The Impact of Complexity, Political Knowledge, and Party Mobilization on Voter Turnout

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Abstract

The number of parties competing in an election boosts the complexity of the vote decision environment by increasing informational costs for potential voters. Using data from the Comparative Study of Electoral Systems, this research examines how voter turnout is conditioned by such complexity. Our expectation is that while voter participation is negatively correlated with complexity, all individuals are not affected equally. That is, both high levels of individual knowledge and contact with politicians should offset the dampening effect of complexity by making it easier for individuals to differentiate among the political parties. Results indicate that the turnout-decreasing effect of multipartism is attenuated among those with more knowledge and those who experienced political contact. The results of this research allow us to identify institutional deterrents to political participation and how these deterrents may be addressed.

Consumers prefer choice. Diners tend to frequent restaurants with eclectic menus, large mega-markets thrive while smaller grocers and general stores shut their doors, and automobile companies strive to diversify their latest model lines in order to appeal to a broad array of consumers. It is thus expected that "electoral consumers," or voters, will be more likely to participate when the party system supplies a large number of choices. However, comparative research has uncovered a curious empirical regularity: as the number of political parties rises, citizens are, in fact, less likely to turn out to vote. There have been multiple conjectures as to why this relationship is repeatedly observed, but none has gained traction in the literature.

In this research, we examine a rationale for this puzzle previously put forth by Blais and Dobrzynska (1998) and shown by Jusko and Shively (2005). Fractionalized party systems demand that each potential voter processes a relatively high amount of information before casting his or her vote. Thus, the costs associated with voting are high in such systems, meaning the potential benefits an individual gets from participation – a possible victory for a preferred party or an intrinsic benefit associated with completing a civic duty – are less likely to lead one to vote.

We further the examination of multipartism as a manufacturer of complexity by using the Comparative Study of Electoral Systems to test whether those who are better able to cope with complexity are less likely to be affected by a fractionalized party system. We identify two factors that help individuals wade through complexity: political contact and knowledge. First, contact has been shown to matter for the turnout decision (Goldstein and Ridout 2002; Hillygus 2005; Wielhouwer 2000), and one of the long-recognized roles of parties is to help voters overcome at least some of the costs associated with political participation at election time (e.g. Wielhouwer 2000, 208). An individual that recalls having been contacted by a party possesses a powerful heuristic when formulating his or her vote. Second, as one's level of sophistication or political knowledge increases, the costs of distinguishing among the parties are less likely to be prohibitive. We offer a fuller explanation than Jusko and Shively (2005) by showing that, in general, factors which make it easier for voters to cope with complexity attenuate its participation-reducing effects.

Our findings indicate that multipartism does indeed lower turnout, and those with lower levels of knowledge and without the benefit of contact with a political party are particularly sensitive to party system fragmentation. These results provide reconciliation for studies that argue more parties should increase participation by making it more likely that an individual will find a party that matches his or her preferences (Black 1991; Dahl 2002) and empirical results that suggest otherwise; an increase in participation may be expected given an array of choices, but only if the potential voter is well enough informed to take advantage of the greater breadth of options. For low-information individuals, the increased costs of participating in a more complex election offsets the potential benefits of voting for a party that may more closely reflect their preferences.

Thus, electoral consumers are peculiar in that they are not necessarily enticed by a large supply of choices. In fact, those members of the electorate who are least able to deal with complexity are actually *less* likely to participate when there is a broad array of parties. Those with an interest in stimulating turnout should be aware of electoral context, and, in situations of multipartism, may have to step up efforts to engage individuals through personal contact and civic education.

Electoral Systems, the Number of Parties, and Turnout

Electoral systems affect a host of behavioral outcomes and attitudinal characteristics, including, for example, the vote choice decision calculus (Karp and Banducci 2002; Kedar 2005), democratic satisfaction (Aarts and Thomassen 2008), and even one's level of political information (Gordon and Segura 1997). Due to their ubiquitous presence in electoral affairs, electoral systems are show to be a key factor in stimulating or suppressing voter turnout.

More specifically, the level of turnout tends to increase with the proportionality of the electoral system. Endersby and Krieckhaus (2008) provide three main reasons for this positive relationship. First, elections in countries with single-member districts, which tend to lead to disproportional outcomes, are non-competitive and thereby suppress turnout by making it frivolous to vote. Second, voters who favor minor parties in disproportional electoral systems are relatively unlikely to turn out, as they anticipate that their most preferred party will likely not win parliamentary representation (Jackman 1987). Finally, individuals in proportional systems are more likely to see democracy as generating fair outcomes, and are thereby more likely to vote (Birch 2008; Blais and Carty 1990).

It is also the case that the number of viable political parties in a country has a strong, positive link to the proportionality of the electoral system (Lijphart 1999; Taagepera 1999), meaning that multipartism should positively drive turnout. Moreover, the number of parties should boost turnout by increasing the likelihood that a voter will find a party offering a policy platform that they support and through increasing the amount of voter mobilization efforts (Black 1991; Blais 2006; Dahl 2002).

However, a major puzzle in the comparative literature is the routine uncovering of a negative relationship between the number of viable competing parties in a given election and electoral turnout (Blais and Carty 1990; Blais and Dobrzynska 1998; Jackman 1987; Jackman and Miller 1995; Jusko and Shively 2005). This is a curious pattern, and while there is no accepted rationale for this empirical regularity, Blais and Dobrzynska (1998) offer two possible explanations. First, voters under multipartism feel less inclined to vote because their most preferred party will be unlikely to form a single-party government if victorious, and its role in the policymaking process will be watered down by the coalition politics that often arise in situations of high party fragmentation.

However, it has not been empirically demonstrated that voter turnout is higher in elections that produce single-party majority governments (Blais and Carty 1990; Blais and Dobrzynska 1998). Testing whether the drop in participation is related to the increased probability of coalition governments or an increase in the complexity of the decision environment, Blais and Dobrzynska conclude that it is likely the former that is producing lower turnout.[1] Thus, a second possibility, as we will argue here, is that more parties increase the complexity of the decision and ultimately the costs of voting, producing a drop in participation (Blais and Dobrzynska 1998; Downs 1957; Gordon and Segura 1997; Jackman 1987; Lau and Redlawsk 2006).

The Turnout Decision Calculus and Electoral Complexity

We argue that the number of parties decreases turnout by increasing the informational costs of voting. Thus, factors that make gathering information easier should help to offset such costs. The rational choice model of voter turnout makes several clear predictions: a

[1] Although admittedly, there is a strong correlation between the measures of electoral systems, number of parties and majority government when testing for the effect of coalition governments.

potential voter's likelihood of participation increases when a there is a competing party that takes an ideologically similar stance to the individual, when the probability of an individual's vote being decisive is relatively high, when the costs of voting are relatively low, and when the intrinsic benefits one would get from turning out are relatively high (Downs 1957; Palfrey and Rosenthal 1983; Riker and Ordeshook 1968). A potential voter's expected utility calculation can be modeled as follows:

$$u_i = p_i b_i - c_i + d_i, \quad (1)$$

where i indexes individuals, b represents the benefit a voter expects to receive from the election of her ideologically closest party or candidate, c represents the costs of voting, and d intrinsic benefits. The p term captures the probability that one will cast a decisive vote. When u_i is greater than zero, it becomes rational for an individual to vote.

When the number of parties contesting the election rises, individuals must consider more factors when determining their vote choices. Though multipartism gives voters a broader menu of choices, assuming it boosts turnout implies voters are "…well informed about political affairs…know what the issues are, what their history is, what the relevant facts are, what alternatives are proposed, what the party stands for, [and] what the likely consequences are" (Berelson, Lazarsfeld, and McPhee 1954). As Berelson and colleagues observed in 1954 (308), and others more recently (Converse 2006; Lau and Redlawsk 2006), "[b]y such standards the voter falls short." As citizens are generally uninformed about the options available to them, increasing the number of choices will do little to encourage, and as we argue, will actually discourage participation. Multipartism increases the costs associated with information gathering, and, ultimately, voting. More formally, an increase in the number of parties boosts the c term in Equation 1, therefore decreasing u, the overall expected utility of electoral participation.

Knowledge, Complexity, and the Turnout Decision Calculus

Klingemann and Weßels (2009) contend that "[t]he greater the number of meaningful alternatives to choose from in an election, the greater the voter's motivation to invest and weigh strongly those criteria which are best suited to support the particular choice" (238). While we accept their logic, we contend that it is not just motivation that needs to be considered, but also *ability*. Not all voters will have the necessary tools to make such an investment, and for some, even identifying what those criteria are could pose a challenge. Thus, we agree with Klingemann and Weßels (2009, 263) that voters strive to reduce complexity when making a vote decision, but we add to this that for less informed voters, this simplification of the decision may carry with it considerable costs in itself, which will lead many low-information voters to abstain altogether.

Complexity-increasing effects of multipartism attenuate when information gathering becomes easier. And, as one's level of sophistication or political knowledge increases, the costs of distinguishing among the parties should decrease. Jusko and Shively (2005), for example, find that the relationship between the number of parties competing and the probability of voting varies according to level of political information. For low-information voters, the probability of participating in an election decreases as the number of parties increases.

Alternatively, given their access to a deeper arsenal of cognitive tools, those better equipped to deal with the more difficult decision environment will be relatively unaffected by

complexity, as compared to their less informed counterparts (see also Lau, Andersen, and Redlawsk 2008). Political knowledge helps to offset the complexity-increasing effect of high party fragmentation by increasing each individual's capability of acquiring information about the candidates. Thus, the dampening effect of multipartism on turnout should be relatively weak among high-knowledge individuals, while for voters unequipped to offset the increased costs of a more complex decision environment, the probability of abstaining will increase. We take this as our first hypothesis ("Information and Complexity" hypothesis).

Political Contact, Complexity, and the Turnout Decision Calculus

The mobilization role of parties is an important variable in the voting behavior equation, as illustrated by the fact that the American National Election Survey has had a question for "party contact" for the last 60 years (Goldstein and Ridout 2002; Wielhouwer and Lockerbie 1994). Yet, research has only recently started to disentangle the role of party contacts at election time and their effectiveness in terms of increasing turnout (Gerber and Green 2000; Goldstein and Ridout 2002; Hillygus 2005; Huckfeldt and Sprague 1992; Karp, Banducci, and Bowler 2008; Pattie and Johnston 2009).

In the comparative setting, Karp et al. (2008)(find higher incidence of party contacts in systems with single member districts (SMD) than in PR, which they attribute to the incentives that SMD systems provide to individual candidates to reach out to their constituents. They also find lower incidence of contacts in systems with higher numbers of effective parties, which they hypothesize is due to the presence of strong social groups, which are responsible for sharing at least part of the mobilization effort. While Karp et al.'s analysis is a pioneering effort in shedding light on the contextual effects on party contact, their analysis is based on just 8 elections in 7 countries. More importantly however, Karp et al. do not examine how contact affects one's susceptibility to the complexity of the electoral environment.

We argue that, while incidence of reported contact might be lower in countries with high numbers of effective parties, the effectiveness of contact in these countries should increase: when there is party contact, electoral complexity should be less likely to prevent one from voting ("Contact and Complexity" hypothesis). When an individual remembers having been contacted by a party, he or she has access to a powerful heuristic in an environment that is otherwise full of information that "cognitive misers" (Fiske and Taylor 1991) may find hard to process.

There is growing evidence that parties tend to primarily contact individuals who have a record of voting and are relatively informed (Goldstein and Ridout 2002; Huckfeldt and Sprague 1992; Karp et al. 2008); this targeting policy has been attributed to the fact that previous voters and more informed individuals are easier to identify, either through networks or based on previous voter lists where available. There is also evidence that more informed voters are more likely to respond to parties' appeals and turn out to vote in greater numbers when contacted.

However, these results have been obtained in individual countries (most of the time, the US), therefore holding the number of parties (and the complexity that it entails) constant. A second limitation lies in the measurement error expected to affect recollection of party contact. As shown by Zaller (1992), people have selective retention of the information they are exposed to, and we would expect more informed people to be more sensitive to information that interests them in the first place, and therefore to be more likely to remember it in a survey. The reverse should be true for low information individuals, who are more likely to underreport the incidence of party contacts. If, however, they do recall

party contact, this will act as an important heuristic for their turnout decision. As such, those with both low levels of information and no political contact should be most susceptible to electoral complexity. Because both knowledge and political contact serve to offset the complexity-increasing effects of multipartism, our third and last hypothesis is that the number of parties should exercise the strongest effect on those individuals who are low in political information and were not contacted by a political party ("Contact, Information, and Complexity" hypothesis).

Data and Measurement

Data is from Modules I and II of the Comparative Study of Electoral Systems (CSES)[2] and is available each variable for each variable used across 18 countries, 32 elections, and 45,767 individuals. There are an average of 1,430 individuals per election, with a minimum of 588 and a maximum of 3,793.

Our dependent variable is simply whether or not one reported voting, coded 1 for those who voted, and 0 otherwise. Non-voting individuals often incorrectly report participation in an election (Karp and Brockington 2005), perhaps due to incorrect recollection or social desirability. If overreporting is systematic (see Silver, Anderson, and Abramson 1986), inferences drawn from individual-level turnout data will be biased. To guard against this, we employ survey weights to adjust for overreporting across countries. For example, in Finland in 2003 reported turnout in the CSES was about 80.6%, while official turnout was about 70.0%. To correct for this disparity, each respondent who reported voting was assigned a weight of $70.0/80.6 \approx 0.87$, and each individual who reported abstaining was assigned a weight of $(100\text{-}70.0)/(100\text{-}80.60) \approx 1.55$. We applied weights to each individual in each election in the sample based on reported and actual turnout.[3] Figure 1 displays actual turnout across each election in our sample.

[Figure 1 About Here]

Our first independent variable of interest is the number of political parties, which we have identified as a strong determinant of electoral complexity. We measure this with Laakso and Taagepera's (1979) effective number of electoral parties index (ENEP).[4] The variable was obtained from the CSES Macro Data.[5]

The CSES asks factual questions across countries, which can be used to gauge political knowledge. However, due to variation in the difficulty of these questions, we follow the approach of Sniderman et al. (1991) and proxy political knowledge with education using a simple dummy variable that is coded 1 if an individual has a university education and 0 otherwise, from the CSES. Regarding political contact data, Module I of the CSES does not differentiate between constituent-initiated and politician-initiated contact, while Module II

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[2] Available at http://cses.org/

[3] Actual turnout data from http://www.idea.int/vt/

[4] This variable is measured as $\frac{1}{\sum_{j=1}^{m} v_j^2}$, where v_j is the proportion of votes for party j in a given election.

[5] Available at http://www.cses.org/download/contributions/contributionsmirror.htm

asks separate questions differentiate these types of contact.[6] We use only politician-initiated contact from Module II, as citizen-initiated contact is likely correlated with a host of other factors that would serve to boost one's propensity to vote. We create a dummy variable coded 1 if one experienced political contact, and 0 otherwise.

Examining a diverse range of countries naturally introduces a large amount of unobserved error into any analysis, which cannot always be captured with a slew of control variables (see, for example, Selb and Lachat 2009, p. 577). However, we feel our question is best addressed in a cross-national analysis, but aim to boost comparability and reduce error by limiting our empirical tests to parliamentary systems. Potential voters in presidential systems deal with a different set of institutional constraints and incentives, and are often persuaded to vote by the power and prestige of the office at stake (Jackman 1987; Norris 2004). Limiting our analysis to parliamentary systems also allows us to control for less factors, which increases our degrees of freedom and our ability to make useful inferences from the results (Achen 2002).

Based on the correlates of turnout identified in previous literature, we also control for the following factors. Each variable is from the CSES or the CSES Macro Data:

Individual-Level

Age: Age in years. Growing older increases one's amount of information and should thus be positively related to turnout (Verba and Nie 1972; Wolfinger and Rosenstone 1980). Previous research also shows older individuals to have a higher sense of civic duty, which accentuates the intrinsic benefits one receives from voting (Almond and Verba 1963; Franklin 2004; Putnam 1993).

Female: A dichotomous variable, coded 1 for females and 0 for males. There is no directional expectation for this variable, but in line with nearly all previous individual-level turnout studies, we control for gender.

Income: Income in quintiles, with 5 being the highest income. Financial costs associated with voting include the time it takes to go to the polls, time off work, and transportation costs. Thus, less wealthy individuals are less likely to vote (Blais 2000; Nevitte et al. 2009). Low income voters are also more likely to consider basic survival needs to be more important than civic engagement (Wolfinger and Rosenstone 1980).

Efficacy: Gauged with a CSES question which inquires as to whether the respondent feels that his or her vote makes a difference in the political process.[7] The variable is split into five categories, with higher values corresponding to more political efficacy. Those who believe voting is meaningless are less likely to do so, and many studies confirm that voting turnout is indeed more likely among individuals who see the democratic process as valid (Banducci and Karp 2009; Norris 2004).

Election-Level

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[6] The Module I question we use is "During the past twelve months, have you had any contact with [a member of Parliament/a member of Congress] in any way?," while the Module II question is "During the last campaign did a candidate or anyone from a political party contact you to persuade you to vote for them?"

[7] Question wording: "Some people say that no matter who people vote for, it won't make any difference to what happens. Others say that who people vote for can make a difference to what happens. Using the scale on this card, where would you place yourself?"

Disproportionality: Gallagher's (1991) disproportionality index.[8] This index accounts for disparity in the amount of seats as compared to the amount of votes for each party in each election and has a theoretically range of 0 to 100 (0 indicating perfect proportionality). As noted above, disproportionality is generally held to suppress turnout.

Victory Margin: the victory margin between the first- and second-place parties in each election. We code this variable at the national level rather than the district level as individuals are likely to perceive electoral competitiveness as reported by the media, which generally focuses on the national-level race. When voters perceive a close race they will understand that their vote has a higher likelihood of being decisive, and will thus be more likely to vote (Riker and Ordeshook 1968). This has been confirmed in numerous empirical studies (Blais 2006).

Compulsory: A dummy variable coded one for countries that employ and enforce compulsory voting, with the obvious expectation that those who are legally compelled to vote are more likely to do so.

Table 1 summarizes each variable across the individuals in our sample.

[Table 1 About Here]

Methods and Results

In Figure 2, we first present a simple scatterplot with a fitted regression line, which depicts the relationship between the mean number of parties in each election in our sample and actual turnout. As expected, turnout does decrease as the number of parties rises, though this is a weak association (r = -0.234). Nevertheless, this election-level depiction does not fully capture the relationship between election context and turnout, an individual-level phenomenon.

[Figure 2 About Here]

Accordingly, we examine how the bivariate, individual-level relationship between the number of parties an overall turnout levels varies with both education level and political contact. Table 2 displays the percentage of respondents voting across various combinations of multipartism, education, and political contact. Among those who do not have a college education and those who did not experience political contact, turnout is less likely when the number of parties is above its median. These differences are only about 3.5% and 1.5% respectively, but correspond to quite a large amount of people in countries with electorates of several million, thus illustrating the negative relationship between the number of parties and turnout that so many empirical analyses have shown.

However, among the educated and those who experienced political contact, turnout actually *increases* with the number of parties. As their decision calculus is less susceptible to cost-increasing complexity, such individuals may be incentivized to turn out when there are more options to choose from; for high information individuals, the rationale of Black (1991) and Dahl (2002) may be realized.

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[8] The formula is $\sqrt{\frac{\sum_{j=1}^{m}(v_j - s_j)^2}{2}}$, where where v_j is the percentage of votes for party j and s_j is the percentage of seats won.

[Table 2 About Here]

Of course, these simple analyses do not account for the multilevel structure of the data or other theoretically important covariates. As such, to further test our hypotheses, we switch to a multilevel framework. We estimate a two-level model in which we consider individuals (level-1) to be nested within elections (level-2), and fit a random intercept to each election. As the dependent variable (whether or not one voted) is dichotomous, we use a logistic link function to map the independent variables to the dependent.

We estimate a total of five models to test our expectations, depicted in Tables 3 and 4. The first, Model A, is purely additive and examines the effect of each independent variable on the propensity to turn out. In Model B we include an interaction between education and the number of parties to test whether complexity's effects are offset among high information individuals. Similarly, in Model C we include an interaction between political contact and the number of parties to test whether complexity's effects are offset among those who experienced political contact. Finally, in Models D and E we examine how education and contact work in tandem to condition the effects of complexity on turnout propensity.

[Table 3 About Here]

[Table 4 About Here]

In each model ρ indicates how much variance in individual-level turnout is attributable to election-specific factors not captured by the covariates.[9] In other words, ρ indicates the proportion of unobserved variance at the election level. The value of ρ is between .05 and .10 across the models, indicating that about 5-10% of unobserved variance is at the election level.

Model A indicates that both having a university education and having contact with a politician serve to boost turnout. In terms of odds ratios,[10] the odds of voting for those with a university education are 1.63 times greater than those of an individual without. The odds of an individual who experienced political contact voting are 1.55 times greater than those of an individual who did not. Regarding the effective number of parties, a one-unit increase in this index decreases the odds of voting by a factor of 0.75. Political contact and education serve to ease the information-gathering tasks associated with voting, while a rise in the number of parties boosts such costs.

Models B-E include interaction terms, and the coefficient on a constitutive variable in an interaction term is equal to the variable's effect when the other constitutive variable

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[9] $\rho = \frac{\psi}{\psi + \left(\pi^2 \div 3\right)}$, where ψ is the estimated variance of the election-specific intercepts and $\left(\pi^2 \div 3\right)$ is the assumed variance of the residuals in a logistic regression.

[10] Odds ratios report the factor change in the odds of voting associated with a change in a given independent variable (Long and Freese 2006). For any coefficient, *b*, in a logistic regression estimation, the odds ratio associated with a unit change is simply exp(*b*).

equals zero (Brambor, Clark, and Golder 2006; Braumoeller 2004). In addition, it is difficult to infer whether a constitutive variable in an interaction term has a meaningful effect on the dependent variable from the magnitude of the term itself (Brambor et al. 2006, 74). Because of these added difficulties in interpretation due to the inclusion of interaction terms, we summarize the conditional effect of the number of parties by education level and political contact in Table 5.

[Table 5 About Here]

The cell entries in Table 5 give the change in the odds of voting associated with a unit change in the effective number of parties and the *p*-values associated with such changes. Thus, the further an odds ratio is below one, the stronger the negative impact observed. Looking first at the upper row of odds ratios, it is clear that, as predicted by our "Information and Complexity" hypothesis, the negative effect of multipartism is more pronounced among those without a college education. While high party fragmentation still serves to decrease turnout among the more educated, this effect is less severe. In addition, the effect of multipartism is essentially nonexistent among those who experienced political contact, while party fragmentation still serves to decrease the odds of voting among those without contact, which supports our "Contact and Complexity" hypothesis.

Looking at the bottom row of coefficient estimates, in line with our "Contact, Information, and Complexity" hypothesis, it is clear that the turnout decreasing effect of multipartism is most pronounced among those without university educations who do not have political contact. In addition, among those who were contacted and have a university education, there is no observed turnout-decreasing effect of party fragmentation.

These findings reinforce our theoretical expectations. A rise in the number of parties boosts electoral complexity and thus the costs of voting, meaning that the overall odds of an individual participating in an election decrease as party fragmentation rises. However, such costs are offset or decreased among those who have experienced political contact and those with a university education. Among such individuals, electoral complexity is not a driving factor in determining whether or not to vote.

Regarding the individual-level control variables, in line with previous findings, in each model growing older, having a relatively high income, and feeling that elections meaningful positively boosts the propensity to vote, while gender is unrelated to the turnout decision. In addition, voting is more likely in proportional electoral systems and when participation is state-mandated. Finally, the effect of victory margin is the opposite of expected. In Models A-D less competitive national elections are shown to be associated with *increased* turnout. However, the findings associated with this variable may be an artifact its conceptualization and should be taken with a grain of salt; perhaps, for example, individuals who prefer a minor party are unconcerned with the gap between the largest and second largest parties.

Conclusion

As shown is this research and a handful of previous examinations, the more policy options one has, the less likely it is he or she will engage in politics to support one of those options. On the face of it, this is a truly puzzling reality. We argue that higher numbers of parties introduce additional complexity in an arena that is already complicated enough for the average citizen, and, in turn, examine how both contact with a political party and pre-existing knowledge can help voters wade through such complexity.

We first find that party contact acts as a heuristic in orienting people in the complex electoral environment created by a higher number of parties from which one must choose. In addition, we find that less astute individuals are not lured by an array of choices, but instead are deterred from voting by the added complexity such choice introduces. For the informed, complexity is unrelated to the decision to turn out; such voters are unaffected by the amount of supply provided by the party system. By identifying these conditional relationships, this paper helps to clarify some of the mystery surrounding multipartism's turnout-dampening effect.

The consequences of these findings are straightforward, and we use them to identify several options for boosting electoral participation in a country. One option is to engineer the party system to restrict choice by barring certain parties from the race. This has obvious undemocratic implications and is very impractical. A country could also shrink its party system by switching to a less proportional electoral rule. However, this could also be counterproductive, as, all else equal, proportional electoral systems tend to engender turnout through increasing perceptions of fairness and representation (Birch 2008; Blais and Carty 1990; Jackman 1987).

However, boosting education, and especially political contact, is relatively easy. This paper shows a boost in either serves to help voters deal with the complexity that is inherent in multiparty environments. It is difficult to engineer constitutions in order to decrease the number of parties, and doing so may lead to unwanted consequences. As such, if increased turnout is the goal, engagement with citizens is the best path to take.

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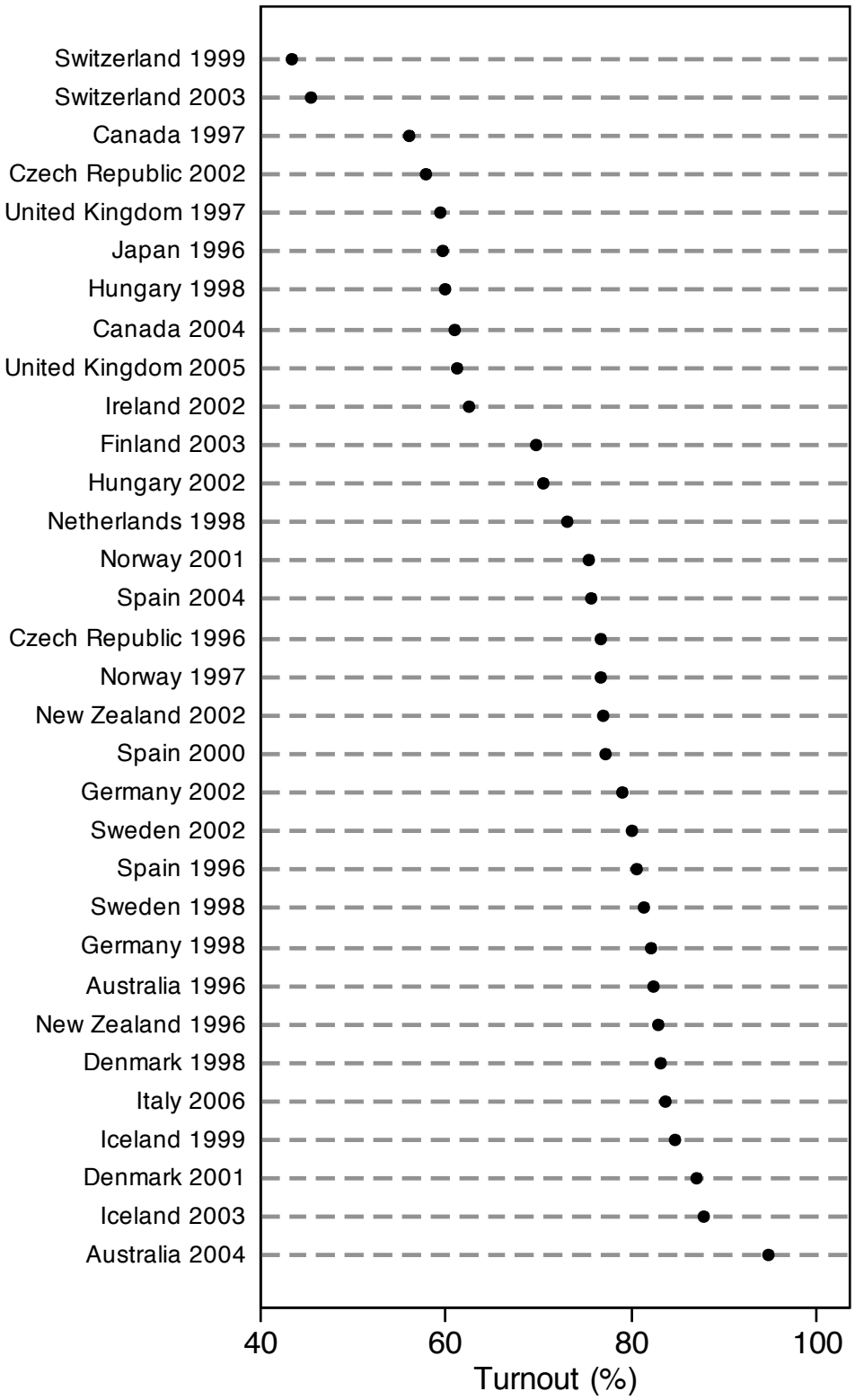

Figure 1: Turnout Across Elections

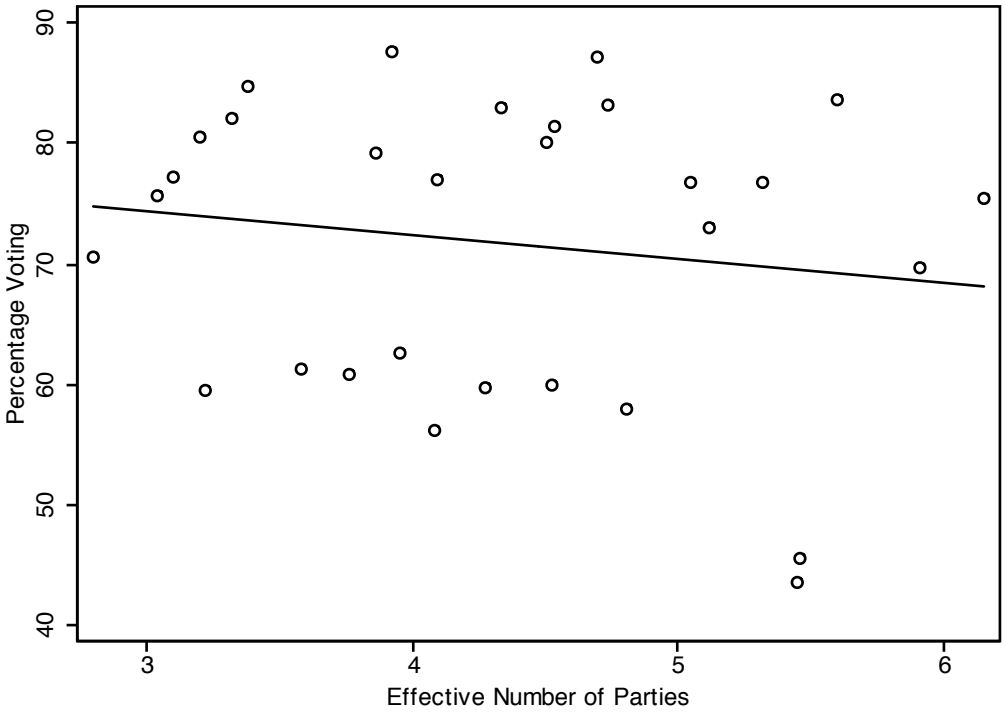

Figure 2: The Number of Parties and Turnout at the Election Level

Table 1: Summary Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
Individual-Level				
Voted	0.861	0.346	0.000	1.000
Education	0.172	0.377	0.000	1.000
Contact	0.204	0.403	0.000	1.000
Age	46.990	16.522	16.000	101.000
Female	0.508	0.500	0.000	1.000
Income	2.971	1.393	1.000	5.000
Efficacy	3.871	1.167	1.000	5.000
Election-Level				
Effective Parties	4.276	0.875	2.801	6.149
Disproportionality	6.638	4.163	1.610	16.770
Victory Margin	8.178	6.822	0.100	24.590
Compulsory	0.062	0.241	0.000	1.000

Table 2: The Number of Parties, Turnout, Education, and Contact

	With College Education	No College Education	With Contact	No Contact
ENEP below median	80.74	72.61	78.67	71.53
ENEP above median	85.33	69.23	81.61	70.07

Note: Cell entries are percentage of respondents voting. Survey weights used to adjust for reported vs. actual turnout levels. Countries with strongly enforced compulsory voting excluded (Belgium and Australia).

Table 3: The Number of Parties, Turnout, Education, and Contact: Multilevel Models

Coefficient Estimates and Significance Levels						
	Model A: Additive		Model B: Interactive, Education		Model C: Interactive, Contact	
Variable	**Coef.**	***p*-value**	**Coef.**	***p*-value**	**Coef.**	***p*-value**
Individual-Level						
Education	0.486	0.000	0.363	0.447	0.489	0.000
Contact	0.438	0.000	0.438	0.000	-0.228	0.636
Age	0.026	0.000	0.026	0.000	0.026	0.000
Female	-0.029	0.511	-0.030	0.510	-0.022	0.610
Income	0.187	0.000	0.187	0.000	0.195	0.000
Efficacy	0.362	0.000	0.362	0.000	0.378	0.000
Election-Level						
Effective Parties	-0.291	0.000	-0.294	0.000	-0.144	0.015
Disproportionality	-0.065	0.000	-0.065	0.000	-0.060	0.000
Victory Margin	0.028	0.000	0.028	0.000	0.016	0.006
Compulsory	0.743	0.000	0.744	0.000	0.543	0.000
Interactions						
Education × Parties			0.029	0.778		
Contact × Parties					0.157	0.167
Constant	-1.008	0.000	-0.996	0.000	-1.453	0.000
Random Effects Parameters						
Coefficient	**Estimate of Variance**	**Standard Error**	**Estimate of Variance**	**Standard Error**	**Estimate of Variance**	**Standard Error**
Constant	0.185	0.015	0.184	0.015	0.302	0.047
ρ	0.053		0.053		0.084	
Number of Observations	45,767		45,767		45,767	
Number of Elections	32		32		32	
Log Likelihood	-22718.392		-22718.161		-22779.544	

p-values are two-sided. The dependent variable is whether one voted or not. Survey weights used to adjust for reported vs. actual turnout levels.

Table 4: The Contact-Specific Effects of Multipartism by Education

Coefficient Estimates and Significance Levels

	Model D: Only No University Education		Model E: Only University Education	
Variable	**Coef.**	***p*-value**	**Coef.**	***p*-value**
Individual-Level				
Contact	0.031	0.950	-0.372	0.649
Age	0.027	0.000	0.013	0.011
Female	-0.051	0.237	0.119	0.157
Income	0.196	0.000	0.156	0.003
Efficacy	0.375	0.000	0.254	0.000
Election-Level				
Effective Parties	-0.306	0.000	-0.205	0.225
Disproportionality	-0.064	0.000	-0.094	0.000
Victory Margin	0.031	0.000	-0.001	0.974
Compulsory	0.684	0.000	1.402	0.026
Interactions				
Contact × Parties	0.100	0.380	0.216	0.267
Constant	-1.110	0.000	-0.618	0.568

Random Effects Parameters

Coefficient	**Estimate of Variance**	**Standard Error**	**Estimate of Variance**	**Standard Error**
Constant	0.195	0.014	0.212	0.070
ρ	0.056		0.061	
Number of Observations	37,891		7,876	
Number of Elections	32		32	
Log Likelihood	-19684.920		-2946.863	

p-values are two-sided. The dependent variable is whether one voted or not. Survey weights used to adjust for reported vs. actual turnout levels.

Table 5: The Conditional Effects of Multipartism

	With College Education	No College Education	With Contact	No Contact
Impact of Number of Parties	**0.766** (0.009)	**0.745** (0.000)	1.013 (0.908)	**0.867** (0.015)
	No College Education, Contact	No College Education, No Contact	With College Education, Contact	With College Education, No Contact
Impact of Number of Parties	0.814 (0.070)	**0.736** (0.000)	1.011 (0.947)	0.815 (0.225)

Note: Cell entries are odds ratios. Estimates based on Models B-E in Tables 2 and 3. Two-sided *p*-values in parentheses.