

# **Outsiders, Elections and Equilibriums. Dualization in the Labor Market as a Cause of Electoral Volatility**

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I, the undersigned JORGE GALINDO ALFONSO hereby declare that I am the sole author of this thesis. To the best of my knowledge this thesis contains no material previously published by any other person except where due acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

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## Abstract

Why do crises affect to the stability of some party systems more than others? Three main answers have been proposed: cleavage variation; change in the institutions/rules of the electoral game; external shocks that affect the voters' evaluation of parties' performance. But these perspectives use a definition of volatility (Pedersen 1980, 399) that does not capture the key aspects of the phenomenon. To avoid this I depart from a concept of the party system as an oligopolistic equilibrium between voters, dominant parties (inside the equilibrium) and smaller parties (outside the equilibrium). An economic shock affects the party system stability through the labor market structure. The shock increases the number of outsiders (workers with low employment protection, unemployed) and makes their situation more precarious, pushing them to punish the dominant parties. I use a OLS regression as well as a first difference approach to show that when a shock is in place, a higher number of outsiders will generate more electoral volatility outside the equilibrium. However, an increase in temporary workers in a country does not provoke higher volatility. I explain how temporary workers have evolved in a particular way during this crisis that is different from other outsiders. Finally I apply a micro-level test to show that a worker with the category of outsider in the labor market has more probability to vote to a party different from the core than an 'insider'.

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## List of Abbreviations

CDU: German Christian-Democratic Party

EPL: Employment Protection Legislation

EU: European Union

GLES: German Longitudinal Election Study

OECD: Organization for Economic Cooperation and Development

OLS: Ordinary Least Squares

SPD: German Social-Democratic Party

SD: Social-democratic

# 1. Introduction

Europe is going through one of the hardest economic crisis in its modern history. The crisis has countless effects, and one of them seems to be the erosion of party support in almost every country. Since the crisis started in 2008, almost every single country in the continent has replaced its government. Moreover, in some of them the whole party system has been put upside down. Greece, Italy, Denmark, France, Spain or Ireland are countries that have witnessed how dominant parties have lost a significant amount of support with smaller, even new organizations rising from nowhere. The size of the shock does not explain this variation. The biggest impacts of the crisis took place in countries like Finland (-7.1% of real GDP in 2009) or Estonia (-14.6%), and no significant change in the party system was observed in these places. The correlation between crisis and volatility should be more complex, bearing a hidden mechanism explaining why some countries have experienced higher erosion in their party systems.

I claim that the effect of shocks in party system stability should be understood through the structural positions of voters in the economy as well as providing a mechanism explaining why does the aggregate change happens. More specifically, I point to the effect of dual labor markets in a move of votes from the core of the party system (the most voted groups) to the periphery (the least voted groups or newcomers). I understand dualization as the division of workers between insiders (those who have little or no exposure to the risk of being unemployed) and outsiders (those who either have a considerable exposure to the risk of being unemployed or that are already unemployed). I argue that once a shock is in place it generates a certain amount of new outsiders as well as it deteriorates the evaluation of the managing performance of the main parties made by both new and existing outsiders. The shock accelerates a structural tendency with this double effect. These two effects will reflect in an erosion of supports for the main political parties because the electors will perceive that the rulers are to blame for their worse situation, compared to that of other groups and countries within the continent. The mechanisms

through outsiders decide to switch their vote are related to the notion of retrospective economic voting: outsiders will blame the existing rulers for their current situation, as dualization in the labor market is largely a result of regulation. This blaming will be extended to all dominant parties and not only to those in government because all of them will be considered as non-credible alternatives to the incumbents in terms of solving the problems of outsiders.

I add a second-level argument: not every outsider faces the same challenges in every country. More specifically, during a crisis there is a mixed effect on temporary workers: on one hand, the job destruction tends to center on them, particularly on countries with a high difference in employment protection between temporary and open-ended contracts. This is: the least productive among the temporary workers become a part of the unemployed. On the other hand, and as a consequence, the massive layoff process leaves the most productive among the temporary workers on their positions. Moreover, in highly dualized countries most of new contracts happen under a temporary form. These two changes generate an 'insiderized' form of outsiders, deleting both the increase effect and the blame effect.

First of all the notion of what a party system is and how shall social theory contemplate the changes within it should be spelled out. I do it in Section 2. In Section 3 I discuss which are the causes presented by the literature to explain changes in voting patterns, and how does every one relate to the situation I am aiming to. Once the dependent variable and the micro level is drafted, I move through the independent side of the equation in Section 4, characterizing the key features of the structure of labor markets I am looking at. In Section 5 I build the explanation of the mechanism, the theoretical link between both sides of the formula characterizing outsiders' behavior as voters. Then I proceed to specify and test hypotheses in Section 6. I run different analyses to ensure robustness: I use a cross-national regression to test whether there is a relation between electoral volatility and dualization; a first difference test to check that the relation holds when considering structural change and not only the new level situation; a test on whether there

is an influence of the overall sentiment and expectations over economic performance; and a country-specific analysis focused on Germany to expose the micro-level functioning of the mechanism. I also include a further discussion on temporary workers using Spain as an example. Finally, a conclusion is deployed in Section 7, acknowledging the main shortcomings of the present work from which I derive future research possibilities.

Hopefully, this work will contribute to the existing body of literature advancing the understanding of electoral volatility linked to party system stability in a more sound way, using a solid theoretical framework departing from a novel notion. Also, I try to introduce a new *explanandum* for the phenomenon comprehending two different kinds of factors (cleavage/constituency change and external shock) interacting. But the insights provided here may go beyond the academy, shedding some light on why certain labor market reforms are never undertaken and some fail to find support. Rueda (2005) showed how social-democratic (SD) parties would not end with dualization in the labor market due to the fact that insiders are their core constituency. Rueda and Lindvall (forthcoming) translate this to the electoral world, showing how SD parties face a dilemma: they may either propose an electoral platform appealing for outsiders, losing votes in their core constituency, or keeping the insiders' perspective and thus pushing outsiders out of their base. The present work deepens on this idea and enlarges it to every kind of governing party, introducing a lesson for policymakers: the dilemma may turn against them if outsiders are big enough and angry enough to push for smaller parties and against their groups in the next election.

## 2. The dependent variable: volatility in the party system

Political parties are the fundamental mechanism that representative democracies use for aggregating preferences and channeling conflicts over different issues (Mainwaring and Scully 1995, 6). In each election, citizens choose which electoral platform makes a better match for their preferences. Voting is not the sole feature of party system (Sartori 1976), but it is arguably the most important one as it conveys in one action the past and future policy actions, both through accountability and electoral choice. There are changes in the aggregate as well as in the individual level over elections, hence vote support varies. This variation is often strong enough to provoke a change in majorities, defining democracy (Przeworski 1991). Therefore, changes in vote support are at the core of any democratic system. Electoral volatility is defined as the change in vote shares obtained by each party over elections (Ascher and Tarrow 1975, 477). Under any definition of democracy, but particularly the minimal versions, it constitutes a crucial indicator of democratic stability (Olson 1998; Bartolini and Mair 1990; Roberts and Wibbels 1999). The assumption that a high level of volatility can affect negatively the stability of a party system is present all across the literature<sup>1</sup>.

Since Pedersen created his index to measure volatility in 1979, three decades of work have occurred based on his seminal proposition. The basis of his approach is to quantify the changes over time on party support among all of them. The formula is quite straightforward: all the votes received by every party at election  $t-1$  are subtracted to all the votes received by every party at election  $t$ , one by one. The differences are turned into absolute numbers to avoid mutual cancellation, and then summed up and divided between two to remove duplication. The result gives an idea of how big has been the change in votes among parties when comparing election  $t$  and election  $t-1$  (Pedersen 1980).

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<sup>1</sup> The references cited up to this point accomplish this.

At a first sight it seems to be a sound approach: it gives a clear and understandable account of the vote variation. But as Powell and Tucker (2009) point out, this formula hides a crucial confusion on how volatility affects the stability of the party system. The theoretical reflection on the definition of what a party system is, how does it work and why is volatility relevant for political science has been insufficient. This lack of theoretical care has led to a widespread use of a tool without a full consideration of what does this index actually measure. For instance, Mainwaring (1998) is a seminal work on the degree of institutionalization and stability<sup>1</sup> of Third Wave democracies that points to considering a higher Pedersen index as a proof of lower stability<sup>2</sup>. Some recent examples in the same fashion are Lewis (2000), Tavits (2005), Kuenzi and Lambright (2005), Mozaffar (2005), Lindberg (2007), but there are many more.

Powell and Tucker (2009), completed by Powell and Tucker (2012), start their critique from a distinction between two phenomena. They see an essential difference between vote changes among parties that already existed in previous elections and are recognized and have a relative support base, and changes between these parties and the newcomers. While, according to them, the former variation is considered as 'normal' in representative democracies around the world the latter change is usually associated with party system instability and pose various challenges to representative democracies (Powell and Tucker 2012, 3). Following this approach, what the literature based on Pedersen's perspective tried to capture is *the volatility related to newcomers*. But using a unique aggregated formula the measures confused both.

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<sup>2</sup> Mainwaring (1998) and many other authors tend to use the notion of institutionalization instead of stabilization or stability. I consider that this may be confusing, as the notion of institution is highly disputed in the general literature of social sciences. Moreover, as electoral volatility may be affected by other elements that fall under the category of institutions, such as electoral rules, I prefer to leave this concept aside and focus on the much clearer and straightforward idea of stability, which refers to the absence of change in the distribution of supports among parties over time. For the purposes of the present work, focusing only on the voting process and not in all the different faces of a party system, this should suffice.

This new vision builds upon some recent papers. Birch (2001) considers necessary to differentiate between vote changes among existing and new parties. Tabits (2008) tracks down the causes of new party entry in the system. Mainwaring et al (2009) compile volatility effects as a result of new party entry. Behind these notions there is a specific conception of party system as market equilibrium. Parties are the representation of conflict of interests; they engage in a process (elections) to resolve which portion of influence every group is going to have in the conflict solving mechanism. In elections, parties supply to people with solutions fitting their interests. Voters then choose whom to support, making a 'payment' in the ballot. This notion, implicit in many comparative politics work, is rarely made explicit. And the lack of this explication is what made it so difficult to come with a critique to the Pedersen index.

The particularities of this market make the Pedersen approach inadequate to measure party system change. To start with, the number of interest conflicts that divide a society is limited, and not all have equal relevance. Normally some issues tend to define more the political agenda (Rae and Taylor 1970). Also, electoral rules often favor stability over representation (Cox 1997). But the most important feature of the elections market is its tendency to concentrate purchases (i.e. votes). The utility of each vote for the individual who casts it increases with the expected aggregated number of votes of the party as the goal is to influence in policymaking. The voting market is an oligopoly as some parties tend to accumulate more supports than other. Market clears when the utility regarding conflict resolution and probability of influence the policymaking reach a maximum for every voter. As a by-product, the oligopoly includes a reduced number of suppliers who are part of the core and a larger number of parties willing to enter. Hence, there is a crucial difference between changes within the oligopoly and changes that attack it. As stability does exist, we tend to wonder why changes arise. The Pedersen index approach cannot answer properly to this question because it cannot capture this difference and

confuse both phenomena. Therefore, a new measure is needed. And this measure should explicitly come from the notion of the party system as equilibrium.<sup>3</sup>

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<sup>3</sup> A short note about turnout: not voting is a de facto disengagement of the political process of elections, and hence a distinct phenomenon that should be treated apart from electoral volatility, even when it might fall in the theoretical framework deployed here.

### 3. The independent variable: explaining volatility

Broadly speaking, there are three answers proposed by the literature to the question of the origin of volatility. A significant amount of work has been devoted to explain how the rules and institutions of the electoral competition affect the voting decisions of the actors. For instance, Cox (1997) argues that the number of parties in competition is a function of electoral coordination as there are fewer parties than seats to be filled. When the magnitude of the district is higher, coordination is more feasible as fewer votes are necessary. Electoral barriers and entry costs (Tavits 2006; Hug 2001) have also been cited as factors, as well as other institutional aspects (Birch 2001) such as corruption (also in Mainwaring et al 2009). It is impossible to deny the effect of these settings in the evolution of volatility. However, this group of factors is much more relevant when considering a long-term evolution of the system, and has little or no application in the case that occupies the present work: a specific change in a short time frame with little or no institutional modification.

The second strand of literature for explaining electoral volatility is more related to my goals: economic performance as a cause of change. Implicitly based on the theory of economic voting (Stokes 1960; Ferejohn 1986), in this story incumbents receive a punishment in case the economy is performing badly (Lewis-Beck and Stegmaier 2000). For Roberts and Wibbels (1999), the relation is much less straightforward and may be more closely related to big shocks (positive or negative) and not to average development. According to Lewis-Beck and Nadeau (2012), poor performance makes the electorate particularly sensitive. This is: in a situation as the current, economic retrospective voting is more feasible than preference-based voting (Lewis-Beck and Nadeau 2012).

This comparison leads to the third possible explanation of volatility: differences on policy preferences. For instance, Madrid (2005) identifies ethnical divisions as a key *explanandum* for electoral volatility in Latin America. Also, Ferree (2010) points to the size and configuration of

ethnic groups to explain volatility and stability in the African context. These works rely on the notion of cleavages (Lipset and Rokkan 1967) and the idea of voters taking a spatial position in an imaginary line between the extremes of each cleavage (Downs 1957). As such, it clashes with the notion of retrospective voting. While for the latter voters change their mind based on their evaluation of the incumbents performance, for the former the evaluation is *ex ante* and based on the electoral platform. This is one of the oldest and more long-lasting questions in political science, and it is well beyond the scope of the present work trying to solve it. However, if the voters were simply retrospective, the loss in GDP would straightforwardly explain electoral volatility, but as I stressed before it does not. Conversely, if it were a mere cleavage effect, we would observe a change only if preferences were modified, and any considerations of which importance may a shock have would disappear.

A possible compromise comes from considering what a cleavage exactly determines. A cleavage refers to a structural difference among groups within the population, related to a specific characteristic. Therefore it divides groups in conflict. A shock in a country is likely to affect individuals in a different way depending on their position in the structure of, for instance, the labor market. Those who are more affected will give a larger importance to retrospective voting. This is consistent with the cited work of Lewis-Beck and Nadeau (2012) and would fill the requirement by Roberts and Wibbels (1999) of not taking the relation between shock and volatility as a simple one. It is also coherent with recent work on retrospective voting based on both experiments and survey analysis (Marx, unpublished, 5). In simple words, the inference made by the citizens affected by a shock would be something like ‘things are going worse for me because those who are in power are actually taking the wrong decisions for my interests.’ Back to the notion of party system as equilibrium, volatility outside it arises when the utility obtained from the performance of the parties is not enough to compensate for the loss of utility if the vote is moved to smaller parties with less options to influence the policy-making process.

Note that in this story the shock is just an activating spark of certain structural conditions that are the true determinant. Following this logic and maintaining the hypotheses in the field of retrospective voting, an adequate research strategy for explaining a given case of electoral volatility would be (1) identifying the shock and separating it from a previous or 'control' period without shock; (2) finding the effects in the different parts of social structure; (3) analyzing how did this shock affect unequally to these groups in their objective situations for the distinct economies considered; (4) elaborate testable hypotheses in order to find to what extent did this changes affect the oligopolistic equilibrium in each party system. Steps 1 to 3 are considered in the following Section before jumping to empirics in step 4.

## 4. Dualization as a cause for volatility

In 2008 the European economy suffered the biggest shock since the Second World War. The loss in terms of aggregated income in 2009 deeply affected every single Western country. The recession continued in 2010 if not in terms of GDP loss, in the labor market and other fields of the economy. Before that, the economy was enjoying a long growth phase that was fueled in many cases by a housing bubble. The shock was particularly harmful for the labor markets in Western countries. Unemployment rate in the EU rocketed to 11% at the end of 2012 from 6.9% in 2007 (Eurostat 2013). Part-time workers escalated from 20% to 22.4% in the same period (Eurostat 2013). Temporary workers have lost their jobs in massive quantities, dropping their share in the whole labor force (Eurostat 2013).

These changes have an asymmetric distribution among countries. While some countries such as Germany have managed to even create employment (and increase its share of temporary workers), others like Spain or Greece have massively destroyed. This destruction brought lack of confidence and even indignation regarding the expected economic situation in the short and middle run.

The cleavage in place when looking at these dynamics may be labeled as dualization. Dualization refers to the division between those workers whose job position is protected by different measures making more costly for firms to fire them (insiders) and those who do not have such protection (Lindbeck and Snower, 1988)<sup>4</sup>. Rueda (2005) recovered this definition and filled it with analytical power in order to explain what he considers as puzzling policy choices made by SD parties. Rueda (2005) starts his analysis by disaggregating labor in a fashion similar to Lindbeck and Snower (1988) and other related work (Lindbeck and Snower 1984, 1985, 1986;

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<sup>4</sup> The notion of dualization and the difference between insiders and outsiders have been conceptualized in several ways, some of them being not directly related with the labor market. Here I choose to focus on its labor aspect. For a broad review of the concepts, see Davidsson (2009).

Shaked and Sutton 1984; Blanchard and Summers 1986): insiders would be those workers with highly protected jobs, while outsiders would be constituted by unemployed *and workers with low level of protection*, not only in the informal sector, but also involuntary part-time employees or temporary workers. Rueda (2005) also includes students in its analysis as he considers that they face an uncertainty equivalent to that of the rest of outsiders. Finally, Rueda (2005) argues that while insiders will care about job protection (EPL), outsiders will care about unemployment benefits and job access (low EPL). SD parties have insiders as their core constituency, and hence will tend to apply high EPL when in office.

Different authors have proposed alternative perspectives on the division between insiders and outsiders. Paugam (2000) and other sociologists propose labeling as outsider to every job that is not only characterized by insecurity, but also by 'personal satisfaction' and payment. This conceptualization is problematic as it seems rather difficult to make a clear difference on what is and what is not 'satisfying'. Instead of that, but still putting an emphasis on the subjective dimension, other authors propose to contemplate self-perceived job security as the defining variable. Several works have been devoted to self-perceived job security related to the insider/outsider division (Mughan 2007; Green 2009). Implicit or explicit on this perspective is the idea of qualifying a worker as an insider or an outsider because of its self-perceived job insecurity. Duman and Kemmerling (unpublished) find a smooth correlation between this subjective dimension and the demand of higher EPL. Also, they argue that is highly debatable to make a clear cut between insiders and outsiders when (1) the distinction in both policy preferences and risk exposure is gradual and not dichotomous; (2) the relation between objective position and subjective attitude may be mixed, i.e. outsiders with high skill level may be much more confident of getting a (better) job than insiders with low or non-marketable skills.

This last point connects with another strand of literature in which skills are proposed as the key variable to understand dualization (Giesecke and Gross 2003; D'Addio and Rosholm

2005). But the work of Polavieja (2006) has shown how this distinction is insufficient as segmentation also affects to high-skilled workers. This is clear, for instance, in the case of Spain, where temporary contracts reached one third of the labor force during the first half of the 2000s. These contracts were distributed almost equally among skilled and unskilled workers, and the most important factor explaining the tenure of a fixed-term contract was age, not education. This is a logical pattern in labor markets in which entry barriers to the open-ended contracts are very high, as companies face big potential costs in terms of severance payment with each new worker of this kind, and therefore try to use temporary contracts instead.

The discussion around what is dualization and how to define insider and outsider as separated categories often conflates the causes of being an insider/outsider, the definition of what does it mean to be an insider/outsider, and the consequences of each of the positions. Hence, the authors worried about skills consider unskilled as outsiders, but taking Rueda (2005) perspective there would be no problem with admitting the skill level as a possible determinant of ‘outsiderness’, instead of a defining characteristic of it. This determinant will have a variable degree of correlation with the central conceptualization. The argument may be extended to any feature that may condition the position of a worker in the labor market: family origin, earned income, even disability.

More complex is the case of self-perceived risk. In the same line, it is arguable that this feature is a consequence of the position in the labor market. Using Rueda (2005) concept of insiders and outsiders, the latter would be likely to have a higher self-perceived risk and the former a lower one. But as pointed out by Duman and Kemmerling (unpublished) this correlation is not straightforward because the same factors affecting the condition of insider/outsider situation also affect the likeliness of shifting from the latter to the former or vice versa. Also, this perception can be affected by the overall economic situation (Häusermann and Schwander 2012 as cited in Duman and Kemmerling, unpublished).

The endogeneity problems when confronting the different possible definitions of dualization are summarized in Figure 1, in which I also introduce volatility as a (possible) outcome of dualization.

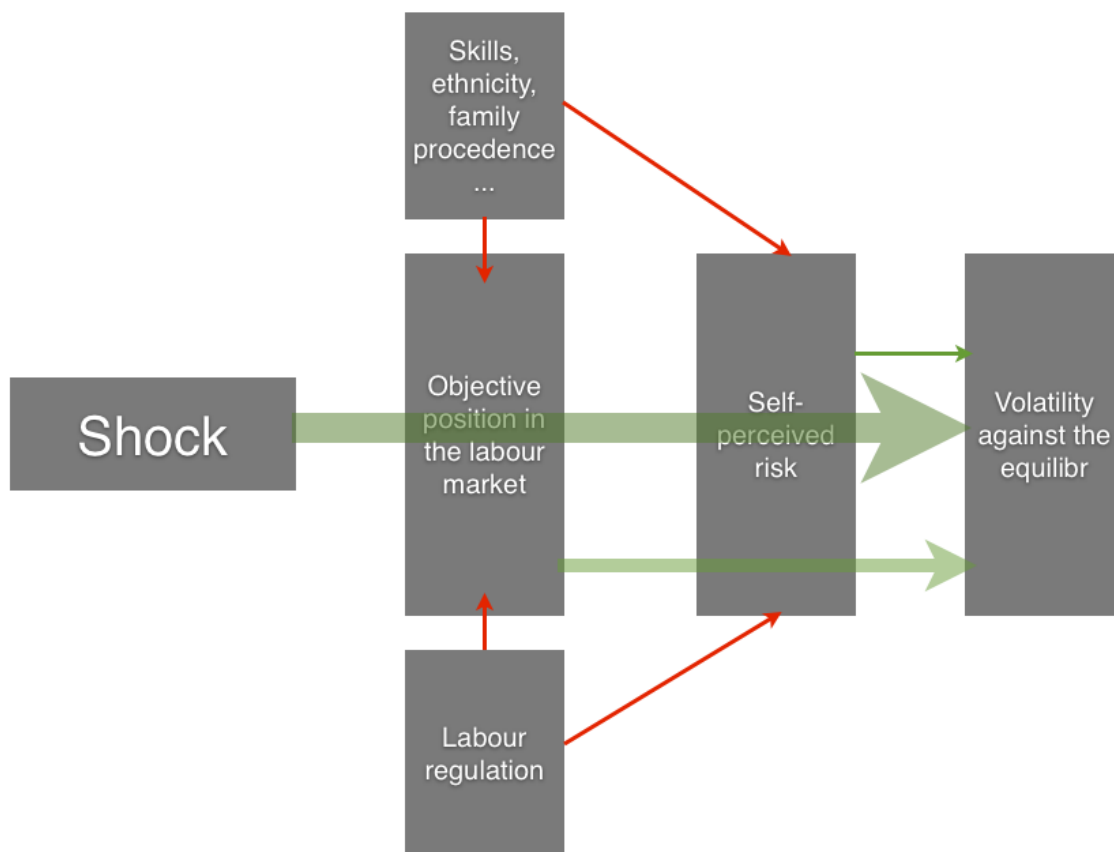


Figure 1: The relation between an economic shock, the structure of the labor market and electoral volatility. Source: own elaboration.

In order to keep clarity and parsimony, structural conditions affecting the likelihood of an individual of being an outsider will be dropped from this analysis. One causal phenomenon at a time is enough. Having put this aside the choice is between the subjective and the objective definition. It is necessary to remember the primeval goal of the present paper: to understand how economic shocks affect electoral volatility through the labor market structure. Choosing the self-perceived job insecurity as a definition of what an insider or an outsider is would not actually address this issue. More properly, it would be a way to measure how the crisis changes agents' perceptions about future economic situation and this fact modifies voting behavior. I believe the

mechanism through outsiders (defined as the unemployed and those with atypical contracts) influence volatility is related to their perception of the economic performance of those who hold the power to make or influence policy choices. Expectations regarding future economic situation are more properly defined as a consequence of it. Hence, although it might be interesting to keep a distinction between the effects of variables of self-perception and pure structural variables, I consider that the self-perception of job risk enounces a phenomenon correlated to but distinct from the objective position in the labor market. Hence, I stick to the objective definition of dualization from Rueda (2005) and leaving the subjective approach to further research in the coming future. Hence, the final phenomenon to test is whether a higher degree of dualization affects volatility when a shock is in place (and does not have an effect otherwise).

There is an important nuance to make when addressing the objective definition of insider/outsider in a crisis. It has been rightly argued that temporary employees may face mixed effects during a shock due to the dual dimension of this position. Temporary employment is usually portrayed as a bridge to open-ended contracts (McGinnity et al 2005; Steijn et al. 2006; Booth et al 2002), at least as much as a continuous situation of precariousness (Giesecke and Gross, 2003; Gash, 2008). The shock may incentive the layoff of those temporary workers who were less productive, thus probably closer to a precarious situation than to a 'gate to the insider world'. In a country with a highly dualized labor market provoked by high employment protection in open-ended contracts and low protection for atypical contracts this effect will be accentuated. The result of this will be an important bias in the composition of temporary workers after a shock and during the recessionary phase in the countries with high dualization: those remaining in their positions are among the outsiders who will be in the 'good side' of the bad side of dualization: the one that may lead to a better situation (as insiders) in the future instead of being a chronic and long-lasting condition. Therefore outsiders should and will have to be disaggregated.

## 5. Outsiders as voters

What I have exposed until now is an existing pattern of voting behavior that takes an oligopolistic form. Voters are divided into different categories regarding their position in the labor market. When a shock is in place, the effect of this shock is distinct to every worker depending on her position in the market. Also, the shock will generate a certain amount of new outsiders. But what about how does this effect happen? There is little work done on how do outsiders, as a category, may change or stick to their vote under specific economic conditions.

In terms of the definition of dualization, the closest work to this paper is probably found in Rueda and Lindvall (forthcoming). Here the authors address the electoral implications of being an outsider understood as an objective condition. According to them, SD parties would face a dilemma: either propose high EPL and then facing the risk and the cost of pushing outsiders out of its support and even out of the system (in fact, out of what I call the oligopolistic equilibrium) or propose low EPL and bear with the loss of their core constituency. They test their hypothesis with a case study, Sweden in the 1990s. In the roots of their analysis for the Swedish case is a spatial model with voters choosing policies along a specific line. They introduce elements of complexity in this model: parties count with a core constituency (for SD parties, insider workers; for centre-right parties, owners, managers and businessmen in general) and there is a group of swing voters formed by outsiders who may allocate their vote from centre-left to far-left or to centre-right, depending on the configuration of the party system as well as on the electoral platform of the SD parties. They explain the nominal choice among parties using the position in the labor market. Comparing 1994 and 1998 elections, they come to the conclusion that outsiders did shift their vote out of SD parties, as they did not ‘represent their interests’.

There, outsiders are considered as economic *prospective* voters. They hold an interest on which policies could improve their situation and if a party does not propose them, they will vote for another one. But as the SD party was in power during the 1994-1998 legislature, this vote

switch may be understood as much as prospective-based as retrospective-based. With their proposed model we cannot test whether the change was due to the new electoral platform or to the results of their policies in the term. Hence, this perspective is not helpful when trying to explain how a shock affects voting behavior. As Marx (unpublished) points out, Rueda (2005) and his subsequent work relies on strong assumptions of voters' rationality. They would be sophisticated enough to understand which policies are better for them *beforehand*. I consider that the importance of the structural position of an individual and the consequences that different policies have or do not have for her welfare are better revealed under a shock: the individuals who see their position more affected for it will put a higher weight on retrospective voting. And this may happen with both centre-left and centre-right parties as both may be considered responsible by the voters. Therefore, I agree with Rueda and Lindvall (forthcoming) on qualifying outsiders as swing voters, but I expect their swinging to be retrospective if a significant economic shock is in place, and non-significant (or better said, un-patterned towards smaller parties) otherwise.

Closer to an economic voting perspective, Mughan et al. (2003) exposes how job insecurity affected to the rise of a far right party in the Australian election of 1998. Singer (2013) shows a relation between economic vote and job insecurity for a wide sample of Latin American and Eastern European countries. Both point to the direction I am pointing to. However they depart from a subjective conceptualization of dualization, which I have discarded.

Marx (unpublished) also uses a model on which voters evaluate incumbents' performance in office in a retrospective manner. But he does so relying on an objective definition of dualization. He shows how outsiders in Germany were more likely to vote against the governing party in 2009 as a result of their worse situation. But (1) he refrains to a very narrow definition of what an outsider is and (2) he is mainly concerned about the vote out of the government (CDU). I instead propose a broader definition of 'outsiderness' inherited from Rueda's works, including

temporary, part-time workers and unemployed. I will also keep the division between temporary workers and the other categories due to the differentiated effect of crisis on these workers in countries with high dualization as explained above. At the same time, I intend to show that this effect goes beyond voting against the incumbent, as it has been exposed before.

Finally, when it comes to explain the micro mechanism provoking aggregated vote shifting, Marx (unpublished) uses social psychology and invokes the idea of ‘blame attribution’ coming from relative deprivation: temporary workers feel they are deprived from something they consider they are entitled to have (a stable job) compared with other members of society. They blame the government, again following Marx (unpublished), for two reasons: (1) outsiders identify their situation with their shared legal-contractual status and (2) dualism is recognized to be an outcome of policymaking, not a natural status with exogenous causes. I believe that both factors can actually be conflated to produce a more straightforward explanation, consisting on the mere inference: politicians will be blamed simply *because they appear to be the ones to blame*. Institutions, as shown by a large amount of literature and has been translated to the political debate, do generate dualization (Saint-Paul 1996; Saint-Paul 2002; Rueda 2005; Rueda 2007 are only some examples). Outsider voters actually notice that they are worse off than in other parts of society or than in other countries (Emmenegger 2012; Ochel 2009). This also offers an alternative rationale for Rueda and Lindvall (forthcoming) findings. The effect is expected to be particularly concentrated on the governing party, but it will not stop there, and this is why affects to the whole equilibrium and relates to volatility. If outsiders are self-conscious of their own situation and the one of their peers, they can and will infer an institutional cause for it.

For temporary workers, this identification may not happen, as the aggregate behavior of this category is tricky under a shock. If a country has been losing temporary contracts as a percentage of total dependent workers and has witnessed a significant increase of productivity due to this, the inference to make is that the outsiders who would actually embark in a blame

strategy against the main party system have been transferred from the section of temporary workers to those unemployed or discouraged. Hence, the effect is expected to be different, and even contrary to the rest of the outsiders. This distinction is to be tested in the coming Section.

## 6. Testing the relation between volatility and dualization

In order to find out if there is a correlation between electoral volatility outside the equilibrium and the number of outsiders once an economic shock affects the economy, I follow a simple two-step analysis. Using an OLS model I test the direction and intensity of this relation. First I test it for a 'world without crisis' and then for a 'world after the shock'. Fifteen countries represent both worlds from Western Europe<sup>5</sup> and their respective parliamentary elections right before and right after the crisis. Hence, this short experiment will show (1) if there is an effect of dualization on volatility outside the party system equilibrium when a crisis is in place and (2) if this effect can explain to any extent the differential in volatility among these Western countries. Actually, the focus is put on the cross-country variance, and step (1) is a mere pre-condition that should be spelled out for showing the shock as the activating factor and nothing more. I do not attempt to explain variation of volatility over time, but over different economic structures. But as the economic shock is the intervening factor I consider the comparison to be clarifying and useful. In order to add robustness to the results, I subsequently add more data. More specifically, I address three different points: dealing with differences instead of levels of 'outsiderness' and volatility; the possibility of mixing up the size and the nature of the punishment effect (more outsiders vs. population with a worse sentiment towards the functioning of the economy); and the specific form of the micro mechanism.

### 6.1. The core link between volatility and outsiders

The dependent variable is volatility outside the equilibrium as measured by Powell and Tucker (2009) and Powell and Tucker (2012): first, I find the difference in votes between the election at  $t$  and the election at  $t-1$  by every single party. Then I obtain the absolute values for each of them. After that I sum up the results dividing them into two categories: inside the equilibrium and outside the equilibrium. Volatility inside the equilibrium will be formed by

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<sup>5</sup> Unfortunately, Austria is excluded from the sample because the last election held in the country at the moment of writing this was in 2008.

absolute vote changes in parties that were at  $t-1$  inside the National Parliament and are still at  $t$ . All the rest (parties exiting from the parliament, parties entering in the parliament and parties outside it) will be considered as volatility outside the equilibrium. The sum is divided by two to avoid duplicity, and constitutes the dependent variable.

Table 1 shows three measures of volatility for the considered country sample in their last election before the 2008 economic shock and the first one after the shock. These measures are the Pedersen index and its decomposition in volatility inside and outside the equilibrium with the explained threshold. There is a clear increase in all volatility measures in the latter period. This gives a solid base to consider the search of new factors acting under the shock.

	Last election before the crisis			First election after the crisis		
	Pedersen	Inside eq.	Outside eq.	Pedersen	Inside eq.	Outside eq.
Belgium	16.3	8.23	8.07	14.95	13.5	1.445
Denmark	11.05	7	3.55	14.75	9.7	5.05
Finland	6.7	6.45	0.25	15.05	14.8	0.25
France	16.82	5.71	11.1	21.38	14.44	6.94
Germany	8.5	7.6	0.9	7.9	7.2	0.7
Greece	11.67	4.11	7.56	51.58	23.08	28.5
Ireland	6.1	4.05	2.05	29.25	24	5.25
Italy	21.43	3.83	10.35	41.765	17.965	23.745
Netherlands	19.7	13.1	7.8	22.65	22.25	0.4
Norway	19.18	17.65	1.53	7.22	6.4	0.82
Portugal	15.25	12.48	2.77	12.47	8.4	4.27
Spain	5.87	2.705	3.165	17.5	11.89	5.6
Sweden	16.7	14.55	2.15	8.62	8.06	0.56
Switzerland	7	5.3	1.7	12	12	0.01
UK	8.4	5.45	2.95	10.75	4.45	2.95
<b>Sumatory</b>	<b>190.67</b>	<b>118.215</b>	<b>65.895</b>	<b>287.835</b>	<b>198.135</b>	<b>86.49</b>

Table 1: Measures of Volatility. Source: own calculations based on data compiled from each Government Agency responsible for electoral procedures.

At a more detailed glance, some countries stand out: Italy, Greece, France, Spain, Ireland and Portugal. Those who are familiar with the development of the European crisis may be already envisaging a pattern. In order to nail it down I move to the other side of the equation.

The chosen explanatory variables come from the OECD Employment Database, and are the number of unemployed, discouraged people and involuntary part-time workers as well as the

number of temporary workers. Temporary workers are kept separately due to the already explained reasons that I retake explaining the results below.

Table 2 presents the measures of three variables for each country in the year corresponding to their last election before the 2008 economic shock and the first one after the shock. If there is any pattern that comes out at a first sight, it is the amount of outsiders measured as unemployed + discouraged workers + involuntary part-time workers.

	Last election before the crisis			First election after the crisis		
	GDP growth	Outsiders	Temporary	GDP growth	Outsiders	Temporary
Belgium	2.88%	11.18%	6.82%	-2.80%	11.50%	7.13%
Denmark	1.58%	7.48%	8.05%	1.10%	12.50%	7.65%
Finland	5.73%	13.69%	12.97%	3.30%	15.50%	12.53%
France	2.29%	12.74%	12.09%	1.70%	14.10%	12.05%
Germany	0.69%	16.90%	11.81%	1.10%	13.30%	12.21%
Greece	3.53%	11.10%	6.41%	-7.10%	21.80%	6.05%
Ireland	3.70%	5.70%	6.34%	-0.90%	22.02%	7.00%
Italy	2.20%	18.20%	9.27%	-2.40%	24.40%	9.20%
Netherlands	3.94%	9.73%	15.09%	1.00%	9.40%	14.84%
Norway	2.59%	9.31%	8.58%	0.10%	5.60%	7.14%
Portugal	7.75%	11.10%	15.63%	0.10%	19.56%	15.38%
Spain	3.47%	15.60%	24.01%	-0.30%	32.76%	16.63%
Sweden	4.29%	11.30%	14.65%	-5.00%	13.76%	13.56%
Switzerland	3.84%	8.31%	9.64%	3.00%	8.30%	9.69%
UK	2.77%	8.50%	4.80%	-4.00%	12.45%	4.87%

Table 2: Economic performance and labor market data. Source: OECD Statistical Database.

Spain, Italy, Ireland, Greece and Portugal stand out among the rest. Conversely, the level of growth does not seem to follow any pattern related with volatility. Moreover, confronting both tables no correspondences seem to exist in the non-crisis period. This is consistent with the enounced theoretical framework in Sections 4 and 5. But in order to confirm all these intuitions, it is time to move to regression analysis. The three core hypotheses to test are the following:

*H1: When a shock is in place, a higher number of outsiders, measured as involuntary part-time workers, unemployed workers and discouraged workers will generate more electoral volatility outside the equilibrium.*

*H2: Conversely, when a shock is in place, a higher number of temporary workers will not generate more electoral volatility outside the equilibrium and may even be associated with less volatility outside the equilibrium.*

*H3: Without any shock in place, no significant effect will be observed in the relation between outsider workers and electoral volatility.*

A quick look to the scatter plots gives a clue of validity for H1 and H2. Figure 2 shows the plot for outsiders (excluding temporary workers) and volatility outside the equilibrium. The positive relation is apparent (taking into consideration how small the sample is). The weight of the distribution is located at the low levels of volatility and 'outsiderness', maintaining two 'dense' outliers in terms of the dependent variable (Greece and Italy). The next Figure plots the relation between temporary workers and volatility. Now the relation has changed its direction and it is much less clear.

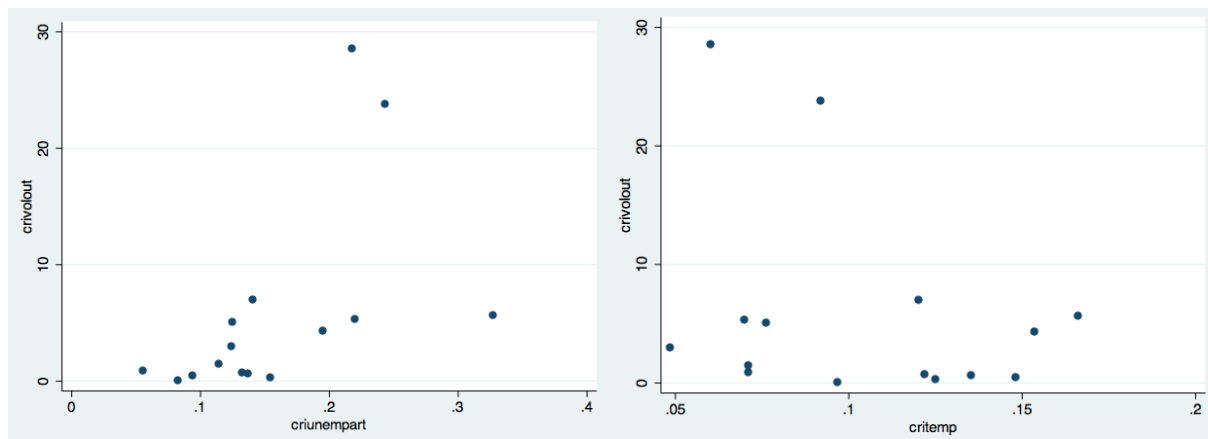


Figure 2: Scatter plots relating volatility and outsider workers. Source: own calculations.

These sketches are coincident with the analysis. Table 3 shows the results for two OLS models regressing the electoral volatility outside the equilibrium on the number of outsiders. A measure of the recession (GDP destruction at the year of election) has been included as a control variable to show that the size of the shock by itself cannot explain the cross-country variation. Also, there has been no significant change in the electoral rules in the countries between one

election and the other. Finally, I include an additional variable in order to control for another institutional changes: the number of effective parties present in the Parliament. This value captures at the same time different institutional features that might be affecting the cross-country analysis, namely the number of feasible options within the equilibrium and, indirectly, as a proxy of the proportionality of the system. This is done in order to control for institutional differences among systems. The small size of the sample makes necessary to take the obtained results with extraordinary caution. The size of the effect won't be as important as its direction.

#### Before the shock

Outsiders	23.32	(0.76)
Temporary	-3.04	(-0.63)
GDP growth	-24.64	(-0.3)
Effective parties	0.3472	(0.5)
Constant	1.337	(0.23)
N	15	
R-squared	0.12	

#### After the shock

Outsiders	67.693	(2.33)***
Temporary	-98.471	(2.18)**
GDP growth	-1.038	(1.93)*
Effective parties	-0.107	(0.08)
Constant	5.729	(0.54)
N	15	
R-squared	0.66	
***Significant at $p < 0.05$ **significant at $p < 0.06$ *significant at $p < 0.1$		

Table 3: Results on a OLS regression for the relation between electoral volatility and labor market structure. Source: own calculations.

The direction of the effects follows what expected in hypothesis 1 and confirms that temporary workers do have a counter-intuitive behavior. Results should be interpreted as they are usually understood with OLS models: as regression coefficients. The model shows how an additional point in the level of outsiders increases volatility outside the equilibrium in 0.67 points, whereas an additional point in the level of temporary workers makes the dependent variable decrease in 0.984<sup>6</sup> points. The effects are quite substantial as a mere point in volatility means in practice *thousands of votes*. The overall fitting of the model is relatively high, and the main searched effect resists the control. Hence, H1 and H2 may be confirmed under this test.

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<sup>6</sup> Results are divided into 100 to equal percentages.

As results are only significant after the shock H3 is confirmed. The directions of the effect remain equivalent between both tests, but the size has seriously diminished and they are all non-significant before the shock. Recapitulating, the amount of unemployed, discouraged and involuntary part-time workers in a country of my sample in relation to the total labor force has a positive, substantial and significant effect in the electoral volatility referred to parties that are or were out of the National Parliament before the election. This relation seems to be significant only if a crisis is in place.

## 6.2. The counter-intuitive effect of temporary workers

Conversely, temporary workers show a weaker but negative link with volatility: the more they are, the less volatility outside the equilibrium is generated, up to 0.98 points of volatility in my index. A rationale for this might lay in the fact that during the crisis those temporary employees who were less productive were the first to be fired, particularly on countries with a higher degree of dualization provoked by a wide gap between employment protection in temporary and open-ended contracts. At the same time, during a recession most of the new-signed contracts are done in the atypical form because the firm is not able to foresee the evolution of its demand in the medium and long term. This makes the composition of temporary workers to change from 'pure' outsiders to 'all type of workers' with a bias towards 'those who are capable to find a job in a crisis', who will tend to protect the current equilibrium. The other, former temporary workers now are part of the unemployed, the involuntary part-time workers or the discouraged<sup>7</sup>.

It is interesting to take a closer look to how the flows have worked during the crisis. Table 4 offers the change in the considered variables before and after the crisis. The evolution of temporary workers seems to confirm the explained intuition: changes are marginal in most countries, peaking in Spain.

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<sup>7</sup> The effect in the first model, before the shock, appears also negative, but it is non-significant above  $p=0.5$ , hence little can be inferred from this result.

	Outsiders	Temporary	Volatility out
Belgium	0.32%	0.32%	-6.625
Denmark	5.02%	-0.40%	1.5
Finland	1.81%	-0.45%	0
France	1.36%	-0.05%	-4.16
Germany	-3.60%	0.40%	-0.2
Greece	10.70%	-0.36%	20.94
Ireland	16.32%	0.66%	3.2
Italy	6.20%	-0.07%	13.395
Netherlands	-0.33%	-0.25%	-7.4
Norway	-3.71%	-1.44%	-0.71
Portugal	8.46%	-0.25%	1.5
Spain	17.16%	-7.38%	2.435
Sweden	2.46%	-1.09%	-1.59
Switzerland	-0.01%	0.05%	-1.69
UK	3.95%	0.07%	0

Table 4: Changes in the percentage of outsiders, temporary workers and volatility outside the equilibrium between the year of the last election before the crisis and the year of the first election after the crisis. Source: own calculations.

Spain is the country with highest dualization in the considered sample, measured in terms of the different employment protection level between open-ended and atypical contracts. This favors the layoff of temporary workers during recessions, as Figure 3 shows: between 2008 and 2011, the job destruction has heavily concentrated on temporary workers (31% loss), particularly when compared with employees with open-ended contracts (3% loss).

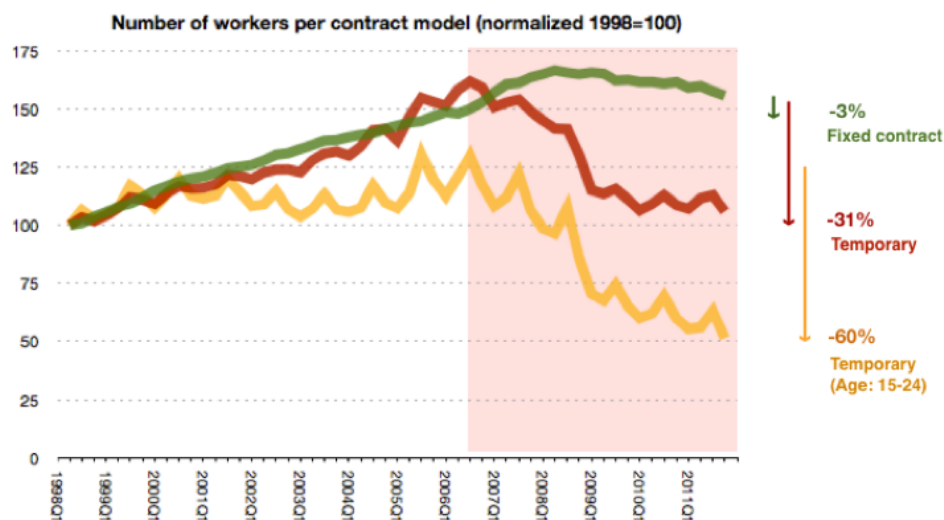


Figure 3: Number of workers per contract model (normalized 1998=100). Source: Llaneras (2012) based on data from the Spanish National Statistics Institute (INE).

Most of these workers were young, unskilled and devoted to construction sector. This is: the least productive among the precarious workers have been 'transferred' to unemployment. Moreover, since 2009 the newly signed contracts are mostly temporary (on a range oscillating between 88% and 95% of all new contracts according to Spanish Social Security data). Most of them have been offered to skilled workers (INE, 2013). If this same pattern has taken place in all European countries (but to a lesser extent due to the lower level of dualization), the evolution and composition of temporary workers is such that makes impossible to predict through its quantity an erosion in support to the main parties through economic voting.

### 6.3. A first difference approach

Data included in Table 4 is interesting for more reasons. The tendencies of the three key variables suggest that there may be also a 'first difference' form of the described effect. This is: not only the level but the *change* in the independent variables affects the *change* in the dependent variable. In other words: the increase/decrease in the number of outsiders may affect positively/negatively in the increase/decrease of the volatility outside the equilibrium.

Confirming such a relation would increase the soundness to my previous results. Instead of comparing static situations before and during the crisis, independent variables convey on themselves the size of the flow. And as shown by Table 4, the evolution is mixed. In some cases such as Greece, Spain or Italy the positions remain, but in others the introduction of the dynamic component drops the country from the high volatility-high level of outsiders category. Hence, the effect is expected to be less significant. More clearly I can formulate H4 as a slight variant of H1.

*H4: the change in the number of outsiders, measured as involuntary part-time workers, unemployed workers and discouraged workers, will generate a higher change in electoral volatility outside the equilibrium. But this relation will be weaker than in the case of stock levels of volatility and number of outsiders.*

When it comes to the role of temporary workers, the effect is expected to be distinct from the one witnessed in the first model. Now the independent variable is accounting for increases in the amount of temporary workers. Hence, if these have taken place the described change in the composition of this category is supposed to be less important. In other words: if in a country temporary workers have increased during the crisis, their effect in volatility will be negative because probably its composition is changing less than in countries with higher dualization. However, the significance of this link is likely to be extremely weak, possibly not relevant at all.

*H5: the change in the number of temporary workers will not have any significant effect in electoral volatility outside the equilibrium, although the direction of the correlation is expected to be positive. This relation will be even weaker than in the case of stock levels of volatility and number of temporary workers.*

To test these hypotheses I run again the same OLS model, only changing the crucial variables for first difference changes. Therefore, 'outsiders' become 'the change, measured in percentage points, of outsiders since the crisis started'; 'temporary workers' become the same change for this category; and 'volatility outside the equilibrium' becomes the result of subtracting the level of volatility outside the equilibrium in the first election after the crisis and the last election before it. This gives an idea of *how much has the change deviated from the change*. Put simpler: the degree of increase of instability at the core of the party system.

As I did with my previous model I start by showing the scatter plots relating the dependent variable with both independent variables. They are included in Figure 4.

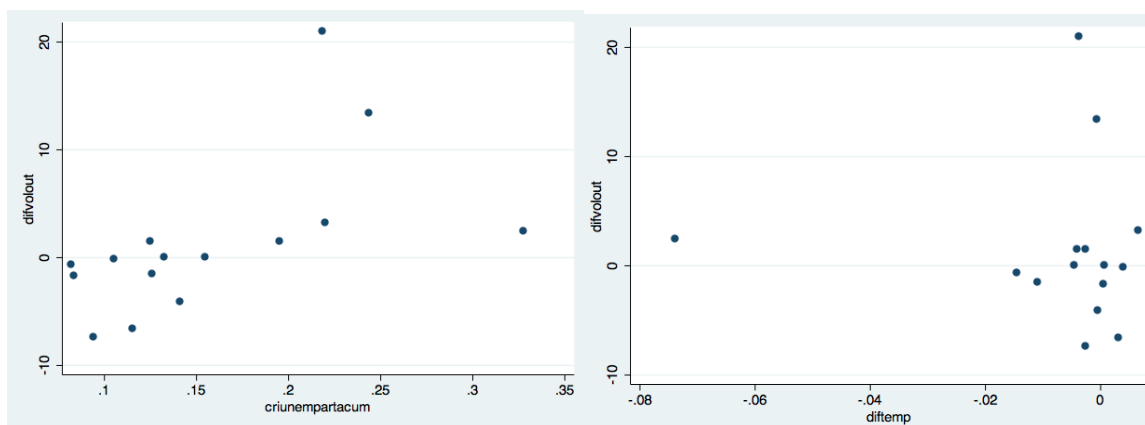


Figure 4: Scatter plots relating the changes in volatility and outsider workers. Source: own calculations.

On the right, the link between temporary workers and volatility seems to be nonexistent. There is a non-shaped cloud around the normal levels of both variables and three outliers, two for high increases in volatility (Italy and Greece) and one for a very high decrease in temporary workers (Spain). Conversely, the left, the relation between the increase in outsiders and volatility seems quite clear. Surprisingly it appears to be even stronger than in the previous model. Only as a mere illustration exercise, I offer now the results of two simple bivariate OLS regressions comparing the 'stock level' option and the 'flow/first differences' option.

#### Stock/levels

Outsiders	68.46	(2.40)*
Constant	-5.046	(-1.0)
N	15	
R-squared	0.306	

#### Flow

Outsiders	60.331	(2.33)**
Constant	-8.155	(-2.0)
N	15	
R-squared	0.338	
**Significant at p<0.02 *significant at p<0.03		

Table 5: Results on two OLS bivariate regressions for the relation between the changes in electoral volatility and labor market structure. Source: own calculations.

The strength of the relation is quite similar in both cases with a slight bias in favor of the stock test, but the significance is slightly higher when considering the flow model. What is most important is that the link holds in both cases. This relation maintains when controls are plugged in, although at a cost. In Table 6 I offer the final results of the OLS model with the control variables.

Outsiders	63.42	(0.76)*
Temporary	128.6	(1.37)
GDP growth	-0.73	(-0.3)
Effective parties	-0.761	(-0.63)
Constant	1.337	(0.23)
N	15	
R-squared	0.62	
*Significant at $p < 0.06$		

*Table 6: Results on a first-difference OLS regression for the relation between the changes in electoral volatility and labor market structure. Source: own calculations.*

The introduction of controls logically decreases the significance of the main variable. But what is most relevant is that the direction and the size of the change remain similar to the first model with a slight drop: from 0.68 to 0.63 points of effect in the volatility index. Also, as predicted, the increase of temporary workers are not significant ( $p=0.202$ ) although their effect is now positive.

However, the existing difference in favor of the stock model should make us think about the specific form of the effect of outsiders on volatility outside the equilibrium. The fact that the level is more important than the change points to give a higher weight to the 'nature' side of the effect, i.e. the deterioration of the evaluation of the managing performance of the main parties made by the population. Separating these two effects would be necessary to avoid ecological fallacies. Unfortunately, there is not sufficiently nuanced data available to distinguish between them in a cross-country fashion. Hence, only a micro test is possible, using survey data at the country level. I do so at the end of the coming section.

#### 6.4. A brief exploration of the micro link

So far there seems to be a connection between the number of outsiders (setting temporary workers apart) and the volatility outside the equilibrium of the party system. However, this link remains true so far at the macro level. Does it still hold at the micro level, when we look at the individuals' behavior?

Germany offers a good case study to approach this: first, it is not the most obvious case to fit with my story. If Spain, Greece or Portugal were chosen, the relation would be much more obvious: first, all of them have incorporated a huge amount of people to their 'group of outsiders' mainly through the jobs destruction. Conversely, Germany has performed rather well during the present crisis even when suffering it between 2008 and 2009 (election year). Hence, the phenomenon I am pointing to is less possible to have arisen in the country.

To test this I use a modified version of the empirical strategy applied by Marx (unpublished). In this paper it is shown how temporary workers had a significantly higher probability to vote against CDU than permanent workers. I make both variables broader in line with my theoretical framework. Therefore, I define 'outsiders' according to Rueda (2005) following my discussion in Section 5: part-time workers, unemployed, discouraged workers. I also include 'mini-job' workers as a particular category from Germany. Mini-jobs were introduced in the Hartz II reform, and they consist on part-time, low-paid jobs. Temporary workers are kept out as I did in the macro model.

The dependent variable is a dummy divided into 'vote to CDU-SPD (core of the party system)' or 'vote out of the core of the party system'. I take a more restrictive consideration on what constitutes the core inside the equilibrium as when doing a case study it is necessary to adjust the parameters to the specific country analyzed, but it does not change at all the premise of the definition of a party system as an oligopolistic equilibrium. However the level of the threshold has no effects on the theoretical framework. The central argument remains unchanged:

outsiders are more likely to vote to parties away from the core. What is slightly modified is the limit of what is considered as the core of the party system because the effect is expected to be smaller in a country in which the shock was weaker.

The hypothesis to test is:

*H6: A worker with the category of outsider in the labor market has more probability to vote to a party different from the core than an 'insider' voter.*

I test it using a multinomial logit model, common in studies addressed to understand causes of voting patterns. I include several control variables to ensure reliability of the results:

- Age and gender as general demographic variables usually determining voting behavior. Age is a continuous variable in years while gender is a dichotomical one. I also include a 'age squared' variable as it is usual in these cases to control for exponential effects.
- Party ID is introduced to control for the fact that the inclination to punish the government due to economic motives are endogenous to party identification. It is coded as a dummy variable dividing respondents into those who have a clear and sustainable support to one of the main parties (CDU/SPD) and those who do not.
- Income and skill levels are included in order to control for external causes of dualization. Income is a continuous variable accounting for monthly rent and skill level is divided into three categories (low, medium, high).

Before moving to the outcome some exploratory analysis is useful. First of all, a brief description of the source proceeds. The German Longitudinal Election Study (GLES) is a periodical survey that takes place before every legislative election. It captures a very broad number of dimensions through more than 100 questions that allows to the researcher to classify every respondent in many categories. For the present work, the category 'outsider' has been defined as explained (and as opposed to 'insider'). The result is that 26.1% of the used sample

(n=2'173) falls into this category. Two-thirds of all these people (66.1%) signaled during the survey an intention to vote outside the party core. This figure was much lower for insiders (52.7%). The average for the whole population is estimated at 56.2%. This brief analysis gives a clue of that something may be actually happening in the hypothesized direction.

The results for the multinomial logit model actually confirm this. Table 7 shows how outsiders had a clear intention to vote outside the core of the oligopolistic equilibrium. More specifically, the probability not to vote to CDU or SPD is more or less 37.5 percentage points higher for outsiders than for insiders. The variable remains highly significant and with an intense effect even when controlling by stronger effects such as party ID.

Outsiders	-0.3754	(-2.03)**
Temporary	0.4271	(1.52)
Party ID = SPD, CDU	3.0345	(26.31)***
Skill: medium or high	0.171	(2.12)*
Income	-3.10	(-2.55)**
Age	0.0082	(2.06)*
Agesq	-0.000008	(-2.23)*
Sex = male	0.1930	(1.67)
Constant	-2.207	(-7.51)
N	2173	
Pseudo R-squared	0.3349	
***Significant at p<0.01 **Significant at p<0.02 *significant at p<0.05		

Table 7: Results on a multinomial logistic regression for the probability of outsiders to vote outside the core parties.

Source: own calculations.

In sum, outsiders are more likely to direct their vote against the existing equilibrium. This is consistent with the results obtained in Section 6: when a crisis is in place, a higher number of outsiders will lead to a higher volatility outside the equilibrium because outsiders are more likely to vote to parties further away from the core. Also, it is noteworthy that temporary workers still have a behavior that differs from the rest of outsiders.

## 6.5. Separating the overall negative sentiment from the 'outsider effect'

Before moving to conclusions, one last test might be performed. I stated from the beginning that there is in fact a double effect driving the deterioration of the oligopolistic equilibrium in the party system: an increase of the number of outsiders plus deterioration on the outsiders' economic sentiment taking the form of increased blaming of personal economic situation to the public administrators. However, making this point comes with a risk: structural change in the labor market might not be the ultimate factor, but the change in economic sentiment would. To discard this I will show that (1) there is a correlation between being an outsider and blaming the public administration for the own economic situation; (2) there is a correlation between blaming the public administration for the own economic situation and voting against the core of the party system; (3) but when a test is performed for both variables at the same time, the effect remains significant only for the 'outsider' situation of the individual.

The GLES includes a question that allows operationalizing this new variable. The degrees of blaming are classified into 'very strongly', 'fairly strongly', 'middling', 'not very strongly' and 'not at all'. I focus on the first response as it conveys the heaviest degree of blaming. Performing a bivariate logit regression with this as a dependent variable and 'outsiders' (as have been already defined) in the independent side offers the following result: outsiders are 4 percentage points more prone to consider the public administration as 'very strongly' responsible of their economic situation than insiders, at a  $p=0.009$ . Therefore, step (1) is proved. Also, a similar model regressing the volatility outside the CDU-SPD equilibrium and the attribution of 'very strong' responsibilities for the personal economic situation to the public administration yields a coefficient of 1.18 significant at  $p=0.00001$ . This, proving step (2), hides a spurious relation. Once a whole multinomial logit model is performed including all the already mentioned control variables (party ID, age, age squared, income, skill level) and both the situation of being an

outsider and the high level of blaming the public administration for the personal economic situation, the explanatory power of the latter disappears, as shown by Table 8.

Outsiders	-0.29	(-2.04)**
Blaming	-0.03	(-0.63)
Age	-0.00807	(-0.3)**
Age squared	-0.000008	(-2.2)**
Gender	0.1995	(1.74)*
Party ID	3.026	(26.26)***
Income level	-0.000003	(-2.53)**
Constant	-2.192	(-7.43)
N	2173	
Pseudo R-squared	0.335	
***Significant at $p < 0.01$ **significant at $p < 0.05$ *significant at $p < 0.1$		

Table 8: Results on a multinomial logistic regression for the probability of outsiders to blame the public administration for their situation.. Source: own calculations.

This is: while it is true that outsiders are more prone to blame the public administration for their own economic situation and it is also true that this blaming positively correlates with voting outside the equilibrium, once both variables are plugged into one single model the situation of being an outsider remains significant but the blaming does not. Hence the ultimate cause is the objective position in the labor market structure.

## 7. Conclusions

In the present work I have tried to show that there is a link between the structure of the labor market and the electoral volatility a country suffers when a crisis is in place. More specifically, a higher dualization in the labor market (measured with the number of outsiders) will lead to a stronger deterioration of the core of the party system. I consider party systems can be characterized as market equilibrium between supply (parties' electoral platforms) and demand (voters). Market clears with most of the demand consuming from few suppliers. Hence the supply side is divided into two categories: a few massively-demanded (voted) parties inside the equilibrium, and more not-so-demanded parties (or the possibility of new ones) that are outside the equilibrium. Volatility is then divided into two categories: aggregated vote changes inside the equilibrium and outside it.

Parties offer solutions in different issues and demand is composed by voters that hold preferences over all of these. I chose to focus on the economic preferences determined by the position of the individual(s) in the labor market. I relied on Rueda's work to define what dualization is and how shall we understand the difference between insiders and outsiders. However, I used a valence-oriented voter model instead of a policy-oriented one: outsiders will blame the dominating politicians for their worse situation because they appear to be the ones to blame. All in all, outsiders will vote against the equilibrium.

In order to test this hypothesis I performed two different analyses. First, at the macro level, I used the election results of 15 advanced countries on their first elections before and after the crisis to discover that there is indeed a significant and direct link between the number of outsiders as a percentage of the national workforce and the volatility outside the equilibrium, i.e. the core of the party system. The link exists in the expected direction and with a sizable intensity of 0.67 points of volatility outside the equilibrium per additional percentage point in the level of outsiders. This result is significant even when controlling by the intensity of the crisis. But it did

not exist before the crisis started. The interaction effect between the shock and the labor market structure is then stressed and holds across countries.

Also, the link was not present for temporary workers, who are a significant portion of what is defined as 'outsiders'. Moreover, even when the relation has less statistical significance it goes in the opposite direction. I briefly explored a possible explanation for this distinctive result: during the crisis the composition of temporary workers considerably changed in most countries (particularly in these with a higher difference in employment protection in favor of open-ended contracts), making of this category less of a classical outsider group.

My central hypothesis is also confirmed using a first difference approach, as well as at the micro level. A very brief case study focusing on one of the sample countries (Germany) offered a zoom into the macro relation drawn from the first analysis: the aggregated pattern covered with the cross-sectional study is explained by the individual (average) tendency of outsiders to vote against the existing electoral equilibrium. Also, the micro analysis allowed me to confirm that the effect of the position in the labor market structure may be distinguished from an overall deterioration of the population's general economic sentiment.

All put together, this paper has hopefully added something on the understanding of how does party system stability and change operate, and how different factors conditioning the voting decisions of individuals help us to understand these patterns. Given contextual limitations, the work offered here will not be (it is not intended to be) a determinant empirical contribution (even less a new theoretical perspective) as much as a first attempt to put together different strands of existing literature in Comparative Politics and Political Economy. I have performed this exercise in order to (1) deepen on the ongoing change in the study of electoral volatility, going towards a consolidation of Powell and Tucker's idea of party system as an equilibrium; (2) offer an instance of how different factors that are usually treated in a separated fashion may and do actually

interact to condition volatility; (3) show how the idea of a dual structure of the labor market matters to democratic institutions.

Needless to say, the present work is not free of shadows. These coincide with what I consider as the most fruitful future research avenues. First, wider and deeper tests using panel data are necessary to add robustness and generalizing power to the obtained results. Second, to what extent is the composition change in temporary workers relevant, and can it be translated to other categories? There are certain standing problems regarding the theoretical and operational definition of what an outsider is. Is it actually possible to separate the position on the labor market structure from the productivity of the worker (and, together with that, the skill level and the risk of losing a job)? Can, or should, productivity be always included when considering people as workers? Third, a much better and complete picture of the micro mechanism is needed. Departing from my merely illustrative example it should be tested if the link holds across countries and time. And, more importantly, to what extent does it maintain when translated to other context in which the core of the party system will be enlarged. An alternative approach could consist on following the decrease on the variable of party ID in several countries across time, impossible with the available data for the present work. Fourth, a better separation of the two effects (the increase in the number of outsiders and the change of behavior of the existing ones) should be performed to compare both mechanisms and make them compete. However this would probably require the use of ad hoc surveys. Fifth, including the dimension of turnover and turnout could possibly provide a richer understanding of outsiders' electoral behavior, as it is likely to expect a significant part of them to entirely withdraw from the political process (Rueda and Lindvall, forthcoming, 1).

Most of the problems of the present work (and thus future research points) come to the micro level. The difficulty of obtaining cross-country data at the individual level is, unfortunately, a constant in social research. But this difficulty should be addressed if we want to really increase

the understanding of complex phenomena such as electoral volatility without poorly falling in Lucas' critique. Notwithstanding these problems, the key insights from the present paper should be kept: volatility is better understood as an oligopolistic equilibrium. Factors affecting are not unique and better understood as an interaction. The dualization of the labor market matters for understanding the (un)stability of policies and those who support them. And from this last point comes a final, possibly useful learning for policymakers: to ignore outsiders in labor market policies does not come for free. There is a price to pay in terms of electoral support, and it may well be high if a crisis lasts enough. Parties willing to keep the statu quo should be also willing to bear with the costs.

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