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# **The Effect of Press System Properties on Electoral Participation in Established Democracies**

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## **Abstract**

In modern democracies elections are considered the central mechanism for people to control their political representatives. Yet, an effective control requires both knowledge of the incumbents' performance and visibility of alternative party options in electoral contests. This paper evaluates how the press system contributes to these premises. By means of cross-national multilevel analysis, we test whether well-balanced and critical media coverage mobilizes voters to go to the polls and counteracts the impact of individual prerequisites for political participation. Contrary to normative expectations, our results indicate that ideologically biased press systems lead to higher turnout and reduce the importance of personal resources and characteristics.

## **Keywords**

voting; media effects; media malaise vs. mobilization; comparative research; multilevel analysis

# 1 Introduction

Despite the growing importance of various other forms of political participation, elections remain a key feature of modern representative democracies. By shaping the composition of the government and by forcing political representatives to consider the citizens' interests in their policy-making, periodical elections are supposed to foster the responsiveness of the democratic system (Teorell, 2006). However, responsiveness requires that people express their preferences at the polls (Verba et al., 1995; Teorell et al., 2006). According to Lijphart (1997), the fewer people vote in elections, the more certain societal groups are systematically excluded from the political process. From this point of view, high turnout levels are desirable for a well-functioning democratic regime. Yet voting presupposes a basic knowledge of the course as well as the specific content of electoral contests. In other words, a modicum of time and effort is needed to cast a vote. And as turnout statistics show worldwide, participation levels in elections tend to be decreasing since the 1960s (Lijphart, 1997).

In this contribution we argue that media and especially print media can provide valuable incentives for individuals to go to the polls. Mass media play an increasingly crucial role in contemporary democracies since they are the main source of information for the vast majority of the electorate (de Vreese and Semetko, 2004, p. 14). Thus, media can be an important mobilizing force in elections if they present voters with the full range of electoral alternatives and thereby help them find their preferred vote choice. Moreover, a diverse coverage of campaigns is supposed to raise the citizens' awareness of the importance of electoral participation. Media, among other context factors, are therefore expected to substantially influence the environment surrounding individuals, providing them with the necessary cues for political participation (Schmitt-Beck and Mackenrodt, 2010; Rosenstone and Hansen, 1993).

The aim of this paper is to test how the performance of the press in this respect affects the willingness of individuals to choose parties and participate in elections. Our study is based on comparative multilevel analyses, for which the individual-level data is taken from large-scale international sur-

veys. The macro variables of interest consist of two innovative indicators which rely on information about a country's press system.

The paper is structured as follows: section 2 and 3 revise the literature on the subject and derive the central expectations. Section 4 discusses the design of the study as well as the data and methods used. Subsequently, the results of the analyses are presented in section 5 while section 6 summarizes the findings and concludes.

## **2 The determinants of electoral turnout**

Needless to say, the literature on the determinants of voter turnout is abundant. Most of the existing election research focuses on individual characteristics to explain whether citizens take part in elections or not (cf. Schmitt-Beck and Mackenrodt, 2010). Following Teorell (2006), there are two driving forces of participation. First, individual resources affect people's capacity to vote. This includes physical capital, such as income, wealth and spare time (Norris, 2000), social capital in the form of social networks (Coleman, 1988; Putnam, 1993), and human capital, which comprises education as well as "political sophistication" (Luskin, 1987). Sophistication requires skills and knowledge, such as the citizens' perception of their political comprehension (internal efficacy), their ability to evaluate government performance, or to place parties and themselves onto the left-right scale (Luskin, 1987; Teorell, 2006; Teorell et al., 2006). The second cause of participation is the people's motivation to vote. Important factors to capture motivation are an individual's general interest in politics, media news consumption, party identification, satisfaction with life or the way democracy works as well as norms like a perceived civic voting duty (Norris, 2000; Teorell et al., 2006).

However, participation levels do not only differ between individuals, they also vary across different environments in which individuals live (Blais, 2006; Bühlmann, 2006; Franklin, 2004). Franklin (1996, pp. 217f.) even claims that "turnout varies much more from country to country than it does between different types of individuals". According to Lijphart (1997, p. 7), this suggests "that in order to expand voting in a country with low turnout it is much more promising to improve the in-

stitutional context than to raise levels of education and political interest”. Similarly, Franklin (2004) holds that the context and character of a specific election are very important for turnout levels, which for Manin (2007) is increasingly true as party loyalties are declining. Such research on the contextual determinants of electoral participation has mainly considered political institutions (such as the type of electoral system, the degree of direct democracy or compulsory voting), features of the party system (the number of parties and the degree of electoral competition) and socio-economic factors (e.g. a country’s economic performance) (Blais, 2006; Rosenstone and Hansen, 1993: p. 45). Most findings, however, are not robust because they lack a compelling microfoundation, i.e., the analyses are only performed at the aggregate level. In applying multilevel analysis, we are able to add micro-founded evidence to the broader research on contextual influences on turnout. Furthermore, our main focus, i.e., the impact of media systems on turnout, has largely been neglected in this tradition of comparative electoral research. This paper therefore makes an effort to provide more insight into the effect of mass media, and more specifically the press, on individual voting propensities in a comparative framework. The next section discusses how mass media can influence electoral participation and outlines shortcomings of previous studies.

### **3 The role of the media system for participation**

Mass media are widely considered to be important mobilizing agents who can propel citizens to go to the polls (Schmitt-Beck and Farrell, 2002).<sup>1</sup> Since progressing dealignment dissolved the stable ideological linkages between voters and parties since the 1960s (Dalton, 1984; Dalton et al., 1984), political ties are ever more established and sustained via the mass media (Bennett and Entman, 2001; Glynn et al., 1999; McAllister, 2002; Ramsden, 1996). More specifically, most citizens only learn about political affairs through the media, and media coverage defines the context in which political leaders are evaluated. De Vreese and Semetko (2004, p. 14) thus argue that “given the centrality of media in campaigns, common sense suggests that the media are bound to have effects on the electorate”. In recent years, there has been a constant stream of micro-level studies of how mass

media consumption structures whether and – more often – how individual voters cast their vote (cf. Barker and Lawrence, 2006; Schmitt-Beck and Mackenrodt, 2010). However, media might not only influence individuals' behavior through direct exposure to their content because we need to keep in mind the “essentially social character of political participation” (Schmitt-Beck and Mackenrodt, 2010, p. 392). Citizens do not cast their vote as atomized individuals but are embedded in social networks and exposed to a climate of opinion that can provide them with cues about whether they should go to polls or not. Thus, media also affect individuals indirectly because they are an important source of information for their personal environments as well (Katz and Lazarsfeld 1955). Hence, an increasing number of studies seeks to explain the effect of media coverage on vote choices or voter mobilization on the aggregate level (cf. Boomgarden and Vliegthart, 2007).

Yet, despite a growing body of research, the existence and nature of media effects, especially contextual effects of media systems, are still not very clear (Schmitt-Beck and Farrell, 2002). So far, the evidence is often weak, inconclusive or even contradictory. In our view, this is due to at least three weaknesses of previous accounts. First, there is still lack of comparative studies. Most research focuses on the United States and sometimes a few additional countries (Gulati et al., 2004, p. 251; Schmitt-Beck and Farrell 2002, p. 2) at best. However, since media systems and cultures vary greatly across countries (Hallin and Mancini, 2004), so might their influence on recipients. Second, the research that does include a broad range of countries often simply looks at the impact of individual media consumption patterns on political behavior without thinking about if and how this depends on what information is being transmitted by these channels of communication (Hellman, 2001; de Vreese and Semetko 2004b, pp. 705f.). By considering both media consumption and specific features of the information environment more generally, we therefore try to detect more precise mechanisms by which media can promote electoral turnout. Finally, the insights of many previous studies are often diluted because they do not account for the heterogeneity within electorates, i.e., the fact that media affect different groups of people to varying degrees (Glynn et al., 1999; Lachat and Sciarini, 2002; Schmitt-Beck, 2003; Shehata, 2010; Zaller, 1992). To account for this

problem, it is important to analyze how media effects interact with individual characteristics by a multilevel framework.

Besides the question *whether* media influence voters or not, the literature is also very controversial regarding *how* media coverage actually affects voters and especially their propensity to vote. Most commonly, mass media have been accused of not living up to the normative expectations imposed on them. According to the “media malaise” theory (Newton, 1999; Norris, 2000; Robinson, 1976; Shehata, 2010), political news does not only increasingly consist of short sound bites but also focuses more and more on personalization, scandals and sensational events as well as the conflict and competition between political actors instead of substantive political issues (Gerhards, 1994; Gulati et al., 2004; Habermas, 2006; Iyengar, 1991; Patterson, 1998; Rhee, 1997). This development, in turn, is supposed to lead to civic disengagement, mistrust and a crisis of political legitimacy (Glynn et al., 1999, p. 441; Gunther and Mughan, 2000, p. 427; Kleinnijenhuis et al., 2006; de Vreese and Semetko, 2004, p. 16).

Such assumptions are challenged by adherents of a more optimistic view, sometimes coined mobilization theory. Pointing to the rising cognitive mobilization of the population (Dalton, 1996; Inglehart, 1990), they conclude that the amount of substantive news in the media is generally satisfying and does actually foster the citizens’ political participation, knowledge and trust (Graber, 2004). Accordingly, Norris (2000) finds that attention to newspapers and TV news has a positive impact on turnout in EU elections. In a similar vein, Newton (1999) shows for the United Kingdom that knowledge, interest and confidence in politics increase with more frequent newspaper and TV news consumption. Following the premises of the mobilization approach, it can be argued that media mobilize citizens by helping them and their personal environments to form opinions. Voters need to be able to choose from a range of alternatives those candidates or parties which best endorse their preferences. Hence, media should provide a fair and balanced platform where political contesters can present their positions and programs (Beierwaltes, 2000; Graber, 2003; von Rautenfeld, 2005; Woods, 2007). In the following we will discuss this claim in more detail.

In electoral contests both incumbents and their challengers can only compete effectively if they get space and time to make their political positions publicly known (Ferree et al., 2002, pp. 207f.). In other words, the democratic process relies on a pluralistic communication infrastructure which allows all political factions to be heard. This is exactly what McQuail (1992, p. 144) has in mind when he defines media diversity as reflecting differences in society, giving access to various points of view and offering a wide range of choice. In this sense and to be more precise, we are interested in the “diversity of opinions” in terms of the “different viewpoints in political conflicts which are conveyed to the citizens” (Voltmer, 2000, p. 10). Trying to find support for the mobilization theory, we argue that the larger the range of ideological positions represented within a media system, the more likely it is that every political actor finds space to articulate its program, and thus, the more likely it is that voters find their preferred vote choice (Hellman, 2001, p. 184). Moreover, diversity is not only supposed to facilitate voters’ opinion formation but also sharpen their sense of the intensity of electoral contests. Franklin (2004) argues that the competitiveness of elections and more specifically the closeness of electoral outcomes is a very consistent determinant of voter turnout. But he only looks at parties’ margins of victory and the largest party’s majority status. A larger incentive for voting than actual closeness of election outcomes, however, should be the perceived competitiveness before the election. In that sense, media diversity might be decisive in shaping citizens’ expectations about how close-fought an electoral contest is. Thus, even voters who do not rely on the mass media to learn about different party options can be mobilized by a well-balanced media environment simply because this increases their perception of a tight race.

There are two distinct ways to conceptualize a media system’s diversity of opinions, one referring to *internal* features of media outlets and the other to *external* or overall characteristics of the media system. First, *internal* opinion diversity requires that a media system exhibits a high share of politically neutral or independent media outlets which are committed to cover the full range of different political opinions. “In their editorials, they either support various standpoints or are generally reluc-



tant to express own preferences” (Voltmer, 2000, p. 11). Internal diversity thus preserves pluralism, even with a restricted choice of newspapers within a particular market (Norris, 2000, p. 28). Second, *external* opinion diversity “permits individual media to be systematically imbalanced” as long as “diversity emerges from the interaction of these actors on the aggregate level of the entire media system” (Voltmer, 2000, p. 10). In other words, politically aligned media organizations have to balance each other out. While some scholars clearly prefer internal opinion diversity because it allows individuals to receive a balanced supply of viewpoints by using just one channel of information (Gunther and Mughan, 2000, p. 423), others acknowledge that biased media organizations in a system of external opinion diversity might provide citizens with helpful guidance for the formation of preferences and also better mobilize them (Norris, 2000, p. 28; Voltmer, 2000, p. 11, 45). We will coequally consider both internal and external opinion diversity as important determinants of voter turnout:

H1a: The higher the share of politically neutral media outlets, the higher is an individual’s propensity to vote.

H1b: The better politically aligned media outlets balance each other out, the higher is an individual’s propensity to vote.

We further argue that media mainly boost electoral turnout because they especially help those citizens to shape their preferences who tend to lack the personal resources and motivation to vote. Hence, we expect mass media to work as an equalizing institution which reduces socioeconomic gaps in political participation (Shehata, 2010, p. 298). Learning about the full offer of party alternatives should not only enable voters to develop political preferences and to check them against the programs of the different competitors but also raise their awareness of the importance of elections. In short, we assume that the more diverse the mass-mediated public forum is, the less important are an individual’s prior resources and motivation to participate in elections:

H2a: The higher the share of politically neutral media outlets, the smaller is the influence of personal resources and motivation on an individual’s propensity to vote.

H2b: The better politically aligned media outlets balance each other out, the smaller is the influence of personal resources and motivation on an individual's propensity to vote.

## **4 Data and methods**

The four hypotheses outlined above are analyzed on the basis of a sample of 33 countries, which were mainly selected according to data availability.<sup>2</sup> All of these countries can be considered established democracies (Bühlmann et al., 2011).

### **4.1 Individual-level variables**

The main variables of interest on the individual level are electoral participation as dependent and individual resources as well as motivation to vote as independent variables. These are based on survey data. For the European Union member states in our samples, we use the European Election Study (EES) 2004. Data for all the other countries is taken from the 5th wave of the World Value Survey (WVS, 2004-2008). The exact question wordings of all the survey items used and their categories are listed in *table A.1* in the appendix.

#### *4.1.1. Dependent variable*

The dependent variable intends to measure whether individuals are likely to participate in elections or not. To this aim, we use a survey item assessing prospective vote intentions. It asks for the party respondents would vote for if there were elections tomorrow. We coded all individuals opting for a party or to vote blank or null as voters and all others as non-voters.<sup>3</sup> Respondents not allowed to vote and other missings were excluded.

The choice of this dependent variable requires some justification since prospective vote intentions are obviously not the same as really taking part in elections. Hence, we are aware of the problem that social desirability and the greater easiness of simply picking a response category than actually going to the polls could lead to overestimated participation rates. A comparison of actual turnout

levels and the aggregated prospective voting question indeed shows considerable deviations from the mean turnout rates between 1995 and 2005. However, our tests have shown that these are generally not larger or more frequent than with the vote recall question.<sup>4</sup> In addition, there is at least one advantage of using this survey item: not restricting our analysis to real election periods might help isolate media effects. Some scholars have pointed out that testing media effects in election campaigns is difficult because it is very unclear if voters are really influenced by the news reports or the political ads of electoral competitors (Glynn et al., 1999, p. 439). So by looking at off-election periods – or at least not election periods exclusively – we can lessen the ‘noise’ coming from other campaign elements.

#### *4.1.2. Independent variables*

The independent variables on the individual level measure the citizens’ resources and motivation to vote (see *table A.1* in the appendix for details on measurement).<sup>5</sup> As for individual resources, physical capital is measured by income. Human capital consists of education and two proxy indicators capturing political sophistication: one is the respondents’ ability to place themselves onto the left-right scale, the other their ability to name the most important problem or aim of their country. Finally, the only comparable social capital factors are whether an individual is member in a trade union (dummy) and how often he or she attends religious services.

The most important indicator to account for individuals’ motivation to vote is their level of general interest in politics. Further, we consider the individuals’ frequency of consuming TV and radio news as well as of reading a newspaper. These two variables will also allow testing the mobilization theory’s central claim that media consumption increases political participation. Finally, we try to capture the respondents’ satisfaction with the way democracy works and with the performance of their governments by two proxy variables asking about trust or confidence in the parliament and in the government.

## 4.2 Contextual-level variables: internal and external diversity

The media variables are the main factors of interest on the contextual level. As discussed in section 3 we will examine the effects of media's opinion diversity on the citizens' propensity to vote. More precisely, we focus on the press only. This is because it is very difficult to find data material for electronic mass media which is available for a large number of countries. This restriction to the print media, however, entails an advantage for our primary research interest. Mobilizing effects are more strongly ascribed to newspapers than for example television (Schmitt-Beck and Mackenrodt 2010).

To assess the political orientations of newspapers, we have chosen a procedure closely based on Voltmer (2000) and coded newspapers' political affiliations by means of expert ratings. The "Political Handbook of the World 2005-2006" (Banks et al., 2005) provides a list of the most important regional and national newspapers for every country, including their circulation and ideological leaning as rated by experts. On the basis of the indicated political affiliations, each newspaper was assigned a Manifesto party family code between 1 and 6. 1 to 3 roughly represent the left side of the political spectrum, 4 to 6 the right side. Newspapers listed as "independent" were considered neutral and therefore received a value of 3.5.<sup>6</sup>

Using these newspaper codes, we created two indicators. The first reflects external opinion diversity and it thus serves as the independent variable for H1b and H2b. It is calculated by the absolute deviance of the averaged newspaper codes from the center position 3.5, multiplied by -1.<sup>7</sup> This measure equals 0 if the political orientations of all newspapers average to 3.5, i.e., if they completely balance each other out. By contrast, the variable reaches its minimum value of -2.5 if all newspapers within a country can be characterized by the extreme code 1, or 6 respectively.

The second indicator reflects internal opinion diversity and will be used as independent variable for H1a and H2a. It corresponds to the circulation of neutral or politically independent newspapers, i.e., those with the code 3.5, relative to a country's total newspaper circulation.

### 4.3 Control variables

Finally, some more variables are needed to control for well-known effects in participation research, both on the individual and the contextual or country level. On the individual level, we control for age and gender. Research has often found that people tend to participate more, the older they are (Bühlmann, 2006, p. 59; Norris, 2000, p. 262; Teorell et al., 2006, p. 393). As for gender, many studies have shown that men tend to vote more often than women (Bühlmann, 2006, p. 60; Norris, 2002, p. 139).

As for the contextual level, we limit the selection of control variables to three, taking into account the party system and socioeconomic conditions. As for the former, we include the effective number of parties in the lower legislative chamber (Gallagher, 2010). This is supposed to affect turnout rates, even though the direction of the influence is not clear. On the one hand, a high number of parties offers voters many choices to find the best representatives for their preferences and usually raises the level of political competition in a country. On the other hand, it also increases the likelihood of government coalitions and makes finding the right choice more complicated (Blais, 2006, p. 118; Bühlmann, 2006, pp. 149f.). To account for the socioeconomic context, we use a country's GDP per capita.<sup>8</sup> This is reasonable since there is quite some variance in terms of the economic situation within our country sample. Moreover, there is strong evidence that this is an influential long-term predictor of turnout (Blais, 2006, p. 117). Finally, because of our special choice of dependent variable, we control for the approximate number of days between the survey and a national, parliamentary election, using the closer of either the last or the next general elections. If an election is close or just took place recently, respondents might be more politicized and thus more likely to express vote intentions.

We do not consider any political institutions as control variables because we do not think that they are crucial for our study. The most decisive institutional factor according to some authors is the existence of compulsory voting within a country (Lijphart, 1997, p. 8; Norris, 2000, p. 263). However, while compulsory voting might be a major incentive for citizens to go to the polls, it should not play

a big role in hypothetical elections as is the case here. The same goes for the electoral system, which is usually regarded as a crucial variable in electoral studies and taken as a proxy for the decisiveness of elections (Blais, 2006; Franklin, 2004). Moreover, our political control variable, the number of parties, should at least partially capture the electoral system since majoritarian democracies generally have fewer political parties (Blais, 2006, pp. 118f.).

#### **4.4 Multilevel analysis**

The hypotheses will be tested by means of multilevel logit regressions.<sup>9</sup> Multilevel analysis allows to study a phenomenon on one level of analysis by taking into account explanatory factors from a higher level of analysis (Bühlmann, 2006; Steenbergen and Jones, 2002). For our purpose, we can explain individuals' willingness to participate by their personal characteristics as well as by certain attributes of the contexts – in our case countries – they live in. Additionally, it is possible to test cross-level interactions. In other words, it can be analyzed how the relationship between an independent and the dependent variable on the individual level varies across contexts and according to contextual factors. This will be useful to test our expectations about the influence of the media variable on individual resources and the motivation to vote.

## **5 Results**

We now turn to the results of our analyses. Section 5.1 discusses the impact of the balance of the press system on individual willingness to vote. Section 5.2 then explores how the degree of ideological pluralism or neutrality of a country's press system affects the strength of personal resources and motivation in determining the likelihood of voting.

### **5.1 The impact of internal and external opinion diversity on the likelihood of voting**

In order to analyze H1a and H1b, we estimated a series of multilevel logit regression models following a stepwise procedure. *Table 1* shows the respective results. In a first step, an empty model

without explanatory variables was estimated in order to test whether the dependent variable varies significantly across contexts. This indicates whether a multilevel model is indeed appropriate to analyze our data. Second, the individual-level variables are introduced to estimate model 2. Finally, the effects of both the individual- and the contextual-level variables are shown in model 3.

[Table 1 about here]

The empty model shows that the contextual variance of the intercept associated with the dependent variable is highly significant. This means that the context is important and applying a multilevel model is justified, since the average individual voting propensity substantially varies across countries. Turning to model 2, we observe that most of the individual determinants of turnout are significant and have the expected positive effects. The predicted probability plots to explore all the significant individual-level effects in detail can be found in the appendix (see *figure A.1*). The level of individual interest in politics has the largest influence, followed by the respondents' ability to place themselves onto the left-right dimension, union membership, trust in parliament and age. To a lesser degree, trust in government, income, the respondents' ability to name a problem their country currently faces and the frequency of attending religious services also increase individuals' likelihood of voting. Furthermore, following news on television or radio has a positive effect on voting propensity as well, which corresponds to the findings of earlier cross-country studies and provides evidence in favor of the mobilization theory (Norris, 2000). Surprisingly, this does not apply to newspaper reading. However, since the requirement to be counted as a newspaper reader is quite weak (reading a newspaper at least once a week), almost all respondents belong to this category and this effect thus has less substantive meaning. Additionally puzzling is the insignificant coefficient of education. This, however, might be due to the fact that this variable is measured by the age when respondents completed their full-time education. A more appropriate indicator would capture the highest level of education that an individual achieved, but such an item was unfortunately not avail-

able in both of the surveys used. While the age when completed full-time education is undoubtedly related to the highest level of education achieved, the former is still an imperfect proxy for the latter.<sup>10</sup> Finally, gender is not a significant predictor of turnout when controlling for other individual characteristics.

Model 3 adds the context factors, both the independent variables of interest measuring internal and external opinion diversity and the three control variables. As *table 1* indicates, the first coefficient on the contextual level is not statistically significant. This suggests that higher internal press diversity, i.e., a higher share of neutral newspapers within a country is not related to individual voting probability. H1a therefore needs to be rejected. The second media variable, by contrast, does have a significant effect on electoral participation. However, contrary to the positive relationship expected in H1b, the coefficient for external opinion diversity is negative as well. Hence, the more a press system is ideologically balanced, the less likely citizens are to vote. Or in other words, the more the press system is skewed towards either the left or the right side of the political spectrum, the more people express their willingness to vote. The magnitude of these effects can again be demonstrated by graphs displaying the predicted probability of voting as a function of internal and external press diversity while holding all other independent variables constant (see *figure 1*).

[*Figure 1* about here]

*Figure 1* reveals that, ceteris paribus, raising internal opinion diversity by one unit – which in our case equals moving from the lowest to the highest share of neutral newspapers – slightly decreases voting probabilities. However, given that the curve is almost flat, it is not surprising that the effect does not reach statistical significance and can thus not be distinguished from 0 with sufficient certainty. The demobilizing impact of a well-balanced press system, however, is quite substantial. Moving from the most biased to the least biased press system in our sample, the probability of voting drops from about 0.75 to 0.50. On average, people are thus 25 percentage points less likely to



vote in Chile, which represents the most heavily skewed press system among the countries we studied, than in the United States, where the press system was found to be most balanced overall. As for the contextual control variables, surprisingly, neither the effective number of parties, the closeness to actual elections nor GDP per capita seems to have an influence on individual's willingness to choose parties and go to the polls.

Our analysis suggests that proponents of external opinion diversity rightly assume that media's endorsements of specific political camps can provide citizens with helpful cues to make vote choices. Voltmer (2000, p. 11) argues that the growing volatility of the American electorate may be related to the predominance of neutrality in mass communication. However, external opinion diversity assumes that there is a high competition between media outlets with different political ideologies which each mobilize the citizens with the same political viewpoints and considers a lack of diverging affiliations in the public sphere dangerous: "The role of the news media as a civic forum becomes problematic if most major news outlets consistently favour only one party or viewpoint [and] if they exclude minor parties or minority perspectives" (Norris, 2000, p. 28). But our analysis implies that it is not about individual newspapers each providing incentives to different groups of voters but rather about the climate of opinion as a whole. Apparently, a uniformly biased public debate facilitates opinion formation more than a public debate which is segregated along political conflict lines. While this finding is probably not in line with normative expectations about how the democratic process is supposed to be working, it nevertheless leads to the desired outcome, at least with regard to political participation: in biased press systems more people are able to make up their minds about which party they prefer and are willing to take part in elections.

## **5.2 The impact of internal and external opinion diversity on the effects of personal resources and motivation to vote**

To test how the media system affects the relationships between individual resources and motivation on voting propensities (H2a and H2b), we checked model 3 in *table 1* for cross-level interactions

between the media system variables and the significant individual-level effects. Since only external opinion diversity turned out to be significant, we restricted the analysis of cross-level interactions to this indicator.

[Table 2 about here]

Column 2 in *table 2* shows whether the slopes of the respective individual-level effects significantly vary between the different countries. If so, we tested whether these variances depend on the degree of ideological diversity in a country's press system. In other words, we checked whether there is a significant interaction term between the two variables holding the individual-level effect at random. These interaction terms are listed in column 3.<sup>11</sup>

The coefficients in *table 2* indicate that four of the individual-level effects vary significantly across countries. Moreover, all of these effects seem to be explained by the contextual variable. Interestingly, they are all positive. This suggests that the influence of personal resources in terms of political sophistication (ability of left-right self-placement) and personal motivation (interest in politics as well as trust in parliament and in government) on the likelihood of voting is higher, the more ideologically balanced a press system is. In turn, personal predispositions become less important determinants of electoral turnout with an increasing bias in the press system. This appears to indicate that especially those groups of people who rather tend to abstain from going to the polls rely on cues which are more easily available in a biased climate of opinion. However, further analyses are required to test whether the discussed interactions are indeed statistically and substantially significant and allow drawing these conclusions. Following the suggestions of Brambor et al. (2006), we calculated the marginal effects of the four respective individual-level variables on the probability of voting, conditioned by the cross-level interactions with external opinion diversity. The corresponding results are illustrated graphically in *figure 2*.

[Figure 2 about here]

The first two graphs in *figure 2* clearly support our interpretation of the interaction effects. They show that the marginal effects of respondents' ability to place themselves onto the left-right dimension as well as of political interest become more positive when external press diversity increases. As a matter of fact, since we computed the marginal effects for a change in the variable of interest from 0 to 1, the estimates equal the maximum effect. In substantive terms, this means that the difference in the likelihood of voting between those who are able to place themselves on the left-right dimension and those who are not is about 0.25 where press diversity is highest. Similarly, individuals who are highly interested in politics have a 30 percentage points higher probability of voting than their fellow citizens with no interest in the most well-balanced press system. Both effects decrease markedly as the ideological balance of press systems declines. In fact, when the value of external opinion diversity falls below 0.3, the effect of left-right self-placement on individual voting propensity disappears, i.e., is no longer statistically different from 0 in our model.<sup>12</sup> This scenario applies to Australia, Chile and Peru. Moreover, interest in politics is not a significant determinant of turnout anymore at levels of press diversity below 0.1, which now only pertains to Chile.

The two lower graphs in *figure 2* display similar patterns as the two graphs just discussed. Again, the marginal effects of trust in parliament and trust in government on the likelihood of voting become more positive as the ideological bias of the press system diminishes. Yet contrary to the previous graphs, the marginal effects fall below 0 and thus turn negative at lower values of press diversity. In the case of trust in parliament, however, its effect is no longer statistically significant when external press diversity is about 0.6 or lower. Given that the mean of external opinion diversity lies at 0.66 (as represented by the vertical line) this would apply to quite a few countries or press systems in our sample, namely: Australia, Canada, Chile, Cyprus, the Czech Republic, Denmark, Germany, India, New Zealand, Peru, Portugal and the United Kingdom. As for trust in government, the picture looks somewhat different. The curve shows that trust in government only affects turnout

positively if external opinion diversity is close to the maximum level. At all other levels, the effect is either insignificant or negative. Hence, when the indicator measuring the ideological balance of the press system drops below 0.2 the probability of voting is slightly lower for those who trust the government completely than for those who do not trust the government at all. Judging from the confidence intervals in the respective graph, though, it seems that this negative marginal effect only barely reaches statistical significance.

From the perspective of citizen representation and responsiveness, our findings from the cross-level interactions seem desirable. If it is especially the less advantaged in terms of personal resources and motivation who are mobilized by the press system, then media contribute to a better representation of the interests of those citizens in the political decision-making process. However, it is arguable whether the vote choices that the politically less interested and less sophisticated make in a biased media environment are also more competent. One could assume that citizens are not presented the full range of electoral alternatives in biased press systems and thus express vote intentions corresponding to the general direction of the public debate but not to their own, intrinsic preferences. This would be in line with Zaller's (1992) RAS model, which holds that individuals with low political awareness do not reflect media messages in light of their own predispositions as critically as their politically more aware fellow citizens, if they pay attention to the elite discourse in the first place.

## **6 Conclusions**

In this paper, we set out to explore how the press system affects electoral participation. More specifically, we argued that if media provide a diverse public forum which gives space to all political forces in a society this should not only increase individuals' voting propensities but also decrease the impact of personal determinants of turnout. We assessed media diversity by the share of neutral newspapers' circulation (internal opinion diversity) as well as the average ideological distortion of a press system (external opinion diversity).

Our first assumption was not confirmed by our data. While we found no impact of internal opinion diversity, we discovered the opposite effect for external opinion diversity: the more a press system leans towards a specific ideological direction, the more people are mobilized. This suggests that if a country's overall climate of opinion as generated by the media discourse is biased towards either the left or the right, citizens find it easier to make vote choices. Although this finding provides evidence for the idea that mass media can be mobilizing agents in elections, it is certainly not in line with common normative concepts of democracy. Thereby, if anything, our results rather lend support to the media malaise than the mobilization theory. For adherents of the former, a potentially manipulative or propagandistic effect of press systems might hardly come as a surprise. Hence and even though we observe positive effects of simple media exposure on the individual level, it is difficult to uphold the optimistic outlook of mobilization theory in our case. Obviously, it is not enough to only look at the relationship between media exposure and voting behavior as most mobilization theorists do. In fact, if one looks more closely at the contextual impact of media content, the story is not so simple.

In addition, with respect to H2a and H2b, all of the four included cross-level interaction effects revealed that individual properties become more important in mobilizing people the more well-balanced and diverse press systems are. This indicates that biased press systems help especially those voters to make up their minds about their party preferences who are less advantaged in terms of political sophistication and have less political interest and trust in the government. Of course, it remains an open question what these results mean for the quality of vote decisions. One possibility to explore this point in more detail would be to model the impact of media diversity on citizens' political competence, such as their ability to choose parties in line with their predispositions. Future research should also address the biggest limitation of the analyses presented here: the dependent variable. As already discussed, the dependent variable used in this contribution is not ideal for really capturing the people's participation levels and choices.

## Notes

1. Especially newspapers and television, which are usually cited as the main sources of information by citizens all over the world (de Vreese and Semetko 2004).
2. Australia, Austria, Brazil, Bulgaria, Canada, Chile, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, India, Ireland, Italy, Japan, Mexico, the Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, the United Kingdom and the United States.
3. All individuals answering “I would not vote”, “none”, “refused” (EES only), “no answer” or “do not know” were coded as non-voters. The last few of these categories could be questioned since answering “do not know” or refusing to answer might just mean that citizens are undecided at the time of the survey but would make up their minds and vote come election day. But taking the survey question literally, we argue that if individuals did not know which party to choose or refused an answer they would probably not go to the polls if there really were elections the following day. It is of course also possible that those who refused an answer would vote, but simply were reluctant to give away their vote choice. However, comparing this category with the question on general party preference as well as on left-right self-placement shows that not responding to the prospective vote questions is rather related to cluelessness than discomfort with naming his or her preferred party or ideological predisposition.
4. In fact, in 14 out of 33 countries the reported prospective participation rates differ less than five percentage points from real average turnout between 1995 and 2005. In six countries, the differences are between five and ten percentage points, while in the remaining 13 countries they are larger than ten points. Looking at retrospective participation levels, the corresponding numbers of countries are three, five and 25. Moreover, the bias in prospective vote intentions does not always overestimate real electoral turnout. In 13 of the 33 countries, aggregate vote intentions are lower than actual turnout.
5. Due to limited availability of comparable survey items across the two different surveys and for all countries, it was not possible to include all the factors discussed in section 2 above.
6. Additional sources were used to define the most important newspapers (World Press Trends (various years); World Association of Newspapers) and to crosscheck the political ratings in Banks et al. (2005): Hans-Bredow-Institut, 2002; Kelly et al., 2004; Østergaard, 1992; Wikipedia (<http://www.wikipedia.org/>); Worldpress.org (<http://www.worldpress.org/>); Mondo Times (<http://www.mondotimes.com/>).

7. The following formula illustrates this:  $PA_i$  is a newspaper's political affiliation,  $C_i$  its circulation and  $F_i$  its frequency of weekly appearance. Accounting for  $C_i$  and  $F_i$  ensures that smaller newspapers and non-dailies receive less weight in the calculation of external opinion diversity.

$$Diversity = \left| 3.5 - \frac{\sum PA_i \times C_i \times F_i}{\sum C_i \times F_i} \right| \times -1$$

8. Source: OECD Economic Outlook (five-year average).
9. We use MLwiN 2.24 and Stata 11 software (see Leckie and Charlton, 2011).
10. Overall, using the WVS cases for which both survey items are available, we only find a moderate correlation between the two (0.53). Separate correlations for each country reveal quite a large variation from 0.39 (USA) to 0.86 (Bulgaria). However, the mean of these country-specific correlations is still only 0.60.
11. Each line in *table 2* represents a single regression model with only the respective individual-level effect randomized. The rest of the coefficients in model 4 are omitted here because they do not really change when the cross-level interactions are included.
12. Marginal effects are only statistically significant if both the upper and the lower bound of the confidence interval are either above or below 0.

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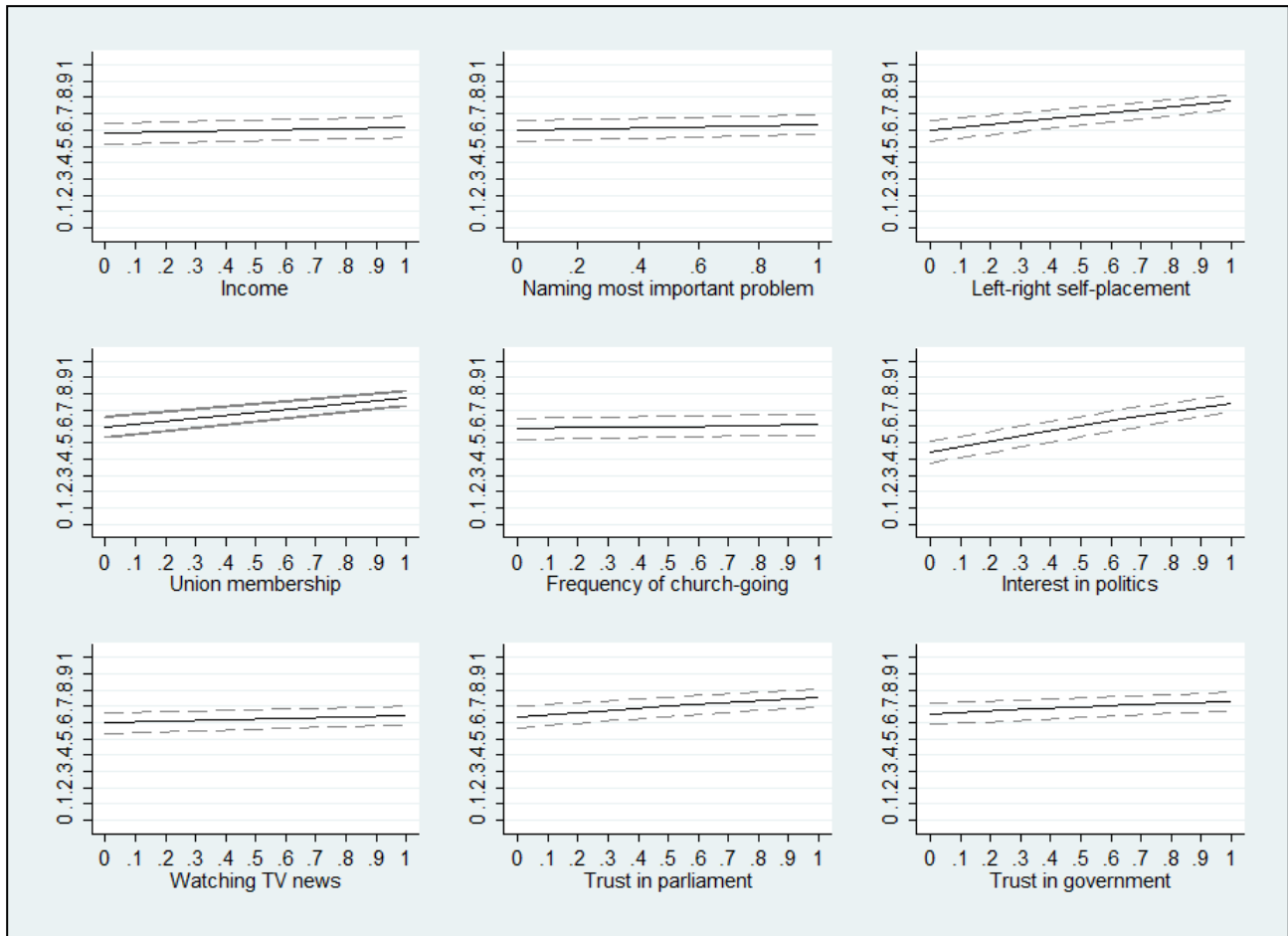
## Appendix

Table A.1: List of survey variables

| <i>Indicator</i>                          | <i>EES items</i>  | <i>WVS items</i>   |
|---|---|--|
| Voting                                    | V114: And if there was a general election tomorrow, which party would you vote for?<br>Recoded: "none", "refused", "would not vote" and "d/k, n/a" → 0; else → 1.               | V231: If there were a national election tomorrow, for which party on this list would you vote?<br>Recoded: "None", "I would not vote", "Don't know" and "No answer" → 0; else → 1  |
| Income                                    | V230: Income scale (scale of 1 - 5)   | V253: On this card is a scale of incomes on which 1 indicates the "lowest income decile" and 10 the "highest income decile" in your country. We would like to know in what group your household is.<br>Recoded: 1 and 2 → 1; 3 and 4 → 2; 5 and 6 → 3; 7 and 8 → 4; 9 and 10 → 5.  |
| Education                                 | V216: How old were you when you stopped full-time education?  | V239: At what age did you (or will you) complete your full time education, either at school or at an institution of higher education?<br>(New Zealand imputed from V238)   |
| Naming important problems/aims of country | V319 / V028: Of those you have mentioned what would you say is the single most important problem?<br>Recoded: "none" and "no response" → 0; else → 1.                           | V69: People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important?<br>Recoded: "No answer" and "Don't know" → 0; else → 1. |
| Left-right self-placement                 | V134: In political matters people talk of "the left" and "the right". What is your position? 10-point scale.<br>Recoded: any number on scale → 1; "refused" and "d/k, n/a" → 0. | V114: In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking? 10-point scale.<br>Recoded: any number on scale → 1; "refused" and "d/k, n/a" → 0.  |
| Trade union membership                    | V215: Are you yourself a member of a trade union or is anyone else in your household a member of a trade union?<br>Recoded: "yes, I am" and "yes both" → 1; else → 0.           | V27: Now I am going to read off a list of voluntary organizations. For each one, could you tell me whether you are an active member, an inactive member or not a member of that type of organization: labor union?<br>Recoded: "Active member" and "Inactive member" → 1; "Don't belong" → 0.  |
| Church attendance                         | V229: How often do you attend religious services: several times a week (1), once a week (2), a few times a year (3), once a year or less (4), or never (5)?<br>Reversed.        | V186: Apart from weddings and funerals, about how often do you attend religious services these days? More than once a week (1); Once a week (2); Once a month (3); Only on special holy days (4); Once a year (5); Less often (6); Never, practically never (7).<br>Recoded: 1 → 5; 2 → 4; 3 and 4 → 3; 5 and 6 → 2; 7 → 1.            |
| Interest in politics                      | V154: To what extent would you say you are interested in politics?<br>Scale from 1 (very) to 4 (not at all) → Reversed.   | V95: How interested would you say you are in politics?<br>Scale from 1 (Very interested) to 4 (Not at all interested) → Reversed.  |

|                     |   |   |
|---------------------|---|---|
| Watching TV news    | V034: Normally, how many days of the week do you watch the news on television? Scale from 0 (never) to 7 (every day).<br>Recorded: “never” → 0; else → 1.   | V224: For each of the following sources, please indicate whether you used it last week (1) or did not use it last week (2) to obtain information: news broadcasts on radio or TV.<br>Recorded: 1 → 1; 2 → 0.<br>(New Zealand constructed from original New Zealand WVS dataset)                         |
| Reading newspapers  | V069: And how many days of the week do you read a newspaper?<br>Scale from 0 (never) to 7 (every day).<br>Recorded: “never” → 0; else → 1.<br><br>V070 (Sweden only): Do you usually read one or several newspapers regularly? With regularly I mean at least one time a week? 0 = no; 1 = yes. | V223: For each of the following sources, please indicate whether you used it last week (1) or did not use it last week (2) to obtain information: daily newspaper.<br>Recorded: 1 → 1; 2 → 0.<br>(New Zealand constructed from original New Zealand WVS dataset)  |
| Trust in parliament | V129: Please tell me on a score of 1-10 how much you personally trust each of the institutions I read out: [country] parliament. Scale from 1 (not trust at all) to 10 (complete trust).<br>Recorded: 1 and 2 → 1; 3 and 4 → 2; 5 and 6 → 2.5; 7 and 8 → 3; 9 and 10 → 4.                       | V140: I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence (1), quite a lot of confidence (2), not very much confidence (3) or none at all (4): parliament?<br>Reversed.                                |
| Trust in government | V131: Please tell me on a score of 1-10 how much you personally trust each of the institutions I read out: [country] government. Scale from 1 (not trust at all) to 10 (complete trust).<br>Recorded: 1 and 2 → 1; 3 and 4 → 2; 5 and 6 → 2.5; 7 and 8 → 3; 9 and 10 → 4.                       | V138: I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence (1), quite a lot of confidence (2), not very much confidence (3) or none at all (4): the government (in your nation’s capital)?<br>Reversed. |
| Age                 | V218: What year were you born?<br>Recorded to reflect age in years.   | V237: This means you are ____ years old.  |
| Gender              | V217: Are you ... [gender]?<br>1 = male; 2 = female.<br>Recorded: “male” → 1; “female” → 0.   | V235: Respondent’s sex. 1 = male; 2 = female.<br>Recorded: “male” → 1; “female” → 0.  |

Figure A.1: Predicted probability of voting by all independent individual-level variables



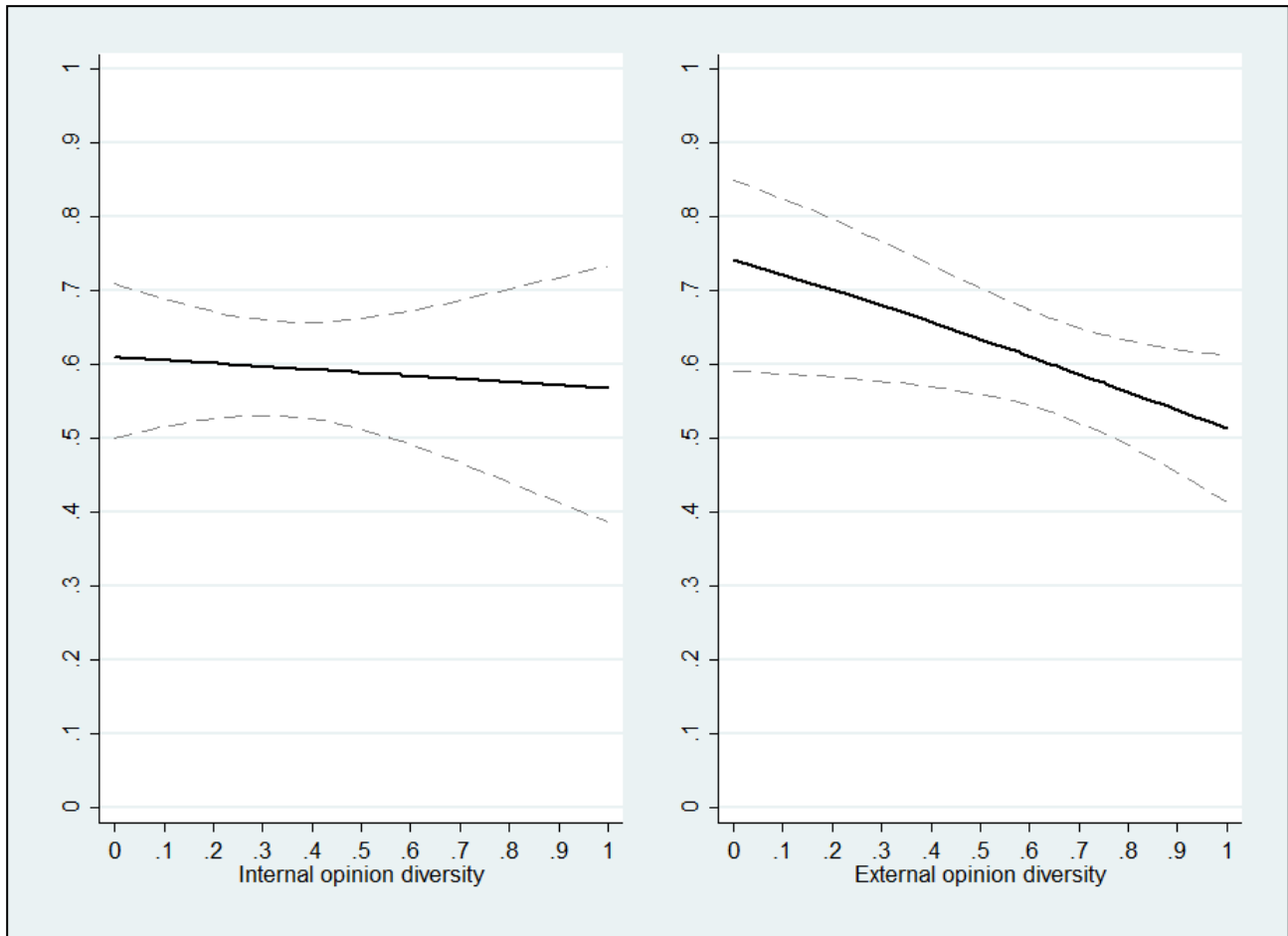
Predicted probability  $P(y=1)$  for varying values of independent individual-level variables, holding all other independent variables at their mean (continuous variables) or at 0 (dummy variables). Dashed lines represent 95% confidence intervals. Predicted probabilities were only calculated for variables with significant effects in *table 1*.

Table 1: Multilevel models predicting willingness to vote

|                               | <i>Empty model</i> |            | <i>Model 2</i> |            | <i>Model 3</i> |            |
|-------------------------------|--------------------|------------|----------------|------------|----------------|------------|
|                               | Coef.              | (S.E.)     | Coef.          | (S.E.)     | Coef.          | (S.E.)     |
| <b>FIXED EFFECTS</b>          |                    |            |                |            |                |            |
| Intercept                     | 1.42               | (0.11) *** | -0.90          | (0.15) *** | -0.48          | (0.40)     |
| <i>Individual level</i>       |                    |            |                |            |                |            |
| Income                        | –                  | –          | 0.17           | (0.05) *** | 0.17           | (0.05) *** |
| Education                     | –                  | –          | -0.30          | (0.26)     | -0.30          | (0.26)     |
| Naming most important problem | –                  | –          | 0.16           | (0.05) *** | 0.17           | (0.05) *** |
| Left-right self-placement     | –                  | –          | 0.83           | (0.04) *** | 0.85           | (0.04) *** |
| Union membership              | –                  | –          | 0.11           | (0.04) **  | 0.11           | (0.04) **  |
| Church attendance             | –                  | –          | 0.12           | (0.06) *   | 0.12           | (0.06) *   |
| Interest in politics          | –                  | –          | 1.31           | (0.06) *** | 1.31           | (0.06) *** |
| Watching TV news              | –                  | –          | 0.21           | (0.06) *** | 0.20           | (0.06) *** |
| Reading newspapers            | –                  | –          | 0.02           | (0.04)     | 0.02           | (0.04)     |
| Trust in parliament           | –                  | –          | 0.57           | (0.08) *** | 0.57           | (0.08) *** |
| Trust in government           | –                  | –          | 0.36           | (0.07) *** | 0.36           | (0.07) *** |
| Age                           | –                  | –          | 0.48           | (0.09) *** | 0.48           | (0.09) *** |
| Gender (male)                 | –                  | –          | 0.04           | (0.03)     | 0.04           | (0.03)     |
| <i>Contextual level</i>       |                    |            |                |            |                |            |
| External opinion diversity    | –                  | –          | –              | –          | -1.00          | (0.48) *   |
| Internal opinion diversity    | –                  | –          | –              | –          | -0.17          | (0.53)     |
| Effective number of parties   | –                  | –          | –              | –          | 0.31           | (0.52)     |
| Days to/since election        | –                  | –          | –              | –          | 0.33           | (0.36)     |
| GDP per capita                | –                  | –          | –              | –          | 0.22           | (0.46)     |
| <b>RANDOM EFFECTS</b>         |                    |            |                |            |                |            |
| Intercept $\sigma_{\mu 0}^2$  | 0.42               | (0.11) *** | 0.41           | (0.10) *** | 0.37           | (0.09) *** |
| <b>MODEL PROPERTIES</b>       |                    |            |                |            |                |            |
| N individuals (countries)     | 29,402             | (33)       | 29,402         | (33)       | 29,402         | (33)       |
| Wald test (df)                | 153.1              | (1) ***    | 1,767.3        | (12) ***   | 1,618.3        | (18) ***   |

Notes: Unstandardized logit coefficients. All variables are rescaled to range from 0 to 1. \*\*\*  $p \leq 0.001$ , \*\*  $p \leq 0.01$ , \*  $p \leq 0.05$ , .  $p \leq 0.10$ .

Figure 1: Predicted probability of voting by internal and external opinion diversity



Predicted probability  $P(y=1)$  for varying values of internal and external opinion diversity, holding all other independent variables at their mean (continuous variables) or at 0 (dummy variables). Dashed lines represent 95% confidence intervals.

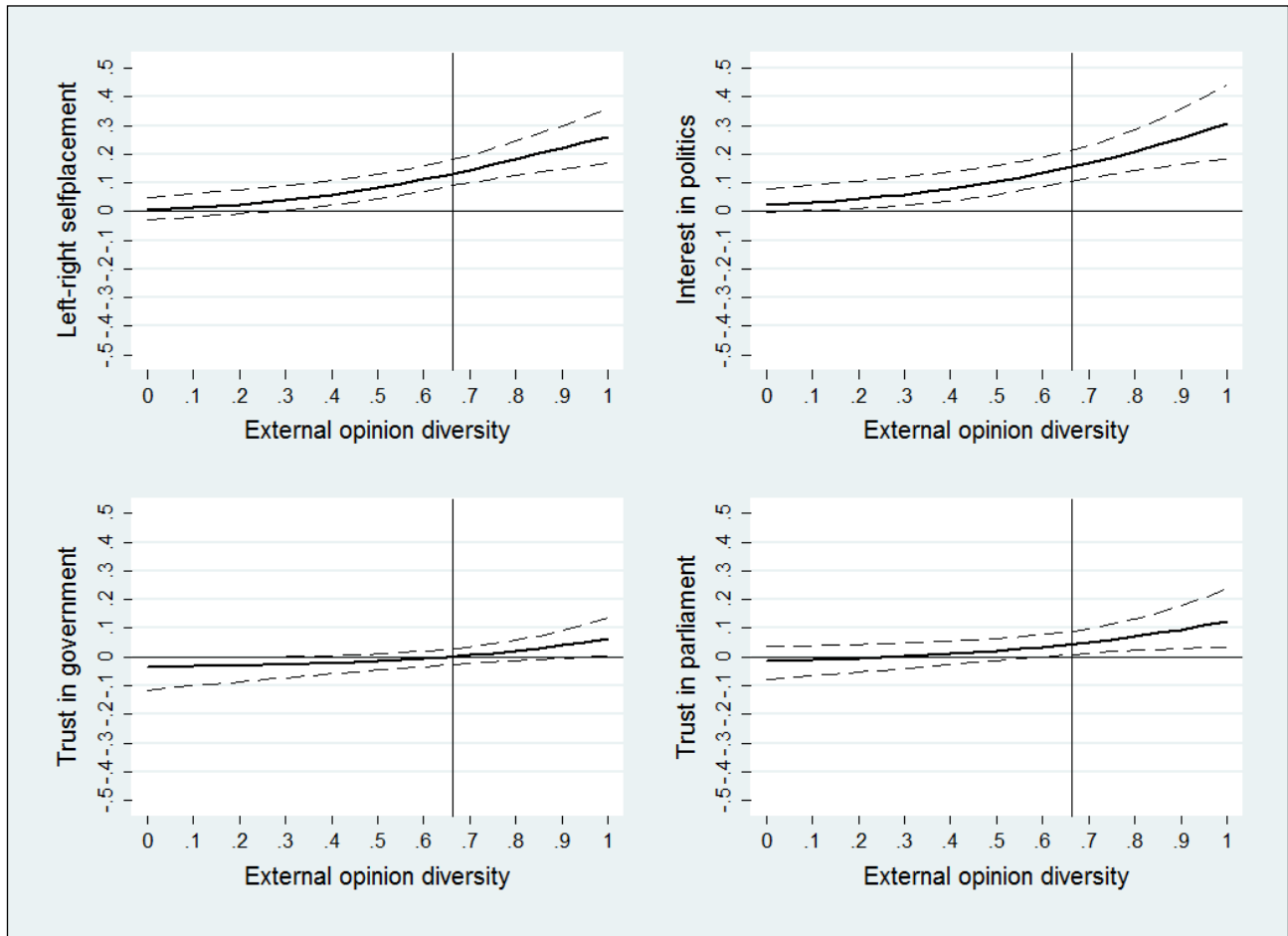
Table 2: Random effects and cross-level interactions with external opinion diversity

|                               | <i>Slope variance</i> |           | <i>Cross-level interaction <sup>a)</sup></i> |          |
|-------------------------------|-----------------------|-----------|--|----------|
|                               | Estim.                | (S.E.)    | Estim.                                       | (S.E.)   |
| Income                        | 0.01                  | (0.02)    | –  | –        |
| Naming most important problem | 0.02                  | (0.02)    | –  | –        |
| Left-right self-placement     | 0.09                  | (0.04) *  | 0.75   | 0.26 **  |
| Union membership              | 0.00                  | (0.01)    | –  | –        |
| Church attendance             | 0.00                  | (0.00)    | –  | –        |
| Interest in politics          | 0.23                  | (0.08) ** | 1.33   | 0.35 *** |
| Watching TV news              | 0.13                  | (0.07)    | –  | –        |
| Trust in parliament           | 0.39                  | (0.13) ** | 0.88   | 0.51 .   |
| Trust in government           | 0.18                  | (0.07) *  | 0.89   | 0.36 *   |

Notes: Standard errors in brackets. a) Unstandardized logit coefficients. \*\*\*  $p \leq 0.001$ , \*\*  $p \leq 0.01$ , \*  $p \leq 0.05$ , .  $p \leq 0.10$ .



Figure 2: Marginal effects of individual-level variables on the probability of voting for different levels of external opinion diversity



Graphs are based on results from model 3 in *table 1*. For each graph, model 1 was complemented by the random effect of the individual-level variable of interest and a product term of the respective variable and external opinion diversity. Marginal effects are calculated for changes of individual-level variables from 0 to 1, holding all other independent variables at their mean (continuous variables) or at their mode (dummy variables). Computation is based on a modification of the Stata code provided by Brambor et al. (2006). Dashed lines represent 95% confidence intervals; the vertical line indicates the mean level of external opinion diversity at 0.66.