The electoral consequences of the financial and economic crisis in Europe

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Abstract

We analyse the electoral consequences of the Great Recession by combining insights from economic voting theories, and the literature on party system change. Taking our cues from these two theoretical perspectives, we assess the impact of the Great Recession on the stability and change of Western, Central and Eastern European party systems. We start from the premise that, to fully assess the impact of the contemporary crisis, classic economic voting hypotheses focused on incumbent parties need to be combined with accounts of long-term party system change provided by realignment and dealignment theories. The empirical analysis draws on an original dataset of election results and economic and political indicators in 30 European democracies. The results indicate that during the Great Recession economic strain was associated with sizable losses for incumbent parties and an increasing destabilization of Western European party systems, while its impact was significantly weaker in Central and Eastern European countries, where political rather than economic failure appeared to be more relevant. In line with the realignment perspective, the results also reveal that in Western Europe radical populist right, radical left, and non-mainstream parties benefited the most form the economic hardship, while the support for mainstream parties decreased further.

INTRODUCTION

In this paper, we analyse the electoral consequences of the Great Recession in Europe from two theoretical perspectives: economic voting and party system change. The vast literature on economic voting suggests that voters react to this kind of crisis by punishing the incumbents and by voting in favour of the opposition. Economic voting occurs in 'normal' times, and we may expect it to occur to an even greater extent under the impact of the contemporary economic crisis. The worldview of this perspective is essentially a short-term and cyclical one: voters follow the business cycle and reward or punish incumbents according to the economic situation. The alternative perspective is that of the development and change of party systems. Contrary to the economic voting literature, the equally vast literature on this perspective takes a long-term view on voting patterns and expects them to move as a result of long-term shifts in the structure of social conflicts. As old social conflicts lose in importance and new conflicts emerge from the fundamental transformation of society, the pattern of political conflict is changing as well. As new political actors emerge and old political actors adapt to the changing conflict structure, the pattern of voting gets destabilized, giving rise to processes of dealignment/realignment in the party system. Applying these two perspectives to the analysis of the electoral consequences of the Great Recession allows us to provide a comprehensive assessment of the voters' reactions to this deep economic crisis and its impact on European party systems.

We argue that the joint consideration of these two theoretical perspectives provides new insights into the political consequences of the Great Recession in Europe. While in normal times economic voting theories may provide an adequate account of the impact of the economy on electoral politics, in extraordinary times, the long-term perspective of party system change needs to be incorporated into the analysis. Applied to a critical moment like the Great Recession, the economic voting perspective only tells a partial story about the impact of the economy on voting.

In contexts like the Great Recession, punishment of the incumbents by the voters is not only likely to occur in much greater proportions, but its consequences are also likely to be longer-lasting than the shifts of the voters to the mainstream opposition parties. In contrast to normal times, during the crisis, the predicted extraordinary punishment of incumbents' parties is expected to contribute to the destabilization of European party systems (i.e. increase their volatility) and, as a consequence, to accelerate pre-existing processes of party system change. Hence, in terms of the perspective of party systems' theory, the Great Recession may constitute a 'critical juncture', which is not only likely to erode the support of incumbent parties, but of all the mainstream parties. By giving rise to extraordinary punishments of all the mainstream parties, the economic crisis may accelerate pre-existing de-/realignment processes.

The economic voting perspective constitutes the starting point for our analysis of the consequences of the Great Recession. Building on this perspective and combining it with the perspective of party system change allows us to formulate more detailed expectations about the specific type of parties that are likely to lose and gain support during the Great Recession.

Incorporating the predictions of economic voting theory into the broader and more general expectations that can be derived from party systems change theories will provide us with a more complete account of the electoral consequences of the Great Recession.

Our empirical analyses draw on a database of electoral outcomes at the aggregate level, complemented with political and economic indicators, for 27 EU-member states, plus Iceland, Norway and Switzerland¹. Our dataset includes data on electoral returns for all relevant parties in these countries in the two elections preceding the outbreak of the economic crisis and of all the elections that have taken place since then up to summer 2014. We start out by presenting some

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¹ Given its late accession to the EU Croatia is excluded.

considerations of the two theoretical perspectives with respect to the electoral consequences of the Great Recession. Next, we present our data. Then, we move on to the presentation of the results and we conclude by a summary discussion.

THEORY

The literature on economic voting provides us with a baseline model for how the crisis has played out in electoral terms. This literature is based on the assumption of instrumentally rational voters, who reward the incumbents with their vote, when the economy is good, and punish them when the economy is bad. According to this literature, it is not the personal financial situation, which is decisive for the economic vote, but the perception of the national economy (Duch and Stevenson 2008, Lewis-Beck and Stegmaier 2007). Empirical studies on economic voting document that it is both pervasive and variable, depending on the context. According to Duch and Stevenson's (2008: 65) overall estimates the median economic vote magnitude is about 5 percent. By comparison, Powell and Whitten (1993: 410) estimated the typical cost of governing at the aggregate level at just 2 per cent. These results were obtained by analysing a large number of 'normal' elections. There is now also a growing literature on economic voting in the Great Recession, which shows that the electoral punishment of the incumbents has been massive and that it is a function of the depth of the recession (Bartels 2014, Kriesi 2014). In line with this literature, we expect that, in a period of economic turmoil, economic considerations are likely to be more salient for the decision of rewarding or punishing the incumbent. During this period, citizens should be more likely to judge the incumbent as a function of the decline in economic performance than in normal times.

The economic voting literature suggests that the size of the electoral punishment for economic performance is conditioned by the political context. More specifically, it suggests that it is less the objective economic conditions than the perception of government responsibility for the economic conditions that is of crucial importance for economic voting. Thus, Powell and Whitten's (1993) documented that the *clarity of political responsibility* conditions economic voting: the voters' assessment of the government's economic performance only plays a role, if the institutional context allows them to clearly attribute the responsibility for the economic performance to the government. In addition, perceived constraints of the government's manoeuvring space also influence the extent to which incumbents are punished. Hellwig and Samuels (2007) show that voters in more open economies are less likely to evaluate incumbents on the basis of fluctuations in economic growth. In the context of the Great Recession, the attribution of responsibility to the EU has led to lower levels of national economic voting in Southern Europe (Lobo and Lewis-Beck 2012). Similarly, Clarke and Whitten (2013) attributed the limited impact of economic voting in the 2009 German elections to 'countervailing factors' – a lack of clarity of responsibility in the German polity and the availability of alternative actors to be blamed.

Given that *perceptions* are crucial for the punishment of incumbents, we would like to point out three implications which seem to us of major importance in the context of the Great Recession. First, we follow Marsh and Mikhaylov (2012), who argue that it is not so much the size of the economic decline that is decisive for the electoral punishment, but the dramatic manner in which the crisis developed. In accounting for the extraordinary severity of Fianna Fáil's losses in the 2011 Irish elections, Marsh and Mikhaylov attribute key importance to two events that have focused the minds of the Irish voters – the bank guarantee in Fall 2008, and the

Irish withdrawal from the bond market in Fall 2010. In a similar vein, Beissinger and Sasse (2014) point to IMF-interventions as critical conditions for austerity protests in Central- and Eastern Europe. In the Irish case, the second moment preceded the ECB/IMF intervention by a few days, but we would still argue that such an intervention was already looming large and, in any case, it may serve as an indicator for critical moments in the unfolding of the Great Recession in the countries particularly hard hit by the economic crisis.

Second, we would like to point out that the severity of the economic crisis is likely to be perceived differently as a function of past experience with economic crises. Building on relative deprivation theory (Gurr 1970), we expect the relative decline in performance to be decisive for the electoral consequences – relative in temporal terms within one country as well as in terms of cross-national comparisons. Relative deprivation theory is based on the idea that citizens' grievances and behaviours are a function of the perceived discrepancy between their expectations about the conditions of life to which they believe to be entitled to, and the realization of these expectations. People's expectations with respect to the economy, in turn, are likely to be influenced by the past economic performance of their own country – their country's past performance in absolute terms and in terms relative to other, comparable countries. Without any reference to this theory, Coffey (2013) has recently introduced the closely related notion of 'pain tolerance' to explain the economic voting of Czech citizens. She showed that the punishment of incumbents is a function of the departure of economic indicators from the long-term average, i.e. relative to the country's past economic performance. In other words, poor past performance increases the voters' tolerance with respect to poor current performance and vice versa for good past performance. In line with this finding, we expect the citizens of Central- and East European (CEE) countries in general to have greater tolerance with respect to poor economic performance

than citizens of West European (WE) countries. When the Great Recession hit the populations of the CEE countries already had a lot of experience with economic hardship as a result of the difficulties encountered in the course of their transition to market economies. For example, the Baltic countries that were hit by massive unemployment increases already had a lot of experience with high levels of unemployment. By contrast, WE citizens, especially in Greece, Spain or Ireland, had experienced economic growth accompanied by a sharp decline in unemployment rates in the decades prior to the crisis, a trend which they probably expected to continue, and which made the equally sharp increases of unemployment during the crisis particularly galling for them.

Third, and in a similar vein, we expect the impact of economic decline on the incumbent vote to be less severe in the first post-crisis election than in subsequent post-crisis elections. In the immediate aftermath of the Lehman Brothers' collapse, most European countries suffered an economic setback, which means that, in cross-national comparative terms, all incumbents performed badly. As time progressed, however, the economic prospects of most, but not all of the European countries improved. The voters of the countries where the economy continued to stagnate or even experienced a pronounced double-dip recession, among other things as a result of the austerity measures that really started to have an impact on the respective economies, are likely to have perceived the incumbents' failure as particularly serious – not only compared to the other countries, but also compared to the past, pre-crisis record.

This discussion can be summarized in four hypotheses: the punishment of the incumbents in the Great Recession should be greater ...

H1: ...in hard hit countries ('severity of the crisis' hypothesis)

H2: ...in countries which experienced comparatively little economic hardship in the recent past (i.e. WE countries) ('past experience' hypothesis)

H3: ...in countries with dramatic unfolding of key events (involving ECB/IMF intervention) ('dramatic events' hypothesis)

H4: ... and, especially, in second post-crisis elections ('timing' hypothesis)

In the economic voting literature, the political context conditions are typically thought to have a short-term impact on the voting choice. This literature does not take into account long-term trends in the development of party systems. This is a serious shortcoming when it comes to the analysis of a major economic crisis. In contrast to 'normal times', when the focus on cyclical effects and incumbent governments seems justified, the intervention of a major crisis may accentuate long-term trends of party system change, and it may even lead to a substantial modification of the structure and equilibrium of the party system in a given country.

As is well known from the literature on the political consequences of economic crises in Latin America (Morgan 2012, Seawright 2012, Roberts 2013), such crises may lead to party brand dilution, to a decline of partisanship and, eventually, to a process of dealignment in the party system. Hence, while the economic voting perspective provides a baseline for the analysis of the effects of the crisis, it needs to be complemented with an approach that allows us to take into account its potential effects on the party system as a whole and the pre-existing long-term trends of party system change. As we indicated above, during the Great Recession the punishment of incumbents as a consequence of the declining economic performance is likely to be substantial. This provides the first condition for the destabilization and change of party

systems as a result of the economic crisis. In normal times voters are likely to turn to mainstream opposition parties, but under extraordinary circumstances voters may lose confidence in all the parties that have habitually governed. This is expected to occur especially if the crisis drags on and successive governments of different mainstream composition prove to be incapable of improving the economic situation. Under such conditions, voters may be more likely to move beyond mainstream opposition parties altogether and opt for parties not so closely associated with the current economic and political system. The cumulated punishment of mainstream parties may accelerate and/or reshape pre-existing de-/realignment processes in the party system, and as a consequence produce further increases in party system volatility.

European party systems have identified profound long-term trends that, at the time of the onset of the Great Recession, have been going on for several decades. Essentially, there are three interpretations of these trends in the literature: the realignment, the dealignment, and the cartel party detachment perspectives (Kitschelt and Rehm 2015). The third perspective, which is a radical version of the second one, proposes that parties in Western Europe are losing their structural roots in society, their coherence and their representative function (Mair, 2013). Indicators of this long-term trend are declining voter turnout, declining party identification, decreasing party membership as well as increasing electoral volatility. Dealignment scholars have long pointed to the mainstream parties' declining embeddedness in social divisions of religion and class, and the increasing importance of issue-voting (see Franklin et al. 1992). This line of argument suggests that the increasing economic voting in times of a deep economic crisis is nothing but an intensification of a longer term trend of destabilization of European party systems.

The realignment perspective does not contradict the dealignment scholars with regard to the overall destabilizing trends. However, it adds countervailing trends which eventually lead to a stable reconfiguration of the party systems: in the long run, strategic parties realign with changing preference distributions among voters, which are related to social structural transformations (Kitschelt/Rehm 2015, Häusermann/Kriesi 2015, Kriesi et al. 2006). Voters gravitate to parties with programmatic appeals congruent with their preferences. More specifically, a new cleavage opposes the low-skilled, nationalistic 'losers of globalization', who are mainly mobilized by parties of the populist radical right, to the high-skilled, cosmopolitan winners of globalization, who are mainly mobilized by Green, liberal and centre-left parties. In other words, this perspective adds more specific expectations about the party families that might be gaining ground in the Great Recession, which complement the main expectation of the economic voting perspective with regards to the lower support of incumbent parties. Since it is above all the 'globalization losers' who have been affected by the economic downturn, we can expect the parties that mobilize these groups of the population to benefit from the punishment of the incumbents, especially in the countries hardest hit by the crisis. Among the parties mobilizing such losers we find above all parties of the populist radical right, parties of the radical left (which have always mobilized the disadvantaged in class terms), and new parties more generally.

From the party systems perspective, CEE countries differ profoundly from those in WE, with far-reaching implications for the potential impact of the Great Recession. While the mainstream parties of WE party systems *no longer* seem to have the means to adequately represent their traditional constituencies, the CEE party systems have *not yet* produced mainstream parties that adequately represent them. When measured against different criteria of institutionalization CEE party systems appear to still be less institutionalized (Casal Bértoa

2014). The most important empirical evidence for the lack of institutionalization of these party systems comes from Neff Powell and Tucker (2013), who show that the very high level of volatility in these systems since the democratic transition has above all been due to the entry and exit of parties.

The high volatility of CEE party systems is linked to the widespread dissatisfaction of the CEE publics with their political elites which predates the intervention of the economic crisis. The low level of political and administrative performance and the corresponding high level of corruption in these countries have contributed to the constitution of anti-elitist sentiments, which provided a general breeding ground for populist challengers, even before the economic crisis intervened (Pop-Eleches 2010: 232). In times of economic crisis, however, the tolerance for corruption that tends to have benefited from the previously good economic performances in these countries is likely to have diminished considerably (see Klasnja and Tucker 2013). In other words, in CEE countries, the Great Recession can be expected to have given rise to a combination of a political and an economic crisis. As a result of this particular combination of circumstances, the mobilization by new challengers in the party system has taken on particular characteristics in CEE. Ucen (2007: 54) has referred to the rise of a new ,centrist populism', and Deegan-Krause (2007: 152) called them a purely anti-elite populism 'focusing entirely on the need for 'new faces in government' as part of a major fight against corruption'. The tough antiestablishment appeal of these new populist challengers has been directed against all previous configurations of the ruling elite.

This discussion of the long-term trends in the party systems can be summarized in the following three hypotheses:

H5: The Great Recession increasingly destabilizes the party systems in WE, whereas it has much less of a destabilizing effect on the party system in CEE ('destabilization' hypothesis)

H6: The changing levels of corruption are contributing to the punishment of the incumbents and to the destabilization of the party systems in CEE, but not in WE ('corruption' hypothesis)

H7: New parties, parties of the populist radical right and the radical left, as well as other non-mainstream parties, benefit from the crisis by receiving greater support in those WE countries most affected by the crisis ('deep crisis' hypothesis)

DATA AND OPERATIONALIZATION

Our empirical analyses rely on a database of electoral outcomes, which includes data on electoral returns for all relevant parties in 30 European countries in the two national legislative elections preceding the outbreak of the Great Recession and of all national legislative elections that have taken place since then, up to and including the Slovenian elections in July 2014. We define as post-crisis elections all the national elections that took place after November 2008. Overall we cover 107 elections: 61 pre-crisis (two per country²) and 46 post-crisis, 30 of which are the first post-crisis election that took place in a given country, and 16 correspond to the second post-crisis election.

² Austria had an election in September 2008. We consider this election as pre-crisis, and we include 3 pre-crisis elections for Austria.

To test our hypotheses we rely on four dependent variables³. First we analyse the role of the economic conditions by assessing their impact on the change in the vote share for the prime minister's party between a given election at time t and t+1. Second, we analyse the electoral returns for the prime minister party at time t+1 as a function of the votes it received in the previous election at time t. To characterize the overall effect of the crisis on the stability and change of party systems as a whole we rely, third, on electoral volatility measures, and, fourth, on the change in the support for individual parties between a given election at time t and t+1. For the analysis of electoral volatility, we adopt the distinction between type-A volatility (volatility caused by the entry and exit of parties from the political system) and type-B volatility (volatility generated by vote switching between existing parties) (Neff Powell and Tucker 2013)

To measure the change in economic conditions in a given country, we rely on three economic indicators: change in GDP, change in the unemployment rate and change in government debt between the election at time t and t+1. Given the expectation that citizens should be more likely to respond to general economic trends and not to the evolution of specific macroeconomic indicators we have combined these three indicators to create a summary measure of a country's economic misery. An exploratory factor analysis on these three items yields a one-factor solution, with all items loading strongly on one single dimension. Based on the factor scores we estimate our misery indicator, which takes higher values for worsening economic conditions. To measure the relative decline in performance across countries we compute an additional variable ("cross-country relative misery") that indicates the degree to which the change in misery in a given country deviates from the pre or post-crisis average change in misery in WE and CEE countries respectively. To compute this variable the misery indicator of each

³ See appendix B for details about variables' operationalization

⁴ See *Table A1* in appendix A.

country-election observation is divided by the average misery of its corresponding geographical location (WE or CEE) in the corresponding time period (pre-crisis or post-crisis). Hence, higher values indicate a relatively higher increase in misery. In order to test our third hypothesis we rely on a variable that captures whether a given country was part of an IMF program that implied policy conditionality.

To characterize the political context, we compute a variable that reflects the change in corruption between the election at time t and t+1 based on the Corruption Perception Index, with higher values indicating an increase in corruption. We also introduce a dummy variable distinguishing between single-party governments and coalition governments to control for 'clarity of responsibility'. In order to control for the permissiveness of the electoral system, in the volatility models we control for the average district magnitude of each country. Following, Powell and Whitten (1993) we also introduce a variable that accounts for the short-term fluctuations in the government party's gains and losses in the previous elections (swing). Given the special character of Switzerland's 'prime minister' we also include a Switzerland dummy.

To test the hypotheses related to gains and losses of different types of parties in WE we classify parties in five mutually exclusive categories: new, radical left, populist radical right, non-mainstream, and mainstream parties. Parties that participate for the first time in a given election are included in the 'new' group irrespective of their ideology. In later elections they are included in their respective category. The radical left and populist radical right are defined based on their ideology. The rest of the parties are classified as either mainstream or non-mainstream. The mainstream parties encompass those parties that have played a key role in a country's party

⁵ Only parties with parliamentary representation and receiving at least three percent of the vote share are included in the dataset.

system since the post-war period, and cannot be classified among radical left or populist radical right parties. All the remaining parties are classified as non-mainstream. In total our sample includes 480 party-election observations: 203 mainstream, 165 non-mainstream, 52 radical left, 40 populist radical right, and 20 new parties⁶.

RESULTS

Following the economic voting model we start our analyses by assessing the effects of the economic context on the performance of the prime minister's party⁷. Given their different patterns of party competition and economic trends, in all the empirical analyses we distinguish between WE and CEE. *Table 1* presents the results with respect to economic voting. The baseline *Model 1* assesses the effect of changes in misery on the performance of the prime minister's party between two elections. As predicted by the economic voting approach, an increase in misery is associated with a worsening performance of the incumbent party at the next election. This effect is stronger in WE countries.

<Table 1>

Model 2 tests whether, during the Great Recession, the punishment of the incumbents has been greater in hard hit countries ('severity of the crisis' hypothesis) and whether the punishment has become greater as the crisis progressed ('timing' hypothesis). In the case of WE both hypotheses are confirmed. During the economic crisis incumbent parties have been more

⁶ Each election in which a party is present is treated as an independent observation of that party. Our WE sample includes a total of 135 parties. See appendix C.

We replicated the analyses that rely on the vote share of the prime minister's party specifying as the dependent variable the vote share of all parties that form the cabinet. Our conclusions are not altered by this change in the specification of the dependent variable (results available upon request).

severely punished as the economic conditions of their countries worsened while they were in office. Moreover, citizens seem to have perceived worsening economic conditions as a greater failure of the incumbent party as the crisis progressed, since a one unit increase in misery is associated with a greater punishment of the incumbent party in the second post-crisis election. Governments elected after the outbreak of the Great Recession which failed to redress the economic situation of their countries were more severely punished than governments that happened to be in office in hard hit countries when the Great Recession began. By contrast, in CEE there are no statistically significant differences between the pre and post-crisis periods, and some of the coefficients suggest that misery may even have had a more limited impact on the performance of incumbent parties during the post-crisis period. To further assess the differences between CEE and WE we pool our data and specify a three-way interaction between the misery indicator, the timing of the election, and the region⁸. Figure 1 summarizes these results and confirms that during the crisis there is a closer relationship between economic performance and incumbents' support in WE. Although none of the coefficients is statistically significant, the three-way interaction coefficients are correctly signed, indicating a lower importance of the economic conditions during the crisis in CEE.

<Figure 1>

To probe further into the importance of the relative decline in economic performance, we introduce in our models a variable capturing the relative decline in performance across countries (cross-country relative misery). *Model 3* reveals that increasing cross-national relative misery significantly reduced the vote share of incumbents in WE, but not in CEE. At the same time, *model 4* confirms that the negative effect of the relative decline in performance was significantly

 8 See *model 1 in table A2* in appendix A.

stronger during the Great Recession, and this negative effect strengthened further as the crisis progressed. These results confirm again the differences between WE and CEE, since all the relevant coefficients are substantially smaller for CEE countries. The differences between WE and CEE also show up in the explanatory power of all of our economic models. Models for WE explain around 40 percent of the variance in the dependent variable. By contrast, in CEE the models only account for a maximum of 20 percent of the variance. In sum, these results clearly confirm the 'severity of the crisis' and 'timing' hypotheses for WE, and they also support our fourth hypothesis about the differences between WE and CEE due to their past experience with economic crises.

Moving to the specific analysis of the impact of IMF interventions, *model 5* assesses whether incumbents have lost support if their countries were part of an IMF program that implied policy conditionality. Results are clear, when compared to incumbents from other WE countries, and independently of the economic performance of their country, incumbents from countries where the IMF intervened could expect to lose as much as 10.8 percent of their support. Hence, in WE governments were heavily punished if they had to resort to the IMF to redress the economic situation of their countries. By contrast, in CEE the incumbents' loss of votes associated with an IMF intervention amounts to only 5.5 percent of their vote share.

In order to provide a comprehensive assessment of the electoral consequences of the Great Recession, we turn to the analysis of the stability and change of European party systems. The extraordinary punishment of incumbents during the Great Recession, predicted by the economic voting approach and confirmed by our empirical analyses, provides the first condition for the destabilization of the party systems of the countries most affected by the economic crisis. As outlined in the theory section, we expect this extraordinary punishment to be the catalyst of

the acceleration of the long-term trends identified by the re/dealignment perspectives. In order to bridge the approaches of economic voting and party system change we first analyse the effect of the economic crisis on the stability and predictability of the support for the main actors in economic voting theories: the incumbents. We assess how the vote for the incumbents at time t predicts the incumbents' vote share at time t+1, in the pre and post-crisis period. If this relationship becomes weaker in the post-crisis period, we have a first indication that party systems are becoming less stable during the crisis. *Table 2* presents the results for this first test.

<Table 2>

Three important results are conveyed by *model 1*. First, for pre-crisis elections, the results confirm the expected key difference between WE and CEE party systems: in pre-crisis elections the previous vote share is a better predictor of the subsequent vote share in WE than in CEE ('percent vote time t' coefficient). This result indicates that sizable fluctuations in the electoral support of incumbent parties were uncommon in WE before the crisis. Second, during the Great Recession WE, but not CEE party systems became less stable in terms of the predictability of incumbent support. *Figure 2* graphs this changing relationship. In WE, the close relationship between the incumbent's vote share at times t and t+1 became weaker as the crisis progressed. The contrary seems to be the case in CEE countries. As the economic crisis advanced in CEE, the predictability of incumbent's vote share increased, although in this region the differences are not statistically significant. These results provide a first indication that the crisis may have affected the party systems of WE and CEE in different ways. Third, *model 1* also includes a

⁹ To test whether the differences between the two groups of countries are significant we pool our data and specify a three-way interaction of the incumbent's vote at time t, the timing of the election, and the region. The results confirm that the economic crisis has weakened the relationship between the previous and subsequent share of votes in WE, and it has strengthened this relationship in CEE countries. See *table A.3* in appendix A.

variable measuring change in corruption levels. The results reveal that while change in corruption levels is a relevant predictor of incumbent performance in CEE, this is not the case in WE.¹⁰ In line with the 'corruption hypothesis', corruption is only associated with a substantial reduction in the vote share of incumbent parties in CEE countries.

<Figure 2>

We probe further into the overall effect of the crisis on the stability of the party systems by analysing the volatility of the elections covered. This is the most adequate indicator of the effects of the crisis on party systems, since it takes into account the electoral outcome of all parties. Table 3 presents a comparison of electoral volatility in the pre and post-crisis periods¹¹. Although the total level of volatility is higher in CEE for both time periods, total volatility has increased substantially in WE during the Great Recession, while this has not been the case in CEE, even if the levels of misery have increased to a similar extent in both regions. In fact, type-B volatility, which refers to vote switching between existing parties, has only increased in WE. Moreover, in the course of the crisis, type-A volatility, which measures volatility caused by the entry and exit of new parties, has generally increased in both parts of Europe, but it increased more substantially in WE. In WE the relative increase in type-A volatility is higher than the relative increase in type-B volatility, which is a clear sign of the acceleration of the erosion of the party system in the West during the economic crisis. Comparing the levels of post-crisis total volatility to the ones calculated by Bartolini and Mair (1990) for the period 1885-1985, it appears that the majority of WE party systems are not undergoing 'normal' times. In the post-crisis

¹⁰ The difference in the impact of corruption between WE and CEE is also confirmed by an interaction between the corruption and the region indicators in our pooled dataset. See *model 1 table A.3* in appendix A.

¹¹ The 2012 Romanian elections are not included in the volatility analyses because they pose a problem for the coding of new parties.

period, mean aggregate volatility (14.9) is almost twice as high as the one for the period 1885-1985 (8.2), and it is even higher than the volatility of turbulent times like the interwar period.

<Table 3>

To analyse the role that fluctuations in the support of incumbent parties play for these changes in the levels of electoral volatility, *Table 3* also provides the explained variance (R2) in the levels of total volatility by the changes in support of PM parties¹². In the case of WE there are clear differences between the pre and post-crisis periods. While before the crisis changes in support of PM parties did not explain much of the variance in electoral volatility, in the postcrisis period they accounted for more than half of the corresponding variance. In CEE, where volatility levels were always higher, the differences in the variance explained between the pre and post-crisis periods are more limited. However, it is worth noting that in both periods change in support of the PM party appears to explain a substantial portion of the volatility variance. Hence, at least in the case of WE, these results support the idea that the central actors in the economic voting models (the incumbent parties) also play a crucial role for the stability and change of party systems during periods of deep economic crisis. Without the large changes in support of incumbent parties as a result of the worsening economic conditions it would have been unlikely that the party systems of WE countries would have reached these high levels of instability in a such a short period of time.

An analysis of the determinants of electoral volatility in WE and CEE provides a formal test of the 'destabilization' and 'corruption' hypotheses. *Figure 3* summarizes the results of this analysis for both type-A and type-B volatility. It becomes apparent that in WE economic

¹² The model has been estimated using OLS with the total volatility measure as the dependent variable and the change in the share of votes for the PM as the independent variable.

performance is an important determinant of both type-A and type-B volatility. As the economy worsens both types of volatility increase in WE. In CEE, however, levels of volatility appear to be unrelated to economic performance. In contrast, changes in the levels of corruption are associated with increases in type-B volatility in CEE but not in WE countries. The effect of corruption on type-A volatility is not statistically significant in any of the regions. As expected, economic performance increases volatility only in WE, and corruption is associated with higher volatility levels only in CEE¹³. Overall, these results provide further support for the 'destabilization' and 'corruption' hypotheses, and explain why volatility has increased in WE as a result of the Great Recession, while that has not been the case in CEE.

<Figure 3>

Having established that WE party systems became more unstable during the economic crisis and that the punishment of incumbent parties has been a relevant factor for this increasing instability, we now turn to an analysis of whether certain types of parties benefited from the party system instability brought about by the economic crisis. We restrict our analyses to WE because the crisis does not appear to have had a substantial impact on the stability of CEE party systems. To assess the gains and losses of the different types of parties we analyse the impact of the economic crisis on the change in the vote share from time t to t+1 of the different types of parties. To assess whether the recession has accelerated pre-existing long-term trends of party system change, our main interest is to compare the performance of the different types of parties against the performance of mainstream parties. This is why we use mainstream parties as our reference category in the next models.

1.

¹³ To further assess these differences we pool our data and regress the summary measure of total volatility on the interactions of misery and region, and corruption and region. *Model 3 Table A4* (appendix A) summarizes the results, which confirm that there are significant differences in the relationship between misery, corruption and volatility between WE and CEE countries.

<Table 4>

The results of *model 1* in *Table 4* confirm that, independently of the economic conditions, ruling is costly for incumbents. Parties that are part of government coalitions are expected to receive 3.6 percent less votes in the next election, and an extra 1.5 percent loss is added to the prime minister party. *Model 2* examines the effects of economic conditions for different types of parties. The results reveal that in comparison to mainstream parties all the other party types generally make significant gains as the economy worsens. The populist radical right and new parties are the ones who benefit the most from the increases in misery. It is important to note that these and subsequent results hold under control for incumbent status, which suggests that mainstream opposition parties are not generally among the beneficiaries of the incumbents' losses. On the contrary, controlling for incumbency (prime minister and government status) increases in misery are associated with a lower vote share for mainstream parties (whether in government or in opposition), as indicated by the significant negative effect of the misery coefficient in *model 2*.

Moving now to the specific impact of the Great Recession, *model 3* assesses whether the fact that a country required IMF assistance had consequences for the support of the different types of parties. The results reveal that IMF interventions implied an average loss of 4 percent of their votes for mainstream parties (direct effect of IMF-intervention), while all the other types of parties appear to have benefited from IMF interventions. Again, the parties that made the most significant gains were non-mainstream, radical right, and new parties. By definition new parties always increase their vote share. However, in countries with IMF interventions, the gains of new parties, with respect to mainstream parties, were twice as important as in countries that were not part of an IMF program.

Finally, model 4 compares the effect of economic performance before and after the onset of the Great Recession. The purpose of this model is to test whether non-mainstream, peripheral (radical left and right) and new parties have always benefited from increases in misery, or whether this has only been the case during turbulent times. Figure 5 summarizes the results of this model. The differences between the two periods are unambiguous. Before the economic crisis, the economic situation had no apparent effect on the support of different types of parties, with the exception of radical right and new parties. The former received less, the latter more votes as the economy worsened, but none of the effects is statistically significant during the precrisis period. ¹⁴ However, after the onset of the Great Recession the picture changed. First, mainstream parties started receiving fewer votes as the crisis became more severe, independently of their incumbent status. In fact, the average support for mainstream parties fell from 25 percent in the last pre-crisis election to 21 percent during the crisis period. Second, both non-mainstream and peripheral parties significantly benefited from the worsening economic conditions during the Great Recession. In this period, citizens of countries that suffered worsening economic conditions were more likely to defect from mainstream parties and to opt for either nonmainstream or peripheral parties. These results provide support for the 'deep crisis' hypothesis, with regard to radical left and populist right parties as well as non-mainstream parties. It is in the countries most affected by the economic crisis, in terms of misery increase and IMF intervention, that we can find growing support for this kind of parties. Surprisingly, though, even if our aggregate data supports the idea that both the number and share of votes of new parties increased

 $^{^{14}}$ For the pre-crisis period none of the slopes in *Figure 5* is statistically significant. For the post-crisis period the slopes of non-mainstream, radical left and radical right parties are positive and statistically significant at least at p<0.1. For mainstream parties the slope is negative and statistically significant at p<0.01. The effects are not statistically significant for new parties in any of the periods. Marginal effects for *model 4* interactions are summarized in *Table A5 appendix A*.

during the crisis (results not shown), *model 5* suggests that during this period the gains of new parties were not more closely related to economic performance.

<Figure 5>

Conclusion

Our analyses by and large confirm the economic voting model, which we have used as a baseline for our analysis. In the Great Recession, incumbents have been heavily punished, especially in the hardest hit countries of WE. Electoral punishment of poor economic performance has generally been more limited in CEE, where populations have been more accustomed to economic hardship than in WE. If dramatic events like IMF interventions have increased punishment across Europe, their impact was especially severe in WE. Moreover, if the crisis dragged on, electoral punishment has been stepped up in WE, but not in CEE. Adopting a broader and more general perspective that shifts the focus from incumbent parties to the entire party system, we have been able to show, however, that, in WE, the cumulated effect of the Great Recession, goes far beyond the short-term punishment of incumbents. Thus, the predictability of the incumbents' vote share decreased substantially in the course of the Great Recession, while the overall volatility of the entire party system increased, but the other mainstream parties which habitually govern hardly benefited from the predicament of the incumbents. As expected by the party systems perspective, the main beneficiaries of the crisis and the increasing electoral volatility have been parties of the populist radical right and the radical left, as well as new parties. Radical parties benefited especially in the hardest hit countries, while the vote share of new parties has been rising independently of economic hardship in post-crisis elections across WE. Taken together, these results suggest that the long-term trend towards a destabilization of the WE party systems has been accelerated during the Great Recession.

By contrast, the impact of the Great Recession on the party systems of CEE has been quite different. In these countries, incumbents have been punished less for economic hardship than for increasing corruption. Overall, the party systems of this region have followed an opposite trend to the one observed in WE. While the volatility of the CEE party systems is still higher than in WE, it is noteworthy that the volatility between established parties has actually decreased in the post-crisis period in CEE countries. Taking a long-term view, Lane and Ersson (1996: 130) suggested that, in terms of volatility, fractionalization, and polarization, the party systems of the two parts of Europe might have more in common than things that set them apart. While it is still premature to speak of convergence of the party systems in the two parts of Europe, the contrasting experience of WE and CEE party systems during the Great Recession suggests that the long-term trend may bring them closer together (see also Casal Bértoa 2014).

As we have pointed out in our theoretical discussion, all three interpretations of the long-term developments of WE party systems agree on the destabilizing trends. Where the realignment perspective differs from the other two is that it does not only identify destabilizing factors, but also points to countervailing trends that are expected to eventually lead to party system restructuration. The fact that the parties of the radical left and right as well as other non-mainstream parties (a category that includes above all Green parties) have been benefiting the most from the economic hardship suggests that the Great Recession has (so far) served as a catalyst for the acceleration of long-term trends that have been restructuring WE party systems for more than three decades by now.

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Table 1. Economic conditions and the performance of PM (Y = % votes t+1 - % votes t)

	WE					CEE				
Variables	M1	M2	M3	M4	M5	M1	M2	M3	M4	M5
Misery	-4.662***	-1.642			-2.764**	-2.956	-2.579			-3.605
	(-5.006)	(-0.942)			(-2.528)	(-1.289)	(-0.721)			(-1.523)
Cross-country relative misery			-12.78***	-3.911				-6.359	-4.835	
			(-4.488)	(-0.942)				(-1.188)	(-0.721)	
Election timing. Ref (pre-crisis)										
First post-crisis	-0.576	-0.687	-5.229***	9.645	-1.592	0.836	0.909	-2.435	4.829	3.133
	(-0.294)	(-0.341)	(-3.033)	(1.503)	(-0.845)	(0.159)	(0.159)	(-0.521)	(0.388)	(0.554)
Second post-crisis	-2.913	-2.891	-7.238***	10.16	-0.207	-1.037	-3.370	-4.563	-12.23	1.649
	(-1.181)	(-1.139)	(-2.945)	(1.321)	(-0.0824)	(-0.169)	(-0.409)	(-0.846)	(-0.337)	(0.249)
Coalition government	-1.775	-1.461	-1.907	-1.461	-1.881	1.399	2.213	1.500	2.213	1.074
	(-1.064)	(-0.888)	(-1.111)	(-0.888)	(-1.194)	(0.206)	(0.300)	(0.220)	(0.300)	(0.159)
Swing	-0.110	-0.138	-1.799	-3.288	-0.133	-0.323**	-0.363*	-0.319**	-0.363*	-0.303**
	(-0.747)	(-0.946)	(-0.481)	(-0.906)	(-0.957)	(-2.213)	(-2.007)	(-2.176)	(-2.007)	(-2.058)
Switzerland	-2.296	-3.288	-0.102	-0.138	-2.333					
	(-0.631)	(-0.906)	(-0.671)	(-0.946)	(-0.679)					
IMF intervention					-10.88***					-5.517
					(-2.920)					(-1.067)
Election timing * Misery Cross-relative misery	country									
First post-crisis		-3.904*		-14.74**			-1.481		-7.410	
		(-1.771)		(-2.409)			(-0.316)		(-0.631)	
Second post-crisis		-4.933*		-18.19**			3.348		7.154	
		(-1.882)		(-2.339)			(0.285)		(0.211)	
Constant	-1.389	-0.570	12.62***	3.776	-0.800	-6.332*	-5.582	2.239	1.243	-6.534*
	(-1.187)	(-0.467)	(4.128)	(0.883)	(-0.713)	(-1.818)	(-1.338)	(0.331)	0.153	(-1.877)
Observations	69	69	69	69	69	37	37	37	37	37
R-squared	0.401	0.442	0.365	0.445	0.475	0.171	0.177	0.16	0.18	0.201

t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

Figure 1: Misery and PM support in WE and CEE

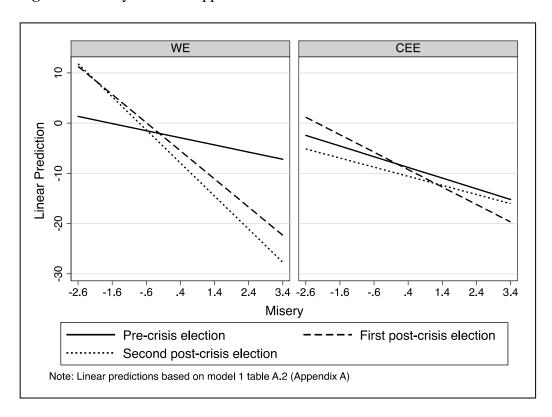


Table 2: Political model: PM t+1 results as a function of time t votes and corruption

		WE	CEE	
	Variables	M1	M1	
	% Vote time t	0.735***	0.328	
		(5.502)	(1.224)	
	Election timing. Ref (pre-crisis)			
	First post-crisis	2.134	-8.926	
		(0.266)	(-0.483)	
S	Second post-crisis	17.18	-30.43**	
Je CT		(1.510)	(-2.093)	
Main effects	Change in corruption	-0.112	-6.789**	
		(-0.0730)	(-2.269)	
	Swing	-0.0836	-0.131	
		(-0.502)	(-0.970)	
	Coalition government	2.315	3.062	
		(0.983)	(0.428)	
	Switzerland	-0.818		
		(-0.208)		
S	Election timing*% Vote time t			
Two-way interactions	First post-crisis	-0.221	0.187	
		(-0.981)	(0.331)	
	Second post-crisis	-0.705**	0.709	
		(-2.087)	(1.588)	
	Constant	7.701*	15.21*	
_		(1.786)	(1.775)	
	Observations	69	35	
	R-squared	0.573	0.472	

t-statistics in parentheses

^{***}p<0.01, **p<0.05, *p<0.1

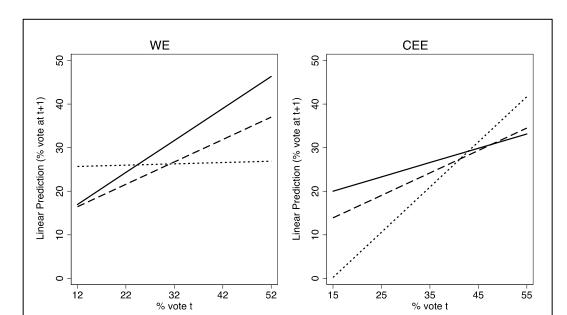


Figure 2: PM vote at time t as a predictor of vote at time t+1

Table 3: Volatility in pre and post-crisis periods.

pre-crisis election

Note: Linear predictions based on M1 table 2

1st post-crisis election

2nd post-crisis election

	West			East			
	Pre-crisis	Post-crisis	Difference	Pre-crisis	Post-crisis	Difference	
Volatility (Total)	9.3	14.9	5.6***	28.4	28.7	0.3	
Туре-А	0.9	3.4	2.6***	11.0	12.6	1.6	
Туре-В	8.5	11.5	3.0**	17.4	14.8	-2.6	
Explained variance (R2) in Volatility (Total) by change in support of PM party	0.10	0.56	0.46 ^{NA}	0.35	0.51	0.16 ^{NA}	
Misery	-0.3	0.7	1.0***	-0.8	0.4	1.1***	
Corruption	2.3	2.8	0.5	5.5	5.2	-0.3	

pre-crisis election

1st post-crisis election

2nd post-crisis election

^{***}p<0.01, **p<0.05, *p<0.1, NA not applicable

Figure 3: The determinants of volatility in WE and CEE

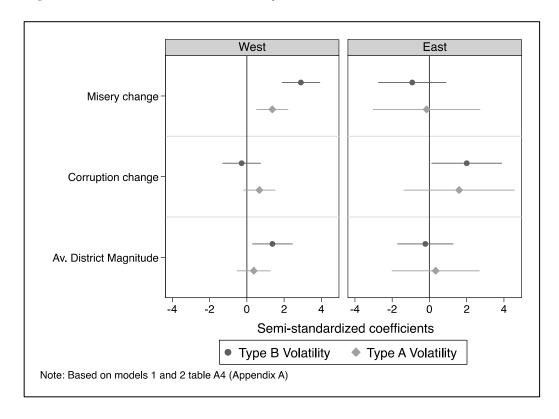
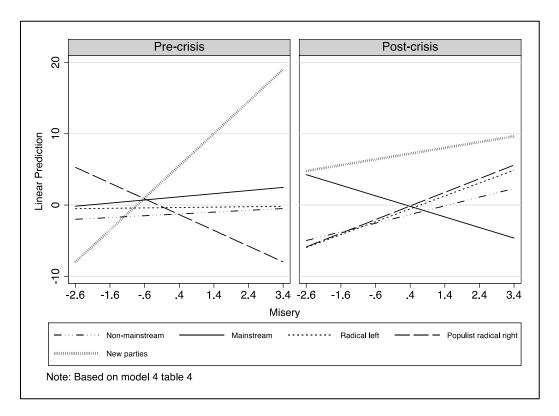


Table 4: The effects of misery, IMF intervention, and crisis for different parties (Y = % votes t+1 - % votes t)

		M1-Baseline	M2-Misery	M3-IMF	M4-Misery and crisis
	Prime Minister	-1.482**	-1.438*	-1.405*	-1.287*
	Time willister	(-1.974)	(-1.953)	(-1.879)	(-1.743)
	Government	-3.619***	-3.504***	-3.657***	-3.633***
	Covernment	(-6.316)	(-6.216)	(-6.399)	(-6.400)
	Misery	0.226	-0.990**	0.260	0.439
	iviisei y	(0.732)	(-2.459)	(0.842)	(0.580)
	Crisis election	-0.312	-0.341	-0.323	-0.571
(A	Crisis election	(-0.643)	(-0.714)	(-0.667)	(-0.792)
ect	IMF intervention	-1.142	-1.267	-4.216***	-1.286
eff		(-1.177)	(-1.327)	(-2.945)	(-1.271)
Main effects	Party family: Ref. Mainstream	(1.177)	(1.327)	(2.545)	(1.271)
Ĕ	Non-Mainstream	-1.608***	-1.721***	-1.923***	-2.323***
	Non Manistream	(-2.890)	(-3.140)		(-3.130)
	Radical Left	-0.627	-0.755	-0.884	-1.348
	Nadical Ecit	(-0.831)	(-1.015)	(-1.140)	(-1.265)
	Populist radical right	-0.425	-0.688	-0.777	-1.436
	Topulse rudicul right	(-0.515)	(-0.825)	(-0.922)	(-1.249)
	New parties	5.032***	4.243***		2.736
	New parties	(4.515)	(3.685)	(3.462)	(1.110)
	I	(4.515)	(3.003)	(3.402)	(1.110)
	Party family*Misery IMF				
	Non-Mainstream		1.899***	4.734**	-0.188
			(3.587)	(2.514)	(-0.162)
	Radical Left		2.121***	3.897	-0.385
			(2.811)	(1.447)	(-0.242)
	Populist radical right		2.358**	6.291*	-2.651
S	- opanse radical right		(2.333)	(1.775)	(-0.822)
Ö	New parties		2.969***		4.064
Two-way interactions	ivew parties		(3.302)	(1.923)	(0.790)
Eer	Party family*Crisis		(3.302)	(1.323)	(0.750)
.⊑	Non-Mainstream				0.103
Λaγ	Non Manistream				(0.0937)
۰ -	Radical Left				-0.315
≥	Nadical Ecit				(-0.196)
	Populist radical right				0.133
	1 opunst radical right				(0.0763)
	New parties				3.745
	New parties				(1.248)
	Crisis election*Misery				-1.921**
	Crisis election wisery				(-2.092)
					(-2.032)
' 0	Party family*Misery*Crisis				
ous	Non-Mainstream				2.886**
Ē					(2.104)
era	Radical Left				3.673*
ir					(1.938)
/ay	Populist radical right				6.047*
- -					(1.757)
Three-way interactions	New parties				-1.774
È					(-0.337)
	Constant	1.906***	1.927***	2.103***	2.406***
		(3.842)	(3.957)	(4.221)	(4.279)
	Observations	480	480	480	480
	R-squared	0.197	0.234	0.212	0.254
		0.10,	* 0.1	V.L12	U.EJT

t-statistics in parentheses ***p<0.01, **p<0.05, *p<0.1

Figure 5: Misery and support of different parties in pre and post-crisis periods



Appendix A: Additional tables

Table A1: Factor analysis economic variables

	Loadings
Unemployment rate change	0.80
GDP growth rate	-0.82
Debt change	0.87

Note: Entries are the result of a principal-component factor analysis. 1 component extracted, eigenvalue 2.06.

Table A2: Pooled model. The impact of misery and timing of elections

i	Variables	M1
	Misery	-1.422
		(-0.575)
	Election timing. Ref (pre-crisis)	
	First post-crisis	-0.920
ts		(-0.322)
fec	Second post-crisis	-2.961
ı ef		(-0.822)
Main effects	Coalition government	-0.908
Σ		(-0.427)
	Swing	-0.288***
		(-2.789)
	Switzerland	-3.214
		(-0.622)
	East	-5.611*
	•	
	Election timing * Misery	
	First post-crisis	-4.185
ons		(-1.338)
acti	Second post-crisis	-5.165
era		(-1.385)
Two-way interactions	Election timing * East	
лау	First post-crisis	1.028
V-0		(0.213)
Ň	Second post-crisis	1.069
		(0.163)
	East * Misery	-0.707
Three-way int.	Election timing * Misery*East	
ау	First post-crisis	2.840
ν-ć		(0.631)
ree	Second post-crisis	5.480
느		(0.642)
	Constant	-0.335
		(-0.204)
	Observations	106
	R-squared	0.355
	t statistics in parentheses *** p<0.01	** 20 05 *

t-statistics in parentheses *** p<0.01, ** p<0.05, *
p<0.1

 Table A3: Pooled model: Political model

	Variables	M1
	% Vote time t	0.738***
		(4.949)
	Election timing. Ref (pre-crisis)	•
	First post-crisis	2.250
		(0.238)
S	Second post-crisis	17.46
fect		(1.311)
Main effects	Corruption change	-0.173
aju		(-0.0967)
Σ	Coalition government	2.418
		(0.980)
	Swing	-0.120
		(-1.320)
	Switzerland	-0.801
		(-0.173)
	East	7.513
		(0.941)
	l =	
	Election timing * % Vote time t	0.225
	First post-crisis	-0.225
2		(-0.850)
Ö	Second post-crisis	-0.713*
Two-way interactions		(-1.808)
ıteı	Election timing * East	11 27
. <u>></u>	First post-crisis	-11.27
Ň	Canada and misis	(-0.665)
ò	Second post-crisis	-48.21*** (2.707)
⊭	9/ \/ata tima t * Fast	(-2.797) -0.409*
	% Vote time t * East	
	East * Corruption change	(-1.742) -6.553**
	Last Corruption change	(-2.291)
نہ	Election timing * % Vote time t * East	(-2.291)
Ihree-way int.	First post-crisis	0.412
۸a)	1 113t post-crisis	(0.818)
-6-	Second post-crisis	1.435***
٦Ļ	Second post crisis	(2.785)
_	I Constant	7.661
	Constant	(1.545)
	Observations	104
	R-squared	0.582
	t-statistics in parentheses *** p<0.01. **	

t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A4: Volatility, misery and corruption.

Type B WE M1 2.906*** (4.703) -0.482 (-0.452) de 0.0364**	Type B CEE M1 -0.920 (-0.852) 3.459* (1.795) -0.00578	Type A WE M2 1.368*** (2.660) 1.166 (1.312)	Type A CEE M2 -0.150 (-0.0884) 2.754 (0.909)	Total volatility M3 4.297*** (3.869) 0.691
2.906*** (4.703) -0.482 (-0.452) de 0.0364**	-0.920 (-0.852) 3.459* (1.795)	1.368*** (2.660) 1.166 (1.312)	-0.150 (-0.0884) 2.754	4.297*** (3.869) 0.691
(4.703) -0.482 (-0.452) de 0.0364**	(-0.852) 3.459* (1.795)	(2.660) 1.166 (1.312)	(-0.0884) 2.754	(3.869) 0.691
-0.482 (-0.452) de 0.0364**	3.459* (1.795)	1.166 (1.312)	2.754	0.691
(-0.452) de 0.0364**	(1.795)	(1.312)	_	
de 0.0364**	, ,	• •	(0.909)	(0.000)
	-0.00578		(0.505)	(0.360)
(2.440)		0.00983	0.00890	0.0255
(2.110)	(-0.247)	(0.686)	(0.242)	(1.141)
				16.37***
				(8.650)
				-5.375***
				(-2.900)
				5.536*
				(1.692)
8.795***	16.65***	1.426**	10.84***	10.56***
(13.34)	(13.11)	(2.601)	(5.429)	(9.330)
70	34	70	34	104
, ,	0.100	0.123	0.031	0.488
		(13.34) (13.11) 70 34	(13.34) (13.11) (2.601) 70 34 70	(13.34) (13.11) (2.601) (5.429) 70 34 70 34

t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A5: Average marginal effects of misery on the change in votes between t and t+1 for different party families in pre and post-crisis periods (From model 4 table 4)

0.44 (0.58) 0.25 (0.29)	-1.48*** (-2.87) 1.22**
0.25	, ,
	1.22**
(0.20)	
(0.23)	(2.07)
0.05	1.81*
(0.04)	(1.91)
-2.21	1.92*
(-0.71)	(1.66)
4.50	0.80
(0.88)	(0.79)
	-2.21 (-0.71) 4.50

t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

Appendix B. Variables operationalization and summary statistics

Variable	Operationalization	Mean / %	SD	Min	Max
Dependent Variables					
Vote	% of votes for a given party at a given election. Sources: NSD European Elections Database and Wolfram Nordsieck elections database	12.52	11.92	0.00	58.63
Vote difference	Difference in % of votes for a given party between a given election and the previous one. Sources: NSD European Elections Database and Wolfram Nordsieck elections database	0.00	7.12	-35.99	42.74
Type A volatility	Type A volatility is operationalized as follows: $\frac{ \sum_{o=1}^{n} p_{ot} + \sum_{w=1}^{n} p_{w(t+1)} }{2}$, where o=old disappearing parties that contested only the election at time t and w=new parties that contested only the election at time $t+1$, and p represents the percentage of votes received by each of those parties, at either t or t+1.	5.57	8.89	0.00	39.36
Type B volatility	Type B volatility is operationalized as: $\frac{\sum_{i=1}^{n} p_{it} - p_{i(t+1)} }{2}$, where $i = \sum_{i=1}^{n} p_{it} - p_{i(t+1)} $	11.90	6.50	0.50	31.73
Total volatility	pre-existing parties. The total volatility for a given election is calculated by adding up type A and type B volatility, which is equivalent to the Pedersen index.	17.48	12.68	0.5	50.11
Independent variables					
GDP growth rate	Change in GDP (in percent) between election at time t+1 and election at time t. Source: Eurostat. Variable nama_gdp_c with "Gross Domestic Product at market prices" unit selected	23.98	24.49	-41.90	128.88
Unemployment rate change	Change in the unemployment rate (in percent) between election at time t+1 and election at time t. Source: Eurostat. Variable Ifsq_urgan.	0.37	3.82	-9.90	13.40
Debt change	Change in Government debt between election at time t+1 and election at time t. Source: Eurostat. Variable General government gross debt with % of GDP option selected.	4.24	16.33	-42.30	79.50
Misery	Variable predicted from principal components factor analysis of GDP growth rate, Unemployment rate change, and Debt change (see appendix A)	0.00	1.00	-2.66	3.56
Cross-country relative misery	Variable measuring the degree to which the change in misery in a given country deviates from the average change in WE and CEE in the pre or post-crisis periods. Before computing the variable the misery indicator in which this variable is based has been rescaled so that it only takes positive values. For example the cross-country relative misery for the first German elections in the post-crisis period has been calculated as follows:	1	0.31	0	1.85

	$\frac{(\textit{Misery Germany firs post-crisis election})}{(\textit{Misery WE post-crisis period})}. \text{ Hence, higher values indicate a}$				
	relatively higher increase in misery				
IMF intervention	Variable that takes the value 1 if a given country is under an SBA or EFF agreement with the IMF and 0 otherwise. Source: IMF database	0.13	0.34	0.00	1.00
Corruption	Change in corruption perception index between election at time t and election at time t+1. Source: Transparency International.	0.03	0.58	-2.30	1.38
Election timing (Categorical)					
Pre-crisis	t+1 election took place before the Great-Recession	0.56			
First post-crisis	t+1 was the first election in a given country after the onset of the Great Recession	0.28			
Second post-crisis	t+1 was the second election in a given country after the onset of the Great Recession	0.16			
Crisis election	Variable that takes the value 1 if the election at time $t+1$ took place during the Great Recession and 0 otherwise	0.43	0.50	0.00	1.00
Av. District magnitude	Average district magnitude of electoral districts in each country. Source: Quality of Government Dataset.	19.12	37.7	1	150
Coalition government	Variable that takes the value 1 if between the election at t+1 and t the government of a country was formed by a coalition. Source: Wolfram Nordsieck elections database	0.22	0.41	0.00	1.00
Swing	Parties gains or losses in the previous elections. Votes at time t - votes at time t -1. See Powell and Whitten 1993 p. 397	6.03	11.11	-15.75	43.96
Prime Minister	Variable that takes the value 1 for the Prime Minister's party between elections t and t+1. (exception for Switzerland)				
Government	Variable that takes the value 1 for those parties that were part of the cabinet between election and time t and t+1				
Party category (Categorical)	See data and operationalization section and appendix C for details . Only for \ensuremath{WE}				
Non-mainstream		0.37			
Mainstream		0.39			
Radical left		0.10			
Populist radical right		0.08			
New parties		0.06			

APPENDIX C. Classification of parties in party categories (WE)

Country	Party/ies	Name /s	Party category	Year founded
	BZO	Bündnis Zukunft Österreich	Non-mainstream	2005
	FPO	Freiheitliche Partei Österreichs	Populist radical right	1956
	Greens	Die Grünen – Die Grüne Alternative	Non-mainstream	1986
Austria	SPÖ	Sozialdemokratische Partei Österreichs	Mainstream	1888
	ÖVP	Österreichische Volkspartei	Mainstream	1945
	FRANK	Team Frank Stronach	New	2012
	NEOS	Das Neue Österreich und Liberales Forum	New	2005
	CD&V / CDH	Christian Democratic and Flemish / Humanist Democratic Centre	Mainstream	1972
Belgium	ECOLO / GROEN	ECOLO / GROEN	Non-mainstream	1981
	MR / VLD	Reform Movement / Open VLD	Mainstream	1972
	PS / SPA	Socialist Party / Socialist Party Different	Mainstream	1978
	PTB-PVDA	Worker's party of Belgium	Radical left	1979
	N-VA / VB / LDD	Flemish interest /New Flemish Alliance / Libertarian, Direct, Democratic	Populist radical right	2001/2004/2007
	EVROKO	European Party	Non-mainstream	1996
	EDEK	Movement of Social Democrats	Mainstream	1969
	AKEL	Progressive Party of Working People	Radical left	1926
Cyprus	DIKO	Democratic Party	Mainstream	1976
	DISY	Democratic Rally	Mainstream	1976
	EDI	United Democrats	Non-mainstream	1993
	NEO	New Horizons	Non-mainstream	2001
	KF	Conservative People's Party	Mainstream	1915
	DF	Danish People's Party	Populist radical right	1995
	LA	Liberal Alliance	New / Non-mainstream	2007
	V	Denmark's Liberal Party	Mainstream	1910
	EL	Unity List – The Red-Greens	Radical left	1989
Denmark	RV	Radical left	Mainstream	1905
	S	Social Democracy	Mainstream	1871
	SF	Socialist People's Party	Radical left	1959
	CIU	Convergencia i Unió	Non-mainstream	1978

	PP	Partido Popular	Mainstream	1989
Snain	PSOE	Partido Socialista Obrero Español	Mainstream	1879
Spain	UPD	Unión Progreso y Democracia	New / Non-mainstream	2007
	IU	Izquierda Unida	Radical left	1986
	KESK	Finnish Centre	Mainstream	1908
	кок	National Coalition Party	Mainstream	1918
	SFP	Swedish People's Party in Finland	Mainstream	1906
Finland	PS	True Finns	Populist radical right	1995
Tillialiu	KD	Finnish Christian Democrats	Mainstream	1958
	VIHR	Green Alliance	Non-mainstream	1987
	VAS	Left Alliance	Radical left	1990
	SDP	Finnish Social Democratic Party	Mainstream	1899
	UDF / MoDem	UDF / MoDem	Mainstream	1978
	UMP / NC	Union for a Popular Movement / New Centre	Mainstream	2002
	EELV / Verts	Europe Ecology The Green	Non-mainstream	2010
France	FN	National Front	Populist radical right	1972
	PS	Socialist Party	Mainstream	1969
	PCF / FG	French Communist Party / Left Front	Radical left	1921 / 2008
	PRG	Radical Party of the left	Non-mainstream	1972
	Grüne	Alliance 90 / The Greens	Non-mainstream	1980
	CDU/CSU	Christian Democratic Union of Germany	Mainstream	1945
Germany	FDP	Free Democratic Party	Mainstream	1948
	PDS/ Linke	Die Linke	Radical left	2007
	SPD	Social Democratic Party of Germany	Mainstream	1875
	ANEL	Independent Greeks	New / Non-mainstream	2012
	ND	New Democracy	Mainstream	1974
	DIMAR	Democratic Left	New / Non-mainstream	2010
	PASOK	Panhellenic Socialist Movement	Mainstream	1981
Greece	ChA	Golden Dawn	Populist radical right	1993
	SYRIZA	Coalition of the Radical Left	Radical left	2004
-	KKE	Communist Party of Greece	Radical left	1924

	LAOS	Popular Orthodox Rally	Populist radical right	2000
	BF	Citizens' Movement	New / Radical left	2008
	BF	Bright Future	New	2012
	SSF	Independence Party	Mainstream	1929
Iceland	VG	Left-Green Movement	Non-mainstream	1999
iceianu	XF	Liberal Party	Non-mainstream	2009
	Р	Pirate Party	New	2012
	FSF	Progressive Party	Mainstream	1916
	S	Alliance – Social Democratic Party of Iceland	Mainstream	2000 / 1916
Ireland	FF	Soldiers of Destiny	Mainstream	1926
	FG	Family of the Irish	Mainstream	1933
	GP	Green Party	Non-mainstream	1981
ITEIaTIU	LAB	Labour Party	Mainstream	1912
	PD	Progressive Democrats	Non-mainstream	1985
	SF	We Ourselves	Radical left	1905
	Verdi	Federation of Greens	Non-mainstream	1990
	IdV	Italy of Values	Non-mainstream	1998
	PRC / PDCI	Communist Refundation Party / Party of Italian Communists	Radical left	1998
	LN	League North	Populist radical right	1989
Italy	M5S	Five Star Movement	New	2009
italy	PD	Democratic Party	Mainstream	2007
	PdL	The People of Freedom	Mainstream	2009
	SC	Civic Choice	New	2012
	SEL	Left Ecology Freedom	New	2010
	UDC	Unione di Centro	Non-mainstream	2002
	CSV	Christian Social People's Party	Mainstream	1944
	GRËNG	The Greens	Non-mainstream	1983
Luxembourg	DP	Democratic Party	Mainstream	1955
Luxeiiibouig	ADR	Alternative Democratic Reform Party	Non-mainstream	1987
	LENK	The Left	New / Radical left	1999
	LSAP	Luxembourg Socialist Workers' Party	Mainstream	1902

Malta	PL	Labour Party	Mainstream	1921
Iviaita	PN	Nationalist Party	Mainstream	1926
	SV	Socialist Left Party	Radical left	1975
	AP	Labour Party	Mainstream	1887
	SP	Centre Party	Mainstream	1920
Norway	KRF	Christian People's Party	Mainstream	1933
Norway	Н	Right	Mainstream	1884
	V	Left	Mainstream	1926
	FRP	Progress Party	Populist radical right	1973
	MDG	Environment Party	Non-mainstream	1988
	SP	Socialist Party	Radical left	1972
	GL	Green Left	Non-mainstream	1991
	PvdA	Labour Party	Mainstream	1946
	D66	Democrats 66	Non-mainstream	1966
Netherlands	CDA	Christian Democratic Appeal	Mainstream	1980
	VVD	People's Party for Freedom and Democracy	Mainstream	1948
	CU	Christian Union	Non-mainstream	2001
	LPF	Lista Pim Fortuyn	Populist radical right	2002
	PVV	Freedom Party	New / Populist radical right	2004
	BE	Left Bloc	Radical left	1999
	PCP/PEV	Portuguese Communist Party / Ecological Party The Greens	Non-mainstream	1921 / 1982
Portugal	PS	Socialist Party	Mainstream	1973
	CDS-PP	People's Party	Non-mainstream	1974
	PSD	Social Democratic Party	Mainstream	1974
	V	Left Party	Radical left	1917
	MP	Environment Party The Greens	Non-mainstream	1981
	S	Social Democratic Workers' Party	Mainstream	1889
Sweden	С	Centre Party	Mainstream	1913
	KD	Christian Democrats	Mainstream	1964
	М	Moderate Coalition Party	Mainstream	1904
	FP	Liberal People's Party	Mainstream	1934

,	SD	Sweden Democrats	Populist radical right	1988
	GPS	Green Party of Switzerland	Non-mainstream	1986
	SP	Social Democratic Party of Switzerland	Mainstream	1888
Switzerland	GLP	Green Liberal Party Switzerland	New	2007
	CVP + CSP	Christian Democratic People's Party	Mainstream	1912
	BDP	Civic Democratic Party Switzerland	New	2008
	FDP	The Liberals / Liberal Party of Switzerland	Mainstream	2009 / 1913
	SVP	Swiss People's Party	Populist radical right	1971
UK	LAB	Labour	Mainstream	1906
	CON	Conservative and Unionist Party	Mainstream	1832
	LD	Liberal Democrats	Non-mainstream	1988