant effect on turnout choice under compulsory voting. Figure 4.4 shows that while having been contacted by a political party during the campaign is a strong and significant predictor of an individuals' choice to turn out to vote when under voluntary voting, it has virtually no effect on an individuals' choice to turn out under CV.[47] While this is expected given that voting is mandatory under CV, it shows that mobilization is much less of a factor under CV, therefore discouraging parties to spend significant resources on mobilization. But, when voting is voluntary, it is clearly worthwhile to still invest in contacting voters with the goal to mobilize them to the polls.

Figure 4.4. Predicted Probability of Voting by Voting Law and Party Contact



Notes: Figure 4.4 shows the predicted probability of reporting having voted based on whether individual is subject to voluntary or compulsory voting and whether they were contacted by a party or not during the campaign. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on results presented in Table C7 in Appendix C.

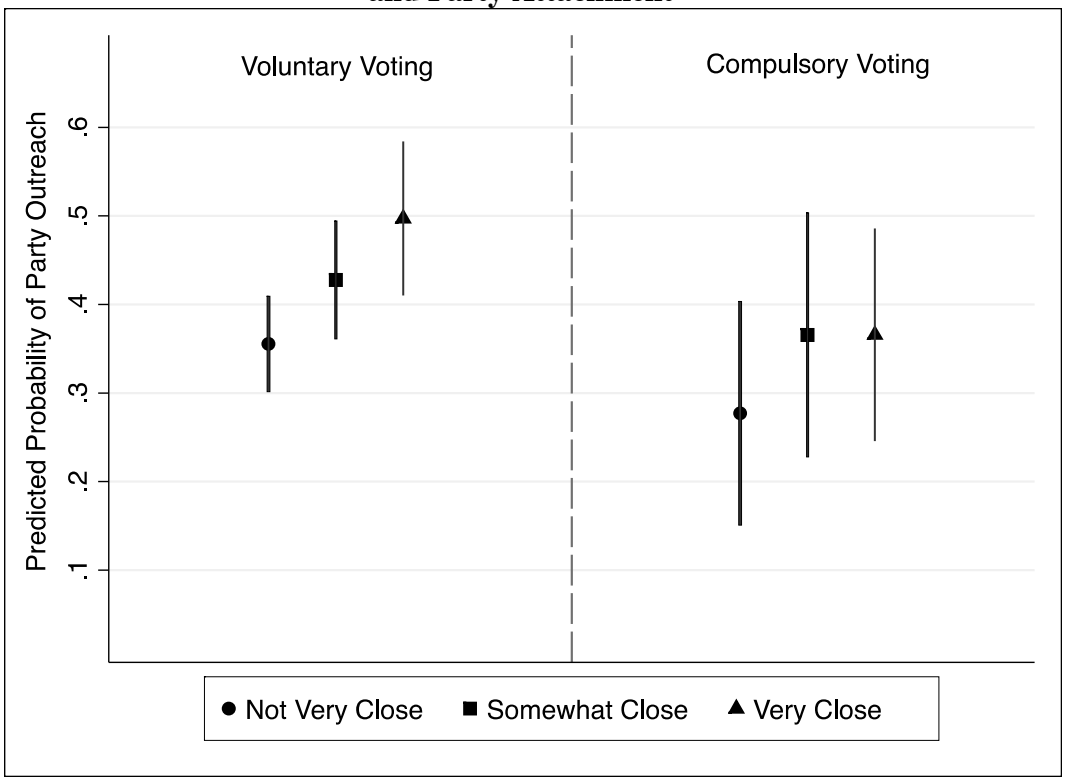
[47] Predicted probabilities were generated from results presented in Table C7 in Appendix C.

Karp and Banducci (2007) note that one way to specifically distinguish whether parties are engaging in mobilization versus persuasion efforts is to see whether they are targeting individuals that are already partisan or not. If parties are targeting mostly individuals who have strong party attachments—and hence are less likely to be persuaded—then it is likely that parties are engaging in mobilization efforts, and simply ensuring that those individuals turn out to vote. But, if parties are reaching out to a broader electorate and not only targeting individuals with high party attachments, it could mean that they are reaching out to those who are more likely to persuaded. Using my sample, I test whether parties under compulsory and voluntary voting are more likely to target those with low or high party attachment.

Figure 4.5 shows that there is a clear increasing trend in the probability that parties under voluntary voting will contact an individual based one their level of party attachment.[48] Specifically, the probability of being contacted by a political party under VV when you report not being very close to a political party is about 35 percent. That probability increases to approximately 50 percent when an individual reports being very close to a party. These differences, however, are non-existent under compulsory voting—individuals have similar probabilities of being contacted by a political party regardless of their party attachment, as average levels are comparable and confidence intervals overlap. Altogether, this evidence provides support for the theoretical expectation that even though parties under compulsory voting do not have an incentive to invest resources on mobilization, they still engage in party outreach with the goal to persuade voters and secure their votes.

[48] Predicted probabilities were generated from results presented in Table C8 in Appendix C.

Figure 4.5. Predicted Probability of Party Contact by Voting Law and Party Attachment



Notes: Figure 4.5 shows the predicted probability of reporting having been contacted by a party based on whether individual is subject to voluntary or compulsory voting and the individuals' reported level of party attachment. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated based on results presented in Table C8 of Appendix C.

Conclusions and Implications

This study directly contributes to our lack of detailed understanding of how elite behavior can be conditioned by institutional design. By simply requiring citizens to turn out at the polls, compulsory voting laws can significantly alter many aspects of the political sphere. Unfortunately, most studies of compulsory voting focus solely on its effects on individuals who are subject to the laws and their behavior at the polls. The few studies investigating the impact of CV at the elite level focus on what kinds of electoral outcomes might arise from mandatory voting laws, largely overlooking the fact that elites will strategically update their strategies when presented with such institutional design.

The results of this analyses show that political parties do adjust to their institutional environment. When voting is mandatory, parties continue to invest their resources in campaign outreach, and are also less likely to focus significantly more on those individuals with higher socioeconomic status. Yet, right-leaning parties do not appear to substantially change their strategy in order to offset potential gains by the left.

Of particular importance are the differences in party outreach based on education. College graduates will be the target of parties no matter what voting laws are present, highlighting that SES is still an important determinant of party mobilization. But, compulsory voting can be an effective tool to prevent parties from severely skewing their target population. These findings have important implications for countries that have considered either adopting or abandoning compulsory voting laws. In Chile, for example, compulsory voting was recently abolished, and one of the factors cited in support of the change is that under voluntary voting, parties would be encouraged to reach out to marginalized voters in other to get them to turn out (Barnes and Rangel 2014). But, as Hooghe and Perilaux (1998, 423) argue, "although some proponents of abolishing the compulsory vote state that after abolishment, political parties will try to convince voters to actually go to the polls, it is much more likely that they will try to win voters from other parties, rather than to try to motivate the disinterested." The results presented in this paper corroborate this argument, suggesting that voluntary voting may only exacerbate political marginalization.

The analyses show that right-leaning parties do not substantially change their outreach strategy as theoretically expected. This could be because when voting is voluntary, right-leaning parties may update their campaign strategy in a different way.

Instead of changing their outreach efforts or who to target, they may simply shift policy positions to appeal to the new electorate. The data limitations in this study do not allow us to investigate how CV may shape campaign platforms and ideology. Some studies have begun to investigate whether this second component of political campaigning is conditioned by institutional context (Bugarin and Portugal 2015; Fowler 2013). Scholars could also reach out to political elites in CV countries and obtain feedback as to how their political strategies are shaped by this institutional design. Therefore, the further consideration of how other aspects of campaign behavior are shaped by mandatory voting laws appears to be a fruitful avenue for future research.

This research provides evidence of an association between compulsory voting and party outreach strategies. At the same time, further research is necessary to investigate the *causal* relationship between these political features. A lack of elite or survey campaign data expanding a long period of time in a number of countries where compulsory voting was abolished or implemented makes it difficult to infer how strong the causal effect of CV is. Future experimental or qualitative work could be useful in addressing this shortcoming. Meanwhile, this research presents a comprehensive and novel attempt to establish how patterns of elite behavior can be shaped by institutional context.

Still, the findings of this research also speak to other potential implications that can come out of the patterns observed under the two different systems. When marginalized individuals are forgotten in the political process, they may feel abandoned by the system and powerless vis-à-vis the more educated, privileged class. Their interests might not get represented and public policy will skew away from those who might need it

the most. By contrast, when political parties are making an effort to reach out to those who are not part of the mainstream, individuals' own sense of importance and efficacy might increase, encouraging them to engage with the polity in a deeper and more meaningful way. Further, as discussed by Lijphart (1997) and Lever (2010), mandatory turnout and the shift of parties' focus away from encouraging or depressing mobilization towards winning over individuals' votes can decrease the need for negative campaigning and attack ads, which are typically used in efforts to increase turnout. This would in turn promote a more honest and inclusive campaign, which could have positive impact for the country's political system overall.

Chapter 5
Conclusions and Implications

One of the most commonly studied questions in political science is when and why people turn out to vote. This is because citizen participation remains a central component of the democratic process, determining who gets elected and influencing what policies are implemented by elected officials. Some countries deem voter turnout important enough to require it by law. This dissertation has focused on understanding how citizens and elites respond to the legal requirement to vote. From a citizens' perspective, I investigated attitudinal consequences of compulsory voting laws, as well as political behavior beyond voting on election day. From an elite perspective, I propose and test expectations regarding campaign behavior when elites are faced with a mandatory requirement to vote. In doing so, I engage different sets of data and research designs.

In chapter two, I developed a detailed theoretical framework that highlights whether compulsory voting increases citizens' feelings of civic duty, or generates resentment amongst eligible voters. I also posited that compulsory voting could decrease the novelty attached to voting, increasing levels of indifference. I use a hierarchical modeling technique and survey data from the 2010 Latin American Public Opinion Project, which includes over 17,000 individuals in 18 different countries. Results show that voters living under CV are no more likely to report either increased feelings of civic duty or higher rates of resentment, compared to their counterparts under voluntary voting. Instead, individuals who are required to turn out by law are slightly more likely to feel indifferent towards electoral participation.

Chapter three takes advantage of the recent abolition of compulsory voting in Chile in order to evaluate whether CV laws promote political engagement beyond election day. I construct a dataset using novel survey-data from Chile's *Centro de Estudios Publicos,* by combining 11 waves of public opinion surveys conducted from 2005 to 2016, totaling over 11,000 respondents over an 11 year period. I also investigate the impact of CV on six different elements of political engagement, related to information seeking, the discussion of politics, and political activism. This unique research design contributes directly to our understanding of how and when political engagement is affected by a legal requirement to vote. I show that under compulsory voting, individuals are significantly more likely to read and watch political news, and also to discuss politics with friends. This effect is stronger for those with lower levels of education.

Finally, in chapter four I investigate whether mandatory voting laws alter elite campaign behavior and encourage political parties to reach out to a wider set of the electorate. I conduct cross-national hierarchical analyses using data from the latest wave of the Comparative Study of Electoral Systems—a comprehensive dataset of post-election surveys of over 40,000 individuals in 27 different countries. I also combine party ideology data from the Manifesto Project to construct measures of party outreach for left and right-leaning political organizations. I find that levels of partisan outreach are similar under both systems, and that this is likely because parties under compulsory voting are more likely to change their outreach strategy form mobilization to persuasion. These data show that while compulsory voting, intuitively, should minimize mobilization efforts, levels of party outreach are actually similar to when voting is voluntary. Further evidence shows that this is likely because parties under CV are shifting their strategy from

mobilization to persuasion. At the same time that overall levels of party contact are similar, some interesting differences between compulsory and voluntary voting systems do emerge. When voting is voluntary, parties are significantly more likely to reach out to individuals with higher levels of education, while these differences are not apparent under compulsory voting. Outreach strategies do not seem to vary when taking into account party ideology, though this could be because party platforms may shift when voting is mandatory.

Taken together, these findings speak directly to the potential of compulsory voting to affect different aspects of the democratic process that extend beyond simply increasing voter turnout rates on election day. Compulsory voting does not necessarily alter citizens' attitudes towards voting in a positive or negative way, but it does alter patterns of political behavior when it comes to engaging with politics. This indicates that increased political engagement under CV is not necessarily a product of psychological or attitudinal changes per se, but likely a more rational calculation of when to invest on obtaining additional political information given the institutional context. At the same time, we know that it's not only citizens that respond to the institutional contexts—elites also take into account institutional design when making rational calculations on how to best achieve their goals. Given that campaign strategies can be different under compulsory voting, many more aspects of the political landscape (such as party ideological positions, and consequently, electoral gains) could be shaped by mandatory voting laws. The contributions this dissertation makes to our understanding of the impacts of compulsory voting laws also suggest several policy implications.

Policy Implications and Avenues for Future Research

The proposed theories and empirical evidence in this dissertation, first and foremost, offer interesting suggestions to practitioners in places where voting is voluntary. These implications speak to two different situations: occasions where adopting compulsory voting might be an appealing institutional innovation, and situations where a country might be considering abolishing compulsory voting. In the former case, a country with waning turnout rates should not necessarily be assumed to desire higher turnout. Voter ID laws and other efforts to suppress turnout in the United States are an example of a clear resistance against promoting electoral participation. Despite these concerns, research has shown that higher turnout in the United States may cause modest changes in electoral outcomes (Citrin, Schickler, and Sides 2003; Highton and Wolfinger 2001), suggesting that higher turnout could increase legitimacy and bolster participation but not be as damaging to the Republican Party as it may seem. For countries that welcome a reform like this, however, higher turnout via CV laws may come with additional ramifications.

These ramifications, in turn, could be viewed as either beneficial or detrimental. The fact that CV does not necessarily promote strong attitudinal effects amongst citizens could be a positive thing for those who fear the implementation of compulsory voting will lead to immediate attitudinal backlash. At the same time, it may be disappointing for some who believe instituting a legal requirement to vote will awaken feelings of civic duty amongst individuals. If anything, compulsory voting may slightly increase indifferent feelings towards voting, turning voting into a mundane task rather than extraordinary act.

While we can observe patterns of average levels of specific attitudes in a given country with or without compulsory voting, it is less clear whether adopting compulsory voting at the present moment would lead to a stronger change in attitudes towards voting. This is because in the sample studied in Chapter 2, compulsory voting has been existent for a long period of time and, therefore, become an ingrained part of society. Most individuals taking the surveys, for example, lived under compulsory voting rules their whole lives. It would thus be interesting to investigate how voters might react if compulsory voting were implemented in countries with a long-standing culture of voting as a voluntary act. It could be that in today's society, where democratic values of freedom and individual liberty are touted as essential, individuals would react more negatively to a legal requirement to vote. In the United States, for example, several Gallup surveys from 1960 to 2004 have consistently shown that approximately 70 percent of Americans believe compulsory voting to be a "poor law" (Panagopoulos, 2004). If the Colombian government decides to adopt compulsory voting laws in the near future, as it has recently debated, a closer examination of citizen attitudes towards voting pre and post reform in a context of long-standing voluntary practice could be a prominent avenue for future research. In the meantime, experimental work that simulates a legal requirement to turn out via the imposition of penalties (i.e., Shineman, forthcoming) could also be helpful in predicting not only political behavior, but also attitudinal outcomes.

It is perhaps harder to argue that having more individuals seeking out political information under compulsory voting could be a negative thing. If we believe that any information—however superficial it may be—can contribute to a more educated vote choice, then countries should welcome a more engaged citizenry. This finding provides

an answer to skeptical individuals who raise concerns about having a large pool of uninformed voters enter the electorate by implementing CV laws. I show that when voting is required, individuals (especially those with lower levels of education) tend to engage with political information at significantly higher rates. Given data limitations I am not able to show that this information will subsequently lead to higher rates of political knowledge or valid voting at the polls, but it does tells us that the likelihood individuals will blindly go to the polls when voting is mandatory is lower than what opponents of CV might argue.

At the same time, this research shows that while CV does have an impact on engagement beyond the ballot box, the impact is not as widespread as some proponents of this institutional design might argue. Compulsory voting does not necessarily lead a more politically active society in terms of direct political action. As my results in Chapter 3 demonstrate, compulsory voting does not promote discussion of politics among friends, or engaging in political activities such as working with parties or persuading others to think a certain way about politics. The effects of CV are primarily private and do not extend beyond the individual or the family. In this vein, the legal requirement to vote does not necessarily transform aggregate levels of political activity beyond turnout in a country, but can to a certain extent alter individual political engagement or even decisions at the ballot box.

Another important implication of this dissertation is that it also gives elites an idea of how they would be influenced if compulsory voting were to be implemented. Often, during debates on this institutional design, legislators will argue on many points regarding the influence it will have on voters, some of which were addressed in Chapters

2 and 3 (Senado 2012). But, it is also important for legislators to consider the effects CV may have on political campaigns and the political landscape. Evidence presented here suggests that, contrary to certain beliefs (Keaney and Rogers; Lijphart 1997), compulsory voting may not drive the costs of campaigns down. Former President Obama, for instance, was recently quoted saying "other countries have mandatory voting…it would be transformative if everybody voted—that would counteract money more than anything" (Somin 2015). If we focus solely on campaign spending on party outreach, that is likely not to be the case. Legislators will have to broaden their mobilization strategy to reach out to marginalized citizens, and will still invest in trying to persuade them for their votes. Given that party outreach is not the only aspect of campaign spending, however, future research should expand on our understanding of campaign investments once voting is compulsory.

The data limitations in this study do not permit a further investigation into changing campaign platforms and ideology under compulsory voting. A productive way to move this literature forward would be to survey or interview political elites in CV countries and obtain feedback as to how their political strategies are shaped by this institutional design. A closer examination into subnational campaign spending patterns in Chile, for example, could also provide useful information into how the abolition of compulsory voting altered campaign behavior. Research could also investigate campaign speeches and platforms before and after reform to capture any particular changes in how politicians have chosen to appeal to voters when presented with different institutional contexts.

While it is common to think about the evidence presented here and in related literature as a way to inform scholars and practioners on the benefits or consequences of adopting compulsory voting, it is also important to consider how this research can also inform those countries that have compulsory voting laws and may consider abandoning it. In fact, the abolition of compulsory voting has been more common than the adoption of it in the past 40-50 years. Chile, the most recent example of abandoning this institutional design, may have inspired other countries in the region to reconsider their election laws. Public opinion surveys conducted in Brazil, for example, have shown that compulsory voting is becoming increasingly unpopular amongst the population. Datafolha (2015), a public-opinion think thank in Brazil, shows that the percentage of people who are against the compulsory voting law has risen from 43 percent in 2008 to a high of 66 percent in 2015. Average rates of disapproval are highest amongst those with higher levels of education and income. This could be puzzling—perhaps indicating that even though those with lower socioeconomic status are more likely to suffer from the costs of turning out to vote under CV, they do not seem to resent the system as much. A deeper examination into the reasoning behind support or opposition to CV could also present an interest research agenda.

If a country like Brazil chooses to follow public opinion and abolish compulsory voting, however, they should be prepared to experience some of the patterns that are presented in this research. Overall rates of political engagement may decrease—particularly among less educated individuals. Campaign strategies will shift, and likely be less inclusive, but won't necessarily be less extensive, as we see that rates of outreach are similar under each system. A country like Brazil could also look to Chile's experience in

considering election reform. Prior to abandoning CV in 2010, about 78 percent of Chile's population opposed the legal requirement to vote while only 22 percent supported it, suggesting similar levels of disapproval of the current system in Brazil. But, levels of support for compulsory voting in Chile have recently risen up to almost 50 percent, suggesting Chilean citizens may be starting to regret the reform (CEP 2016). Carey and Horiuchi (2013) suggest that this buyer's remorse may be even stronger for Progressive Chileans, as public opinion towards economic redistribution appears to have shifted after the large drop-offs in participation. Drawing from the findings in this research, it could also be due to lower levels of political engagement now that voting is voluntary, and a shift on partisan strategies that have minimized efforts to mobilize marginalized citizens. Because the reform in Chile is still recent, other trends may be observed in future years that could help inform countries considering abolition. The theories and evidence presented in this dissertation, however, provide broader empirical answers to some of the debates surrounding the maximization of voter turnout through a legal requirement to vote.

Overall, this dissertations shows that the legal requirement to vote do not necessarily promote strong positive or negative feelings towards the democratic process, but does in fact increase levels of political engagement, and keeps political parties active and engaging with all types of voters. These findings help inform the debate on whether countries should adopt or abolish compulsory voting, by mitigating concerns on whether the adoption could have significant negative effects, and at the same time highlighting some of the beneficial aspects of CV that countries considering abolition may regret losing (e.g., lower rates of political engagement, more unequal party outreach).

Going forward, efforts to test some of the existing causal mechanisms that can't be properly captured through observational research designs will aid in our understanding of how maximizing turnout via CV laws influences the political realm. Yet, this dissertation has directly contributed to our understanding of how political institutions can affect political behavior, and the importance of electoral participation for the democratic process—which Dahl (1989, 322) considers "the most reliable means for protecting and advancing the good and interests of all the persons subject to collective decisions." Requiring that all citizens participate, then, may be a way to ensure that such interests get advanced.

Appendices

Appendix A: Chapter 2 Additional Tables and Figures

Table A1. Spanish Translation of the Dependent Variable

Language	Question	Answer Options	Source
Spanish	"¿Cuál de éstas frases esta más cerca de sus sentimientos cuando va a las urnas a votar?	1=Tengo un sentimiento de satisfacción 2=Lo hago sólo porque es mi deber 3=Me siento molesto, es un desperdicio de tiempo 4=No siento nada en particular 5=No voto	Latinobarometro 2010

Table A2. Countries in the Sample by Voting System

Country	Voting System	Enforced?
Colombia	Voluntary	-
El Salvador	Voluntary	-
Guatemala	Voluntary	-
Nicaragua	Voluntary	-
Venezuela	Voluntary	-
Argentina	Compulsory	Enforced
Bolivia	Compulsory	Unenforced
Brazil	Compulsory	Enforced
Chile	Compulsory	Enforced
Costa Rica	Compulsory	Unenforced
Dominican Republic	Compulsory	Unenforced
Ecuador	Compulsory	Enforced
Honduras	Compulsory	Unenforced
Mexico	Compulsory	Unenforced
Panama	Compulsory	Unenforced
Paraguay	Compulsory	Unenforced
Peru	Compulsory	Enforced
Uruguay	Compulsory	Enforced

Table A3. Description of Control Variables

Variable Name	Description & Coding	Source
Age	"Age of the Respondent."	Latinobarometro 2010
Female	"Sex of the Interviewee." 1=female; 0=male	Latinobarometro 2010
Education	"What level of education do you have? What was the last year you completed?" 0 years= 1(none or illiterate); 1-11 years=2 (less than HS); 12 years=3 (completed HS); more than 12 years=4 (some college or more)	Latinobarometro 2010
Political Interest	"How interested are you in politics?" 4=very interested; 3=some interested; 2=few interested; 1=not at all interested	Latinobarometro 2010
Satisfaction with Democracy	"In general, would you say that you are very satisfied, quite satisfied, not very satisfied or not at all satisfied with the working of the democracy in (country)?" 1=not at all satisfied; 2=not very satisfied; 3=quite satisfied; 4=very satisfied	Latinobarometro 2010
Voter	"If elections were held this Sunday, which party would you vote for?" 0= Wouldn't Vote; 1=everything else	Latinobarometro 2010
Income	I use principle component factor analysis to generate quintiles of wealth based on household assets. See Cordova (2009) for detail.	Latinobarometro 2010
Minority	"Ethnic group (code by observation)." 1=asian, black, indigenous, mestizo, mulato, or other race; 0=white	Latinobarometro 2010
GDP per capita	The Log of Gross Domestic Product (GDP) per capita for 2010	World Development Indicators 2016
Democracy Level	Freedom House Civil Liberties and Political Rights Ratings (1-7). The variable was transformed in order to report states with higher scores in the FH Scale as more democratic, while lower scores reflect less democratic states	Freedom House, 2016

Table A4. Descriptive Statistics

Variable	Min	Max	Mean	S.D.	N
Age	16	96	40.1	16.49107	20,204
Female	0	1	0.52	0.50	20,204
Education	1	4	2.34	0.84	20,204
Political Interest	1	4	1.93	0.94	19,946
Satisfaction with Democracy	1	4	2.41	0.87	19,316
Voter	0	1	0.78	0.41	19,420
Income	1	5	2.96	1.39	20,204
GDP per capita	7.31	9.5	8.64	0.67	20,204
Democracy Level	3	7	5.33	1.12	20,204

Table A5. The Impact of Compulsory Voting on Individual Attitudes Towards Voting (Abstention as the Baseline)

	Civic Duty	Resentment	Indifference	Satisfaction
Compulsory Voting	0.771	0.946	1.260*	0.680
	(0.616)	(0.588)	(0.589)	(0.421)
Age	0.037*	0.035*	0.025*	0.041*
	(0.003)	(0.003)	(0.003)	(0.003)
Female	-0.004	0.041	-0.008	-0.011
	(0.079)	(0.098)	(0.088)	(0.082)
Education	0.254*	0.168*	0.149*	0.250*
	(0.058)	(0.071)	(0.064)	(0.060)
Political Interest	0.279*	0.227*	0.170*	0.691*
	(0.051)	(0.062)	(0.056)	(0.052)
Satisfaction with Democracy	0.121*	-0.195*	-0.024	0.317*
	(0.047)	(0.060)	(0.053)	(0.049)
Voter	1.684*	1.065*	1.297*	2.320*
	(0.081)	(0.102)	(0.092)	(0.090)
Income	0.062*	0.088*	0.073*	0.137*
	(0.031)	(0.038)	(0.034)	(0.032)
Minority	0.062	-0.147	0.122	0.087
	(0.093)	(0.114)	(0.104)	(0.094)
GDP per capita	-0.096	-0.059	0.040	0.039
	(0.365)	(0.349)	(0.349)	(0.249)
Democracy Level	-0.144	-0.025	-0.261	-0.213
	(0.270)	(0.258)	(0.258)	(0.184)
Constant	-0.341	-1.978	-1.298	-3.911*
	(2.789)	(2.668)	(2.668)	(1.904)
Number of Observations	17,020			
Number of Countries	18			

Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline response of Abstention. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table A6. The Impact of Compulsory Voting on Individual Attitudes Towards Voting (Resentment as the Baseline)

	Civic Duty	Indifference	Satisfaction	Abstention
Compulsory Voting	-0.175	0.314*	-0.266	-0.946
	(0.114)	(0.127)	(0.202)	(0.588)
Age	0.002	-0.010*	0.006*	-0.035*
	(0.002)	(0.003)	(0.002)	(0.003)
Female	-0.045	-0.049	-0.052	-0.041
	(0.068)	(0.079)	(0.072)	(0.098)
Education	0.086	-0.019	0.082	-0.168*
	(0.046)	(0.054)	(0.049)	(0.071)
Political Interest	0.052	-0.056	0.465*	-0.227*
	(0.040)	(0.047)	(0.041)	(0.062)
Satisfaction with Democracy	0.316*	0.171*	0.512*	0.195*
	(0.042)	(0.048)	(0.044)	(0.060)
Voter	0.619*	0.232*	1.255*	-1.065*
	(0.074)	(0.086)	(0.084)	(0.102)
Income	-0.026	-0.014	0.049	-0.088*
	(0.026)	(0.031)	(0.028)	(0.038)
Minority	0.209*	0.270*	0.234*	0.147
	(0.079)	(0.092)	(0.083)	(0.114)
GDP per capita	-0.036	0.100	0.099	0.059
	(0.071)	(0.078)	(0.121)	(0.349)
Democracy Level	-0.119*	-0.236*	-0.188*	0.025
	(0.051)	(0.056)	(0.089)	(0.258)
Constant	1.637*	0.680	-1.933*	1.978
	(0.564)	(0.622)	(0.942)	(2.668)
Number of Observations	17,020			
Number of Countries	18			

Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline response of Resentment. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table A7. The Impact of Compulsory Voting on Individual Attitudes Towards Voting (Satisfaction as the Baseline)

	Civic Duty	Resentment	Indifference	Abstention
Compulsory Voting	0.091	0.266	0.580*	-0.680
	(0.211)	(0.202)	(0.193)	(0.421)
Age	-0.004*	-0.006*	-0.016*	-0.041*
	(0.001)	(0.002)	(0.002)	(0.003)
Female	0.008	0.052	0.004	0.011
	(0.038)	(0.072)	(0.056)	(0.082)
Education	0.004	-0.082	-0.101*	-0.250*
	(0.025)	(0.049)	(0.038)	(0.060)
Political Interest	-0.413*	-0.465*	-0.521*	-0.691*
	(0.020)	(0.041)	(0.032)	(0.052)
Satisfaction with Democracy	-0.196*	-0.512*	-0.341*	-0.317*
	(0.022)	(0.044)	(0.034)	(0.049)
Voter	-0.635*	-1.255*	-1.023*	-2.320*
	(0.056)	(0.084)	(0.071)	(0.090)
Income	-0.075*	-0.049^	-0.063*	-0.137*
	(0.015)	(0.028)	(0.022)	(0.032)
Minority	-0.025	-0.234*	0.036	-0.087
	(0.045)	(0.083)	(0.068)	(0.094)
GDP per capita	-0.135	-0.099	0.001	-0.039
	(0.125)	(0.121)	(0.114)	(0.249)
Democracy Level	0.069	0.188*	-0.048	0.213
	(0.092)	(0.089)	(0.084)	(0.184)
Constant	3.570*	1.933*	2.613*	3.911*
	(0.965)	(0.942)	(0.890)	(1.904)
Number of Observations	17,020			
Number of Countries	18			

Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline response of Satisfaction. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table A8. The Impact of Compulsory Voting on Individual Attitudes Towards Voting (Dichotomous Outcomes)

	Duty	Resentment	Indifference	Satisfaction	Don't Vote
Compulsory Voting	-0.037	0.178	0.560***	-0.137	-0.716
	(0.193)	(0.178)	(0.162)	(0.232)	(0.528)
Age	0.003***	0.001	-0.011***	0.008***	-0.037***
	(0.001)	(0.002)	(0.002)	(0.001)	(0.003)
Female	0.001	0.047	-0.003	-0.014	0.006
	(0.031)	(0.067)	(0.050)	(0.036)	(0.078)
Education	0.036	-0.049	-0.078*	0.062*	-0.299***
	(0.021)	(0.046)	(0.035)	(0.024)	(0.059)
Political Interest	-0.205***	-0.151***	-0.220***	0.447***	-0.385***
	(0.017)	(0.039)	(0.029)	(0.019)	(0.050)
Satisfaction with Democracy	-0.035	-0.327***	-0.165***	0.235***	-0.112*
	(0.019)	(0.041)	(0.030)	(0.022)	(0.047)
Voter	0.147***	-0.552***	-0.300***	0.888***	-1.724***
	(0.039)	(0.073)	(0.057)	(0.054)	(0.080)
Income	-0.037**	0.009	-0.010	0.070***	-0.073*
	(0.012)	(0.026)	(0.019)	(0.014)	(0.030)
Minority	0.038	-0.189*	0.055	0.011	-0.035
	(0.040)	(0.081)	(0.064)	(0.046)	(0.092)
GDP per capita	-0.117	-0.079	0.060	0.095	0.041
	(0.115)	(0.112)	(0.098)	(0.137)	(0.314)
Democracy Level	0.055	0.159*	-0.110	-0.076	0.099
	(0.085)	(0.081)	(0.072)	(0.101)	(0.232)
Constant	0.965	-1.531	-0.852	-4.153***	0.685
	(0.882)	(0.857)	(0.754)	(1.054)	(2.405)
# of Observations	17,020	17,020	17,020	17,020	17,020
# of Countries	18	18	18	18	18

Notes: Estimated coefficients indicate the impact of each independent variable on the probability of selecting the dependent variable listed at the top. Coefficients are statistically significant at *p<.05;**p<.01;***p<.001. Standard errors in parentheses.

Table A9. The Impact of Enforced Compulsory Voting on Individual Attitudes Towards Voting (Civic Duty as the Baseline)

	Resentment	Indifference	Satisfaction	Abstain
Unenforced CV	0.195	0.501***	-0.019	-0.613
	(0.117)	(0.090)	(0.207)	(0.612)
Enforced CV	0.131	0.463***	-0.274	-1.074
	(0.127)	(0.098)	(0.240)	(0.719)
Age	-0.002	-0.012***	0.004***	-0.037***
	(0.002)	(0.002)	(0.001)	(0.003)
Female	0.045	-0.004	-0.007	0.004
	(0.068)	(0.052)	(0.038)	(0.079)
Education	-0.086	-0.105**	-0.003	-0.256***
	(0.046)	(0.035)	(0.025)	(0.058)
Political Interest	-0.052	-0.108***	0.412***	-0.280***
	(0.040)	(0.031)	(0.020)	(0.051)
Satisfaction with	-0.316***	-0.145***	0.196***	-0.122*
Democracy	(0.042)	(0.031)	(0.022)	(0.047)
Voter	-0.617***	-0.387***	0.638***	-1.687***
	(0.074)	(0.059)	(0.056)	(0.081)
Income	0.025	0.011	0.075***	-0.061*
	(0.026)	(0.020)	(0.015)	(0.031)
Minority	-0.214**	0.059	0.016	-0.055
	(0.080)	(0.063)	(0.046)	(0.093)
GDP per capita	0.053	0.145**	0.196	0.209
	(0.075)	(0.054)	(0.127)	(0.376)
Democracy Level	0.121*	-0.115**	-0.053	0.160
	(0.051)	(0.038)	(0.088)	(0.262)
Constant	-1.782**	-1.042*	-4.140***	-0.675
	(0.604)	(0.446)	(1.003)	(2.958)
# of Observations	17,020			
# of Countries	18			

Notes: Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline response of Civic Duty. Coefficients are statistically significant at *p<.05;**p<.01;***p<.001. Standard errors in parentheses.

Table A10. The Impact of Compulsory Voting on Individual Attitudes Towards Voting, Conditional on Voting Behavior (Civic Duty as the Baseline)

	Resentment	Indifference	Satisfaction	Abstain
Compulsory Voting	0.091	0.133	0.007	-0.825*
	(0.171)	(0.131)	(0.259)	(0.140)
Voter	-0.675*	-0.748*	0.725*	-1.795*
	(0.170)	(0.126)	(0.117)	(0.139)
*Compulsory Voting*Voter*	0.081	0.455*	-0.111	0.167
	(0.188)	(0.142)	(0.133)	(0.168)
Age	-0.002	-0.012*	0.004*	-0.037*
	(0.002)	(0.002)	(0.001)	(0.003)
Female	0.046	-0.001	-0.011	0.020
	(0.068)	(0.052)	(0.038)	(0.077)
Education	-0.088	-0.105*	0.031	-0.171*
Political Interest	-0.050	-0.107*	0.416*	-0.288*
	(0.040)	(0.031)	(0.020)	(0.050)
Satisfaction with Democracy	-0.322*	-0.149*	0.184*	-0.137*
	(0.042)	(0.031)	(0.022)	(0.046)
Income	0.025	0.011	0.069*	-0.093*
	(0.026)	(0.020)	(0.015)	(0.029)
Minority	-0.235*	0.042	-0.019	-0.350*
	(0.078)	(0.061)	(0.047)	(0.085)
GDP per capita	0.024	0.129*	0.116	0.032
	(0.069)	(0.049)	(0.137)	(0.072)
Democracy Level	0.127*	-0.110*	-0.074	0.201*
	(0.049)	(0.036)	(0.101)	(0.052)
Constant	-1.489*	-0.637	-3.506*	0.968
	(0.552)	(0.406)	(1.053)	(0.590)
Number of Observations	17,020			
Number of Countries	18			

Notes: Estimated coefficients indicate the impact of each independent variable on the probability of selecting the dependent variable over the baseline (Civic Duty). Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table A11. The Impact of Compulsory Voting on Individual Attitudes Towards Voting, Conditional on Political Interest (Civic Duty as the Baseline)

	Resentment	Indifference	Satisfaction	Abstain
Compulsory Voting	0.142	0.254	-0.363	-0.821*
	(0.208)	(0.155)	(0.247)	(0.205)
Political Interest	-0.051	-0.202*	0.321*	-0.328*
	(0.091)	(0.069)	(0.039)	(0.090)
*Compulsory Voting*Political Interest*	0.005	0.120	0.130*	0.054
	(0.100)	(0.076)	(0.045)	(0.107)
Age	-0.002	-0.012*	0.004*	-0.037*
	(0.002)	(0.002)	(0.001)	(0.003)
Female	0.045	-0.004	-0.011	0.018
	(0.068)	(0.052)	(0.038)	(0.077)
Education	-0.088	-0.105*	0.031	-0.172*
	(0.047)	(0.035)	(0.025)	(0.053)
Satisfaction with Democracy	-0.322*	-0.149*	0.184*	-0.136*
	(0.042)	(0.031)	(0.022)	(0.046)
Voter	-0.612*	-0.383*	0.643*	-1.676*
	(0.074)	(0.058)	(0.056)	(0.078)
	(0.026)	(0.020)	(0.015)	(0.029)
Minority	-0.235*	0.041	-0.017	-0.350*
	(0.078)	(0.061)	(0.047)	(0.085)
GDP per capita	0.025	0.134*	0.122	0.037
	(0.069)	(0.049)	(0.136)	(0.072)
Democracy Level	0.126*	-0.114*	-0.077	0.198*
	(0.049)	(0.036)	(0.100)	(0.052)
Constant	-1.537*	-0.761	-3.264*	0.945
	(0.554)	(0.407)	(1.047)	(0.594)
Number of Observations	17,020			
Number of Countries	18			

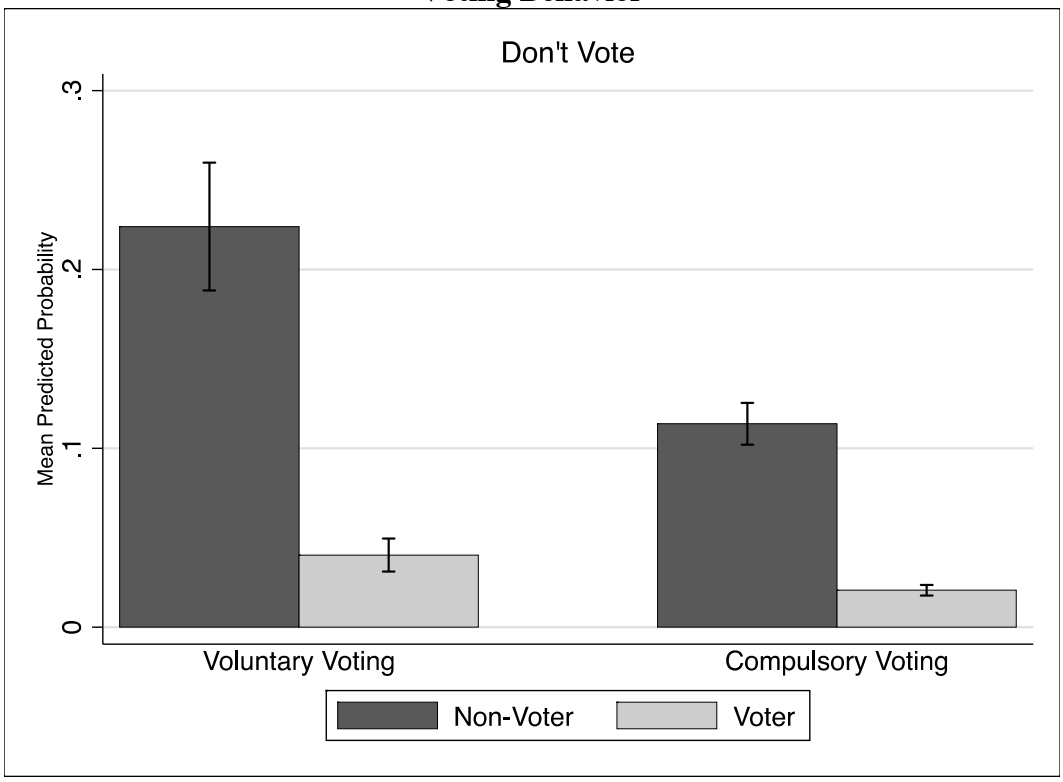
Notes: Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline (Civic Duty). Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table A12. The Impact of Compulsory Voting on the Civic Duty to Vote

	Civic Duty to Vote
Compulsory Voting	0.041
	(0.191)
Age	0.003**
	(0.001)
Female	0.103**
	(0.036)
Education	0.005
	(0.025)
Political Interest	0.054**
	(0.020)
Satisfaction with Democracy	0.098***
	(0.022)
Voter	0.341***
	(0.043)
Income	0.019
	(0.014)
Minority	-0.001
	(0.045)
GDP per capita	0.155
	(0.115)
Democracy Level	-0.158
	(0.084)
Constant	-0.297
	(0.878)
Number of Observations	16,984
Number of Countries	18

Notes: Hierarchical Logit Models. Coefficients are statistically significant at *p<.05;**p<.01;***p<.001 *p<.05. Standard errors in parentheses.

Figure A1. Predicted Probability of Selecting "I Don't Vote" by Voting System and Voting Behavior



Notes: Figure A1 shows the predicted probability of selecting "I Don't Vote," conditioned by being a voter or not. Confidence intervals indicate statistical significant differences at the 95% confidence level. Estimates were calculated from results presented in Table A10 in Appendix A.

Appendix B: Chapter 3 Additional Tables and Figures

Table B1. List of Surveys Available Pre and Post Election Reform

Survey #	Year	Month	# of Individuals	Voting Compulsory?
Survey 1	2005	June	1,501	Yes
Survey 2	2007	November	1,492	Yes
Survey 3	2008	November	1,492	Yes
Survey 4	2009	October	1,495	Yes
Survey 5	2010	June	1,488	Yes
2011: Compulsory Voting Abolished				
Survey 6	2013	July	1,471	No
Survey 7	2014	July	1,434	No
Survey 8	2015	August	1,389	No
Survey 9	2015	November	1,425	No
Survey 10	2016	June	1,392	No
Survey 11	2016	November	1,453	No

Table B2. Spanish Translations of Dependent Variables

Language	Primary Question	Source
Spanish	*"Para cada actividad que le nombraré indique si Ud. la realiza frecuentemente, a veces, o nunca."*	CEP (Centro de Estudios Públicos)

Variable	Sub-Question	Answer Options
Watch Politics	*"Mira programas politicos en television"*	*1=Nunca* *2=A Veces* *3=Frequentemente*
Read Politics	*"Lee noticias sobre politica"*	*1=Nunca* *2=A Veces* *3=Frequentemente*
Talk Politics with Family	*"Conversa en familia sobre politica"*	*1=Nunca* *2=A Veces* *3=Frequentemente*
Talk Politics with Friends	*"Conversa con Amigos sobre politica"*	*1=Nunca* *2=A Veces* *3=Frequentemente*
Persuade	*"Trata de convencer a alguien de lo que Ud. Piensa politicamente"*	*1=Nunca* *2=A Veces* *3=Frequentemente*
Work with Party	*"Trabaja o ha trabajado para un partido o candidato"*	*1=Nunca* *2=A Veces* *3=Frequentemente*

Table B3. Description of Control Variables

Variable Name	Description & Coding	Source
Female	"Sex" 1=female; 0=male	CEP (Centro de Estudios Publicos)
Age	"What is your age?" age of the respondent	CEP (Centro de Estudios Publicos)
Education	"What is your educational level?" 0=none; 1=primary incomplete; 2=primary complete; 3=middle incomplete; 4=middle complete; 5=high school incomplete; 6=high school complete; 7=university incomplete; 8=university complete; 9=post-graduate	CEP (Centro de Estudios Publicos)
*Income**	"What is your monthly income" 1=less than $35000; 2=35001-56000; 3=56001-78000; 4=78001-101000; 5=101001-134000; 6=134001-179000; 7=179001-224000; 8=224001-291000; 9=29101-358000; 10=358001-448000; 11=48001-1000000; 12=10000012000000; 13=2000001-3000000;14=more than 3000000	CEP (Centro de Estudios Publicos)
Rural	"Urban or Rural zone?" 1=rural; 0=urban	CEP (Centro de Estudios Publicos)
Presidential Election	"Did a presidential election take place the year of the survey?" 1=yes; 0=no	Servicio Electoral de Chile (SERVEL)
Municipal Election	"Did a municipal election take place the year of the survey?" 1=yes; 0=no	Servicio Electoral de Chile (SERVEL)
GDP growth	GDO growth (annual %); lagged by one year	World Development Indicators (World Bank)

**Note: ***Income is measured in Chilean pesos. To compare, 1,000 Chilean Pesos equals approximately $1.51 US Dollars. A value of 1 in this measure would indicate a monthly income of approximately $52 dollars.

Table B4. Descriptive Statistics

Variable	Min	Max	Mean	S.D.	N
Female	0	1	0.59	0.49	16,176
Age	18	98	47.50	18.00	16,168
Education	0	9	3.70	2.22	15,929
Income	1	14	6.49	3.23	11,211
Rural	0	1	0.16	0.36	16,176
Presidential Election	0	1	0.27	0.44	16,176
Municipal Election	0	1	0.27	0.44	16,176
GDP Growth	-1.03	6.04	3.26	1.97	16,176

Table B5. The Effect of Compulsory Voting on Political Engagement, Conditional on Education

	Read Politics	Watch Politics
Compulsory Voting	0.498***	0.498***
	(0.092)	(0.081)
Education	0.346***	0.246***
	(0.014)	(0.014)
*Compulsory Voting * Education*	-0.029	-0.025
	(0.018)	(0.017)
Female	-0.373***	-0.402***
	(0.041)	(0.039)
Age	0.005***	0.011***
	(0.001)	(0.001)
Income	0.056***	0.034***
	(0.007)	(0.007)
Rural	-0.469***	-0.181***
	(0.059)	(0.052)
Presidential Election	0.130	0.175*
	(0.084)	(0.072)
Municipal Election	-0.038	-0.139*
	(0.074)	(0.063)
GDP per capita	0.045**	0.037*
	(0.017)	(0.015)
Constant	2.072***	1.449***
	(0.120)	(0.111)
# of Observations	11,014	11,023
# of Surveys	11	11

Note: Hierarchical Ordered Logit Models. Coefficients are statistically significant at *p<.05;**p<.01;***p<.001. Standard errors in parentheses

Table B6. The Effect of Compulsory Voting on Political Engagement, Controlling for Registration

	Read Politics	Watch Politics	Talk Politics w/ Family	Talk Politics w/ Friends	Persuade Others	Work w/ Party
Compulsory Voting	0.469*	0.475*	0.224*	0.138*	0.045	0.142
	(0.063)	(0.054)	(0.046)	(0.067)	(0.088)	(0.128)
Female	-0.380*	-0.408*	0.018	-0.512*	-0.234*	-0.168*
	(0.041)	(0.039)	(0.041)	(0.042)	(0.054)	(0.074)
Age	0.003*	0.008*	-0.003*	-0.006*	-0.007*	0.010*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Education	0.329*	0.231*	0.269*	0.281*	0.110*	0.188*
	(0.011)	(0.011)	(0.011)	(0.011)	(0.014)	(0.019)
Income	0.053*	0.033*	0.042*	0.053*	0.014	0.027*
	(0.007)	(0.007)	(0.007)	(0.008)	(0.010)	(0.014)
Rural	-0.480*	-0.190*	-0.195*	-0.242*	-0.275*	-0.274*
	(0.059)	(0.052)	(0.056)	(0.060)	(0.080)	(0.117)
Registered	0.364*	0.296*	0.367*	0.308*	0.067	0.405*
	(0.068)	(0.066)	(0.069)	(0.071)	(0.090)	(0.141)
Presidential Election	0.129	0.173*	0.177*	0.262*	0.290*	0.083
	(0.085)	(0.072)	(0.059)	(0.091)	(0.119)	(0.176)
Municipal Election	-0.033	-0.136*	0.080	0.173*	0.199	-0.057
	(0.074)	(0.063)	(0.053)	(0.079)	(0.103)	(0.153)
GDP per capita	0.042*	0.035*	0.025*	0.029	0.012	0.035
	(0.018)	(0.015)	(0.012)	(0.019)	(0.025)	(0.037)
Constant	2.209*	1.563*	1.910*	1.786*	1.909*	4.262*
	(0.120)	(0.112)	(0.112)	(0.125)	(0.159)	(0.236)
# of Observations	10,999	11,008	10,997	10,996	10,995	10,982
# of Surveys	11	11	11	11	11	11

Note: Hierarchical Ordered Logit Models. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table B7. The Effect of Compulsory Voting on Political Engagement, Only Registered Voters

	Read Politics	Watch Politics	Talk Politics w/ Family	Talk Politics w/ Friends	Persuade Others	Work w/ Party
Compulsory Voting	0.465*	0.474*	0.226*	0.155*	0.070	0.123
	(0.066)	(0.054)	(0.045)	(0.065)	(0.088)	(0.134)
Female	-0.386*	-0.423*	-0.004	-0.523*	-0.242*	-0.158*
	(0.044)	(0.042)	(0.044)	(0.045)	(0.058)	(0.077)
Age	0.003*	0.009*	-0.002	-0.006*	-0.006*	0.010*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Education	0.339*	0.242*	0.284*	0.291*	0.118*	0.203*
	(0.012)	(0.011)	(0.012)	(0.012)	(0.015)	(0.019)
Income	0.055*	0.035*	0.043*	0.057*	0.021*	0.023
	(0.008)	(0.008)	(0.008)	(0.008)	(0.011)	(0.014)
Rural	-0.438*	-0.169*	-0.151*	-0.197*	-0.198*	-0.204
	(0.062)	(0.055)	(0.059)	(0.064)	(0.084)	(0.119)
Presidential Election	0.141	0.183*	0.186*	0.233*	0.260*	0.162
	(0.092)	(0.076)	(0.062)	(0.091)	(0.123)	(0.187)
Municipal Election	-0.059	-0.155*	0.068	0.170*	0.171	-0.063
	(0.079)	(0.065)	(0.053)	(0.077)	(0.104)	(0.161)
GDP per capita	0.040*	0.029	0.021	0.030	0.001	0.023
	(0.019)	(0.016)	(0.013)	(0.019)	(0.026)	(0.040)
Constant	1.932*	1.354*	1.622*	1.563*	1.954*	3.878*
	(0.126)	(0.115)	(0.114)	(0.126)	(0.164)	(0.233)
# of Observations	9,673	9,681	9,675	9,673	9,671	9,659
# of Surveys	11	11	11	11	11	11

Note: Hierarchical Ordered Logit Models. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Table B8. The Effect of Compulsory Voting on Political Engagement, Age 40 or Above

	Read Politics	Watch Politics	Talk Politics w/ Family	Talk Politics w/ Friends	Persuade Others	Work w/ Party
Compulsory Voting	0.460*	0.447*	0.188*	0.091	-0.027	-0.046
	(0.067)	(0.054)	(0.054)	(0.087)	(0.106)	(0.165)
Female	-0.391*	-0.443*	-0.014	-0.611*	-0.325*	-0.210*
	(0.053)	(0.050)	(0.053)	(0.055)	(0.073)	(0.093)
Age	0.007*	0.010*	-0.004	-0.006*	0.002	0.012*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)
Education	0.329*	0.237*	0.269*	0.278*	0.113*	0.203*
	(0.014)	(0.014)	(0.014)	(0.015)	(0.019)	(0.023)
Income	0.080*	0.047*	0.062*	0.073*	0.040**	0.039*
	(0.011)	(0.010)	(0.010)	(0.011)	(0.015)	(0.019)
Rural	-0.434*	-0.175*	-0.145*	-0.178*	-0.268*	-0.170
	(0.073)	(0.063)	(0.070)	(0.076)	(0.104)	(0.138)
Presidential Election	0.206*	0.202*	0.174*	0.283*	0.368*	0.132
	(0.092)	(0.073)	(0.074)	(0.123)	(0.149)	(0.228)
Municipal Election	-0.051	-0.149*	0.057	0.175	0.207	-0.132
	(0.080)	(0.064)	(0.064)	(0.104)	(0.126)	(0.196)
GDP per capita	0.033	0.023	0.018	0.027	0.006	0.053
	(0.019)	(0.015)	(0.015)	(0.026)	(0.031)	(0.049)
Constant	2.323*	1.432*	1.605*	1.548*	2.509*	4.120*
	(0.183)	(0.167)	(0.176)	(0.199)	(0.257)	(0.343)
# of Observations	6,972	6,978	6,978	6,973	6,972	6,965
# of Surveys	11	11	11	11	11	11

Note: Hierarchical Ordered Logit Models. Coefficients are statistically significant at *p<.05. Standard errors in parentheses.

Appendix C: Chapter 4 Additional Tables and Figures

Table C1. List of Countries in the Sample

Country	Post-Election Survey Year	Compulsory Voting
Australia	2013	Yes
Austria	2013	No
Brazil	2014	Yes
Bulgaria	2014	No
Canada	2011	No
Czech Republic	2013	No
France	2012	No
Germany	2013	No
Greece	2012	Yes
Iceland	2013	No
Ireland	2011	No
Israel	2013	No
Japan	2013	No
Mexico	2012	Yes
Mexico	2015	Yes
Montenegro	2012	No
New Zealand	2011	No
Norway	2013	No
Poland	2011	No
Portugal	2015	No
Serbia	2012	No
Slovenia	2011	No
South Korea	2012	No
Sweden	2014	No
Switzerland	2011	No
Taiwan*	2012	No
Thailand	2011	Yes
Turkey	2015	Yes
United States	2012	No

*Because important aggregate level data is missing for Taiwan, it is not included in the main empirical analyses

Table C2. Description of Control Variables

Variable Name	Description & Coding	Source
Education	"Highest level of education of the respondent" 1=none or less than primary; 2= primary or incomplete secondary; 3=secondary complete and some tertiary; 4=college or more	CSES
Female	"Gender of the respondent" 1=female; 0=male	CSES
Age	"Age of respondent in year"	CSES
Party Attachment	"are you close to any political party?" 1=yes; 0=no	CSES
Presidential Election	"type of election prior to survey" 1= presidential; 0=parliamentary	CSES
PR System	"Does the country have a proportional representation system?" 1=yes; 0=no	Database of Political Institutions (DPI)
Effective # of Parties	Effective number of electoral parties (ENEP)	CSES
Democracy Level	Freedom House Scores 1=full autocracy; 7=full democracy	Freedom House
GDP per capita	Log of GDP per capita during election year	World Development Indicators (World Bank)

Table C3. Descriptive Statistics

Variable	Min	Max	Mean	S.D.	N
Education	1	4	2.92	0.80	49259
Female	0	1	0.52	0.50	49670
Age	16	103	49.00	17.48	49296
Party Attachment	0	1	0.45	0.50	46126
Presidential Election	0	1	0.22	0.42	49837
PR System	0	1	0.54	0.50	49837
Effective # of Parties	2.19	14.1	5.24	2.68	49837
Democracy Level	4	7	6.53	0.81	49837
Log of GDP per capita	8.54	11.53	10.26	0.833	49837

Table C4. The Influence of Compulsory Voting on Left-Leaning and Right-Leaning Party Outreach (excluding those contacted by both parties)

	(3) Left-Leaning Outreach	(4) Right-Leaning Outreach
Compulsory Voting	-0.918	0.428
	(0.827)	(0.577)
Education	0.234***	0.260***
	(0.033)	(0.031)
Female	0.015	-0.001
	(0.045)	(0.042)
Age	0.001	0.001
	(0.001)	(0.001)
Party Attachment	0.618***	0.407***
	(0.049)	(0.046)
Ideology	-0.080***	0.113***
	(0.009)	(0.009)
Presidential Election	-0.379*	-1.191***
	(0.186)	(0.173)
PR System	-1.419**	-0.429
	(0.543)	(0.378)
Effective # of Parties	0.130	0.093
	(0.100)	(0.071)
Democracy Level	-0.876	-0.650
	(0.637)	(0.445)
GDP per capita	0.341	1.091***
	(0.474)	(0.331)
Constant	-0.714	-11.234***
	(3.453)	(2.505)
Num. Individuals	27,351	27,351
Num. Countries	24	24

Note: Hierarchical logit models. Coefficients are statistically significant at *p<.05; **p<.01; ***p<.001. Standard errors in parentheses.

Table C5. Compulsory Voting and Type of Party Outreach (Multinomial Models, Left Outreach as the Baseline)

	(3) No Outreach	(4) Right-Leaning Outreach
Compulsory Voting	-6.916	-6.511
	(11.305)	(10.590)
Education	-0.291***	0.024
	(0.030)	(0.039)
Female	0.005	-0.030
	(0.042)	(0.053)
Age	-0.000	0.000
	(0.001)	(0.002)
Party Attachment	-0.711***	-0.159**
	(0.045)	(0.058)
Presidential Election	-1.297	-2.911
	(2.052)	(1.926)
PR System	-6.361	-6.537
	(7.421)	(6.972)
Effective # of Parties	-1.624	-1.381
	(1.330)	(1.251)
Democracy Level	-12.957	-12.987
	(8.782)	(8.306)
GDP per capita	5.179	5.732
	(6.454)	(6.057)
Constant	57.810	47.376
	(48.514)	(45.604)
Num. Individuals	37,420	37,420
Num. Countries	24	24

Notes: Estimated coefficients indicate the impact of each independent variable on the probability of selecting one of the options listed above over the baseline (Left-Leaning Contacted). Coefficients are statistically significant at *p<.05; **p<.01; ***p<.001. Standard errors in parentheses.

Table C6. The Influence of Compulsory Voting on Left-Leaning and Right-Leaning Party Outreach, by Individual Ideology

	(3) Left-Leaning Outreach	(4) Right-Leaning Outreach
Compulsory Voting	-1.055	0.651
	(0.836)	(0.585)
Ideology (Middle)	-0.590***	0.415***
	(0.070)	(0.079)
Ideology (Right)	-0.657***	0.853***
	(0.076)	(0.080)
*CV*Ideology(Middle)*	0.195	-0.200
	(0.122)	(0.126)
*CV*Ideology(Right)*	0.209	-0.340**
	(0.126)	(0.129)
Female	0.012	0.004
	(0.045)	(0.042)
Age	0.001	0.001
	(0.001)	(0.001)
Party Attachment	0.569***	0.410***
	(0.050)	(0.047)
Education	0.230***	0.254***
	(0.033)	(0.031)
Presidential Election	-0.397*	-1.160***
	(0.187)	(0.173)
PR System	-1.436**	-0.430
	(0.547)	(0.378)
Effective # of Parties	0.129	0.093
	(0.101)	(0.071)
Democracy Level	-0.863	-0.660
	(0.641)	(0.445)
GDP per capita	0.350	1.081**
	(0.477)	(0.331)
Constant	-0.780	-10.936***
	(3.476)	(2.505)
Num. Individuals	27,351	27,351
Num. Countries	24	24

Note: Hierarchical logit models. Coefficients are statistically significant at *p<.05; **p<.01; ***p<.001. Standard errors in parentheses.

Table C.7. The Influence of Party Contact on Voting, by Voting Law

	(1) Voted
Compulsory Voting	0.591
	(0.516)
Party Contact	0.561***
	(0.044)
*Compulsory Voting*Party Contact*	-0.051
	(0.094)
Education	0.457***
	(0.022)
Female	-0.038
	(0.030)
Age	0.019***
	(0.001)
Party Attachment	1.117***
	(0.036)
Presidential Election	0.402**
	(0.132)
PR System	0.238
	(0.315)
Effective # Parties	-0.027
	(0.062)
Democracy Level	-0.687
	(0.370)
GDP per capita	0.660*
	(0.294)
Constant	-3.257
	(1.931)
# of Observations	41,781
# of Countries	27

Note: Hierarchical Logit Models. Coefficients are statistically significant at *p<.05;**p<.01;***p<.001 *p<.05. Standard errors in parentheses.

Table C8. The Influence of Party Attachment on Party Contact, by Voting Law

	(1) Party Contact
Compulsory Voting	-0.434
	(0.600)
Party Attachment (Somewhat Close)	0.193***
	(0.049)
Party Attachment (Very Close)	0.580***
	(0.059)
*Compulsory Voting*Party Attachment (Somewhat Close)*	0.131
	(0.083)
*Compulsory Voting*Party Attachment (Very Close)*	-0.193*
	(0.096)
Education	0.296***
	(0.021)
Female	-0.003
	(0.030)
Age	0.004***
	(0.001)
Presidential Election	-1.493***
	(0.147)
PR System	-1.347***
	(0.366)
Effective # Parties	0.199**
	(0.072)
Democracy Level	-0.651
	(0.431)
GDP per capita	0.621
	(0.343)
Constant	-3.814
	(2.243)
# of Observations	24,103
# of Countries	27

Note: Hierarchical Logit Models. Coefficients are statistically significant at *p<.05;**p<.01;***p<.001 *p<.05. Standard errors in parentheses.

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Summer Program in Quantitative Methods, *University of Michigan*

Peer-Reviewed Publications

Córdova, Abby, and **Gabriela Rangel**. 2017. "Addressing the Gender Gap: The Effect of Compulsory Voting on Women's Electoral Engagement." *Comparative Political Studies*, 50(2): 264-290.

- *Featured in UKNOW*

Barnes, Tiffany D., and **Gabriela Rangel**. 2014. "Election Law Reform in Chile: The Implementation of Automatic Registration and Voluntary Voting." *Election Law Journal*, 13(4): 570-582.

Working Papers

"Subnational Patterns of Participation: Compulsory Voting and the Conditional Impact of Institutional Design" (with Tiffany Barnes). *Under Review*.

"Does Mandatory Turnout Promote Civic Duty? Evidence from Latin America."

"Engaging in Politics When Voting is Mandatory: Evidence from Chile's Election Law Reform."

"Campaigning Under Compulsory Voting: A Cross-National Analysis of Partisan Outreach."

"Protests and States of Emergency" (with Jaclyn Johnson).

Conference Presentations

"More Turnout, More Protest: How Compulsory Voting Affects Civic Behavior," presented at the *Ohio Association of Economists and Political Scientists*, 2016.

"Does Compulsory Voting Promote Civic Duty or Resentment? Evidence from Latin America," presented at the *Midwest Political Science Association*, 2016.

"Protest Variations and the Imposition of States of Emergency" (with Jaclyn Johnson), presented at the *Midwest Political Science Association*, 2016.

"Does Compulsory Voting Promote Civic Duty or Resentment? Evidence from Latin America," presented at the *Kentucky Political Science Association*, 2016.

"Protest Variations and the Imposition of States of Emergency" (with Jaclyn Johnson), presented at the *Southern Political Science Association*, 2016.

"Stretching the Constitutional Order: The Concentration of Executive Power Through States of Emergency and Martial Law," presented at the *Midwest Political Science Associati*on, 2015.

"Addressing the Gender Gap: The Impact of Compulsory Voting on Female Political Engagement" (with Abby Córdova), presented at the *Midwest Political Science Association*, 2014.

"When and How Institutions Matter: Election Law Reform and Voter Participation in Chile" (with Tiffany D. Barnes), presented at the *Kentucky Political Science Association*, 2014.

"De Obligatorio a Voluntario: Participación Electoral en las Elecciones Municipales de Chile" (with Tiffany D. Barnes), presented at the *Congreso Nacional de Ciencia Politica*, 2013.

Other Conference Participation

Panel Discussant, Ohio Association of Economists and Political Scientists, 2016.

Awards and Fellowships

Malcom E. Jewell Award for Outstanding Political Science Graduate Student, Department of Political Science, University of Kentucky, 2017.

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Best Graduate Student Paper Award Runner-Up, Ohio Association of Economists and

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Head Teaching Assistant, Department of Political Science, University of Kentucky, 2016.

Summer Research Award, Department of Political Science, University of Kentucky, 2016 ($2000).

Prestage-Cook Award, travel to Southern Political Science Association Meeting in Puerto Rico, 2016 ($300).

Outstanding Teaching Assistant Award, College of Arts and Sciences, University of Kentucky, 2015.

Emerging Global Scholars Award, Department of Political Science, University of Kentucky, 2015.

Travel Grant for Field Research, Latin American, Caribbean, and Latino Studies Program, University of Kentucky, 2015, ($700) (Declined).

David Hughes Memorial Award Nomination, Kentucky Political Science Association, for “Addressing the Gender Gap: The Impact of Compulsory Voting on Women's Political Engagement"(with Abby Córdova), 2015.

Teaching Assistance Fellowship, Latin American, Caribbean, and Latino Studies Program, University of Kentucky, 2014-2015.

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