The impact of compulsory voting on inequality and the quality of the vote

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ABSTRACT
Democratic elections imply that the electorate holds incumbents accountable for past performance, and that voters select the party that is closest to their own political preferences. Previous research shows that both elements require political sophistication. A number of countries throughout the world have a system of compulsory voting, and this legal obligation boosts levels of voter turnout. Under such rules, citizens with low levels of sophistication in particular are thought to turn out to vote in higher numbers. Is it the case that the quality of the vote is reduced when these less sophisticated voters are compelled to vote? This article investigates this claim by examining the effect of compulsory voting on accountability and proximity voting. The results show that compulsory voting reduces stratification based on knowledge and level of education, and proximity voting, but it does not have an effect on economic accountability. The article concludes with some suggestions on how systems of compulsory voting might mitigate the strength of political sophistication in determining the quality of the vote decision process.

KEYWORDS Compulsory voting; political sophistication; electoral accountability; proximity voting; CSES

Is high voter turnout a good thing for representative democracy? During the past decades, this apparently very simple question has led to heated debates within the field of electoral research. The answer to the question, of course, has huge political and social consequences. If high turnout levels improve electoral representation, it is a straightforward suggestion to take any measure possible to ensure high voter turnout, including the introduction of compulsory voting (Lijphart 1997). If high turnout levels do not matter all that much, the current trend toward declining levels of voter turnout should not necessarily be seen as problematic (Hooghe 2014). On the one hand, some scholars emphasise
the fact that high voter turnout serves as a political equaliser (Avery 2015). If a very large proportion of the electorate turns out to vote, the possibilities for inequality or distortion of the electoral signal are mathematically strongly reduced. Other scholars, however, are more concerned about the quality of the vote. Their main fear is that if citizens are forced to vote, this obligation might lead to a superficial boost in voter turnout as those that are least interested in politics turn out to vote. In that case, it is assumed, these ‘forced’ voters will either cast blank or invalid votes (Mackerras and McAllister 1999) or vote in a rather random manner (Selb and Lachat 2009), thus eroding the representative function of elections. The main idea in the debate is, therefore, that we are confronted with a trade-off between high turnout and equality on the one hand, and quality of the vote on the other (Rosema 2007). However, very few studies thus far have investigated whether the concerns of equality and quality are mutually exclusive.

Liberal democracies, then, appear to be confronted with a conundrum resulting from this debate. Either they focus on the quantity of the vote (i.e. high turnout), or they focus on the quality of the vote (i.e. having knowledgeable voters). What is missing in the current debate, however, is a clear conceptualisation of what the ‘quality of the vote’ is. Routinely, this concept is operationalised as the ideological distance between voters and their preferred party, although this concept has also been contested in the literature (Lau and Redlawsk 2006). From the theory on representative politics we know that there are two vote-choice mechanisms that allow the realisation of representation through elections. On the one hand, it is thought of foremost importance that voters use elections to hold incumbents accountable for the policy they have pursued. Being held accountable by the voters, and the possibility of being thrown out of office, is a powerful incentive for politicians to deliver on their electoral promises (Przeworski et al. 1999). On the other hand, scholars have stressed that it is important that voters vote prospectively, casting a vote for the political party that is ideologically closest to their own preferences (Campbell et al. 1960; Lewis-Beck et al. 2008). By doing so, voters give a policy mandate to parties. While such mandates could be given with respect to a multitude of issues, ideology serves as an efficient shortcut for estimating issue positions (Downs 1957; Rosema 2007). If we take the argument of representational quality seriously, both mechanisms could contribute to a well-functioning electoral democracy. In this article we therefore include both mechanisms, a step that has not yet been taken by earlier research on compulsory voting. It falls outside the scope of the current article to assess the relative importance of both mechanisms. As our ambition is mainly empirical, we considered it a safe option to test both the mechanism of proximity voting and the occurrence of accountability voting; so the results of our analysis should be relevant for both theoretical approaches. Furthermore, we introduce solid comparative empirical material to this discussion that thus far has to a large extent been conducted on
normative grounds (Brennan and Hill 2014). If systems of compulsory voting do indeed erode the mechanisms of accountability and proximity voting, the only obvious conclusion should be that this legal obligation does not contribute to the overall quality of the electoral process.

Compulsory voting is an interesting phenomenon for our theoretical endeavour to understand the interplay between institutional rules and individual voter motivations (see the guest editors in their introduction to this special issue, Dassonneville et al. 2017). We know from previous research that political sophistication and ideological preferences have a strong effect on the voting decisions taken by citizens (Bartels 1996; De Vries and Giger 2014). As a result, citizens with low levels of political knowledge, or without strong convictions, have few incentives to find the party that best fits their preferences. In the context of compulsory voting, however, the ‘natural’ default option of not voting at all is closed off, with the potential consequence that this group will cast a rather random vote which does not contribute to the quality of electoral representation. If the ‘forced’ voters lack interest, knowledge, and sophistication and if political sophistication is a precondition for accountability and proximity, then forcing non-sophisticated voters to cast a vote is inherently problematic. Imposing or removing a system of compulsory voting, therefore, can have a direct effect on the individual decision to turn out to vote or not (Irwin 1974; Singh 2015). As emphasised in the introduction to this special issue, this implies that voters take into account a set of country-specific decision rules in their own vote choice decision. As the least sophisticated are forced to vote, it becomes all the more relevant to know how successful this group will be in identifying the party that best fits their evaluation and their preferences. We use data from all four modules of the Comparative Study of Electoral Systems (CSES) project and from the 2014 PartiRep Belgian Election Study to investigate these claims. Our analysis covers up to 113 elections in 44 countries between 1996 and 2015, including representative samples from multiple countries with some form of compulsory voting.1

**Compulsory voting**

Several democratic systems have introduced compulsory voting (Birch 2009; Malkopoulou 2015). This decision was often motivated by a concern to protect newly enfranchised groups of the population from any effort to inhibit them from using their democratic rights. Especially in predominantly Catholic countries, compulsory voting was also meant to send a signal that ‘good’ citizens with a sense of civic duty should vote. The adoption of compulsory voting proved to be effective in increasing turnout. The staggered implementation of compulsory voting in Australian provinces, for example, increased turnout by about 24 percentage points (Fowler 2013). Comparative studies show that compulsory voting increases turnout, on average, by about 5 to 10 percentage points (Blais and Dobrzynska 1998). In countries like Belgium and Australia
where the obligation is strictly enforced, turnout rates remain above 90% (Hooghe and Pelleriaux 1998). In a country like Paraguay, on the other hand, most citizens are aware of the fact that this rule is no longer enforced and voter turnout only reached 68% in the latest elections. Compulsory voting can also alter the political system in other ways. Jensen and Spoon (2011), for example, find compulsory voting increases the effective number of parties and increases the range of ideological positions in government.

As the twentieth century progressed, however, upholding this legal obligation became increasingly difficult, as new age cohorts questioned the right of the state to impose such a legal obligation. The abolition of compulsory voting in the Netherlands in 1970, Chile in 2012 and the more gradual process of abolishing compulsory voting in Austria are examples of states abandoning compulsory voting, with, as a result, marked decreases in turnout in each country (Ferwerda 2014; Irwin 1974; Miller and Dassonneville 2016; Navia and Pozo Quevedo, 2012) and increased stratification in the voting population (Irwin 1974).

This drives home the message that, despite all the obvious practical difficulties, compulsory voting still boosts voter turnout. It is, however, important to include information on the degree to which voter turnout is enforced. In this study, therefore, we will include information on the extent to which compulsory voting is actually enforced.

The observation that compulsory voting has a powerful effect on voter turnout has received new attention, as liberal democracies are experiencing a rapid decline in voter turnout since the 1980s (Gray and Caul 2000; Hooghe 2014). Various efforts have been undertaken to counter this trend, but none appear to match the effect of compulsory voting to increase turnout. Postal and internet voting only seem to have a limited effect on turnout (Alvarez et al. 2009; Gerber et al. 2013). Proposals to introduce systems of compulsory voting, on the other hand, are often met with the counterargument that states should not impose the legal obligation to cast a vote, as this is a decision that should be taken in an autonomous manner by the individual citizen (Hill 2006).

In the empirical debate about compulsory voting, the arguments are straightforward. Supporters of compulsory voting argue that the system increases turnout and reduces socio-economic inequalities. If compulsory voting is strictly enforced, it is associated with turnout levels in the range of 90% of the electorate, leaving very little leeway for any distortion of the electoral signal. Most of the available empirical research shows that electoral inequalities are weaker in systems of compulsory voting, as those with lower levels of education or, in general, a lower socio-economic status will be compelled to vote (Gallego 2010; Henn and Oldfield 2016; Irwin 1974; Jaitman 2013; Singh 2011, 2015).

It also has to be noted, however, that not all empirical research confirms this expectation. Older age groups, for example, react more strongly to having a system of compulsory voting (Quintelier et al. 2011). A survey of British
18-year-olds revealed that non-voters would be more likely to vote under a compulsory voting regime; however, compulsory voting may also produce a sense of resentment toward democratic politics in Britain (Henn and Oldfield 2016). An analysis of turnout in Brazil has furthermore shown that the more highly educated are more easily targeted by administrative sanctions, thus widening the turnout gap between more highly and less educated citizens (Cepaluni and Hildalgo 2016). Comparative survey data from the Latinobarometer demonstrates that compulsory voting leads to higher dissatisfaction with democracy in this region because anti-democratic voters are compelled to appear at the polls (Singh forthcoming). We therefore begin our analysis by assessing whether compulsory voting is associated with lower levels of electoral inequality.

Given that most research finds compulsory voting to increase turnout among less sophisticated and less involved citizens, the obvious argument against compulsory voting is that it might contribute to quantity, but that it simultaneously erodes the quality of the vote, and it therefore does not contribute to democratic representation (Jakee and Sun 2006). Selb and Lachat (2009) show that especially the less interested and less knowledgeable will be compelled to vote when they are obliged to. Because of their lack of political sophistication, this group of voters is less successful in correctly identifying the political party that is best able to represent their preferences. The authors conclude that compulsory voting reduces the accuracy of the electoral signal.

A counter-argument to such accounts might be that compulsory voting could increase political sophistication. If citizens are forced to vote, they receive an incentive to acquire more political information so that they are able to cast a meaningful vote. Most studies, however, do not find evidence for the claim that compulsory voting increases levels of political sophistication (Carreras 2016; Quintelier et al. 2011). Sheppard (2015), by contrast, has found that political knowledge is somewhat elevated under compulsory voting rules.

From this review of the literature, it becomes evident that it is too early to conclude that compulsion reduces the quality of the vote. First, Sheppard’s work (2015) hints at a potential positive impact of compulsory voting. In addition, the Selb and Lachat (2009) study was limited to a single country, and they only considered the proximity function of elections. However, accountability – i.e. holding incumbents accountable for what they have done – is equally important, and therefore we will investigate both these functions of elections in a comparative research design. Given the repeated finding that compulsory voting reduces inequalities based on education level and political knowledge, and taking into account that these indicators of sophistication are essential in order to cast an informed vote, our working hypothesis is that the mechanisms of accountability and proximity voting will be weaker in countries with compulsory voting.

The aim of the current article is not to contribute to the theoretical or normative debate. Rather, we want to investigate whether compulsory voting contributes to the professed goals of representative democracy. We do not consider
Accountability and proximity voting

Citizens casting a vote can be motivated by retrospective and prospective considerations. First, voting retrospectively and holding incumbents accountable for their performance is a mechanism that contributes to democratic representation. The fear of being punished for bad performance incentivises incumbents to govern in the best interests of their voters (Przeworski et al. 1999). Although theoretically the accountability mechanism should be at play in various policy domains, most of the available research focuses on economic voting as an important form of accountability (Lewis-Beck and Stegmaier 2013). Economic considerations tend to be important for most voters and, furthermore, incumbents are often held responsible for the state of the economy (Dassonneville and Lewis-Beck 2017; Duch and Stevenson 2008). With regard to other policy domains, it has been shown that voters take into account the past performance of the incumbents when casting a vote as well (de Vries and Giger 2014). In this analysis, we follow the lead of Van der Brug et al. (2007), who suggested that this kind of evaluation should be based on objective economic indicators, as subjective evaluations are most likely biased by the political preferences of the voter.

Second, voters assess to what extent they agree with the objectives of the parties and candidates that compete in the elections (Lau and Redlawsk 2006; Przeworski et al. 1999; Rosema 2007). The idea of voters choosing proximate parties originates in the work of Downs (1957) and a large number of studies developing spatial models of voting behaviour have substantiated the relevance of ideological distance in explaining vote choices (Jessee 2012; Joesten and Stone 2014). According to the theoretical literature on representation, a proximity voting mechanism is essential for ensuring that elected representatives represent the interests of the citizens (Thomassen and van Ham 2014). In principle, proximity rules could relate to positions on a large number of different policy issues. Ideology, however, can be considered an informative summary of parties’ and voters’ positions on different issues (Rosema, 2007). Therefore, the left–right dimension can be considered a ‘super-issue’ (van der Eijk et al. 2005). Following previous comparative proximity voting research, we focus on proximity voting in terms of a left–right dimension.

Accountability and proximity voting are expected to contribute to democratic representation. Both mechanisms require that citizens are sufficiently knowledgeable about politics. Although this threshold can, to some extent, be overcome by relying on cognitive short-cuts, such as partisanship (Lau and Redlawsk 2006), previous research has shown that both mechanisms are
stronger among the highly politically sophisticated. Political experts engage in accountability and proximity voting at a higher level than their less sophisticated peers (Joesten and Stone 2014; Singh and Roy 2014). If compulsory voting rules force the less knowledgeable voters to vote, it is logical to expect that compulsory voting will weaken proximity and accountability mechanisms in the vote choice.

This review of the literature leads to three hypotheses that will guide us through the empirical analysis.

H1. Compulsory voting reduces education- and knowledge-based stratification of voter turnout.

H2. Compulsory voting reduces the strength of economic accountability voting.

H3. Compulsory voting reduces ideologically congruent voting.

**Data and methods**

For testing our hypotheses, we make use of the data from the Comparative Study of Electoral Systems (CSES, 2015a, 2015b, 2015c, 2016). This project, which now consists of four modules (1996–2016), combines data from a large number of national election studies that all include a common set of questions. Furthermore, for each of these election samples fieldwork was done shortly after a national election, which further increases the validity of the measurements and which is a major advantage compared to previous work relying on non-electoral surveys (Nevitte et al. 2002). The CSES project covers elections worldwide, but we restrict the analysis to free and fair elections according to Freedom House. We add information from the PartiRep 2014 Belgian election study, as Belgium is one of the few countries in the world with a strictly enforced system of compulsory voting.

In this article, we are interested in disentangling the impact of compulsory voting on individuals’ probability to vote and on their vote choice. How we operationalise compulsory voting is, therefore, of foremost importance. As we have already noted, there is substantial variation in forms of compulsory

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**Table 1.** Number of elections (and countries) included in the analysis, by compulsory voting rules.

| Analysis         | No CV | Weak CV | Strict CV | Total |
|------------------|-------|---------|-----------|-------|
| Turnout (Table 2) | 88 (35) | 10 (3) | 15 (6) Australia, Belgium, Brazil, Chile, Peru, Turkey | 113 (44) |
| Accountability (Table 3) | 86 (32) | 8 (2) | 13 (7) Australia, Belgium, Brazil, Chile, Peru, Turkey, Uruguay | 107 (41) |
| Proximity (Table 4) | 81 (32) | 9 (2) | 11 (5) Australia, Belgium, Brazil, Peru, Turkey | 101 (39) |
voting and in the extent to which mandatory voting is enforced. We take such differences into account in our coding of compulsory voting. We adopt the categorisation between weakly and strictly enforced compulsory voting provided by the Institute for Democracy and Electoral Assistance (IDEA). Our compulsory voting variable can take three values: 0 if voting is voluntary; 1 if voting is compulsory but weakly enforced; and 2 if voting is compulsory and strictly enforced. Table 1 provides an overview of the number of elections included in each category and includes an overview of the countries that are included in the compulsory voting categories as well. As can be seen from this overview, we can include a fair number of elections that were held under strictly enforced compulsory voting rules. For weakly enforced compulsory voting, however, the number of elections and – more importantly – the number of countries included is extremely limited. As a result, estimates of analyses in which the two categories are coded by means of separate dummies are highly unreliable (results available from the authors). We therefore treat the compulsory voting indicator, which runs from 0 to 2, as a continuous indicator. Note, furthermore, that an alternative operationalisation, distinguishing between strictly enforced compulsory voting and any other option (either weakly enforced compulsory voting or voluntary voting) leads to essentially the same conclusions as the results reported in this manuscript (results available from the authors). In Switzerland, voting is mandatory in Schaffhausen. For the period under analysis, it is important to know that there were also forms of compulsory voting in Obwalden until 2012 and in the canton of St Gallen until 2009. Voting is voluntary in all other cantons. For reasons of consistency, we excluded the limited number of Swiss respondents for whom voting was mandatory and code Switzerland as a voluntary voting country.

We first examine the individual-level determinants of turnout. For this, we use respondents’ self-reported turnout, which takes the form of a dichotomous variable (coded 1 if a voter reported they voted and 0 if they reported abstaining). Self-reported turnout tends to overestimate turnout rates. Katosh and Traugott (1981), however, suggest that relying on self-reported turnout is not associated with any systematic bias in the results of a statistical analysis. In explaining differences in turnout, we focus on the impact of education and political knowledge. For education, we distinguish respondents with a college degree from those without a degree. Political knowledge is measured by summing the correct answers on three (in CSES modules 1, 2 and 3), four (in CSES module 4) or 5 (in the Belgian PartiRep 2014 survey) factual knowledge questions and rescaling this sum to a 0 to 1 variable. Respondents’ sum of correct answers was subsequently divided by the mean level of correct answers in their election sample. As such, the measure becomes an indicator of how knowledgeable a respondent is compared to other respondents in their country (Dassonneville and Dejaeghere 2014; Singh and Thornton 2013).  To ascertain that the estimated effects of education and political knowledge are not spurious effects, we control for some important correlates of turnout. First, we control
for the socio-demographic variables gender, age and income, which are all consistently found to affect individuals’ probability of turning out to vote (Smets and van Ham 2013). Furthermore, we include a measure of feeling close to a party, because partisans are known to turn out to vote at higher rates (Smets and van Ham 2013). We also control citizens’ sense of political efficacy, which is correlated to turnout and our main independent variables of interest, education and political knowledge (Banducci and Karp 2009). In addition, our interest in the impact of a contextual-level variable – compulsory voting – and the more limited number of observations at the contextual level, requires good controls for other systemic differences between countries. We thus control for the effective number of parties, the least-squares index of disproportionality, and the ideological polarisation of the party system, which have all been shown to be important contextual-level predictors of electoral participation (Geys 2006).

Next, we investigate how compulsory voting rules affect the quality of the vote choices. We examine the moderating impact of mandatory voting on accountability voting. To do so, we explain the probability of voting for the lead party. Following Kayser and Peress (2012), we operationalise the lead party as the party of the chief executive (i.e. the prime minister in parliamentary systems and the president in presidential systems) and estimate its position in a left–right policy space using the mean position assigned to the party by all respondents. Previous research has shown that such mean placements correlate well with other approaches to operationalising parties’ positions, such as expert placements (Dalton and McAllister 2015). By focusing on the lead party only, and not on all parties in the governing coalition, we rely on previous work, showing that the attribution of responsibility is directed towards the most clearly identifiable governing party – and less so to junior coalition partners (Powell and Whitten 1993), which would be in line with previous work on economic voting (Duch and Stevenson 2008).

We incorporate indicators of government performance to assess whether accountability mechanisms are weakened under compulsory voting. We first investigate the presence of accountability mechanisms by estimating the impact of objective economic indicators on voting for the lead party. We expect the probability of voting for the lead party to be higher under better economic circumstances. We incorporate GDP growth (compared to the previous year) and the change in unemployment rates compared to the previous year into our models, as these variables are the most regularly used indicators in this line of research (Lewis-Beck and Stegmaier 2013). Information for both indicators comes from the World Bank and was measured annually. To take into account differences in the timing of the election (i.e. elections in January versus elections in December), we used information from the election year as well as the year before and constructed a weighted indicator. To examine whether accountability mechanisms are weakened under compulsory voting, we include terms interacting our indicator of compulsory voting and each of the objective economic indicators.
In a final set of analyses, we assess the impact of compulsory voting rules on the quality of the vote choice with regard to ideological proximity. To measure the ideological position of parties, we make use of the mean placement, on a 0 to 10 left–right scale, of all respondents in an election sample. We first estimate the probability that a voter chooses the ideologically most proximate party, and the effect of compulsory voting rules on this probability. Subsequently, we investigate in more detail what determines the ideological distance between a voter and the party they choose, and whether compulsory voting rules have a significant impact on this distance.

To explain the vote choice (either voting for the lead party or for the most proximate party), we take into account a rich literature which argues that socio-demographic characteristics affect the vote choice and we control for respondents’ gender, age and their level of education. Furthermore, we take into account the impact of partisanship by including a dummy variable, identifying voters who feel close to the lead party (when explaining voting for the lead party) or a dummy distinguishing partisans from non-partisans (when focusing on proximity voting). The models explaining voting for the lead party additionally include a measure of the ideological distance to the lead party – which takes into account that voters generally choose ideologically proximate parties (Jessee 2012). The models explaining proximity voting include, besides socio-demography and partisanship, a control for political knowledge – because more knowledgeable voters tend to vote for more proximate parties (Joesten and Stone 2014). In addition, we include a measure of the ideological extremeness of a voter, because voters who place themselves at the extremes on a left–right scale are less likely to find an ideological party they would consider voting for. To identify the impact of compulsory voting rules in our fairly limited set of countries, it is of foremost importance that we control for other systemic differences between countries. Therefore, all vote choice models include a series of contextual-level controls (we include the effective number of parties, the least squares index of disproportionality and a measure of polarisation).

The data have a nested structure, with individual respondents nested in election years and election years nested in countries. We present a series of mixed models where intercepts and slopes are allowed to vary between elections (Hox 2010) to assess the impact (and, separately, the moderating effect) of contextual-level variables on individual behaviour. When explaining turnout, voting for the lead party and voting for the proximate party, we present the results of mixed logistic regression models. For modelling the ideological distance to the party voted for, we present the results of a mixed linear model. We also verify whether the results are robust enough to take into account overdispersion in this dependent variable (see Online Appendix B). Given the limited number of compulsory voting countries in our dataset, we verify the impact of influential cases on the results from the mixed models (see Online Appendix D).
Results

We first investigate whether, in line with most previous studies, we can confirm that inequalities in voting are reduced when turnout is mandatory (Singh 2015). This analysis of the impact of education- and political knowledge-based stratification serves as a test for the argument made by advocates of compulsory voting that the better educated and more knowledgeable are more likely to turn out to vote under a voluntary voting regime.

In Model 1, we only include the main effects (Table 2). We are mainly interested in the effect of compulsory voting laws on the probability of a respondent turning out to vote. Not surprisingly, the effect is positive and significant, confirming that citizens living in countries where voting is mandatory are
more likely to vote. Furthermore, it can be confirmed that both educational attainment and political knowledge serve as a stratification mechanism between who turns out to vote and who does not.

In Model 2 we add an interaction between compulsory voting (measured on a scale from 0 to 2) and having a college degree. Doing so allows us to verify whether the educational stratification between voting and abstaining is reduced when voting is compulsory. As is evident from the results, the interaction term is indeed negative and significant. To ease the interpretation of this interaction effect, however, we present the marginal effects of having a college degree on the probability of turning out to vote and do so for different operationalisations of compulsory voting rules. As is clear from Figure 1, the marginal effect of having a college degree is significantly reduced when voting is weakly enforced, and even more strongly so in a context of strictly enforced compulsory voting. These results confirm that there is less stratification based on education when voting is compulsory.

In a final model (Model 3 in Table 2), we add an interaction between compulsory voting and political knowledge, allowing us to verify whether knowledge-based stratifications in turnout are reduced under mandatory voting. In line with what we observe for educational attainment, the effect is negative and significant, suggesting that the effect of knowledge on turnout is reduced when citizens are compelled to vote. The marginal effects in Figure 2 further clarify this interaction effect. We observe a strong impact of political
knowledge on the probability of turning out to vote when voting is voluntary; this impact is weaker in contexts where voting is mandatory.

The analysis presented in Table 2 and Figures 1 and 2 support our first hypothesis. Compulsory voting rules significantly reduce education- and political knowledge-based stratification in turnout. This observation has led proponents of voluntary voting systems to claim that the votes that are cast under such rules are—on average—better informed votes, and therefore higher quality votes (Brennan and Hill 2014; Selb and Lachat 2009). We empirically test the validity of this claim by means of analysis of the accountability and proximity mechanisms guiding the vote choice.

To examine whether the accountability function of elections is diluted when voting is mandatory, we examine in Table 3 what explains voting for the lead party. We expect the probability of voting for the lead party to be higher in a context of high levels of GDP growth and to be lower when unemployment rates increased more strongly. The results of Model 1 confirm that GDP growth rates are significantly and positively related to the probability of voting for the lead party. The effect is rather weak, and only significant at \( p < 0.05 \), but in terms of the size, it is in line with previous research on this relation (Kayser and Peress 2012). From the results of Model 3 it can be observed that changes in unemployment rates significantly affect the odds of voting for the lead party as well. An increase in unemployment rates reduces the probability that voters will vote for the lead party. We further note that the main effect of compulsory voting on choosing the lead party is significant in Model 1 but not in Model 3.
The results of Model 1 and Model 3 offer some indication that accountability mechanisms affect the vote choice. Model 2 and Model 4 allow for testing whether this accountability mechanism is weakened under compulsory voting rules. To this end, we add an interaction term between compulsory voting and GDP growth in Model 2 and an interaction between compulsory voting rules and the change in unemployment rates in Model 4. The estimates in Model 2 offer no indication that compulsory voting rules significantly weaken the effect of GDP growth rates. Furthermore, the results in Model 4 give no indication of a significant interaction effect with changes in unemployment rates either. To gain insights into these interaction effects, however, we also plot in Figure 3 the marginal effect of GDP growth (left-hand panel) and change in the unemployment rate (right-hand panel) on voting for the lead party. The plot shows a significant marginal effect of GDP growth on voting for the lead

### Table 3. Explaining voting for the lead party.

|                      | Model 1  | Model 2  | Model 3  | Model 4  |
|----------------------|----------|----------|----------|----------|
|                      | b (s.e.) | b (s.e.) | b (s.e.) | b (s.e.) |
| Female               | 0.071*** | 0.071*** | 0.070*** | 0.070*** |
|                      | (0.016)  | (0.016)  | (0.016)  | (0.016)  |
| Age                  | 0.003*** | 0.003*** | 0.003*** | 0.003*** |
|                      | (0.000)  | (0.000)  | (0.000)  | (0.000)  |
| College education    | −0.158***| −0.158***| −0.161***| −0.161***|
|                      | (0.019)  | (0.019)  | (0.019)  | (0.019)  |
| Lead party ID        | 3.738*** | 3.738*** | 3.740*** | 3.739*** |
|                      | (0.037)  | (0.037)  | (0.037)  | (0.037)  |
| Ideological distance to lead party | −0.497*** | −0.497*** | −0.501*** | −0.501*** |
|                      | (0.006)  | (0.006)  | (0.006)  | (0.006)  |
| ENEP                 | −0.174***| −0.172***| −0.162***| −0.161***|
|                      | (0.047)  | (0.046)  | (0.046)  | (0.046)  |
| Least squares index  | 0.001    | 0.001    | 0.008    | 0.007    |
|                      | (0.019)  | (0.019)  | (0.018)  | (0.018)  |
| Polarisation         | 0.026    | 0.023    | 0.047    | 0.050    |
|                      | (0.034)  | (0.034)  | (0.034)  | (0.034)  |
| Compulsory voting (0–2) | −0.285* | −0.089 | −0.212 | −0.217 |
|                      | (0.118)  | (0.201)  | (0.115)  | (0.114)  |
| GDP growth rate      | 0.081*   | 0.104**  |         |         |
|                      | (0.032)  | (0.038)  |         |         |
| Δ unemployment rate  |         | −0.173*  | −0.140   |         |
|                      |         | (0.072)  | (0.078)  |         |
| CV × GDP growth      |         | −0.052   |         | −0.103   |
|                      |         | (0.044)  |         | (0.102)  |
| CV × Δ unemployment rate |         |         |         | −0.103   |
|                      |         |         |         | (0.102)  |
| Constant             | 0.336    | 0.282    | 0.338    | 0.330    |
|                      | (0.285)  | (0.286)  | (0.282)  | (0.280)  |
| σ²                   | 0.623    | 0.615    | 0.610    | 0.604    |

Notes: Coefficients and standard errors (in parentheses) of random intercept logistic regression models explaining voting for the lead party. Election samples with fewer than 400 observations were excluded from the analysis. Voters living in Swiss cantons where voting was compulsory (weak or strictly enforced) were also excluded from the analysis. Significance levels: 

*p < 0.05; **p < 0.01; ***p < 0.001.
Source: CSES Modules 1, 2, 3 and 4.
party in voluntary voting systems only. However, and importantly, the figure also shows no significant differences in the impact of GDP growth between the three categories of voting rules. For changes in unemployment rates as well, the plot clarifies that there are no significant differences in impact between the three forms of compulsory voting rules. The conclusion of our analysis of accountability mechanisms thus has to be that the extent to which voters hold incumbents accountable for the state of the economy does not vary significantly with different compulsory voting rules. We find no evidence confirming our second hypothesis. Accountability mechanisms are not weakened significantly when voting is mandatory, and when the less politically sophisticated are compelled to vote.

Next, we investigate whether the same holds for ideological proximity (Table 4). In a first model, we present the results of a mixed linear model explaining the ideological distance between a voter and the party they voted for. Female and older voters are significantly more distant from their party. Not surprisingly, being more highly educated and being more knowledgeable reduce the ideological distance between voter and party. Additionally, it appears that being close to a party serves as a useful heuristic for choosing a proximate party, as the ideological distance to the party of choice is significantly smaller for those who feel close to a party. Finally, it can be observed that for voters who place themselves closer to the extremes of the left–right scale, the ideological distance to the party voted for is significantly larger. Looking at the effect of the macro-level variables, it can be observed that a more polarised party system significantly reduces the distance to the party of choice. ¹¹ It thus seems that

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**Figure 3.** The effect of GDP growth rate and Δ unemployment rate on voting for the lead party, for varying compulsory voting rules.

Notes: Marginal effect of a one-unit increase in GDP growth rate (left panel) or Δ unemployment rate (right panel). Obtained from 10,000 simulated observations, using the estimates of Model 2 and Model 4 in Table 3. All other variables are set at the sample mean.
choosing a party in a system where parties are more polarised, and thus also more clearly distinct ideologically, allows for closer connections on average between voters and the parties they choose (Lupu 2015). Finally, and most importantly, we observe a significant impact of compulsory voting rules on the ideological distance between a voter and their party. The effect is positive and significant, implying that voters in systems with mandatory voting are, on average, more ideologically distant from the party they end up choosing.

The ideological distance between a voter and the party they choose, however, is not determined only by the choices that a voter makes. To a large extent, whether or not a voter can vote for an ideologically proximate party depends on the options, and thus on the supply side. A more direct test of voters’ capacities for choosing a party that matches well with their opinions hence consists of an analysis of the extent to which they choose the most proximate party, given the

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### Table 4. The effect of compulsory voting rules on proximity voting.

|                           | Model 1                  | Model 2                  |
|---------------------------|--------------------------|--------------------------|
|                           | Ideological distance to the party of choice | Choosing the most proximate party |
|                           | b(s.e.)                  | b(s.e.)                  |
| Female                    | 0.044***                 | −0.040***                |
|                           | (0.007)                  | (0.014)                  |
| Age                       | 0.002***                 | −0.000                   |
|                           | (0.000)                  | (0.000)                  |
| College education         | −0.162***                | 0.143***                 |
|                           | (0.009)                  | (0.017)                  |
| Political knowledge       | −0.131***                | 0.124***                 |
|                           | (0.006)                  | (0.012)                  |
| Party ID                  | −0.227***                | 0.217***                 |
|                           | (0.008)                  | (0.015)                  |
| Extremeness left—right placement | 0.340***              | 0.255***                 |
|                           | (0.002)                  | (0.005)                  |
| ENEP                      | −0.031*                  | −0.115***                |
|                           | (0.014)                  | (0.026)                  |
| Least squares index       | 0.010                    | 0.025*                   |
|                           | (0.006)                  | (0.011)                  |
| Polarisation              | −0.049***                | 0.027                    |
|                           | (0.011)                  | (0.020)                  |
| Compulsory voting (0–2)   | 0.131***                 | −0.152*                  |
|                           | (0.040)                  | (0.071)                  |
| Constant                  | 1.394***                 | −1.185***                |
|                           | (0.086)                  | (0.154)                  |
| \( \sigma^2 \) election years | 0.058                  | 0.186                    |
| N respondents             | 98,403                   | 98,403                   |
| N election years          | 101                      | 101                      |

Notes: Coefficients and standard errors (in parentheses) of random intercept linear regression model explaining the ideological distance to the party of choice (Model 1) and logistic regression model explaining voting for the most proximate party (Model 2). Election samples with fewer than 400 observations were excluded from the analysis. Voters living in Swiss cantons where voting was compulsory (weak or strictly enforced) were also excluded from the analysis. Significance levels: ‘\( p < 0.05 \); \( ** p < 0.01 \); \( *** p < 0.001 \).

Source: CSES Modules 1, 2, 3 and 4.
options available. In Model 2 we estimate a mixed logit model examining the determinants of choosing the most ideologically proximate party. The results in Table 4 show that more highly educated, more knowledgeable voters, voters with a party identification, as well as more extreme voters are more likely to vote for the party that is closest to them. It can further be noted that the probability of choosing the most proximate party is significantly reduced if there are more parties in a party system. Under this somewhat stricter test, we also find indications that compulsory voting rules weaken proximity voting. That is, we find a negative and significant (at $p < 0.05$) effect of compulsory voting rules on the probability of choosing the most proximate party. This estimated effect is somewhat uncertain, however. When constructing a measure of parties’ left–right placement that is based on the position attributed to parties by respondents with a college degree only (see Singh and Thornton 2013) and re-estimating this model, we find that this effect is still negative but falls short of statistical significance (full results can be found in Online Appendix A). Nevertheless, the fact that the estimate is consistently found to be negative, and the fact that it ties in with the results of Model 1, allow the conclusion that proximity voting appears to be weakened when citizens are compelled to turn out to vote.

**Conclusion**

With the current paper, our aim was to test the often repeated argument that systems of compulsory voting might be associated with higher turnout, but that precisely because they force the least knowledgeable citizens to vote, they have a detrimental effect on the quality of electoral representation.

Our analysis confirms previous findings: systems of compulsory voting diminish stratification based on political knowledge or level of education, as is indicated by the negative interaction of compulsory voting and education on turnout. Given the ongoing concerns about the representation of groups with a lower socio-economic status in the political decision-making process (Schlozman et al. 2012), this is an important finding as it confirms that government intervention can mitigate this form of stratification. This finding is in line with previous studies (Singh 2015), and it leads to an even sharper dilemma: if these less knowledgeable citizens turn out to vote, should we be worried about the quality of their electoral decision-making process? It is indeed widely assumed that voters need these cognitive resources, both to make an adequate judgement about the past performance of politicians, and to identify the political party that is closest to their own ideological preference. Nevertheless, we observe that accountability mechanisms are equally strong in countries with a system of compulsory voting. Only for proximity voting are there indications of a negative impact of compulsory voting rules.

This apparent paradox could be solved in a number of ways. First, it might be assumed that given the obligation to vote, the least knowledgeable will be
forced to pay at least some attention to the electoral campaign, as they know they will have to make a vote choice. Second, an alternative suggestion might be that perhaps it does not require a certain level of political sophistication to arrive at a judgement about economic performance. Based on previous research, the most sophisticated are better equipped to assess the economic situation, but the margin of error apparently does not inhibit voters from arriving at the same conclusion of accountability. For proximity voting, we did find that the mechanism is weakened in a context of mandatory voting. Traditionally, retrospective voting is effectively considered a less demanding way of voting compared to what spatial and proximity models of voting require (Key 1966). Consequently, when it comes to holding incumbents to account, compulsory voting rules do not imply a loss of strength of this mechanism. By contrast, proximity voting, which is a somewhat more challenging exercise, is becoming a less effective vote choice determinant when compulsory voting rules are in place – and when the electorate overall is somewhat less informed.

In the theoretical literature on the role of elections, two main mechanisms are thought of as important in realising democratic representation: accountability and proximity voting. Our results indicate that only one of those two mechanisms is weakened when citizens are compelled to vote – that is, when mandatory voting rules are in place. We do not wish to make claims about which of the mechanisms is the most important one; that is a largely normative discussion. We do, however, wish to bring more nuance into the debate on the implications of compulsory voting rules. We already know from previous research that compulsory voting should not be considered as a panacea to give equal voice to everyone in the population. The counter-argument that compulsory voting would erode the representative function of elections, however, receives only mixed support here. While we can confirm that proximity voting is weakened under compulsory voting, the same does not hold for the mechanism of accountability. Previous work on the quality of the vote choice and on the impact of compulsory voting rules thereon has not accounted for the importance of the accountability mechanism. Doing so, we show, makes for a somewhat more balanced view on the consequences of compelling (in particular less knowledgeable) citizens to turn out to vote. A number of changes over time in voting behaviour furthermore render accountability an increasingly important vote choice determinant. Left–right identifications are becoming less important vote choice factors among younger generations of voters (Walczak et al. 2012). In addition, it has been claimed that a trend towards dealignment implies that performance evaluations are becoming increasingly important (Kayser and Wlezien 2011). If accountability mechanisms are effectively becoming increasingly important in determining the vote choices of citizens, the implication of our results is that differences in the ‘quality’ of the vote choice in compulsory and non-compulsory voting contexts, respectively, is becoming less relevant.
Notes

1. Due to missing information on some of the variables, the sample sizes differ somewhat from one analysis to another. Full information on what samples are included in each of the analyses and reasons for non-inclusion are included in Appendix E of the Online Appendix.

2. We exclude cases where Freedom House rated political rights above five (on a seven-point scale where seven indicates ‘few or no political rights because of severe government oppression’). This excludes Belarus in 2001 and 2008, Kyrgyzstan in 2005, Thailand in 2007 and Russia in 2004.

3. For a number of control variables, the question wording in the Belgian election study differed from the CSES question format (e.g. income, efficacy and political knowledge). For comparability, the scales of these variables were standardised so they match the metrics of the CSES questions. The Belgian 2014 elections are not included in the accountability analysis, as the data did not allow operationalisation of the direction of partisanship.

4. All knowledge items were closed-ended questions, and not answering a question was treated as an incorrect response. In modules 1-3, the knowledge items were intended to return correct responses by two-thirds, one-half and one-third of the respondents respectively. Surveys in module 4 of CSES by contrast included the same four – general – knowledge questions. Finally, the Belgian survey included five knowledge questions. We verified the robustness of the result when relying on a single standardised approach to measuring political knowledge, that is, the approach implemented in modules 1 to 3 of CSES. The results of these additional analyses are available from the authors and lead to substantially the same conclusions.

5. Based on a standardised scale of the items ‘who is in power makes a difference’ and ‘who people vote for makes a difference’ for surveys where both items were included. When only one item was included, the measure is based on a single question. For Belgium, the standardised scale of seven political efficacy questions was used.

6. The effective number of parties (ENEP), measured in votes, and the least squares index of disproportionality come from Gallagher’s website or were updated by the authors. For mixed systems, calculations are based on the party list tier only. We implemented the formula used by Lupu (2015) to calculate polarisation within CSES. The exact formula is $P = \sum_{j=1}^{n} \omega_j \left( p_j - p' \right)^2$, where $\omega_j$ is the share of the vote received by party $j$, $p_j$ is the position of party $j$ on the left–right scale, and $p'$ is the average position of the parties.

7. In operationalising these variables, we thus take into account change over the last year and not, for example, change over the full electoral cycle. This way of operationalising the economic indicators is in line with a rich literature which indicates that voters are myopic and consider especially the state of the economy in the most recent period when evaluating the performance of incumbents (Achen and Bartels 2016; Wlezien 2015).

8. Following the formula proposed by Bélanger and Gélineau (2010: 98): $\rho = \left[ \rho(t - 1) \ast (12 - \sigma(t))/12 \right] + \left[ \rho(t) \ast (\sigma(t)/12) \right]$, where $\rho$ is the annual economic indicator, $\sigma$ is the election month and $t$ is the election year.

9. We also verified whether results are robust for estimating party positions based on the assessment of highly educated respondents only. The results of these
analyses are reported in Online Appendix A and are in line with the main results reported here.

10. We opted for a two-level model, because in a number of countries only one election was included, which would invalidate a three-level design (Singh 2015).

11. Descriptive statistics for these macro-level variables by country are included in Online Appendix C.

12. It should be noted here that in our analysis compulsion does not diminish this form of stratification because it strengthens levels of political knowledge. In a separate analysis, we did not observe any effect of compulsory voting on levels of political knowledge.

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