The Impact of Cleavages on Political Participation and Electoral Volatility

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#### Abstract:

This paper examines some rarely tested hypotheses about the impact of cleavages on voting behavior, which can easily be connected to Lipset and Rokkan's freezing hypothesis. Overlapping, mutually reinforcing cleavage lines should clearly increase political polarization in society, thus reducing the space for electoral volatility. At the same time, through increasing the utility differential of the average citizen between the party alternatives, overlapping cleavages should probably be expected to generate higher political participation. Cross-cutting cleavages, in contrast, should have the opposite effect: reduce participation, increase volatility, and open the electoral market to a greater influence of short-term influences on vote choices from valence issues created by, say, scandals or economic performance evaluations. If so, then these mechanisms can provide the hitherto underdeveloped micro-logic for the freezing hypothesis regarding citizens' voting behavior. The paper uses data from the World Values Survey to evaluate some of these propositions with pooled cross-national survey data. The methods to estimate the pull of cleavages use vote probabilities to estimate the extent to which different possible cleavage lines pull individual voters in the same partisan directions. The individual level estimates obtained this way can be readily aggregated at the national level. The paper then analyses whether the mobilization of cleavages affect in the theoretically expected way political participation and electoral volatility. The results suggest that this is only likely for attitudinal rather than social group cleavages.

### INTRODUCTION

One of the most common folk theories about voting behavior is that the political mobilization of political cleavages ignites political passions in the electorate and cements party loyalties.<sup>1</sup> Lipset and Rokkan's (1967) freezing hypothesis is probably the best known expression of this belief. In a much-quoted but vague and somewhat *ex cathedra* remark, they asserted that the party systems of the 1970s reflected, "with few, but significant exceptions" the party systems of the 1920s, because the mobilization of some initial cleavages made West European party systems resistant to sweeping social changes, even though the latter "have made the old established [party] alternatives increasingly irrelevant" (Lipset and Rokkan 1967: 54). In this paper we present some new evidence that can support this proposition at least in spirit, despite the fact that it is hard to find any party system characteristics that became 'frozen' after the 1920s (Shamir 1984), and previous research returned relatively little evidence about the impact of cleavage mobilization of party alternatives.<sup>2</sup>

The central concepts that we rely on are the pull of cleavages and cross-pressure. The first merely means that some persistent lines of attitudinal or social division in society have a recurrent effect on voting behavior over a longer period of time, and designate some sections of the electorate as the likely core supporters of one or another rival party that mobilize support along those cleavage lines. Cross-pressure, in turn, means that some people are under conflicting influences with respect to their vote choice; a "combination of characteristics which, in a given context, would tend to lead the individual to vote on both sides of a contest" (Berelson, Lazarsfeld and McPhee 1954:

<sup>&</sup>lt;sup>1</sup> For the purposes of this analysis, by cleavages we merely mean divisions in the electorate that are relatively independent of specific, transient issues and political actors, and create (or at least have the demonstrated potential to create) enduring, recurrent differences in the social and attitudinal composition of the electorates of different parties.

<sup>&</sup>lt;sup>2</sup> Heath (2005) reached arguably the furthest by showing that, at the state level within India, a stronger impact of social cleavages on the vote goes together with lower electoral volatility. Before him, even Bartolini and Mair (1990) stopped short of demonstrating such an effect. The latter merely showed that electoral volatility somewhat decreased after the 1920s, and that ethno-religious heterogeneity, union density and party membership rate influenced electoral volatility – which can hardly be called compelling evidence about the impact of cleavage mobilization on the freezing of party alternatives,

283; see also Lazarsfeld, Berelson and Gaudet 1948: 53, 56). For instance, a Venezuelan voter who supports Hugo Chavez's social policy initiatives but is also keen on congressional oversight and the rule of law must feel such cross-pressure with respect to electoral choice.<sup>3</sup> Voters who are not particularly attracted to any party by the established cleavages provide another example. At any one point in time they may have a more or less clear preference for one or another party on the basis of some short-lived or valence issues – say the performance of the national economy under the current incumbents –, i.e. considerations that are unrelated to persistent cleavages. But the cleavages that are politically mobilized by the party system leave them about equally likely to support any of the partisan alternatives. Hence we can call these voters cross-pressured too since over time they are likely to be pulled into different partisan directions as economic performance and other non-cleavage factors change. The key proposition about the impact of cleavages that we examine here is that either type of cross-pressure undermines the commitment of the individuals concerned to their political preferences.

Obviously, the cleavage structure underlying the party system has a great deal of systematic and persistent influence on who is subject to a strong pull of cleavages or a lot of cross-pressures instead. An interesting, and thus far largely ignored explanation for how cleavage structures may obtain surprising stability in democratic societies is that if cross-pressure does indeed weaken political commitments, then the political arena must be disproportionately populated by the citizens for whom positions on the already politically mobilized cleavage lines "coincide" exactly the way the party system binds positions on the different cleavages together. Thus the politically most active layers of society may sustain the established cleavage lines even after they have lost relevance for large segments of the population. This is especially so since voting appears to be an

given that none of these variables appear to measure the latter, and especially not in the light of Bartolini and Mair's complex definition of cleavages.

<sup>&</sup>lt;sup>3</sup> That we attach this rather specific connotation to the concept is not to say that there is uniformity in how the word "cross-pressure" is used in the scholarly literature. As a colloquial term, it can of course refer to any pair (or multitude) of conflicting impulses and this is certainly reflected in the usage of the word in the literature. For instance, Gschwend and Leuffen (2005) talk about cross-pressure between party allegiance and regime preference (a unified or divided government), and Gschwend and Hoogue

acquired habit (cf. Franklin 2005; Gerber, Green and Shachar 2003; Green and Shachar 2000). Hence, who votes and who does not can easily become a social mechanism that allows long-forgotten past events to leave a large footprint on present-day patterns of activism. At the same time and for much the same reason, the more citizens are pulled in the same partisan direction by the relevant electoral divides in their society, the less likely it becomes that some new issues, new parties, or short-term factors could make them vote for a different party than in the past. Hence the more strongly some cleavages influence voting behavior at any point in time, the less electoral volatility we should be able to observe over time, and cross-pressures may well be one of the mechanisms through which the "freezing of party alternatives" takes place.

The paper starts by locating our argument in the scholarly literature on the sources and political impact of cleavages and cross-pressure. The subsequent empirical investigation relies on data that is less context-specific than that used in the study of cross-pressure so far. One of our original contributions is a novel measure of cleavage mobilization, which we find superior to previous attempts on several counts. First, it does not require a dichotomous operationalization of relevant divisions in the electorate. Second, it allows us to deal with the complicated case of multiparty democracies the same way as with (near) two-party systems. Third, instead of treating all cleavages and parties as equally important, our measure allocates each of them exactly as much weight as folk theories of cleavage mobilization and cross-pressure attributes them with respect to their impact on the development of political commitments in the electorate. We use this new measure for multilevel- and aggregate-level analyses of how cleavages impact citizens' political participation and electoral volatility.

#### 1. SOURCES AND CONSEQUENCES OF CROSS-PRESSURE AND CLEAVAGE PULL

It will help clarifying our intentions if we dissociate them from some of the best known previous work on cross-pressure and stress what other previous works we relate to with our investigation. Cross-pressure theory can be traced back to the works of the early 20<sup>th</sup> century German sociologist Georg Simmel (1964), and found its most memorable

<sup>(</sup>forthcoming) between diverging preferences for political party, candidates, and coalition arrangements.

expressions in the work of pluralist theorists and their followers in political sociology, who argued that the chances of stable democracy are weaker when the politically mobilized cleavage lines reinforce, rather than cross-cut each other (cf. Berelson, Lazarsfeld and McPhee 1954: 318-9; Dahrendorf 1959: 215; Lipset 1963: 75-9; Dahl 1956: 104-5; Dahl 1966: 377-81; Dahl 1967: 277; Axelrod 1970: 159-62; Taylor and Rae 1969; Rae and Taylor 1970; Mayer 1972). The empirical evidence remained patchy and less than fully supportive of the proposition (cf. Budge and Leary 1971; Conn 1973; Ross 1985; Schafer 1997), and theories of political stability in democracies quickly shifted to a focus on institutions and accommodative elite behavior and downplayed the role of deepseated cleavages per se from the late 1960s onward (cf. Lijphart 1968, 1977). Though influential recent works by Diana Mutz (2002a, 2002b, 2006) revived interest in the impact of cross-pressure on democratic virtues like tolerance, we do not at all pursue this line of argument here.

Instead, we focus on the impact of cleavage mobilization on political involvement and, broadly speaking, strength of political commitment. Herbert Tingsten (1937: 230-1) was probably the first to coin the idea that cross-pressures decrease citizens' cognitive and behavioral involvement in party politics. He found that in interwar Stockholm turnout among the working class increased with the proportion of workers living in the district. His explanation, the "law of the social center of gravity", was that workers in working-class areas received a reinforcement of their underlying voting preferences for the social democratic party in their residential environment, while other workers received the opposite stimulus. Lazarsfeld, Berelson and Gaudet (1948: 58-60, 62, 67-69) and Berelson, Lazarsfeld and McPhee (1954: 19-20, 27, 129-32, 384) generalized the idea, linking different sorts of cross-pressure to varied expressions of involvement and partisanship, such as the vote decision being delayed till late during the election campaign, downplaying the importance of the election outcome, weaker partisan feelings, and hesitating between candidates (Lazarsfeld, Berelson and Gaudet 1948: 58-60, 62, 67-69). We will use here the generic expression of political commitment to refer to all such cognitive, affective and behavioral consequences collectively. A key aspect of Lazarsfeld's broad concept of cross-pressure is that it could mean (a) simultaneous belonging to different social categories that, on the whole, display different distributions

of partisan preferences; or (b) the presence of conflicting partisan commitments in someone's immediate social environment; or (c) conflicting thoughts on the mind of an individual, which would not necessarily come from interpersonal influence.<sup>4</sup> Whatever its sources, cross-pressure seemed to help explaining who can possibly be converted during an election campaign from one side to another, and counter simplistic popular notions about the deterministic impact of any single factor – like attitudes on a major issue or social class – on vote choice.

What we borrow from Lazarsfeld's concept of cross-pressure is above all the idea that, since voting behavior is likely influenced by a multiplicity of factors, it is not merely the impact of one cleavage on vote choices – e.g., the strength of class or religious or ethnic voting, or whichever is the strongest of them – but rather the combined impact of all persistent divisions in the electorate that can be expected to impact the intensity of political commitments in the electorate. Citizens who are strongly pulled towards the same party by most or all cleavages will continue to have a large utility differential between the parties, low decision-making costs, and – as long as they prefer like-minded discussion partners and media outlet – will receive much reinforcement for their party preferences from their information sources. In contrast, citizens who are cross-pressured – either synchronically, by a multiplicity of transient influences on their vote choices – will tend to have a lower utility differential, higher decision-making costs, and more often encounter information that should prompt them reconsidering their party preferences.

The recent scholarly literature on voting behavior has been mostly concerned with the impact that cross-pressure exerted on individuals via the receipt of conflicting partisan cues and signals from their immediate social environment, i.e. discussion partners in family, at work, among friends, and so forth (Grönlund 2004; Huckfeldt, Ikeda and Pappi 2005; Huckfeldt, Johnson and Sprague 2004; McClurg 2003; Mutz 2002a, 2002b, 2006; Mutz and Mondak 2006; Nieuwbeerta and Flap 2000; Nir 2005; Tardos 2007; Scheufele *et al.* 2004; Zuckerman, Dasovic and Fitzgerald 2007). While we

<sup>&</sup>lt;sup>4</sup> (ADD REFERENCES TO RELEVANT LOCI, including the mentions of "social attitudes" and "preferences" by Berelson, Lazarsfeld and McPhee 1954:195, 126)

do not dispute the importance of interpersonal communication for turning the objective situation of cross-pressure into a subjectively meaningful lived experience, our own contribution focuses on the existence of any – direct or indirect – link between the supposed behavioral consequences of cross-pressure and the placement of particular individuals in – objectively speaking – cross-pressured situations. We find this linkage potentially important because it may provide a micro-mechanism through which the macro consequences of cleavage structures like their supposed freezing can occur. Which citizens and to what extent are subjected to objective cross-pressures created by social and attitudinal divides in society is obviously and directly related to the nature of the cleavages embodied by the party system. In contrast, to what extent members of difference societies experience partian conflict in their interpersonal discussion networks seems to vary both over time within individual countries (cf. Lup 2007) and across countries (for a review of the scarce comparative data see Richardson and Beck 2007) in ways that cannot, it seems to us, be readily linked to cross-contextual differences in the cleavage basis of partisan preferences.

In practice, here we will keep interpersonal influence as part of a black box hiding the various micro-mechanisms that translate (or fail to translate) the individual's objective location in the multidimensional structure of cleavages into subjective reasons to prefer one party or another. We do address however a rather different debate about what factors can and what factors cannot contribute to the stabilization of party alternatives and cleavage structures in a democratic society. There is a strong tradition in the scholarly literature that stresses that "real" cleavages must in some ways be anchored in the socio-demographic characteristics differentiating citizens – political divisions based on differences in political attitudes only should not, in this account, be called cleavages (cf. especially Bartolini and Mair 1990; Knutsen and Scarbrough 1995). In contrast, we think it must be treated as an open empirical question whether one or another type of voter alignment is better able to produce the behavioral and attitudinal consequences – such as the stabilization of voting preferences over time or the creation of effective cross-pressure – that are, in empirical political theory, commonly attributed to "cleavages".

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Tóka (1998) did indeed find that vote choices in the Czech Republic, Hungary and Poland in the mid-90s were more stable over time if they were anchored in citizens' value orientations rather than in their socio-demographic characteristics. Indeed, this is what we can expect even on theoretical grounds in countries where the party system is relatively fragmented, links between interest groups and parties somewhat vague and unstable, and where parties make little use of direct appeals to social group identities. However, at this point, we would not want to speculate about whether attitudinal or socio-demographic cleavages are, in a global comparison, more capable of increasing citizens' political commitment. We merely note that they probably do so through different micro-mechanisms. Socio-demographic cleavages can only be expected to increase political commitment – beyond the level that we could explain with the attitudes of the individual – through their positive impact on the partisan homogeneity of one's interpersonal environment and other information sources. Given the well-documented impact of the interpersonal environment on vote choices, this factor may keep citizens vote diligently and consistently over time. Attitudinal cleavages, in their turn, can link the individual's party preference to some of the most persistent issue attitudes that he or she has. This is likely to create subjectively meaningful links between one's electoral choices and some major issues of conviction, which should strengthen political commitment.

Again, we use the word "commitment" quite deliberately, since notwithstanding the focus on electoral volatility in the scholarly literature on the consequences of cleavages, the same question of what kind of divides may cement party loyalties most emerges regarding other possible expressions of political commitment, like involvement and turnout: are they boosted by any kind of divisions between the electorates or just some special types? Regarding turnout, Powell (1980) demonstrated the very interesting possibility that a strong impact of cleavages on voting behavior may have as much or even more effect than, say, institutional arrangements. However, he did not differentiate between the impact of social and attitudinal cleavages in the analysis, and his results were neither replicated nor extended in later studies. We think it is well worth to do so, especially since we can use a broader sample, better measures, and also consider extensive individual level data on political participation – none of which was available to his pioneering analysis at the time. Similarly, Mainwaring and Torcal (2003) used cross-

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national survey data to show that social class and left-right self-placement tend to have weaker effects on vote choices in Latin America than Western Europe, and suggested that this may contribute to the higher electoral volatility in the first than in the second region. We share a question with these analyses but try to base the analyses on a broader range of countries, a broader take on the possible dependent variables within the same theoretical framework, and use a research design and measurement strategy that allows us considering a wide range of different cleavage dimensions and countries at the same time.





At the end of our theoretical introduction, it may be worth to restate the major hypothesis. People who, because of their own observable characteristics along either socio-demographic or attitude divides between the supporters of the rival parties, should be pulled towards the same party by all major divides between the parties will have a stronger political commitment than others. Cross-pressured citizens, who, again because of their own observable characteristics along either socio-demographic or attitudinal divides between the supporters of the rival parties, should be pulled towards different parties by the major divides between the supporters of the different parties will *ceteris*  *paribus* have a weaker political commitment than other citizens. We expect this stronger commitment to be revealed in more active political participation and less electoral volatility.

Figure 1 shows how we conceive the micro-mechanisms that may underline the impact of cleavages on citizens' commitment to whatever party or candidate they are the most likely to support. The objective individual position in the cleavage structure is simply a constellation of political attitudes and socio-demographic characteristics that given the nature of the political alternatives on offer in elections – significantly influence vote choice in the given polity at the given point in time. This constellation, in conjunction with the party system, determines how strong, objectively speaking, is the net pull of cleavages is on any individual, and how much cross-pressure he or she is subject to due to being located at the junction of rival social or attitudinal cleavages. The individuals may or may not recognize that they are subject to conflicting pressures, but we except that the expected consequences in terms of weaker or stronger political commitment occur in any case. Exactly what factors mediate between the distant cause – citizens' location in the structure of cleavages - and the observed level of commitment as revealed by electoral volatility and political participation rates is not examined here empirically, but the figure summarizes our thoughts on this in any case. We speculate that a cross-pressured situation will reduce the reinforcement that the current party preference of the individuals receives simply from routine attendance to the daily flow of political information. Since their own traits are such that they should in principle be open to the appeal of different parties along the different lines of political cleavages, the news themselves will sometimes remind them reasons to vote for one party and sometimes reasons to support the opposite alternative. If citizens, as seems likely, discuss politics mostly with like-minded socio-demographic look-a-likes, then cross-pressured individuals will encounter a greater heterogeneity and lesser intensity of partisan preferences in their discussant networks than citizens who are strongly pulled in a partisan direction by their objective position in the cleavage structure. This will then weaken their partisan commitment, i.e. increase the volatility of their voting preferences and reduce their level of political involvement. At the same time, a weaker pull of cleavages on the individual should increase indifference between the party alternative and

the cognitive and affective costs of electoral decision making. Both of the latter should reduce political involvement (participation) and increase volatility.

By the net pull of all cleavages on the individual we mean the kind of difference between individuals that Lazarsfeld, Berelson and Gaudet (1948) and Berelson, Lazersfeld and McPhee (1954) measured with their Index of Political Predisposition – a linear combination of individual characteristics like class and urban-rural residence that are statistically correlated with party choice in the given context. Technicalities aside, the key difference between our respective variables and the Index of Political Predispositions stems from the latter had high values for respondents who, because of their objective characteristics were likely to vote for, say, the Republic Party and low values for those who, on account of the same factors, were likely to vote for the Democratic party. In contrast, our measure of the net pull of cleavages is such that likely supporters of any party score high, and those respondents score low who, because of their individual constellation of social characteristics or attitudes, are likely to be relatively indifferent between the parties.

#### 2. AN IMPROVED TEST

Below we seek a more comprehensive test of the above hypotheses than previous studies provided for. Our key innovations concern increasing cross-contextual variation in the data and reducing sampling errors through enlarging the sample; giving simultaneous considerations to more electoral divides, including value conflicts, than previous analyses covered; and using a new measure of cleavage "pull", which can be applied to both individual- and aggregate-level analysis.

We use cross-national data for the analysis partly because of the universal character of our hypotheses that refer to any democratic society. Another advantage is that our analysis of pooled cross-national data allows us to examine the validity of the above hypotheses at both the individual and the aggregate (national) level. Besides, the very large-N in our data analysis should assure that even a relatively weak relationship can be reliably distinguished from a non-existent one.

The causal chains linking cross-pressure to political involvement rely on several highly uncertain steps.<sup>5</sup> Hence, it should come neither as a surprise nor as a compelling refutation of cross-pressure theory if the expected relationship between the two ends of the chain depicted in Figure 1 only shows up in some contexts. If so, then it should be a further task for inquiry to study the conditions under which it occurs, and our multilevel analysis of the WVS data will help the assessment of how much cross-national variation there may be.

The survey data in the analysis are coming from the third wave of the World Values Survey, for which fieldwork was carried out around 1996.<sup>6</sup> Appendix 1 describes why certain countries were excluded from the analysis. The analysis is based on weighted national samples from countries with at least a modicum of electoral competition: Argentina, Armenia, Australia, Bangladesh, Brazil, Belarus, Bosnia-Herzegovina,

<sup>&</sup>lt;sup>5</sup> Most importantly, it is not at all obvious that "objective" cross-pressure always translates into an actual personal experience of cross-pressure, or that it does so equally across countries. For instance, Powell (1976) found just a very weak link in Austria between objective cross-pressure stemming from multiple socio-cultural group membership on the one hand, and participation (campaign activity) on the other. He could explain the weakness of the link by showing that occupying a supposedly crosspressured position – like being a working class practicing Catholic in a country where party choice was largely reduced to a choice between secular socialists and Christian democrats – only influenced participation indirectly, through several relatively weak links. Objective cross-pressure slightly increased the probability that the individual perceived that different parties promote the interests of the social groups he or she belonged to. This perception had a weak negative impact on the strength of partisanship, which, in its turn, reduced participation. Meanwhile the political homogeneity of one's network of friends also impacted the strength of partisanship as expected by crosspressure theory. But the cross-pressured location of the individual did not have a significant impact on the political homogeneity of these networks. Thus, the pattern of interpersonal relations and the perception of party positions in Austria were such that cross-pressure between one's objective position on the class and religious cleavages was either not salient for most people concerned, or only very weakly influenced their strength of partisanship and political involvement. Yet weak individual-level relationships may have important consequences for the democratic political system, especially if the weak relationship happens to be very resilient and universal. It suffices to recall how weak correlations between social status and electoral participation are sometimes argued to have major consequences for the politics or representation (cf. Lijphart 1997).

Bulgaria, Chile, Croatia, Estonia, Finland, Georgia, Germany, India, Japan, Latvia, Lithuania, Macedonia, Mexico, Moldova, Norway, The Philippines, Poland, Puerto Rico, Russia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, Uruguay, the USA, and Venezuela. The Eastern and Western parts of Germany are treated in the analysis as two separate entities, thus bringing the number of contextual units (henceforth "countries") in the analysis to 37. The number drops to 33 in the analysis of electoral volatility due to some missing information on the dependent variable.

### The cleavages considered

As we noted before, nearly all the negative evidence regarding the Columbia school's theory of cross-pressure comes from studies that only considered cross-pressure supposedly generated by membership in social groups, and neglected the possible cross-pressures that may arise because of the attitudes of the individual.<sup>7</sup> We aim at filling the void and extend the analysis to attitudinal cleavages too. Obviously, it is not feasible here either to consider all attitudes and group affiliations that may impact vote choices in at least one country at one point in time, and as a compromise imposed by data availability we focus on six socio-demographic and five value divisions that, according to our reading of the literature on party systems and voting behavior, have created partisan divisions in the electorate of numerous countries for extended periods of time.

These eleven potential cleavage lines are gender, age, rural vs. urban residence, social class, religion, ethnicity, socio-economic attitudes related to the traditional left-right divide, non-economic attitudes relevant for the new left vs. new right divide, attitudes relevant for the clerical vs. secular cleavage, attitudinal support for the political system – this should capture the regime cleavage where it exists -, and nationalist vs. cosmopolitan attitudes. With the exception of some socio-demographic cleavages like

<sup>&</sup>lt;sup>6</sup> See Inglehart *et al.* (2000). The original collector of the data, ICPSR, and the relevant funding agency bear no responsibility for uses of this collection or for interpretations or inferences based upon such uses.

<sup>&</sup>lt;sup>7</sup> Gopoian and Hadjiharalambous' (1994) study is an exception, but they only examined the impact of cross-pressure on the time of vote decisions. Treier and Hillygus (2006) also consider attitudinal cross-pressure but relate it to such indicators of commitment as political moderation and lack of placement on ideological scales.

gender, several variables or scales will measure the position of the individuals on each cleavage line (see Appendix 2).

#### A new measure for the net pull of cleavages

Our analysis relies on two newly developed measures which tap the extent to which given individuals, merely because of their position along the eleven cleavages mentioned above, are expected to have a particularly high utility from any one of the political parties either on the basis of their socio-demographic or their attitudinal characteristics.

There is nothing in the concept of cross-pressure that would recommend a dichotomous classification of citizens into "pulled" (or "cross-pressured") ones and the rest, or suggest that only one pair of factors can create pull (or cross-pressure) at any single point in time. Yet this is exactly what nearly all previous measures of cross-pressure assume, just as the Alford index of class voting did for the assessment of the "pull".<sup>8</sup> In contrast, we construe measures of pull and cross-pressure as genuine continuous variables, simultaneously influenced by the individual's position on a potentially infinite number of relevant divisions in the electorate.

Each of two "pull of cleavages" variables appearing in our analysis show the degree to which a set of variables pull in the direction of the each respondents towards any party. One of the resulting variables refers to the pull of value orientations (attitudes), and another to the pull of socio-demographic variables. Each is derived from the predicted probability of voting for one party or another in a model taking vote choice as the dependent, and value orientations and/or socio-demographic characteristics as the independent variables.

Note that the convenient summation of the pull of multiple cleavage lines vis-àvis multiple parties is possible exactly because the concept of cross-pressure (pull)

<sup>&</sup>lt;sup>8</sup> Most exceptions that we are aware of used very indirect evidence of such crosspressure though - Grönlund (1997) used aggregate election and referendum results to infer attitudes. More to the point, Gopoian and Hadjiharalambous (1994) operationalized cross-pressure as the standard deviation of a given individual's position across a range of issue dimensions. However, even this measure fails to weight issue dimensions according to the exact degree that they pull vote decisions in opposite directions, and is applicable only to dichotomous party choice options. Treier and Hillygus' (2006) study also runs into a similar limitation.

implicitly establishes a common metric for all of these effects. Namely, the bigger the difference between the distributions of voting intentions in group A and B, the stronger the pull of the cleavage dividing A and B is.

Hence our measures are based on vote probabilities. We use discriminant analysis with likely vote choice in an election tomorrow as the dependent, and indicators of the respondents' position on either the six socio-demographic or the five attitudinal cleavages as independent variables.

The relevant results are contained in as many new variables as parties in the analysis for both the socio-demographic and the attitudinal variable set. These new variables show how likely each respondent in a national sample is to vote for a particular party given his or her socio-demographic traits (or all the relevant attitudes of the person). These variables are all transformed into deviations from their means, so that negative values indicate respondents who have below -average, and positive values respondents with above-average probability to vote for the party in question given their socio-demographic (attitudinal) characteristics. For each respondent, the variable called Pull of Group Cleavages show what is the highest positive deviation of expected vote probability from its mean for any one of the parties given the respondents' sociodemographic traits. For instance, a value of .3 means that one party is estimated to draw 30 percent more support from people with the respondent's socio-demographic characteristics than its level of support in the entire sample, and no other party beats that record among respondents with the same social traits. The higher this figure, then, the more strongly respondents with the given traits are drawn towards a particular party merely by their socio-demographic traits. The Pull of Value Cleavages variable is constructed in an identical manner, except that it is based on vote probabilities estimated with the help of the attitude variable referring to the five value cleavages selected for the analysis. Again, the higher the value of a respondent, the more likely that that person is strongly attracted to a party simply because of his/her position on the attitudinal cleavages.

It follows that if a cleavage is irrelevant for vote choice in a country, then it will have no influence on respondents' scores on the respective cleavage pull variable in the given country. Similarly, if a party receives equal level of support irrespectively of all cleavage variables, then it will have virtually no effect on respondents' scores on the two resulting variables. For instance, if vote choice turns out to be virtually unrelated to all socio-demographic traits in a given country for everyone save the members of small ethnic group, then only the members of this group will have appreciably higher values than zero on the values on the *Pull of Group Cleavages* variable in that country. The appeal of the new measures is mostly that they aggregate, with the help of a naturally comparable common metric, the impact of different sets of independent variables on vote choice across parties and cleavage dimension to provide a measure that has readily interpretable differences across individuals, countries, and groups of cleavages (i.e. social versus attitudinal cleavages).

It is important to note that the measure does not concern the extent that a given individual feels strongly or is aware of the given cleavages. It is solely based on the objective degree<sup>9</sup> to which individual citizens, simply because of their socio-demographic characteristics and values along the 11 dimensions listed above, will have above- or below average probability of supporting the different parties that were coded at the responses in the World Values Survey as the ones that the respondents would vote for in an election tomorrow.

# Model specification issues

Our empirical analyses explore the impact of cleavage pull on seven indicators of political involvement and commitment described in Appendix 3. Five of these are dichotomized individual level variables and refer to different forms of involvement: interest in politics; participation in political discussions with peers, in petitioning, and demonstrations; and party membership. The WVS data also allows us to assess aggregate-level variation across countries along these indicators and whether it can be explained by cross-national differences in cleavage mobilization and cross-pressure – i.e. the sample means of our "cleavage pull" variables.

<sup>&</sup>lt;sup>9</sup> Objective in the sense that this is something externally given for the individual, as it is defined by how the parties appeal to voters and how citizens in that society generally vote.

The remaining dependent two variables are not available in the WVS data set at the individual level, and therefore we can only measure them at the aggregate level. The first is turnout in the next legislative election after the fieldwork for the WVS study. The second is total electoral volatility in the same election as measured with the Pedersen-index.<sup>10</sup>

While the analysis of volatility and turnout could proceed with a simple OLSregression, the five individual-level indicators of involvement are dichotomized variables and hierarchical random coefficient (multilevel) model seemed most appropriate for their analysis. In these analyses, all individual-level determinants of involvement were centered at their respective national sample mean, and their effect on the dependent variable was assumed to vary randomly across the 37 countries in the analysis, with the cross-country variance empirically estimated as part of the statistical model. The assumption of random variance does not mean that we do not expect to find a common trend across countries – in fact we do expect the pull of cleavages to increase political involvement. If there is such a common trend across countries, the random coefficient model will find it, and show a limited – possibly statistically insignificant – variance around that common tendency. But allowing for some random variance in the size of the effect seems reasonable since the numerous unobserved determinants of political involvement presumably leave some space for cross-national differences in the exact degree to which pull and cross-pressure can impact political participation.

A substantively more interesting kind of cross-national difference concerns, of course, the levels of participation. Our model allows the national means of the individuallevel variables referring to the pull of cleavages – as well as level of socio-economic development and the age of democracy – to have a fixed effect on cross-national differences in the expected value of the involvement variables.

As Horan (1971) pointed out, whatever variables are used to establish who is cross-pressured and who is not, their linear effect – on political involvement and so forth

<sup>&</sup>lt;sup>10</sup> To see how this measure works, suppose that there are three parties contesting the first of two elections. The first two receive 40 percent of the vote each, and the third gets 20 percent. If the last one disappears by the time of the next election, and the remaining two receive 60 and 40 percent of the vote respectively, then total volatility between the two elections is ((|60-40| + |40-40| + |20-0|)/2=20 percent.

– must always be controlled for while estimating the impact of cross-pressure. Otherwise the cross-pressure variable would pick up the linear impact of the variables that – in combination with each other – defined the objective probabilities of cross-pressure. Thus the 35 socio-demographic variables and attitude scales used to identify the individuals' positions on the eleven cleavages were controlled for in all our analyses of individual level data regarding the impact of "pull" and cross-pressure on political involvement. Given the technical impossibility to allow so many variables to have a random effect on the dependent variable, however, these 35 control variables only entered the respective equations in the form of a single variable called *Control Instrument*, which was derived as the predicted value from country-by-country logistic regressions of the respective dependent variable on the 35 socio-demographic and value orientation variables.

The need for such control for the position of individual citizens on various cleavage dimensions does not arise in the analysis of volatility and turnout, because that analysis is conducted at a much higher level of aggregation than the data that generated our measure of cleavage pull. Nevertheless, we felt that these analyses will also benefit from the inclusion of controls for at least the most obvious known determinants of crossnational differences in turnout and volatility. For volatility, the only control variables that we tried referred to the time when the party system was established (*New Democracy*), level of democracy (the Freedom House score), and macro-economic conditions (growth, inflation and unemployment). However, only the first registered significant effects, and given the relatively low N in the aggregate level analysis the insignificant control variables were dropped from the analyses reported below. The importance of this factor as a key determinant of electoral volatility was underlined by numerous previous analyses (Rose and Urwin 1970; Bartolini and Mair 1990; Huber, Kernell and Leoni 2005; Roberts and Wibbels 1999), but our way of constructing the New Democracy variable instead reflects Mainwaring and Zoco's (2007) finding who showed that the relationship disappears once the time when the party system was established is controlled for.

For turnout, we experimented with the same variables as for volatility plus log of population size, indicators for the presence of mandatory voting laws, automatic voter registration, the possibility of advanced/postal voting, and provisions for elections to be held on weekend holidays. This list reflects partly the findings of the previous

comparative literature on the determinants of turnout (Powell 1980; Jackman 1987; Jackman and Miller 1995; Blais 2000; Franklin 1996; 2004), and partly our limited ability to gather data for some of the less advanced democracies covered among our 37 cases. Since only compulsory voting showed significant effects, the other control variables were consequently dropped from the analysis.

### **3. RESULTS**

Tables 1 to 5 report findings regarding the impact of cleavage mobilization (pull) on political involvement at the individual and the national level. As a reading aid to the tables, consider the otherwise irrelevant technicality that the *Control Instrument*, as one would have expected, always has a large positive effect on the dependent variable (for instance, 4.64 with a standard error of just 0.04 in Table 1), and the estimated standard deviation of this effect across countries is very small (for instance, 0.09 in Table 1) compared to the estimated average effect. What this means it that it is virtually inconceivable that this effect would ever turn negative in any country of the world that is - in any meaningful sense of sampling - represented by our set of 37 countries in the analysis.

### Tables 1 to 5 about here

Turning now to the theoretically interesting findings, note that the *Pull of Value Cleavages* always has a positive, and – except for demonstration participation – statistically significant effect on the dependent variable at level 1, i.e. the individual level. In contrast, the *Pull of Group Cleavages* always has a negative effect, which reach borderline significance for interest in politics and discussing politics. Substantively speaking, people who are strongly pulled towards a party by attitudinal cleavages become more politically active in virtually every examined aspect and in most democracies, while social cleavages, have a negative, if any, influence on political involvement.

At the aggregate level, cross-country differences in the pull of social and value cleavages only register significant effects – of opposite direction – on political involvement in one out of five tests –, namely in the case of participation in petitioning. It

would thus seem that cleavages have less of a mobilizing effect on society than a redistributive effect. In other words, cleavage mobilization probably does not change the overall level of activism in a society, but it does impact who gets involved and who does not. Generally speaking, those citizens become more active who are most strongly mobilized – on either side of the respective divide – by the value conflicts embodied by the party alternatives. The cross-national variance in the effect of value cleavages tends to be statistically significant, but only for petitioning and demonstration participation we can expect that a sizeable minority of the world's democracies may actually experience a zero or negative effect from the pull of value cleavages. For the three other forms of political acticity, the cross-country standard deviation of the effect is less than half the average effect across the 37 countries, and hence we would expect less than one in twenty countries to go against the trend in the direction of the effect.

The negative findings at the aggregate level, where we cannot identify much in the way of statistically significant effects, can be due to poor model specification – given the relative dearth of macro data and previous research on the determinants of crossnational differences in these forms of political involvement, we probably have difficulties in setting our control variables right. It is therefore particularly interesting to consider turnout as a dependent variable. The aggregate determinants of this variable were quite extensively clarified by the previous literature and therefore we are on a firmer ground there. Table 6 presents our findings regarding turnout.

### Table 6 about here

The preliminary findings reported in these papers are consistent with our story so far. If cleavage mobilization and cross-pressures have any effect on cross-national differences in citizens' political involvement, then that is most likely due to the work of value-based cleavages. However, in this analysis even that effect remains statistically insignificant. Unless increasing the sample or improving model specification will bring about the change in our results, we will have to conclude that cleavage mobilization only has a redistributive effect on political activism. In other words, it influences who participate more and less, but does not influence how many people are engaged in political activities.

As far as the freezing hypothesis is concerned, however, it is only the withincountry redistributive effect of cleavage mobilization on participation patterns that is relevant. So our findings so far remain consistent with the proposition that a stronger impact of cleavages – of value-based cleavages, to be precise – on voting behavior has a stabilizing impact on the issue agenda, political alliances, and the party system.

#### Table 7 about here

Table 7 provides a more direct test of the proposition that, in Bartolini and Mair's (1990) interpretation, underlines the freezing hypothesis. Here our aggregate indicators of cleavage mobilization and cross-pressure enter as predictors aggregate electoral volatility at the national level, while we control for the age of the party system – or if you like, the historical period when the party system was established. The pull of value cleavages in the electorate shows a statistically significant, and, as expected, negative effect on aggreate electoral volatility. Once again, the pull of group cleavages is remarkable for the lack of any effect.

#### 4. CONCLUSION

There are three issues that bear emphasizing in the way of conclusions here. First, we do not consider our analysis complete: adding a few more countries to the analysis from the World Values Survey is still possible, and some further improvement in the macro-variables that we control for in the analysis may still change some of the findings. If possible, it would also be desirable to add a longitudinal analysis regarding the last bit in the analysis. Such an analysis could determine whether – as we implicitly assumed here - the mobilization of value-based cleavages is relatively persistent over time, and whether it contributes to a redistribution of political activity in society as well as to low aggregate electoral volatility. We are as yet to explore the possibilities for such a longitudinal analysis.

Second, and presuming a positive answer to these questions, our findings indicate that cross-pressure theory, at least if reformulated into a theory of cleavage mobilization versus indifference, may offer insights into the micro-mechanisms through which cleavage structures shape political processes in general, and stabilize party systems – as well as the cleavage structures themselves – beyond a degree that we could easily explain merely on the basis of continuity in relevant conflicts in society.

Third, we think it is quite remarkable that virtually all the significant effects that we could observe in this study were associated with the pull of value, rather than social cleavages. This finding is entirely consistent with what Tóka (1998) found in panel studies from four countries about the individual-level determinants of electoral volatility, and may have far-reaching relevance for how we understand electoral politics and party systems. For instance, is an anchoring in social structures really so important for stable party systems to develop? The present results probably suggest otherwise, while at the same also hint at the importance of programmatic, ideological, and value differences between the party alternatives as a key to understand stable electoral alignments.

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### **Appendix 1: Data sets in the analysis**

The analysis relies on the national data sets from the third wave of the World Values Survey included in the first public release in February 2000 (see Inglehart et al. 2000). Separate subnational samples (from Russia, Spain, and Yugoslavia), as well as samples with an unweighted sample size below 800 (Ghana, Pakistan, Dominican Republic) were excluded from the analysis. Pilot study samples (in Georgia and Taiwan) were also excluded. Since this step reduced the sample size below 800 for Taiwan, that country was dropped from the analysis altogether. South Korea, Nigeria and China were excluded because of lack of party competition and/or valid responses to the party preference question (V210). Great Britain was excluded from the analysis because for some undocumented reason only a tiny fraction of the sample answered the party preference question, and hence cross-pressures could not be reliably estimated. Peru and Azerbaijan were dropped from the analysis because a very large majority of all respondents declared support for the same party (not a big surprise given how undemocratic these countries were at the time of fieldwork for WVS3), thus making any analyses of crosscutting largely meaningless. The combined number of cases included in the analysis in the 37 samples was 51713.

# Appendix 2: Variables in the discriminant analyses of party preference

Note: In the description below all variable names like v210 etc. follow the variable names appearing in the original dataset.

- **Dependent variable**: based on V210 of Inglehart (2000), recording responses to the following question: "If there were a national election tomorrow, for which party on this list would you vote?" Respondents without a party preference and supporters of parties who were named by less than 30 (unweighted) respondents were excluded from the discriminant analyses but the predicted probabilities of supporting each party were still calculated for them.
- **Independent variables entering the vote choice models:** The 35 independent variables appearing in the vote choice models included six sets of socio-demographic characteristics measuring gender, age, rural vs. urban residence, social class, religion, and ethnicity, plus five sets of value orientations measured with a total of twelve attitude scales -, each referring to a potential cleavage line that seems to exist in at least some countries.

The construction of individual variables was as follows.

Sex: based on V214. Missing values were recoded as man.

- Age and age-squared: based on V216 (but on V215 if V216 was not available). Missing values were replaced with the weighted national mean and the variable was standardized within the weighted national samples.
- **Urban-rural residence**: respondent's place of living ranked on an urban-rural scale (V232). The scale appears to have a poorly documented country-specific coding.

Missing values were replaced with the weighted national mean and the variable was standardized within the weighted national samples.

- **Tertiary education:** based on V217, recoded as 1=completed university-level education, 0=all else. Note that the education variable is missing for South Africa and Japan, and appears to have a different coding in Croatia, Sweden, and Norway than what my variable recoding assumes on the basis of the available documentation.
- Low education: based on V217, recoded as 1=maximum primary school, 0=all else. Note that the education variable is missing for South Africa and Japan, and appears to have a different coding in Croatia, Sweden, and Norway than what my variable recoding assumes on the basis of the available documentation.
- White-collar occupation: based on V221 (present or last occupation of the chief wageearner in the respondent's household). The variable was recoded as 1=employer, manager, professional, supervisory office worker or other non-manual, 0=all else.
- **Blue-collar occupation**: based on V221 (present or last occupation of the chief wageearner in the respondent's household). The variable was recoded as 1= foreman and supervisor, skilled manual worker, semi-skilled manual worker, unskilled manual worker, or agricultural worker, 0=all else.
- **Subjective social class**: based on V226, which records responses to the following question: "People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the: (1) upper class; (2) upper middle class; (3) lower middle class; (4) working class; or (5) lower class?" Missing values were replaced with the weighted national mean and the variable was standardized within the weighted national samples.
- **Income**: the natural logarithm of V227, recording on a ten-point scale the responses to the following questions: "Here is a scale of incomes. We would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that come in. Just give the letter of the group your household falls into, before taxes and other deductions." In Macedonia and Bulgaria income was apparently measured on a different (continuous) scale, but my variable construction could and did ignore this. Missing values were replaced with the weighted national mean and the variable was standardized within the weighted national samples.
- **Catholic minority**: based on V179 (religious denomination), recoded as 1=Catholic (only where Catholics are a numerically significant minority), 0=all else. In countries where Catholics are a majority the variable was coded zero.
- **Muslim minority**: based on V179 (religious denomination), recoded as 1=Muslim (only where Muslims are a numerically significant minority), 0=all else. In countries where Muslims are a majority the variable was coded zero.
- **Other religious minority**: based on V179 (religious denomination), recoded as 1=other relevant minority (only where there is another numerically significant religious minority than Muslims or Catholics), 0=all else. Note that Protestants in Switzerland were also coded 1 on this variable.
- **Immigrant**: based on V206, recording responses to the following questions: "Were you born in this country?" The variable was recoded as 1=born in another country, 0=all else.

Black: based on V234, recoded as 1=black (only in the United States), 0=all else.

- Language1 to Language9: nine dichotomous variables based on V209 (language spoken at home). Within each national sample, all separately coded language groups were distinguished on a separate variable provided that at least 50 respondents chose that language as the one they speak at home.
- Support for capitalism vs. socialism in the economic domain: an additive scale calculated as zv125 - zv126 + zv127 - zv128 + zv140, where the ZV<sub>i</sub> variables are the standardized scores of the respective V<sub>i</sub> variables. The question wording was as follows. "Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. V125. Incomes should be made more equal OR We need larger income differences as incentives for individual effort. V126. Private ownership of business and industry should be increased OR Government ownership of business and industry should be increased. V127. The government should take more responsibility to ensure that everyone is provided for OR People should take more responsibility to provide for themselves. V128. Competition is good. It stimulates people to work hard and develop new ideas OR Competition is harmful. It brings out the worst in people." ""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 (1) a great deal of confidence, (2) quite a lot of confidence, (3) not very much confidence or (4) none at all? [...] V140. Labor unions." Missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples.
- Attitudes towards the poor: an additive scale calculated as zv172 + zv173 + zv174, where the ZV<sub>i</sub> variables are the standardized scores of the respective V<sub>i</sub> variables. The question wording was as follows. "V172. Why, in your opinion, are there people in this country who live in need? Here are two opinions: Which comes closest to your view? (1) They are poor because of laziness and lack of will power; (2) They are poor because society treats them unfairly. V173. In your opinion, do most poor people in this country (1) have a chance of escaping from poverty, or (2) there is very little chance of escaping? V174. Do you think that what the government is doing for people in poverty in this country is (2) about the right amount, (1) too much, or (3) too little?" Missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples.
- Support for conventional family values: an additive scale calculated as zv94 + zv95 zv92 zv93, where the ZV<sub>i</sub> variables are the standardized scores of the respective V<sub>i</sub> variables. The question wording was as follows. "V92. If someone says a child needs a home with both a father and a mother to grow up happily, would you tend (1) to agree or (2) disagree? V93. Do you think that a woman (1) has to have children in order to be fulfilled or (2) is this not necessary? V94. Do you (1) agree or (2) disagree with the following statement? (READ OUT): "Marriage is an out-

dated institution"? V95. If someone said that individuals should have the chance to enjoy complete sexual freedom without being restricted, would you tend (1) to agree or (2) disagree?" Missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples.

- Moral permissiveness: an additive scale calculated as zv197 + zv198 + zv199 + zv200 + zv201, where the ZV<sub>i</sub> variables are the standardized scores of the respective V<sub>i</sub> variables. The question wording was as follows. "Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card. [READ OUT STATEMENTS. CODE ONE ANSWER FOR EACH STATEMENT ON A 1=NEVER JUSTIFIABLE ... 10=ALWAYS JUSTIFIABLE SCALE.] [...]V197. Homosexuality. V198. Prostitution. V199. Abortion. V200. Divorce. V201. Euthanasia ending the life of the incurably sick." Missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples.
- Religiosity: an additive scale calculated as (zv135 + zv181 + zv182)\*(-1), where the ZV<sub>i</sub> variables are the standardized scores of the respective V<sub>i</sub> variables. The question wording was as follows. "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 (1) a great deal of confidence, (2) quite a lot of confidence, (3) not very much confidence or (4) none at all? [...] V135. Church(es)." "V181. Apart from weddings, funerals and christenings, about how often do you attend religious services these days? [CODING: (1) More than once a week, (2) once a week, (3) once a month, (4) only on special holidays, (5) once a year, (6) less often, (7) never practically never.] V182. Independently of whether you go to church or not, would you say you are...(READ OUT) (1) ... a religious person; (2) not a religious person; or (3) a convinced atheist?" Missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples.
- **Support for democratic values**: the same additive scale as described under the same name above except that missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples before they were summed up.
- Attitudes towards the current political system: calculated as the difference between the standardized score of the difference between V151 and V152 ("People have different views about the system for governing this country. Here is a scale for rating how well things are going: 1 means very bad and 10 means very good. [...] V151. Where on this scale would you put the political system as it was A. in communist times. [IN POLITICAL SYSTEMS THAT HAVE UNDERGONE A REGIME CHANGE WITHIN THE EXPERIENCE OF A MAJORITY OF RESPONDENTS: E.G. MENTION THE COMMUNIST REGIME IN CENTRAL/EASTERN EUROPE; THE FRANCO REGIME IN SPAIN; THE MILITARY REGIME IN CHILE]; B. IN COUNTRIES WHERE THERE HAS BEEN NO REGIME CHANGE IN RECENT TIMES, ASK: ten years ago? V152.

Where on this scale would you put the political system as it is today?") on the one hand, and the sum of the standardized version of V124 ("On this card are three basic kinds of attitudes concerning the society we live in. Please choose the one which best describes your own opinion. (1) The entire way our society is organized must be radically changed by revolutionary action. (2) Our society must be gradually improved by reforms. (3) Our present society must be valiantly defended against all subversive forces.") and V152 (see above) on the other. Missing values on all input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples before they were summed up.

- Post-materialist values: this scale sums up the number of "postmaterialist" values ranked first and second on V104, V105, V106 and V107, minus the number of "materialist" values ranked first and second on them. The question wording was: "V104. 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? [RESPONSE OPTIONS:] (1) A high level of economic growth; (2) making sure this country has strong defence forces; (3) seeing that people have more say about how things are done at their jobs and in their communities; or (4) trying to make our cities and countryside more beautiful? V105. And which would be the next most important?" "V106. If you had to choose, which one of the things on this card would you say is most important? (1) maintaining order in the nation; (2) giving people more say in important government decisions; (3) fighting rising prices; or (4) protecting freedom of speech V107. And which would be the next most important?" Missing values on all input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples before they were summed up.
- **Environmentalism**: an additive scale calculated as zv38 + zv39 zv41 + zv147, where the  $ZV_i$  variables are the standardized scores of the respective  $V_i$  variables. The question wording was as follows. "I am now going to read out some statements about the environment. For each one I read out, can you tell me whether you (1) agree strongly, (2) agree, (3) disagree or (4) disagree strongly? (READ OUT EACH STATEMENT AND CODE AN ANSWER FOR EACH) V38. I would agree to an increase in taxes if the extra money were used to prevent environmental damage. V39 I would buy things at 20% higher than usual prices if it would help protect the environment." "V41. Here are two statements people sometimes make when discussing the environment and economic growth. Which of them comes closer to your own point of view? (1) Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs, OR (2) Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent." "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 (1) a great deal of confidence, (2) quite a lot of confidence, (3) not very much confidence or (4) none at all? [...] V147. The Green/Ecology movement." Missing values on the input variables were replaced with the weighted sample

mean of the respective variables and the variables were standardized within the weighted national samples.

- **Support for women's liberation**: an additive scale calculated as zv99 zv98 zv100 + zv101 + zv102 + zv103 - zv148, where the ZV<sub>i</sub> variables are the standardized scores of the respective V<sub>i</sub> variables. The question wording was as follows. "V98. A working mother can establish just as warm and secure a relationship with her children as a mother who does not work. V99. Being a housewife is just as fulfilling as working for pay. V100. Both the husband and wife should contribute to household income. V101. On the whole, men make better political leaders than women do. V102. If a woman earns more money than her husband, it's almost certain to cause problems. V103. A university education is more important for a boy than for a girl." "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 (1) a great deal of confidence, (2) quite a lot of confidence, (3) not very much confidence or (4) none at all? [...] V148. The Women's movement." Missing values on the input variables were replaced with the weighted sample mean of the respective variables and the variables were standardized within the weighted national samples.
- Attitudes towards the free movement of people and goods: calculated as minus one times the sum of the standardized scores of variables V133, V134 and V149. The question wording was as follows. [V133:] "Do you think it is better if: (1) goods made in other countries can be imported and sold here if people want to buy them; or that: (2) there should be stricter limits on selling foreign goods here, to protect the jobs of people in this country?" [V134:] "How about people from other countries coming here to work. Which one of the following do you think the government should do? (1) Let anyone come who wants to; (2) let people come as long as there are jobs available; or (3) place strict limits on the number of foreigners who can come here; or (4) prohibit people coming here from other countries?" [V149] "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 (1) a great deal of confidence, (2) quite a lot of confidence, (3) not very much confidence or (4) none at all? [V149] [IN EUROPEAN COUNTRIES:] The European Union [in North America:] NAFTA [ELSEWHERE: the most important regional organization]." Missing values on all input variables were replaced with the weighted sample mean of the respective variables.
- **National pride**: based on V205, recording responses to the following question: "How proud are you to be [NAME OF TITULAR NATIONALITY]: (1) very proud; (2) quite proud; (3) not very proud; or (4) not at all proud. (5) [IF VOLUNTEERED]: not a member of titular nation." Missing values were replaced with the weighted sample mean and the variable was standardized within the weighted national samples.

# Appendix 3: Dependent variables in the analyses reported in the tables

- **Political interest**: based on V117: "How interested would you say you are in politics?" The variable was dichotomized so that 1="very interested" or "somewhat interested", and 0=all else.
- **Political discussion**: based on V37: "When you get together with your friends, would you say you discuss political matters frequently, occasionally or never?" The variable was dichotomized so that 1="frequently", and 0=all else.
- **Party membership**: based on V32: "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? [...] A political party". The variable was dichotomized so that 1="member", and 0=all else.
- Petitioning: based on V118: "Now I'd like you to look at this card. I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether (1) you have actually done any of these things, whether (2) you might do it or (3) would never, under any circumstances, do it. [...] V118. Signing a petition." The variable was dichotomized so that 1="have done", and 0=all else.
- Demonstration: based on V120: "Now I'd like you to look at this card. I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether (1) you have actually done any of these things, whether (2) you might do it or (3) would never, under any circumstances, do it. [...] V120. Attending lawful demonstrations." The variable was dichotomized so that 1="have done", and 0=all else.
- **Volatility:** Aggregate electoral volatility between the legislative election that immediately followed the fieldwork for the third wave of the World Values Survey in the given country, compared to the previous legislative election. , The index value equals half the sum of the absolute percentage differences between the votes received by each party in two consecutive elections. Source: Mainwaring and Torcal (2003) supplemented by our own calculations for elections not covered in the source, on the basis of election results reported on the internet (ADD SOURCES).
- **Turnout:** Percentage of voting-age population who voted in the national election that immediately followed the fieldwork for the third wave of the World Values Survey in the given country. Source: Pintor and Gratschew (2002), supplemented with data on Albania, Brazil, Puerto Rico and South Africa from the Inter-Parliamentary Union's website and http://www.ceepur.org and http://electionspuertorico.org.

# **Appendix 4: Control variables in the analyses reported in the tables**

**Mandatory Voting:** coded 1 for the presence and 0 for the absence of mandatory voting laws at the national level. Source: <u>http://www.idea.int/vt/compulsory\_voting.cfm</u>

**New Democracy:** a categorical coded 2 if democracy was only established after 1989 in the given country, 1 if it was established in the 1980s, and zero if it was established already before the 1980s.

**Control Instrument:** the predicted value from a separate set of country-by-country logistic regressions of the respective dependent variable (in each of Tables 1 to 5) on the 35 socio-demographic and value orientation variables listed in Appendix 2.

	B	s.e.	p-value				
Level-2 effects							
Intercept	-0.22	0.09	0.03				
GDP per capita	0.00	0.00	0.01				
New Democracy	0.21	0.12	0.09				
Mean Pull of Group Cl.	0.58	0.87	0.51				
Mean Pull of Value Cl.	-0.26	1.81	0.89				
Level-1	effects						
Pull of Group Cleavages	-0.15	0.07	0.04				
Pull of Value Cleavages	0.89	0.10	0.00				
Control Instrument	4.64	0.04	0.00				
Estimated variance	of randon	n effects:					
Random Effect of:	St.dev.	Variance	p-value				
Intercept	0.57	0.33	0.00				
Pull of Group Cleavages	0.15	0.02	0.39				
Pull of Value Cleavages	0.34	0.12	0.04				
Control Instrument	0.09	0.01	>.500				

Table 1: Multilevel model of interest in politics (Unit-specific model with robust standard errors, N=51713 on level-1 and 37 on level-2)

	B	s.e.	p-value				
Level-2 effects							
Intercept	-1.93	0.07	0.00				
GDP per capita	0.00	0.00	0.67				
New Democracy	0.03	0.06	0.64				
Mean Pull of Group Cl.	0.02	0.36	0.95				
Mean Pull of Value Cl.	1.10	0.72	0.14				
Level-1	effects		_				
Pull of Group Cleavages	-0.20	0.10	0.05				
Pull of Value Cleavages	1.02	0.12	0.00				
Control Instrument	6.61	0.16	0.00				
Estimated variance	of randon	1 effects:					
Random Effect of:	St.dev.	Variance	p-value				
Intercept	0.40	0.16	0.00				
Pull of Group Cleavages	0.21	0.04	0.34				
Pull of Value Cleavages	0.39	0.15	0.05				
Control Instrument	0.84	0.70	0.00				

Table 2: Multilevel model of discussing politics (Unit-specific model with robust standard errors, N=51713 on level-1 and 37 on level-2)

	B	s.e.	p-value				
Level-2 effects							
Intercept	-1.10	0.12	0.00				
GDP per capita	0.00	0.00	0.00				
New Democracy	0.01	0.10	0.96				
Mean Pull of Group Cl.	-2.74	0.84	0.00				
Mean Pull of Value Cl.	4.18	1.92	0.04				
Level-1	effects						
Pull of Group Cleavages	-0.19	0.13	0.15				
Pull of Value Cleavages	0.41	0.13	0.01				
Control Instrument	5.69	0.16	0.00				
Estimated variance	of randon	n effects:					
Random Effect of:	St.dev.	Variance	p-value				
Intercept	0.74	0.54	0.00				
Pull of Group Cleavages	0.41	0.16	0.01				
Pull of Value Cleavages	0.54	0.29	0.00				
Control Instrument	0.86	0.74	0.00				

Table 3: Multilevel model of petitioning (Unit-specific model with robust standard errors, N=51713 on level-1 and 37 on level-2)

	В	s.e.	p-value				
Level-2 effects							
Intercept	-2.06	0.09	0.00				
GDP per capita	0.00	0.00	0.01				
New Democracy	0.15	0.05	0.00				
Mean Pull of Group Cl.	-0.13	0.38	0.73				
Mean Pull of Value Cl.	-0.57	0.74	0.44				
Level-1	effects		_				
Pull of Group Cleavages	-0.10	0.10	0.32				
Pull of Value Cleavages	0.20	0.16	0.23				
Control Instrument	6.76	0.18	0.00				
Estimated variance of random effects:							
Random Effect of:	St.dev.	Variance	p-value				
Intercept	0.56	0.31	0.00				
Pull of Group Cleavages	0.16	0.02	>.500				
Pull of Value Cleavages	0.63	0.40	0.00				
Control Instrument	1.03	1.07	0.00				

Table 4: Multilevel model of demonstration participation (Unit-specific model with robust standard errors, N=51713 on level-1 and 37 on level-2)

	В	s.e.	p-value				
Level-2 effects							
Intercept	-3.79	0.19	0.00				
GDP per capita	0.00	0.00	0.39				
New Democracy	-0.02	0.08	0.78				
Mean Pull of Group Cl.	-1.10	0.76	0.16				
Mean Pull of Value Cl.	1.23	1.36	0.37				
Level-1	effects						
Pull of Group Cleavages	-0.24	0.16	0.16				
Pull of Value Cleavages	1.44	0.19	0.00				
Control Instrument	12.52	0.63	0.00				
Estimated variance of random effects:							
Random Effect of:	St.dev.	Variance	p-value				
Intercept	1.13	1.27	0.00				
Pull of Group Cleavages	0.25	0.06	0.05				
Pull of Value Cleavages	0.34	0.11	0.40				
Control Instrument	3.56	12.64	0.00				

Table 5: Multilevel model of party membership (Unit-specific model with robust standard errors, N=51713 on level-1 and 37 on level-2)

	В	Std.	Beta	T-value	Sig.
Error					
(Constant)	54.26	8.09		6.71	0.00
Mandatory Voting	16.31	5.22	0.50	3.13	0.00
Average Pull (Value Cl.)	62.00	43.62	0.25	1.42	0.16
Average Pull (Group Cl.)	-0.92	25.67	-0.01	-0.04	0.97

**Table 6: OLS-regression of national turnout on aggregate indicators** (N=37, adj. R-squared=.185)

 Table 7: OLS-regression of aggregate volatility on aggregate indicators (N=33, adj.

 R-squared=.407)

	В	Std.	Beta	<b>T-value</b>	Sig.	
		Error				
(Constant)	31.74	12.00		2.65		0.01
New Democracy	10.68	3.16	0.50	3.37		0.00
Average Pull (Value Cl.)	-179.16	61.33	-0.47	-2.92		0.01
Average Pull (Group Cl.)	48.55	34.46	0.24	1.41		0.17