



UNIVERSITY OF
GOTHENBURG

VOTER IDEOLOGY, PARTY SYSTEMS AND CORRUPTION VOTING IN EUROPEAN DEMOCRACIES

ANDREAS BÅGENHOLM

NICHOLAS CHARRON

WORKING PAPER SERIES 2014:15

QOG THE QUALITY OF GOVERNMENT INSTITUTE

Department of Political Science

University of Gothenburg

Box 711, SE 405 30 GÖTEBORG

December 2014

ISSN 1653-8919

© 2014 by Andreas Bågenholm & Nicholas Charron. All rights reserved.

Voter Ideology, Party Systems and Corruption Voting in European Democracies
Andreas Bågenholm
Nicholas Charron
QoG Working Paper Series 2014:15
December 2014
ISSN 1653-8919

ABSTRACT

There is growing literature on an increasingly ubiquitous puzzle in many democratic countries: why do corrupt officials continue to be re-elected by voters? In this study we address this issue with a novel theory and newly collected original survey data for 24 European countries. The crux of the argument is that the ideological position of the voter together with the number of reasonable party alternatives explains why citizens would continue voting for their preferred party despite it being involved in a corruption scandal. Developing a theory of supply (number of effective parties) and demand (voters' acceptable alternatives to their preferred party in relation to their ideological position), we posit that there is a 'U-shaped' relationship between the likelihood of corruption voting and where voters place themselves on the left/right spectrum. However, as the number of viable party alternatives increases, the effect of ideology is expected to play a smaller role. The hypothesis implies a cross-level interaction for which we find strong and robust empirical evidence using hierarchical modeling. In addition, we provide empirical insight into how individual level ideology and country level party systems - among other factors - impact a voter's decision to switch parties or stay home in the face of their party being involved in a corruption scandal.

Andreas Bågenholm
The Quality of Government Institute
Department of Political Science
University of Gothenburg
Andreas.bagenholm@pol.gu.se

Nicholas Charron
The Quality of Government Institute
Department of Political Science
University of Gothenburg
Nicholas.charron@pol.gu.se

Introduction

In recent decades, the harmful effects of corruption on a society have been empirically established and are now considered indisputable. It is associated with less economic development, greater inequality, poorer health outcomes and environmental conditions, less generalized trust and less happy populations (Mauro 1995; Holmberg and Rothstein 2011; Welsch 2004; Gupta et al. 2002). According to democratic theory, one key mechanism through which citizens can combat corrupt elite behavior is electoral choice. Given that corruption is pervasive among incumbents or that a corruption scandal breaks prior to an election, rational voters who understand the costs of corruption will turn against the government in favor of a ‘cleaner’ challenger and ‘throw the rascals out’. Yet the findings of the wave of recent empirical studies have shown that the accountability mechanisms are more ambiguous, as corrupt officials are in many cases re-elected or punished only marginally by voters (see for example Chang & Golden 2010; Eggers & Fisher 2011; Reed 1999; Peters & Welch 1980; Bågenholm 2013). Even though most studies find that the electorate actually punishes politicians and/or parties involved in corrupt dealings, there are still many exceptions to this rule, and many voters still stick to their preferred parties. Despite the increasing literature in the field, the puzzle of why voters are willing to vote for public officials that they know to be corrupt is still not satisfactorily resolved.

Several explanations have been suggested as to why this may be the case. Some focus on societal factors, such as political institutions and what impact they may have for voters to hold politicians accountable (see for example Rose-Ackerman 2005; Persson and Tabellini 2003; Charon 2011; Tavits 2007; Manzetti and Wilson 2007; Ferraz and Finan 2008). Other scholars have highlighted individual level factors. For some voters, it could simply be a function of rational calculation, as they personally benefit from the corrupt activity, for example in the form of clientelism (Fernández-Vázquez et al. 2013; Manzetti & Wilson 2007) or they may have strong loyalties to certain politicians or parties that cloud their vision and allow a form of ‘cognitive dissonance’ (see de Souza & Moriconi 2013: 486). It may also be the case that the government is perceived to be doing a good job in managing the economy and that voters reward them for that rather than punishing them for being corrupt (Choi & Woo 2010; Casey 2014).

This paper makes several contributions to this literature. Firstly, we put forth a novel theoretical model in which corruption voting can be understood, based on individual and system level factors,

highlighting a previously unexplored cross-level interaction between ideology and party systems. In a sense, we make a market like argument of supply and demand. On the individual (demand) side, we propose an alternative factor that has been overlooked by this literature – the *voter's own ideological preference*, as opposed to party membership or party loyalty. On the macro (supply) side, we highlight the effects of the party system, i.e. the number of effective political parties ('ENPs'). We argue that how voters react to a corruption scandal in their party largely depends on the *ideological positions of the voters and the presence of reasonable alternatives*. Our main expectation is that ideology (which we measure as self-placement on a left-right scale) has a U-shaped relationship with the propensity to continue to vote for one's favorite party, despite the presence of corruption, given limited party alternatives – as voters' ideological preferences verge further out toward the extreme left and right, they simply have fewer choices on average to which to change their vote that credibly align with their interests. However, in a typical Downsian (1957) distribution of voter and party preferences (a normal curve agglomeration around the center), centrist voters have more acceptable choices for which to vote and thus their propensity (relative to more extreme voters) is to switch parties in the face of a corruption scandal in their otherwise preferred party. When the number of effective parties increases, however, the U-shaped curve is expected to flatten, as credible alternatives present themselves, even for more extreme voters, and they will thus assumingly switch parties to the same extent as centrist voters do. Nonetheless, in limited party systems (two to three ENPs), a U-shaped relationship is predicted.

Secondly, to test our theory, we employ an observational, comparative research design with newly collected survey data in 24 countries, of approximately 85 000 individuals in in 24 countries, which allows us to inquire directly about corruption voting in a cross-country framework, based on hierarchical data and modeling. Previous studies have looked at corruption voting in the aggregate using cross-country comparison and/or panel data (Chang and Golden 2007; Tavits 2007; Persson and Tabellini 2003), or single country longitudinal studies (Welsh and Hibbing 1997) or at the individual level. Individual level studies have focused mainly on corruption voting in one country with experimental designs and using survey data (Rundquist et al. 1977; Wantchekon 2003; Konstantinidis & Xezonakis 2013; Anduiza, Galego and Muñoz 2013; Weiss-Shapiro 2008; Chong et al. 2015). Only a few studies have employed multi-level designs (individuals nested in countries). Yet, due to limitations in cross-country data, they have relied on less precise measures of the dependent variable, such as satisfaction with the government (Manzetti and Wilson 2007), rather than using a more

direct measure of voting preferences and/or actual voting. Thus third, we also contribute to the literature by using a more direct measurement of both the dependent and independent variables - still with a large N – which allow us to actually examine the precise mechanisms of the impact of party systems on corruption voting.

In addition to the category of respondents who say that they will still vote for their preferred party even when exposed to its being corrupt, we also run multinomial logit models analyzing those respondents who say that they would vote for an alternative party or, as a third option, stay home. We find that the interaction between voter ideology and party system is indeed ‘U-shaped’ in continuing to vote for one’s party when ENPs are low, but flattens as ENPs increase, and the interaction impacts the two other choices as well. In sum, we find that more centrist voters choose the option of ‘staying home’ in the face of a corruption scandal, and that this effect is strengthened in systems with a limited number of ENPs. Moreover, we find, consistent with our argument, that voters in systems with a greater number of ENPs are more likely to switch to another party. Further, in all systems, voters closest to the center are more likely to switch than are voters on the extreme ideological fringes. This is robust to several model specifications and controlling for several individual and country level factors as well as when outliers are removed.

In the remainder of the paper, we highlight past research on corruption voting and relevant findings. We then develop our theoretical argument. Next, we present the data and design we use to test our empirical claims. Results are then presented, and the study concludes with a discussion of the findings and suggestions for future research in this field.

Why Do Voters Vote for Corrupt Officials?

Given the dire consequences of corruption and the fact that European citizens have a distaste for such practices, it is somewhat puzzling why corrupt politicians and parties to a surprisingly large extent manage to maintain popular support and get re-elected (see Special Eurobarometer for corruption opinions in Europe). For the sake of clarity, it should be pointed out that most studies do find that corrupt politicians and parties actually lose support at times; however, this is less than one would expect and more often than not with only limited consequences for remaining in office (see

for example Chang & Golden 2010; Eggers & Fisher 2011; Reed 1999; Peters & Welch 1980; Bågenholm 2013; de Sousa & Moriconi 2013). Why do voters support corrupt politicians?

Although several empirical studies have suggested ways to explain this paradox, the field of research remains limited. In spite of the fact that there are few systematic comparative studies, there are some interesting hypotheses and some results worth highlighting (see de Sousa and Moriconi 2013 for an extensive overview). On the macro level, political institutions that affect the possibilities for holding politicians and parties accountable have been much in focus. It should be noted however that the dependent variable in these studies is usually the level of corruption, implying that politicians will do a better job controlling corruption if there are well-functioning accountability mechanisms. Still, the results are a bit contradictory, as division of power, i.e. presidentialism, has been found to enhance accountability and reduce the level of corruption (Persson and Tabellini 2003); Gerring and Thacker (2004) on the other hand find that parliamentarism and unitarism are negatively correlated to corruption. Regarding electoral systems, several scholars have argued that majoritarian or plurality systems help voters to identify who is responsible for the outcomes, in contrast to PR systems where coalition governments make such distinctions more blurry (Rose-Ackerman 2005; Tavits 2007; Charron 2011). The scrutiny of candidates in single member districts is assumed to make it harder for corrupt politicians to go undetected, whereas candidates on party lists are more anonymous and not individually exposed to the same extent. In contrast, there is also some evidence that at least a moderate number of effective parties is conducive to reducing corruption, in contrast with one party dominance and excessive fragmentation. The point is that the elections should be competitive, implying the existence of some credible challengers that can replace the incumbents if they misbehave. If the challengers are too many and too scattered, however, coordination problems and information costs will reduce their potential as viable alternatives, and corruption will not be checked (see Schleiter & Voznaya 2011:12-14). Moreover, high barriers for new party entries are considered to be detrimental to effective accountability, as they reduce the alternatives and, above all, the opportunities for new parties, specifically focusing on anti-corruption, to challenge the established ones (see Bågenholm & Charron 2014). This implies that PR systems also enhance accountability, although in a different way, by increasing the number of relevant alternatives to voters.

While political institutions may enhance or reduce the possibilities for voter accountability, a prerequisite for that to occur in the first place is naturally that reliable information on corruption scan-

dals is available and comes to the knowledge of the voters (Jiménez & Caínzos 2006: 194). Even if the extent of media coverage on scandals does not seem to affect the extent of electoral punishment, a free press is naturally a necessity in order for accountability to work (Ferraz and Finan 2008; de Souza and Moriconi 2013: 480). It is also the case that the electoral effects of corruption are dependent on whether or not the issue is politicized by the parties (Bågenholm 2013).

Turning to the micro level, information about corruption scandals or the graveness of the problem in general has to be filtered through a number of individual lenses, and the reactions to them may thus differ from one person to the next, depending on the evaluation made in terms of responsibility, saliency, trustworthiness and the alternatives (Jiménez and Caínzos 2006). Governments may get away with corrupt practices if they are perceived to manage the economy well, which is also in accordance with consistent findings in the economic voting literature (see for example Lewis-Beck and Stegmaier 2000). The worse the government is perceived to handle the economy, the more corruption seems to matter, as corruption then becomes more salient. But if the government manages the economy well, corruption does not seem to matter at all (Choi and Woo, 2010; Zechmeister and Zizumbo-Colunga 2013). There is thus a type of rationality in the electorate. If people think that they will personally benefit, they will continue to support the incumbents. Several studies have shown that even outright corrupt practices, i.e. clientelism, may be approved of if people find that it is to their advantage (Manzetti and Wilson 2007; Fernández-Vázquez et al. 2013).

Another factor has to do with “home team” psychology. There is a tendency to disregard negative information about one’s favorite party (see de Souza and Moriconi 2013: 486) or, if corrupt behavior is too obvious to deny, a tendency to think that the other parties are just as corrupt. Also, voters’ personal perceptions and experiences of corruption can be highly relevant in their voting decision (Klasnja, Tucker and Deegan-Krause 2014). Regarding individual factors such as age, gender and level of education, there is little consensus about their impact on the level of tolerance for corrupt politicians (de Souza and Moriconi 2013: 485-486).

In this paper we test related factors, but ones previously overlooked in the literature, namely the *ideological positions of the voters and how they are affected by the presence of reasonable alternatives*. We begin with the assumption that, in general, voters seek to best match their personal ideological preferences with the parties contesting an election. When a voter’s first party choice is involved in some type of malfeasance, he or she must then make a strategic decision as to whether there is an alternative to

vote for. However, alternatives are not just a matter of how many other parties there are to vote for, but also how many of those parties lie within a reasonably close ideological range, which in turn depends on where one places oneself on the left-right scale. All other things being equal, the more to the center you are, the greater the likelihood that you will have more alternatives to choose among, even in more limited party systems. On the other hand, the further a voter identifies with the ideological fringes, the more difficult it is to find a reasonable alternative to switch to, as it could be expected that those voters have strong opinions on matters which the rest of the parties take the opposite stand on, for example immigration, minority rights and issues regarding the state versus the free market. For more limited party systems, it will be more difficult to harbor two competing fringe parties, as they would split votes between them and hence be weakened. We therefore expect that voters in limited party systems are shaped much more by ideology, as strategic voting most likely plays a larger role due to limited choices (Cox 1997). We do not claim however that voters on the ideological fringes are different in their mindset concerning corruption than are voters more to the center - it is simply the lack of alternatives that make them behave differently and adopt different voting strategies when party systems are more limited. Therefore, as the number of effective parties decreases, we argue that it is more likely that such voters would vote according to their political ideology. However, this alternative hypothesis (that voters on the extreme ends of the ideological spectrum are simply less inclined to care enough about political corruption to punish their own party) is tested directly when the party system is taken into account. We argue that the demand an individual has in voting for a party sufficiently close to her ideological preferences is mitigated by the supply of parties. Where party systems contain a high number of effective parties, the ideological differences at the individual level are expected to be washed out, as the likelihood of an alternative party choice increases. Yet, in limited party systems, given that corruption becomes pervasive in one's own party, we argue that the further to the right or left of the ideological spectrum one is, the more likely one will be to continue to vote for the same party, despite corruption being apparent. In light of this, we offer the following hypotheses:

H1: *At the individual level, the relationship between ideology and probability of corruption voting is U-shaped on average; the further out on the fringes that voters place themselves, the greater the likelihood that they will continue to support a party involved in a corruption scandal.*

H2: *The U-shaped relationship between individual ideology and probability of corruption voting is conditioned by the country's party system; as the number of parties increases, the U-shape is expected to flatten.*

Although our primary theoretical interest in this study is the choice to continue to vote for a party one knows to be corrupt, we put forth several other corollary expectations that are consistent with our expectations in H1 and H2. In addition to ‘still voting’ for one’s party, we also track whether or not a respondent would simply ‘stay home’ or ‘vote for an alternative party not involved in the corruption scandal’, which we address further in the subsequent section. Since our argument is essentially one of supply and demand, we anticipate that the choice to ‘vote for an alternative’ will be positively related with the number of ENPs in the system, while ‘staying home’ will be negatively related with the number of ENPs. With respect to ideology, it is anticipated that the ‘vote alternative’ option will essentially be an ‘inverse U’, i.e. a mirror image of the ‘still vote’ option, with centrist voters most likely to switch parties. Finally, and also in accordance with the ‘still vote’ option, the effect of ideology on turnout is expected to increase as the party system gets larger and even voters on the extremes have more viable alternatives.

Sample, Data and Design

The data on corruption voting, ideology and demographic background information about citizens in this study are taken from the largest, multi-country survey specifically focusing on matters of governance and corruption – with a total sample of over 85 000 respondents in 24 European countries conducted by the authors, and it thus serves as an appropriate source for testing multi-level hypotheses.¹ Of the 30 plus questions included in the survey, several are of interest in this context.

First, in constructing the dependent variable, we rely on two survey questions:

1. What political party would you vote for if the national parliamentary election were today?
2. Now imagine that that party was involved in a corruption scandal. Which of the following would be most likely? a) Still vote for preferred party b) Vote for an alternative party not involved in the corruption scandal c) Not vote at all.

Prior to these questions, the term corruption was defined for the respondents via the following description: “In this survey we define corruption to mean ‘*the abuse of entrusted public power for private gain*’. This abuse could be by any public employee or politician and the private gain might include money, gifts or other benefits.” In all, 20.7 percent of all respondents answered that they would still

vote for the same party despite its involvement in corruption, while 33.7 percent responded that they would vote for another, clean party and 38.6 percent that they would not vote at all. 6.9 percent responded ‘don’t know’.ⁱⁱ

As we are most interested in the factors that explain why a voter would continue to vote for a candidate/party despite the presence of corruption, we begin the analysis by re-coding the variable ‘*still vote*’ dichotomously, whereby a respondent is coded 1 if they would still vote for their preferred party and 0 if otherwise. In later models, we also look at the other two options, to ‘vote for another party’ and ‘not vote at all’, using multinomial logit. Proportions of each response by country are given in the appendix.ⁱⁱⁱ

A third question from the survey is taken as the primary explanatory variable of interest at the individual level - the *ideology* of the respondent. In this case, the variable is formulated using standard phrasing, asking respondents to place themselves on a left-right scale:

3. In politics, people sometimes talk of "left" and "right". Where would you place yourself on a scale from 1 to 7, where 1 means the extreme left and 7 means the extreme right?

There are two potential problems with this measure. First, respondents may have difficulty knowing where to place themselves, as left and right may mean different things in different countries and be more or less relevant. Second and more importantly, the question may tap the strength of partisanship, i.e. a respondent who strongly identifies with for example the social democrats would place herself further to the left compared to a less ardent respondent who still supports the same party, which would impact the validity of our findings. Unfortunately, we have no question that asks ‘how loyal’ one is to the party one supports, but we can check whether self-placement of ideology is correlated with left-right ideology of their chosen parties and, if that correlation turns out to be strong, our measure can be considered valid in tracking ideology. To assess this, we test the measurement validity of this variable vis à vis question 1 (intended party vote). We collected data on each available party’s left-right placement from the most recent Chapel Hill party data (Bakker et al. 2012). We take the measure of the overall left-right placement of each party (party_LR) and compare the self-placement ideology with the ideology of one’s preferred party across the entire sample, as well as in each individual country. We find overall that there is a strong, positive correlation between the seven ideology groups and party_LR. Moreover, looking at this relationship within each country, we find a strongly significant and positive relationship between the two variables, which provides a

high degree of discriminant validity for the self-placement ideology measure.^{iv} A summary of the results of this test is found in the appendix.

The left-right self-placement variable is re-scaled from 1-5 (far left, center left, center, center right and far right), where respondents who answered 1 and 2 are grouped in the ‘far left’ and those that answered 6 or 7 are grouped in the ‘far right’. We do this because we find very little difference in party_LR between groups 1 and 2, and 6 and 7, and also in order to increase the number of observations per group, due to the fact that, in some countries (Ireland and Croatia in particular), less than 20 individuals placed themselves in the 1 or 7 categories. However, we re-test the results using the full 1-7 ideology measure, with ‘Don’t know’ respondents coded as 0. The distribution is near-normal, with a slight skew to the right. Of the 85,157 respondents, 4.5 per cent and 21.7 per cent are far left and center left, respectively, while 6.2 per cent and 22.2 per cent place themselves on the far and center right, respectively.^v The modal response is ‘center’, with 36.2 per cent, and 9.2 per cent ‘don’t know’.

In addition to the primary variables of interest, we also include several other factors in the analysis that the literature has shown to be relevant. We control for standard demographic factors, such as gender, age, education, income, rural-urban location of the respondent and employment status. We also include the respondent’s satisfaction with the economy, as this speaks to the idea of the respondent feeling that the status quo (*status quo should be in italics*) has benefitted her, thus making her more likely to vote for the incumbent. An individual’s perception and/or experience of corruption could also impact his or her electoral decision making, as high levels of both perceived and experienced corruption indicate an awareness of the problem. Mixed evidence has been presented as to which ‘matters more’ in voting behavior, with Manzetti and Rosas’ (2012) finding evidence that perception of societal corruption explains more variation in individual level voting patterns in Latin American countries, while Klačnja et al. (2012) find stronger evidence for direct experience of corruption influencing voting in two Eastern European states. Thus, we include two questions – the respondent’s perception of societal corruption and their own direct experience (or lack thereof) of petty corruption – and we expect both to be negatively correlated with ‘still vote’.

We combine the individual level data with country level factors. At the country level, our key variable is the number of effective parties (ENPs), taken from Gallagher (2014), and is averaged for the latest three electoral cycles for each country so as to capture the general trend of the party sys-

tem over the last decade.^{vi} Other institutions highlighted in the literature are the electoral system, the level of freedom of the press and presidentialism, which we also control for here. In addition, we include ‘age of democracy’, as Keefer (2007) argues it will be negatively related with the propensity for clientelistic relationships between parties and voters. Since we have both new and older democracies in the sample, we control for this factor, which we measure as the number of consecutive years coded as 6 or higher in the Polity IV data. Moreover, we include the level of economic development (PPP per capita, logged) and the overall quality of country level institutions, using the ‘control of corruption’ index from Kaufman, Kraay and Matruzzi (2011), as it is plausible that respondents in countries that have low levels of corruption systematically respond differently to political corruption than in countries where country wide corruption is more pervasive. A summary of all variables can be found in the appendix. The latter variables were taken from the QoG Institute’s homepage (Teorell et al. 2011).

We begin the empirical tests by focusing on the ‘still vote’ outcome, employing a hierarchical design, whereby the cross-level interaction effects are tested directly. We find that country level differences in the dependent variable are present, and thus country level effects must be taken into account to avoid bias estimates.^{vii} Simply accounting for regional and/or country dummy variables for individual level variation in an OLS model can lead to problems because the error terms of the lowest level unit (individuals) within the same group will still be correlated. OLS models with regional or country dummies also assume that the second level variables have an equal effect on the dependent variable across all individuals, which is not always the case. Thus we elect to explain individual levels of trust in a hierarchical logit model with two levels, ‘i’ and ‘j’, to represent individual and country levels, respectively. The basic model used here is:

$$Stillvote_{ij} = \beta_0 + \beta_{01}x_{ij} + \beta_{10}z_{1j} + \beta_{11}z_{1j}x_{ij} + u_{1j} + u_{0j} + e_{0ij}$$

Where $Stillvote_{ij}$ is the log of the odds as a function of a set of individual level (x_{ij}) and country level (z_{1j}) fixed effects to estimate our model parameters (β). For random intercepts and random slope models (RIRSM), the parameter (u_{1j}) tests whether the slopes of the individual parameters (in our case, ideology) vary significantly by country, while u_{0j} is the random level intercepts for the country level and e_{0ij} is the error term. If we can reject the null hypothesis that the random slope for ideology is equal to ‘0’, then this serves as the basis for testing our cross-level interaction term ($z_{1j}x_{ij}$)^{viii}.

Our hypothesis implies that the slopes of ideology to vary by country, and the purpose of the interaction term is to directly test whether the country-level ‘effective number of parties’ explains the variations in the slopes of respondent ideology. In testing this, we run both a random intercepts model and a random coefficients model to test the extent to which our interaction explains the cross-country random effects of ideology on corruption voting, as it is recommended to test the very basis of the interaction term before modeling second level modifying variables (Aguinis et al. 2013). The random effects model (using country random intercepts and random slopes for ideology) tests the null hypothesis that the slope of ideology is consistent across all countries (e.g. model 4 in Table 1).

Are ideology and party systems linked with voting for corrupt incumbents?

We follow the recommendations of Aguinis et al. (2013) and ‘test up’ by beginning with an ‘empty model’ in Table 1 to see whether the hierarchical model is appropriate^x. The intercept is -1.49, which equates to 0.22 odds that the average person in the sample will ‘still vote’. The null hypothesis is that the variance (σ^2) is equal to ‘0’ (e.g. no significant cross-country differences), and this is rejected as the chi-square test statistic has a p-value of 0.0000. There is thus strong evidence that between-country variance is non-random, as one would expect given cross-country differences by response. The random effects sigma (σ_{u0}) tells us that, for a country, in the case of one standard deviation above the mean for ‘still vote’, the intercept is 0.31 greater than the intercept for the mean country value, -1.49.

Model 2 tests the bivariate relationship using only ideology as an explanatory factor. We find a ‘U-shaped’ relationship between ideology and ‘still vote’^{xi}. We find that (without accounting for the interaction term or country level effects) respondents on the extreme left and right are almost twice as likely on average to still vote compared with centrist voters, while center left and right lie in between, and the ‘U-shaped’ relationship is highly significant.

TABLE 1; ESTIMATES OF PROBABILITY OF 'STILL VOTE' OF KEY VARIABLES AND CROSS-LEVEL INTERACTION

		1. Empty model		2. Ideology only		3. + Ind. level		4. + country level		5.x-level interaction	
		Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
<u>Level 1(individual)</u>											
Intercept		-1.49	0.000	-2.39	0.000	-2.98	0.000	3.94	0.000	4.98	0.000
Ideology	far left			1.33	0.000	1.22	0.000	1.27	0.000	1.80	0.000
(d/k)	center left			1.05	0.000	0.88	0.000	0.93	0.000	1.36	0.000
	center			0.62	0.000	0.49	0.000	0.54	0.000	0.51	0.005
	center right			1.01	0.000	0.83	0.000	0.88	0.000	0.98	0.000
	far right			1.38	0.000	1.24	0.000	1.30	0.000	1.53	0.000
<u>Level 2 (Country)</u>											
ENPs								-0.07	0.54	-0.01	0.94
<u>Cross-Level Interaction</u>											
Ideology*ENPs	far left*ENPs									-0.15	0.003
	cen. left*ENPs									-0.12	0.01
	center*ENPs									0.004	0.93
	cen. right*ENPs									-0.03	0.49
	far right*ENPs									-0.07	0.12
Random Variance components											
	Randomintercept σ_{u0} (s.e.)	0.567	0.09	0.541	0.08	0.49	0.07	0.524	0.08	0.512	0.07
	RandomSlope σ_{z1} (s.e.)							0.075	0.01	0.070	0.01
Wald model test $\Pr(\chi^2)$		0.0000		0.000		0.000		0.000		0.000	
Log likelihood		-42156		-41277		-38918		-39539		-39538	
LR Test ind. obs (countries)		0.000		0.000		0.000		0.000		0.000	
		85157(25)		85157(25)		85157(25)		82675(23)		82675(23)	

Note: Models estimated using hierarchical modeling with a binary dependent variable (*xtnlogit*). Models 3-5 include level 1 and level 2 controls (see appendix for full results). Models 1-3 control for random country intercepts, while 4-5 also include random slopes for ideology. Individual level controls (not shown) are gender, age, income, education, population, satisfaction with current economy, corruption perceptions and corruption experience. Country level controls are GDP per capita (logged), corruption (WGI), age of democracy, proportional representation and semi-presidentialism. Beta coefficients reported with p-values.

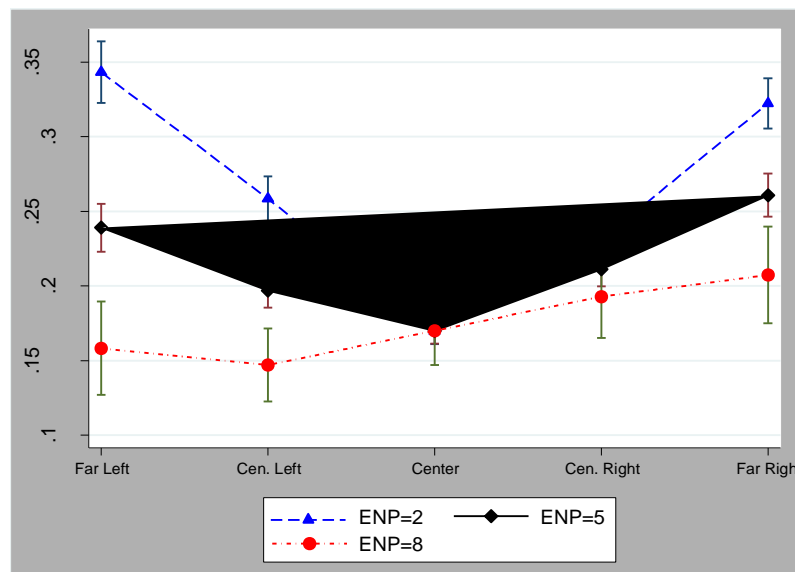
Model 3 adds fixed effects control variables at the individual level. Of the individual level factors of note, we find a strong gender effect – the odds of a female ‘still voting’ are about 24% less compared with a male respondent with otherwise similar demographic characteristics. Further, there is an age and (to some extent) education effect – younger and less educated respondents show a *lower* tolerance for corruption in voting than older and more educated people. Rural respondents are the least likely to still vote for their prior party/candidate, while satisfaction with the economy is

strongly and positively linked to voting for their status quo party. Individual level experience and perceptions with corruption have only a small impact on the dependent variable.

Models 4 and 5 include country level variables – both with and without the interaction term (models 5 and 4, respectively). In model 4, we find that the random slope variance is more than seven times the standard error and the confidence interval around sigma does not include zero. We can thus reject the null hypothesis that the cross-country variance in slopes for ideology is equal to ‘0’, thus giving us empirical justification for including the cross-level interaction, which we test in model 5. Interestingly, ENPs’ direct effect on ‘still vote’ is insignificant (model 4)..

As significance levels for interaction terms in binary models can at times be misleading (Berry et al. 2010), we elect to show the marginal effects (predicted probabilities) of each ideological position on the ‘still vote’ at select levels of ENPs in Figure 1 for a clearer interpretation of the results.

FIGURE 1; IMPACT OF IDEOLOGY ON STILL VOTE CONDITIONED BY THE EFFECTIVE NUMBER OF PARTIES



Note: The ‘d/k’ estimates not included; results from model 5 in Table 1. Estimates shown with all other control variables held at their mean levels.

Figure 1 highlights the two level interaction between respondent ideology and the country level ‘effective number of parties’ (ENPs). For the sake of parsimonious interpretation, we provide the predicted probability of ‘still vote’ as a function of the five ideological placements over two, five

and eight party systems. The results elucidate a clear interaction effect – in highly multiparty systems, one’s ideological position makes little difference (e.g. the ‘U-shaped’ relationship disappears, and all confidence intervals overlap), yet ideological position becomes quite significant as the number of parties decreases and merges toward a two party system^{xii}. For instance, comparing the effects of ideology at the extremes, the probability that individuals on the far right ‘still voting’ increases by about 85% between an eight and two party system, while the probability of respondents on the extreme left ‘still voting’ more than doubles. Interestingly, the effect of ENPs on centrist voters is negligible – they are equally likely to ‘still vote’ in two party systems as they are in multiparty ones, while center left/right voters are somewhat impacted by the ENPs; this is in line with our expectations regarding supply and demand based on the ideology of the voter and the number of alternatives based on the ENPs

Modeling all three response outcomes

In this section, we broaden the analysis to include the other two responses and model the three together in a single logit model^{xiii}. After testing whether the responses could be modeled in an ordered way, we find that we consistently violated the parallel odds assumption, and thus we elect to model the outcomes as non-ordered categories in a multinomial logit model^{xiv}. We thus test for violations of the Independence of Irrelevant Alternatives (IIA) assumption in each model. We also re-run these estimates using general linear structural equations models (SEM) accounting for our hierarchical data^{xv}. Table 2 presents the findings for three models. Model 1 is a simple baseline with only ideology and country fixed effects. Model 2 shows the results of the interaction between ideology and ENPs, while Model 3 includes all individual and country level control variables from Table 1. The comparison baseline group for the three models in Table 2 is the ‘stay home’ outcome.

The baseline model, accounting only for country fixed effects, confirms again that voter ideology plays an important role in how a voter would respond to a corruption scandal in his or her preferred party – corroborating our findings in Table 1. We observe however that, on average, there are significant differences between center voters and those on the left and the right. The predicted probability of a center voter staying home and not voting is roughly 0.10 (10%) greater than voters who identify themselves somewhere on the center left or center right. We find that the probability

for center, center right and center left voters to ‘vote for an alternative party’ is quite similar – between roughly 37% and 39% likely to do so – while voters on the far left or far right are only approximately 30% likely to switch to another party. We find that, overall, the most likely outcome is that the voter simply ‘stays home’ – in particular, those in the center, who are roughly 45% likely to do so on average, which corroborates findings by Chong et al. (2015) that corruption leads to decreases in voter turnout. Model 2 includes all individual level controls and the interaction between party system and voter ideology, while model 3 adds all country level variables. To offer a more accessible interpretation, we provide Figure 2, a visual of the main effects of the key variables and their interaction in the three response outcomes, highlighting the predicted effects of ideology in 2 and 8 party systems across the three responses with all controls held at their mean value.

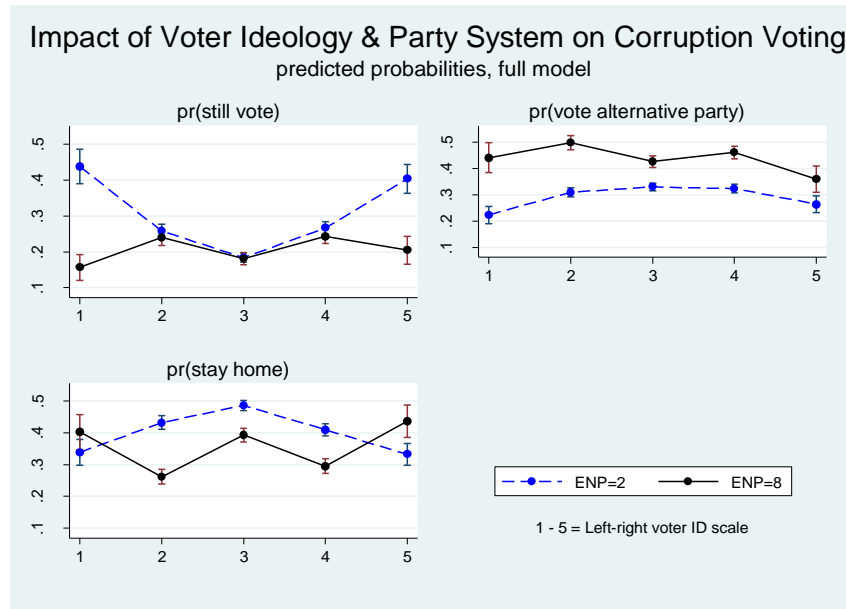
TABLE 2; ESTIMATES OF MULTINOMIAL LOGIT

	1. Baseline (f/e)	p-value	2. interaction	p-value	3. full model	p-value
outcome 1: 'Still Vote'						
Left-right ID						
far left	1.31	0.000	2.69	0.000	2.39	0.000
center left	1.30	0.000	1.63	0.000	1.03	0.000
center	0.65	0.000	1.37	0.000	0.63	0.007
center right	1.24	0.000	1.99	0.000	1.18	0.000
far right	1.34	0.000	2.61	0.000	2.25	0.000
ENPs			0.19	0.000	0.03	0.540
Left-right ID*ENPs						
far left*ENP			-0.28	0.000	-0.23	0.000
center left*ENP			-0.03	0.000	0.05	0.360
center*ENP			-0.11	0.000	0.01	0.910
center right*ENP			-0.12	0.000	0.01	0.790
far right*ENP			-0.26	0.000	-0.19	0.000
constant	-2.32	0.000	-2.640	0.000	8.140	0.000
outcome 2: 'Vote Alternative Party'						
Left-right ID						
far left	0.44	0.000	-0.19	-0.37	0.04	0.89
center left	0.85	0.000	0.06	0.71	-0.07	0.67
center	0.53	0.000	0.28	0.063	0.04	0.81

	center right	0.75	0.000	23	0.13	0.13	0.43
	far right	0.39	0.000	0.11	0.59	0.38	0.08
	ENPs			-0.02	0.41	-0.03	0.32
Left-right ID*ENPs							
	far left*ENP			0.16	0.000	0.12	0.020
	center left*ENP			0.22	0.000	0.20	0.000
	center*ENP			0.09	0.003	0.11	0.001
	center right*ENP			0.16	0.000	0.15	0.000
	far right*ENP			0.09	0.050	0.04	0.440
	constant	-1.03	0.000	-0.81	0.000	4.43	0.000
model statistics							
	observations	79212		78890		72899	
	countries						
	log likelihood intercept	-84563.86		-84239.65		-77994.4	
	log likelihood model	-79654.96		-83839.4		-74530.8	
	Prob>LR	0.000		0.000		0.000	
	Pseudo (??) R ²	0.058		0.020		0.036	
	LR test of IIA	Gr. 1 - Gr. 2	0.000	0.000		0.000	
	(p> χ^2)	Gr. 1 - Gr. 3	0.000	0.000		0.000	
		Gr. 2 - Gr. 3	0.000	0.000		0.000	

Note: beta coefficients reported from multinomial logit estimates for three nominal, categorical outcomes (comparison group is 'stay home'). Model 1 (baseline) includes country fixed effects. Comparison group for left-right self-placement is 'don't know'. Model 3 includes all individual level controls: gender, education, income, population of respondent's home town, unemployed, perceptions of corruption; and country level controls: consecutive years of democracy (Polity IV), country corruption (World Bank), PPP per capita (log), parliamentarism, proportional representation. Test of the IIA is a post-regression LR test (Chi2), where p-values are reported with a null hypothesis that the two groups compared have no distinction as per the regressors.

FIGURE 2; IMPACT OF VOTER AND VOTER PARTY SYSTEM ON CORRUPTION VOTING



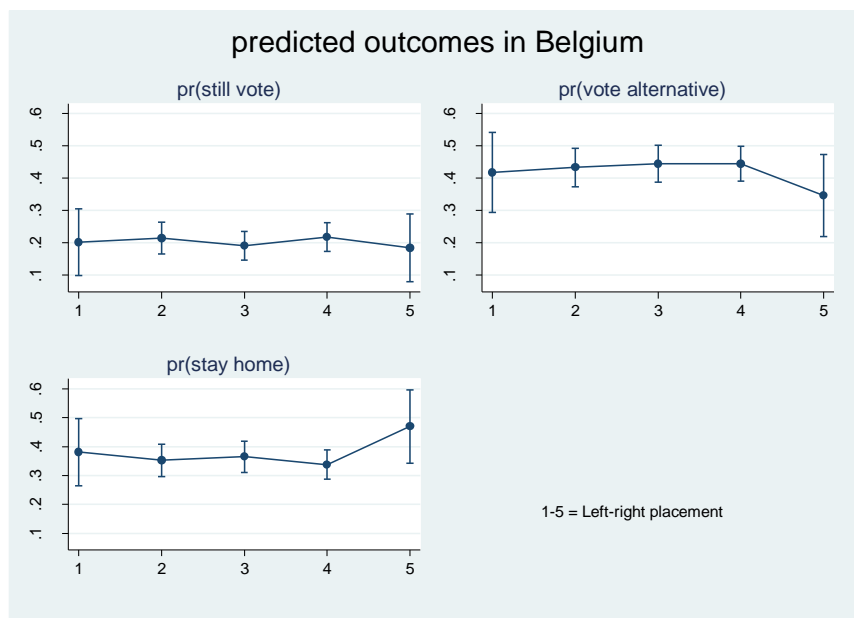
Note: Estimates shown with all other control variables held at their mean levels.

Relative to hierarchical logit, results of multinomial logit and SEM models are admittedly more cumbersome to present. We thus summarize the most important findings. First, both the party system and an individual’s ideological position on the left-right scale play a significant role in how one responds to political corruption in an election. However, voter ideology plays a much more defining role in limited party systems, in particular with regard to the choice between abstaining from voting and continuing to vote for one’s preferred party despite a corruption scandal. The smallest effect of ideology is in fact on a voter’s choice to switch to an alternative party – which the results show is a function of the number of viable alternatives. As the number of ENPs in a system increases, voters become more likely to switch parties, all things being equal.

As regards a voter’s response to a corruption scandal in strong multiparty systems, we find that voters are on average most likely to switch to an alternative parliamentary party, followed by simply abstaining from voting. The alternative ‘still vote’ was the least likely outcome for voters across the ideological spectrum. The small ideological differences we find in multiparty systems are that, relative to others, center right and center left voters are (slightly) more inclined to continue to vote for

their preferred party, albeit at only approximately a 24% probability, all things being equal. Still, mostly, we find the effects of ideology almost negligible in these party systems. One small difference we observe in the data is that voters on the far right are slightly more likely to ‘stay home’ than to switch parties, while all others are most likely to switch to an alternative party. Center left and center right respondents were on average equally likely to ‘stay home’ as they are to ‘still vote’ (roughly 25% each), while they are approximately 50% likely to switch parties. In Figure 3, we highlight these results re-running model 3 in Table 2 for Belgium, the country in our sample with the highest ENP, which exemplifies the aforementioned patterns.

FIGURE 3; PREDICTED OUTCOMES IN BELGIUM

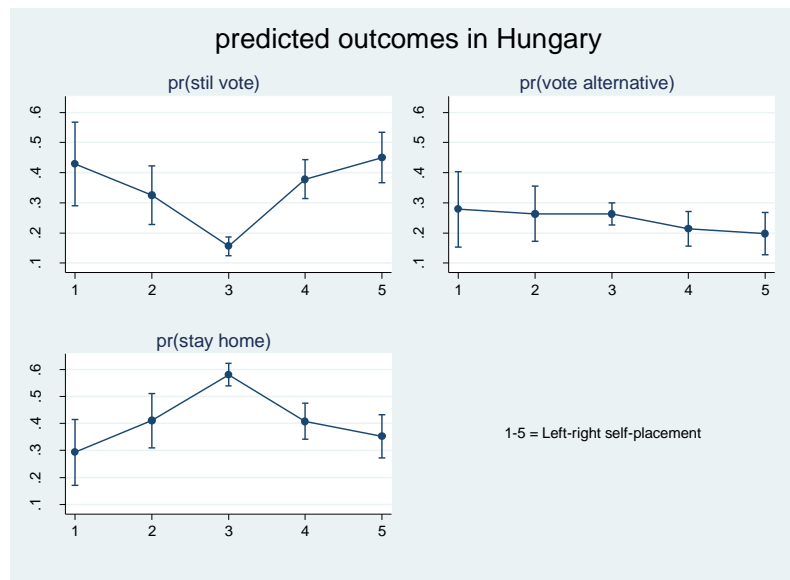


Note: Estimates shown with all other control variables held at their mean levels.

On the other hand, we find noticeably different patterns in countries with limited party systems. Here we find that voters in the ideological center, center right and center left are actually most likely to simply ‘stay home’, followed by switching to an alternative party. However, relative to the other two outcomes, voters on the far left and far right are *most likely* to continue voting for their preferred candidate despite a known corruption scandal, which lends support to our hypothesis. For example, we find that *ceteris paribus*, a voter on the far left is roughly 44% likely to ‘still vote’, while

just 33% and 23% are likely to ‘stay home’ and ‘vote for an alternative party’, respectively. A voter on the far right is roughly 40% likely to ‘still vote’, compared with a 32% and 28% likelihood to ‘stay home’ or ‘vote for an alternative’, respectively. Interestingly, voters in the ideological center in limited party systems are the least likely to ‘still vote’, and, with respect to this response, (and that – why is “and that” needed?) the predicted probabilities for these voters are indistinguishable from estimates for center voters in strong multiparty systems, as well as far right and far left voters. Figure 4 highlights these effects in the country with the lowest ENPs in the sample, Hungary.

FIGURE 4; PREDICTED OUTCOMES IN HUNGARY



Note: Estimates shown with all other control variables held at their mean levels.

Further Checks for Robustness

In addition to re-running the multinomial logit models as SEM accounting for multilevel data, for which we find no substantively different results, we have a relatively low number of second level observations (country level). Thus we run model 3 from Table 2 removing each country in our sample one at a time to test whether the results were driven by any one outlying country. We find that the results hold remarkably well in most all cases, with the ‘U-shaped’ relationship at low ENPs

holding throughout, while the more or less ‘flattened’ effect of ideology holding at high levels of ENPs. The removal of two cases has some impact on the results, mainly on the probability of the far left on ‘still vote’ in limited party systems – Spain and Turkey. When Spanish observations are removed, we find that the probability of far left voters to ‘still vote’ increases to 55% while the far right drops slightly to a 38% likelihood when fixing ENP at ‘2’. When we remove Turkey, we find the opposite – the probability of the far right is indistinguishable from the main results, while the far left drops to a 32% probability. We also test whether altering our measure of ideology (using a seven point scale) and ENPs (taking only the most recent election year) impacts our results, for which we find has negligible effects. Finally, we re-run all hierarchical logit models from Table 1 and multinomial logit models in Table 2, weighting observations by country population from the 2013 Eurostat data^{xvi}. We found no substantive differences in the results due to these changes.

Discussion

One of the key tenets of democratic theory is that elections serve as mechanisms of accountability against office holders that are inclined to abuse power for their own personal gain. Yet many recent studies point to this mechanism breaking down, resulting in corrupt parties and politicians getting re-elected. In this emerging literature on corruption voting, we propose a new, multi-level theoretical framework to understand this dynamic. Our findings, which corroborate our theoretical expectations, show that certain voters, in certain contexts, will continue to vote for their preferred party even in the face of a corruption scandal if not supplied with a reasonable ideological alternative party. The results show that, in systems with a limited number of parties (converging on two), there is a strong U-shaped relationship between individual level ideology and the probability that a respondent will continue to vote for a party in the face of a corruption scandal, while voters in the center are more prone to switch parties or stay home. In strongly multi-party systems, however, this U-shaped relationship diminishes, as voters on the extremes are equally (un)likely to continue voting for their preferred party as are voters in the center. This finding is robust to the inclusion of several individual level factors, along with country level factors such as economic development, presidentialism, electoral system, age of democracy and the level of country wide perceived corruption.

In addition, we look at how one reacts given three alternatives – ‘still vote for preferred party’, ‘vote for clean alternative’ and ‘stay home’. We find that, when controlling for a number of individual and country level factors, both our key individual level factors – ideology and country level factor party systems - play important roles in voter responses. First, ideology matters most in systems of limited ENPs. Voters on the extremes in these systems are most likely to ‘still vote for their preferred party’, while voters in the center, center left and center right are most likely to abstain from voting. Voting for an alternative in limited party systems often implies voting for a party on the other side of the spectrum due to a low supply of alternatives. That voters on the extreme right and left behave the way we observe suggests to us that there is an ‘ideology/malfeasance trade-off’ in that a corrupt party that is ideologically close is in fact preferred to a ‘cleaner’ alternative that is perceived to be too far away. Also, on average, the ‘vote alternative’ option was strongly and positively related to the number of ENPs in the system, which we argue is consistent with our market choice based argument. Second, in strong multiparty systems, the effects of ideology on all choices decrease, implying that, as a closer, more ‘acceptable’ choice is presented, all voters (save far right voters by a slight margin) become more likely to elect an existing alternative party not involved in a corruption scandal. In these systems, ‘staying home’ in fact becomes the least likely option on average, whereas we find that most voters (e.g. those in the center) become most likely to ‘stay home’ as ENPs decrease.

Two caveats from our findings should be highlighted however. One, our theory assumes that the limited number of alternatives when ENPs decrease implies that any alternative parties are sufficiently unacceptable ideologically from the voter’s first preferences (in particular on the far left or right). Two, it is important to remember that roughly only 11% of the sample places themselves on the far left or right, meaning that, while some voters clearly choose to vote ‘strategically’ despite a corruption scandal in their preferred party, these voters might be a minority, most pronounced in limited party systems. However, as ENPs increase, we believe that this provides evidence against the counter hypothesis that voters in the center are more concerned about corruption than those on the extremes: given the choice of a viable alternative, all respondents were more or less equally (un)likely to ‘still vote’.

We make several contributions to this literature in this paper. One, we put forth a novel theoretical model in which to understand corruption voting, based on individual and system level factors, highlighting a previously unexplored cross-level interaction between ideology and party systems. Two,

to test our theory, we employ an observational, comparative research design, which allows us to inquire directly about corruption voting in a cross-country framework based on hierarchical data, which best allows us to test our theory. Our measure of the dependent variable, although not perfect, is also a more direct measure than in previous comparative studies. In doing so, we present newly collected survey data from a sample that includes 24 European countries and roughly 85,000 individual responses. This is therefore one of the most comprehensive comparative studies on this topic to date and serves as an important complement to the majority of experimental, small N studies in this growing literature. Third, we make a clear empirical contribution to the literature. The empirical tests show remarkably strong and robust evidence to support our theoretical claim. In addition, we find that the party system is highly relevant in terms of whether respondents elect to abstain from voting or switch to a cleaner alternative party. In this way, we investigate one of the untested mechanisms in the debate over whether proportional or single member district electoral systems present voters with more opportunities to hold politicians and parties accountable for corruption. Our analysis shows that, in strong multi-party systems (often PR), voters are most prone to switch parties, while, in limited party systems, voters most often stay home or continue to vote for the corrupt party, which points to a potential benefit of the multi-party system in this regard.

Finally, we conclude with several salient implications of this research. Building on the previous point, which system is 'best equipped' to hold corrupt politicians accountable? Is a strong signal of 'abstention' and overall lower voter turnout in the face of a corruption scandal in a limited party system a 'better' way to react to political corruption than voting for an alternative, 'cleaner' choice, as we find in multiparty systems? One could argue that, because strong multi-party systems produce more 'party switching', this leads to greater accountability; yet this assumes that there is a non-corrupt, viable alternative. While our focus has been on the number of parties in the system, does the ideological distribution among the parties themselves (e.g. Clark and Leiter 2014) play a role in voters' choices? Is it preferred that voters behave similarly in reaction to corruption irrespective of ideology (as in multi-party systems) or that a degree of strategic voting occurs with some voters on the extremes, as in limited party systems? We leave these larger questions open for future research and debate.

REFERENCES

- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-Practice Recommendations for Estimating Cross-Level Interaction Effects Using Multilevel Modeling. *Journal of Management*.
- Aldrich, J. H. (1993). Rational choice and turnout. *American Journal of Political Science*, 246-278.
- Anduiza, E., Gallego, A., & Muñoz, J. (2013). Turning a Blind Eye Experimental Evidence of Partisan Bias in Attitudes Toward Corruption. *Comparative Political Studies*.
- Bakker, R., De Vries, C., Edwards, E., Hooghe, L., Jolly, S., Marks, G. & Vachudova, M. A. (2012). Measuring party positions in Europe: The Chapel Hill expert survey trend file, 1999–2010. *Party Politics*, 1354068812462931.
- Berry, W. D., DeMeritt, J. H., & Esarey, J. (2010). Testing for interaction in binary logit and probit models: Is a product term essential? *American Journal of Political Science*, 54(1), 248-266.
- Bågenholm, A. (2013). Throwing the rascals out? The electoral effects of corruption allegations and corruption scandals in Europe 1981–2011. *Crime, Law and Social Change*, 60(5), 595-609.
- Bågenholm, Andreas and Nicholas Charron. 2014. 'Explaining the Choice and Success of Parties Politicizing Corruption in Electoral Politics in Europe'. *West European Politics*, 37 (5), 903-931.
- Carey, J., & Shugart, M. (1995). Incentives to cultivate a personal vote: A rank ordering or electoral formulas. *Electoral Studies*, 14, 417-439.
- Casey, P. C. (2014). Voting for Corruption: How Poverty and Inequality Undermine Democratic Accountability in Latin America.
- Chang, E., Golden, M., 2007. Electoral systems, district magnitude and corruption. *British Journal of Political Science* 37 (1), 115–137.
- Charron, Nicholas. "Party systems, electoral systems and constraints on corruption." *Electoral Studies* 30.4 (2011): 595-606.
- Choi, E., & Woo, J. (2010). Political corruption, economic performance, and electoral outcomes: A cross-national analysis. *Contemporary Politics*, 16(3), 249-262.

Chong, A., Ana, L., Karlan, D., & Wantchekon, L. 2015. "Does Corruption Information Inspire the Fight or Quash the Hope? A Field Experiment in Mexico on Voter Turnout, Choice and Party Identification." *Journal of Politics*, 77 (1):

Clark, M., & Leiter, D. (2014). Does the ideological dispersion of parties mediate the electoral impact of valence? A cross-national study of party support in nine western European democracies. *Comparative Political Studies*, 47(2), 171-202.

Cox, G. W. (1997). *Making votes count: strategic coordination in the world's electoral systems* (Vol. 7). Cambridge: Cambridge University Press.

de Sousa, Luís & Moriconi, Marcelo (2013) "Why voters do not throw the rascals out? – A conceptual framework for analyzing electoral punishment of corruption". *Crime, Law and Social Change* 60: 471-502.

Downs, Anthony. "An economic theory of political action in a democracy." *The Journal of Political Economy* 65.2 (1957): 135-150.

Eggers, A., & Fisher, A. C. (2011). Electoral Accountability and the UK Parliamentary Expenses Scandal: Did Voters Punish Corrupt MPs?. *Available at SSRN 1931868*.

Fernández-Vázquez, Pablo et al. (2013) "Rooting Out Corruption or Rooting For Corruption? The Heterogeneous Electoral Consequences of Scandals". Unpublished manuscript.

Ferraz, Claudio & Frederico Finan. 2008. "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes." *The Quarterly Journal of Economics*, 123(2):703-745.

Gallagher, Michael, 2014. Election indices dataset at: http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/index.php accessed Oct, 2014.

Gupta, S., Davoodi, H., & Alonso-Terme, R. (2002). Does corruption affect income inequality and poverty?. *Economics of Governance*, 3(1), 23-45.

- Holmberg, S., & Rothstein, B. (2011). Dying of corruption. *Health Economics, Policy and Law*, 6(04), 529-547.
- Jiménez, Fernando & Caínzos, Miguel (2006) "How far and why do corruption scandals cost votes?", in John Garrard & James L. Newell (eds.) *Scandals in past and contemporary politics*. Manchester & New York: Manchester University Press.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: methodology and analytical issues. *Hague Journal on the Rule of Law*, 3(02), 220-246.
- Keefer, P. (2007). Clientelism, credibility, and the policy choices of young democracies. *American journal of political science*, 51(4), 804-821.
- Klašnja, M., Tucker, J., & Deegan-Krause, K. (2014). Pocketbook vs. Sociotropic Corruption Voting. *British Journal of Political Science*.
- Konstantinidis, I., & Xezonakis, G. (2013). Sources of tolerance towards corrupted politicians in Greece: the role of trade-offs and individual benefits. *Crime, Law and Social Change*, 60(5), 549-563.
- Lewis-Beck, M. S., & Stegmaier, M. (2000). Economic determinants of electoral outcomes. *Annual Review of Political Science*, 3(1), 183-219.
- Manzetti, Luigi, and Carole J. Wilson (2007) "Why do corrupt governments maintain public support?" *Comparative Political Studies* 40.8: 949-970.
- Manzetti, L., & Rosas, G. (2012). Não rouba e também faz: Testing the corruption- performance trade-off hypothesis in Latin America (Working paper). Dallas, TX: Southern Methodist University and Washington University
- Maas, C. J., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 1(3), 86-92.
- Mauro, P. (1995). Corruption and growth. *The quarterly journal of economics*, 681-712.
- Schleiter, P., & Voznaya, A. M. (2011). Party systems, the selection and control of politicians and corruption. *Paper unpublished. Available online: <http://users.ox.ac.uk/~schleite/paper2.pdf>*.

- Persson, T., Tabellini, G., & Trebbi, F. (2003). Electoral rules and corruption. *Journal of the European Economic Association*, 1, 958-989.
- Peters, J. G., & Welch, S. (1980). The effects of charges of corruption on voting behavior in congressional elections. *The American Political Science Review*, 697-708.
- Pizzorno, A. (1992). Introduzione: la corruzione nel sistema politico. In Donatella della Porta. Lo scambio occulto. Casi di corruzione politica in Italia. Bologna: Il Mulino.
- Rose-Ackerman, S., 2005. "Political corruption and reform in democracies: theoretical Perspectives. In: Kawata, J. (Ed.), *Comparing Political Corruption and Clientalism*. Ashgate, Aldershot
- Reed, S. R. (1999). Strategic voting in the 1996 Japanese general election. *Comparative Political Studies*, 32(2), 257-270.
- Rundquist, B. S., Strom, G. S., & Peters, J. G. (1977). Corrupt politicians and their electoral support: some experimental observations. *The American Political Science Review*, 954-963.
- Tavits, M. (2007). Clarity of responsibility and corruption. *American Journal of Political Science*, 51(1), 218-229.
- Tavits, M. (2008). On the linkage between electoral volatility and party system instability in Central and Eastern Europe. *European Journal of Political Research*, 47(5), 537-555.
- Teorell, J., Charron, N., Dahlberg, S., Holmberg, S., Rothstein, B., Sundin, P., & Svensson, R. (2013). *The Quality of Government Dataset, version 20Dec13*, University of Gothenburg: The Quality of Government Institute.
- Wantchekon, Leonard. "Clientelism and voting behavior: Evidence from a field experiment in Benin." *World Politics* 55.3 (2003): 399-422.
- Weiss-Shapiro, Rebecca. 2008. "Clientelism and the middle class: results of a survey experiment in Argentina." Prepared for delivery at the 2008 Annual Meeting of the American Political Science Association, August 28-31.
- Welsch, H. (2004). Corruption, growth, and the environment: a cross-country analysis. *Environment and Development Economics*, 9(05), 663-693.

Welch, S., & Hibbing, J. R. (1997). The effects of charges of corruption on voting behavior in congressional elections, 1982–1990. *The Journal of Politics*, 59(01), 226-239.

Stokes, Susan C. "Perverse accountability: A formal model of machine politics with evidence from Argentina." *American Political Science Review* 99.3 (2005): 315.

Zechmeister, E. J., & Zizumbo-Colunga, D. (2013). The varying political toll of concerns about corruption in good versus bad economic times. *Comparative Political Studies*, 46(10), 1190-1218.

APPENDIX

TABLE A1; VALIDITY TEST OF IDEOLOGY: CROSS CHECK WITH PARTY IDEOLOGY (PARTY_LR)

	Ideology	mean Party_LR	s.d.	n
	0 (d/k)	5.41	2.11	1158
far left	1	3.52	1.89	2239
	2	3.38	1.59	3093
	3	4.07	1.77	8719
	4	5.15	1.96	12933
center	5	6.20	1.82	7504
	6	6.68	1.62	3430
	7	6.80	1.91	3276
far right				
	total	5.16	2.14	42352

Note: oneway anova test: $F=2111.63$ ($p>F = 0.0000$).

A posttest pairwise comparison of group means (Bonferroni) reveals each difference is significant at the 0.0000 level. A similar result is found using regression analysis with party_LR as the dependent variable (and country fixed effects)

TABLE A2; TOTAL RESPONDENTS, RESPONSE TO CORRUPTION VOTING, AND EFFECTIVE NUMBER OF PARTIES (ENP'S) (AVERAGED OVER LAST THREE ELECTIONS, FROM GALLAGHER 2014), BY COUNTRY AND TOTALS

	still vote	vote alt.	stay home	d/k	Ave. ENP	total respondents
Austria	0.249	0.409	0.268	0.074	3.50	3600
Belgium	0.198	0.411	0.372	0.02	7.79	1208
Bulgaria	0.19	0.258	0.375	0.177	3.55	2402
Croatia	0.137	0.363	0.442	0.058	3.31	800
Czech Republic	0.281	0.32	0.35	0.05	3.75	3236
Denmark	0.219	0.557	0.14	0.084	5.07	2028
Finland	0.243	0.416	0.278	0.064	5.27	2000
France	0.242	0.195	0.538	0.025	2.52	10409
Germany	0.274	0.328	0.301	0.096	4.08	6400
Greece	0.05	0.493	0.443	0.014	2.67	1613
Hungary	0.257	0.226	0.462	0.055	2.2	1215
Ireland	0.169	0.465	0.329	0.038	3.31	800
Italy	0.196	0.365	0.375	0.064	3.86	8510
Netherlands	0.159	0.575	0.179	0.087	5.7	4822
Poland	0.139	0.295	0.451	0.115	2.78	6400
Portugal	0.099	0.278	0.505	0.118	2.87	2886
Romania	0.265	0.263	0.469	0.003	3.16	3200
Serbia	0.06	0.184	0.567	0.189	4.43	1615
Slovakia	0.186	0.376	0.394	0.044	4.44	1609
Spain	0.101	0.334	0.523	0.042	2.49	6800
Sweden	0.259	0.501	0.186	0.054	4.31	1295
Turkey	0.355	0.371	0.241	0.033	2.29	4800
UK	0.233	0.344	0.382	0.041	2.4	4800
Ukraine	0.26	0.203	0.321	0.217	3.78	2400
Total	0.208	0.337	0.386	0.011	3.45	84848

TABLE A3: SUMMARY STATISTICS

	mean	st. dev.	min	max	obs
<i>individual level</i>					
Left-right(5-scale & 0='d/k')	2.76	1.28	0	5	85157
female	0.53	0.5	0	1	85157
education	2.2	0.95	1	4	84862
age	2.47	0.99	1	4	85023
income	1.75	1.01	0	3	85157
unemployed	0.081	0.27	0	1	85157
econ. Satisfaction (higher=less sat.)	3.09	0.85	1	4	84682
paid bribe	0.076	0.26	0	1	85157
corruption perception	4.03	3.09	0	10	81149
population	2.02	0.94	1	4	83904
<i>country level</i>					
PPP p.c. (log)	9.93	0.54	8.37	10.47	85158
consec. yrs democracy (since 1950)	45.9	19.5	5	63	85158
Corruption (WGI)	1.02	0.91	-0.96	2.44	84757
parliamentary	0.73	0.44	0	1	85158
ENP's	4.5	1.08	2.2	7.8	84757

TABLE A4; TABLE 1 IN MAIN TEXT WITH ALL ESTIMATES

		1. Empty model		2. Ideology only		3. Individual level		4. add country level		5. x-level interaction	
<u>Individual Level</u>		Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
Ideology	far left			1.33	0.000	1.22	0.000	1.27	0.000	1.80	0.000
(d/k)	center left			1.05	0.000	0.88	0.000	0.93	0.000	1.36	0.000
	center			0.62	0.000	0.49	0.000	0.54	0.000	0.51	0.000
	center right			1.01	0.000	0.83	0.000	0.88	0.000	0.98	0.000
	far right			1.38	0.000	1.24	0.000	1.30	0.000	1.53	0.000
Gender	female					-0.27	0.000	-0.26	0.000	-0.25	0.000
age	18-29					0.38	0.140	0.35	0.29	0.34	0.34
(d/k)	30-44					0.40	0.100	0.37	0.22	0.35	0.19
	45-64					0.51	0.050	0.48	0.17	0.44	0.16
	65+					0.71	0.010	0.68	0.03	0.70	0.04
education	<secondary					0.25	0.180	0.22	0.31	0.22	0.33
(d/k)	secondary					0.34	0.070	0.30	0.09	0.31	0.10
	someuniversity					0.48	0.011	0.45	0.01	0.43	0.01
	>university					0.45	0.020	0.41	0.02	0.40	0.03
income	<10k					0.11	0.000	0.19	0.000	0.20	0.000
popualtion	10k-100k					0.21	0.005	0.25	0.003	0.26	0.003
(d/k)	100k-1m					0.25	0.001	0.28	0.001	0.28	0.001
	>1m					0.37	0.000	0.39	0.000	0.40	0.000
corruption	perceptions					0.02	0.000	-0.001	0.98	-0.003	0.91
	experience					0.05	0.090	0.04	0.10	0.06	0.08
econ. Sat.						-0.22	0.000	-0.22	0.000	-0.23	0.000
<u>country level</u>											
numberofparties								-0.07	0.54	-0.01	0.94
PPP p.c. (log)								-0.76	0.09	-0.81	0.10
age ofdemocracy								0.03	0.001	0.03	0.001
Presidentialism								-0.03	0.45	-0.01	0.59
PR								-0.12	0.000	-0.11	0.001
Corruption (WGI)								-0.12	0.60	-0.10	0.71
observations (countries)		85157 (25)		85157 (25)		85157(25)		82675(23)		82675(23)	

Endnotes

ⁱThe survey, which was mainly concerned with European citizens' perceptions and attitudes on corruption, quality and impartiality of regional public service, was conducted between February and April 2013 and was funded by the EU Commission. The respondents were asked all questions in the majority language of their region or country and interviewed via telephone with a mix of landline and mobile contacts. A full list of countries and the number of observations is found in the appendix (source concealed for anonymity).

ⁱⁱ There are naturally shortcomings with questions like these. First, the magnitude of the scandal is not mentioned and, even if we had added "a major", we cannot be sure that respondents would think about it in the same way. In some countries it would certainly entail systemic corruption within the party, involving large amounts of money and several top politicians and a desire to protect the culprits from judicial proceedings, whereas in others respondents would think of it as an isolated event, involving relatively few, who would immediately be dismissed from their positions by the party leadership. The natural reaction in the former case would be to punish the party and in the latter to forgive it, which brings us to the second shortcoming, namely that it is the party that is said to be involved in a corruption scandal and not an individual candidate, which in systems of single member districts, such as the UK, we might assume the importance of the candidate to trump the party. Again, if people think that the party credibly handled a corruption scandal, they may find it unproblematic to vote for it. A third issue could be that people might behave differently in reality compared with how they express themselves in a survey. Naturally, we cannot remedy these shortcomings completely, since we cannot know how the respondents interpret the question, a problem we share with other observational, survey based studies. Yet, compared to other similar studies on corruption voting, we do think that our approach has several advantages, above all the combination of a cross-national sample with a large N with a direct and precise indicator of corruption voting, which we still think is adequately valid. Thus, to choose option a) should in our view most reasonably be interpreted as i) indifference to the issue or that it is less salient compared to other issues and ii) that there are no other parties that are close enough on those other salient issues to make the voter want to switch parties. Alternative interpretations are of course possible, but as far as we are concerned, less so.

ⁱⁱⁱ Even though almost 21% claim they would continue to support their preferred party, a potential issue with this measurement is the under-reporting of 'still vote' due to social desirability bias. Under-reporting itself would not cause bias if evenly distributed across individuals. However, this issue could of course bias the results if linked with one of the individual level variables (ideology for instance). Since we have no way of testing this directly, the results should be taken with a degree of caution.

^{iv} An alternative to ideology would be to simply use the ideology score of an individual's party instead. We choose not to do this for two main reasons. One, several countries and many parties even within available countries are missing from the Chapel Hill data as compared with the parties in our survey; thus our sample would be reduced by about 40,000 individuals and our country N would be cut by four. Two, our theory is mostly concerned with the perception of the individual's own ideology in relation to others – thus we would argue that the subjective measure of one's self-placement is a better match than the ideology of one's party in this case.

^vLooking at the distribution of ideology within individual countries (minus 'don't know' responses), we find that the distribution is consistently normally distributed, although a slight skewedness to the right or left varies by country. Thus we reject the null hypothesis of the Shapiro–Wilk and Shapiro–Francia tests for normality (*sktest* in STATA).

^{vi} Since our theory and empirics focus on the voters' perceptions and intentions, we elect to include a broader picture of the party system over the past decade rather than just a one-year snapshot. We do this because, in cases of rapid party system volatility, in particular in Eastern and Central Europe (Tavitis 2008), some voters might not be 'up to date' with the latest round of relevant parties but have a good sense of the overall picture in the last few elections. Average ENPs for each country can be found in the appendix.

^{vii} In addition, we estimate the country effects of the dependent variable with confidence intervals around the estimate in Figure 1 in the appendix.

^{viii} It is sometimes recommended that the individual level variable in the cross-level interaction term be 'centered' on a grand mean (Aguinis et al. 2013: 15). In our case, the ideology variable is treated (with?) essentially five dummy variables (0/1), and thus centering is unnecessary.

^{ix} Since the number of 2nd level observations (countries) is only 24, the sample thus somewhat violates the so-called '30/30 rule' (which advocates at least 30 cases at each level, (Maas and Hox 2005)), we thus check for the effects of outliers in each model and re-run the analyses removing one country at a time in subsequent models.

^x A complete table with estimates for all control variables is given in the appendix; for the sake of space, only the key variables are reported in Table 1.

^{xi} Observe that the variance (σ^2) changed little from the null model, meaning that the distribution of ideology is similar across countries in the sample, which confirms the individual country tests for a normal distribution of ideology.

^{xii} While the model shows that there are significant random country effects, meaning that generalizing about a 'European wide probability' is not very fruitful, we can draw meaningful inferences about the effects of the ideological positions *relative to one another within countries*.

^{xiii} The 'don't know' responses, which constitute 6.9% of the sample, are omitted from the analysis. We thus test to see if there are systematic relationships with the 'don't know' respondents from the dependent variable and the key independent variable. Cross-tab analysis with left-right self-placement shows that respondents that answer 'don't know' to the corruption scandal response, are about 3.5 times more likely to also answer 'don't know' on the left-right self-placement as well (27.2% vs. 7.8%). However, the remaining left-right frequencies are more or less as normally distributed as among those that gave an answer, with the exception of a higher frequency of center voters in the 'don't know' corruption question response, as compared to those that answer one or our three outcomes (48% to 39%).

^{xiv} For example, we attempted to order the outcomes around 'corruption tolerance', such that a '1' (still vote) is the most tolerant, a '2' (vote for an alternative party) and '3' can be seen as the least tolerant (stay home). After running both the baseline models and full control models, we find that the LR test, and the Brant test show that the responses cannot be ordered and thus multinomial logit is appropriate

^{xv} Although the LR test was significant for each model in Table 1, we find when we obtain the results using a standard logit model controlling for country level effects that the model produces remarkably similar estimates.

^{xvi} Multilevel logit (xtmelogit) in STATA does not allow for weights in Stata 12 version. Thus country fixed effects Logit was used as an alternative to account for weighted populations for robustness checks in Table 1.