

# Into the Uncertain Divide

## The political economy of class voting and decentralization\*

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### Abstract

Building on political economic literature on the endogeneity of preferences for inter-personal and inter-regional redistribution under decentralization, and using survey data, the paper shows how regional economic geography shapes class-based party preferences under decentralization.

## 1 Introduction

The last decade has experienced a rebirth of interest in the role of social class as an explanatory factor of voting preferences.<sup>1</sup> The reappraisal of this classic notion has been mainly built on the redefinition of class (Erikson and Goldthorpe, 1992), method refinement (Nieuwbeerta and De Graaf, 1999), and better specification of party preference (Evans, 1999b). Despite these profound empirical rearrangements, the basic theoretical mechanism linking social class and vote has remained basically intact. However, a growing volume of political economy research on the redistributive and political effects of welfare states has questioned the unidirectional causal mechanism of classic class voting supporting the view that voter preferences are actually endogenous to party competition. According to this, the ability of political elites to gain and retain office is a function of their capacity to forge wide electoral coalitions that often overcome class boundaries (Przeworski and Sprague, 1986; Esping-Andersen, 1985; Iversen, 2006). At the same time, another body of literature has found empirical support to the notion that the economic and political geography of political unions influence political actors' preferences on inter-personal and inter-regional redistribution and its institutional arrangement.

In particular, Beramendi (2012) set out a political economic model in which individual income and the geography of wealth and inequality shape preferences for redistribution and fiscal structures under decentralization. Although Beramendi's work built on previous solid political economic research on the determinants of preferences for inter-personal redistribution (Alesina

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\*The title of this paper paraphrases the verse "Into the uncertain divine / We scream into the last divide", William Patrick Corgan (1998).

<sup>1</sup>I'd like to thank Lluís Orriols for granting me access to the data on which he based his study on class and religious voting in Spain (Orriols, 2013), and Andreas Kyriacou, who also generously shared his regional-level dataset with me. Those data were not directly used here, but I clearly benefited from data transformation ideas (e.g., recoding, inequality measures) that they contained.

and Giuliano, 2009), the need to account for the multidimensionality of the political space to understand actors' strategies to forge voter coalitions over redistribution (Roemer, 2001, 1999; Iversen, 2006), and the effect of institutions on redistribution (Iversen and Soskice, 2006), his account of the effects of economic geography in shaping preferences for redistribution has proved effective and fruitful to widen our knowledge of the mechanisms at work within processes that lead to specific institutional designs of decentralized political unions. For one, it has set the pace for others to improve our understanding of the determinants of individual preferences for inter-regional redistribution (Amat, 2012; Balcells et al., 2015).

However, the mechanism linking class (or income) and party preference has not yet been reappraised under this new political geographic and economic framework, and as a result, the specific connection between class-based voting and political decentralization is still in need of further development.

This paper deals with the fragmentation of social class mobilization in political unions due to the effect of economic geography. In the next section I begin with a brief outline of the various strands of literature relevant to the topic of this paper. Afterwards, in section 3 I derive and outline the main hypotheses, and in section 4 the background and the methodology for our empirical analysis are discussed. Finally, section 5 presents and discusses the main empirical results.

## 2 Class, economic geography, and endogenous preferences

The radical economic and social transformations occurred (not only) in Western democracies in the second half of the 20th century—prominently the “disappearance” of the traditional working class—set out the conditions for a “debate over the importance of social class as a basis for political partisanship in advanced industrial societies” (Evans, 1999b). Among the consequences of this debate the most obvious are the radical improvement of measurement tools (e.g., the very redefinition of class by Erikson and Goldthorpe (1992)), a fruitful dialogue and discussion around the most suitable methods to study class voting (e.g., Nieuwbeerta and De Graaf, 1999), and a better specification of party preference (Evans, 1999b).<sup>2</sup> However, the basic theoretical mechanism remains intact: a link between social position and preferences for redistribution, which are defended and claimed by party platforms in competition.

Beyond this isolated mechanism, however, a growing community of researchers has sought to provide models that better integrate the link between class and preferences for redistribution within actual political processes shaped by the establishment and evolution of the welfare state and the saliency of a second political dimension related to national identity and territorial politics.

Regarding the welfare state, Esping-Andersen (1985) and Przeworski and Sprague (1986) endogenized social class to explain the support of the middle class to social-democratic parties. In this research, that strongly influenced current political economy models explaining the relationship between democracy and capitalism (Iversen, 2006), preferences are no longer exogenous to political competition, but they are influenced and shaped by parties and governments to forge voter coalitions; therefore, the class cleavage can be (dis)connected depending on whether social-democratic parties (and governments) seek strictly class-based or cross-class support (Beramendi and Morillas, 2001).

Regarding the second dimension, seminal cleavage studies already tracked and identified an interwoven network of factors that explained the formation and development of other cleavages than class (Rokkan, 2009; Flora, 1999). Among these other cleavages, ethnolinguistic or religious

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<sup>2</sup>Recently class voting has experienced some form of rebirth (Evans, 2000; Elff, 2007, 2009; Evans and de Graaf, 2013).

divisions were assumed to difficult the process of translation from a class-based social structure into political action. In this sense, Bartolini (2000) argues that “in certain circumstances, functional-class interests may be trapped in an uneasy environment in which both cultural and territorial defenses coalesce to make it difficult to appeal to functional identities across territories and across cultural traits[.]” to conclude that “the task of mobilizing, already difficult for working-class parties when they had to cut individuals away from these traditional ties, became even more difficult when and where these traditional ties were already mobilized and were the source of very specific political identities” (Bartolini, 2000).

The specific interaction of class with territorial politics and political geography—where ethnolinguistic and religious conflict is of obvious relevance (Rodden, 2006)—has been mainly explored in accounts of the effects of regional or sub-national identities on voting. In particular, this strand of research has sought to explore to what extent and why voters split their vote across subnational and national elections (Riba, 2000; Fraile and Pérez-Nievas, 2000; Riera, 2009), or decide to vote for nationalist/regionalist parties (Pérez-Nievas and Bonet, 2006), with a few cases exploring both the left-right and national dimensions at the same time of voting within regions holding distinct subnational identities such as Catalonia (Balcells, 2007) and the Basque Country (Fernández-Albertos, 2002).

The framing of most of these latter studies in political economic models has paved the way to explore the endogeneity of territorial or national identity. In the same way that the (de)activation of the class cleavage is dependent on the strategies followed by governments and parties in the political process, this new strand of research has modelled regional or subnational identification as being endogenous to political competition. In this logic, not only is national identification the result of a long process of nation building subject to mid- to long-term historical and political processes at different levels (Anderson, 2006; Martínez-Herrera, 2002), but its effective saliency in the political process is also dependent on heresthetic practices (Riker, 1986) by competing parties and governments. For instance, Pérez-Nievas and Bonet (2006) took into account both national and socioeconomic mobilization to explain voting for ethno-regionalist parties in Belgium, the UK and Spain. Within this latter country but focusing on the Basque Country, Fernández-Albertos (2002) found that under certain circumstances the “national” dimension will be more or less salient (along with the “left-right” dimension) as a function of the strategy followed by political actors to influence voters’ incentives and eventually their behavior.

Due to the specific interest in the link between (sub)national identity and voting or attitudes, this strand of research has privileged the behavior and preferences of those living in special regions holding distinct national identities. This can explain why nationalistic mobilization at subnational level is sometimes seen as a competing dimension *vis à vis* social class only occurring in those regions. However, recent research on the political economy of individual preferences in decentralized polities shows that regional-level factors can effectively shape individual choice beyond the boundaries of this kind of regions, calling for more comprehensive theories of the interaction between individual-level and regional-level variables to explain preferences.

Early studies in the political economy of redistribution already theorized the importance of taking into account the interaction of other divisions than social class or personal income to better understand preferences on redistribution (Roemer, 2001, 1999; Iversen, 2006; Alesina and Giuliano, 2009), but it is the application of these models to understand the territorial distribution of preferences within federal or quasi-federal political unions that has helped establishing a blooming research field.

The key argument here (Beramendi and Díaz-Cayeros, 2008; Beramendi, 2012) is that once some form of decentralization is set up that institutionally establishes a particular fiscal structure determining the extent to which and how resources are transferred across individuals and between regions, individual preferences on redistribution are of a two-fold nature: those regarding

Table 1: Classification of interpersonal and regional income (Beramendi, 2012)

Individuals	Regions	
	<i>Rich</i>	<i>Poor</i>
	<i>Rich</i>	$t \rightarrow 0, T \rightarrow 0$
<i>Poor</i>	$t \rightarrow 1, T \rightarrow 0$	$t \rightarrow 1, T \rightarrow 1$

interpersonal redistribution (at the regional level), and those regarding interregional redistribution (at the union level) (Beramendi and Díaz-Cayeros, 2008). In other words, “citizens face a decision about two policy instruments, namely, the level of interpersonal redistribution ( $t$ ), and the level of interregional transfers of resources among members of the union, that is to say the level of interregional redistribution ( $T$ )” (Beramendi, 2012). Therefore, the essential element of “the geography of income in political unions [is] the coexistence of a redistributive conflict among individuals within regions and a redistributive conflict between regions within income groups” (Beramendi, 2012). The model has proven fruitful so as to provide a stable theoretical framework capable to explain the choice of different fiscal structures in four cases of decentralized political unions, as varied as the models adopted by the U.S. and Canada after the Great Depression, or the equilibrium of preferences that led to the choice of the *Estado de las Autonomías* and its asymmetric fiscal structure during Spain’s transition to democracy.

In a nutshell, Beramendi’s model expects that political decentralization and fiscal structures trigger distinct preferences from otherwise similar social groups—the two-fold nature of economic preferences in scenarios of political decentralization (personal and regional income) gives way to a model in which one can expect distinct preferences for redistribution from similar income groups depending on the wealth of their regions. Under this model, there are four groups of income, which can be summarized in Table 1.

According to the simple model, rich people in richer regions will prefer lowest levels of interpersonal redistribution ( $t \rightarrow 0$ ) and lowest levels of transfers from rich to poor regions ( $T \rightarrow 0$ ), while poor people in poor regions will prefer the exact opposite ( $t \rightarrow 1, T \rightarrow 1$ ). On the other hand, poor individuals in rich regions will prefer highest levels of interpersonal redistribution within their regions, but keeping interregional redistribution toward poorer regions at the lowest level possible, while rich people in poor regions will prefer lowest taxes affecting interpersonal redistribution in their regions ( $t \rightarrow 0$ ) combined with a system that maximizes the transfers from richer regions to poorer ones ( $T \rightarrow 1$ ). In order to complete the dynamics of variation in preferences for different fiscal structures in his case studies, Beramendi (2012) adds inequality into the equation, which may change the order of preferences for each group in Table 1.

For instance, under low inequality within their region, rich people in richer regions will pursue a fiscal structure that minimizes both inter-personal and inter-regional redistribution, preferring a completely decentralized fiscal structure to anything else. If inequality increases, though, the poor are more likely to engage politically, perhaps coalescing with the poor in other regions. In this case, “the marginal cost of sharing nation-wide the burden of redistribution with the rich falls below the marginal cost of coping with a larger number of poor people under decentralization” (Beramendi, 2012), and therefore the rich in richer regions will relax their preference regarding inter-regional redistribution.

Although some previous literature on the saliency of national identity had already endogenized the saliency of nationalism within the political process, under this framework the connection between the class cleavage and national identification can be integrated into a common model of the political economy of preferences for redistribution under federalism (or decentralization). As a result, a blooming but already rich strand of research sheds new light on the dynamics of

preference formation under decentralized states. For instance, from the party system point of view, León (2015) finds traces of territorial cleavage activation among the elites of the two main state-wide parties in Spain. From the citizen perspective, Amat (2012) explores how “the rhetoric of political parties can influence the nature of inter-regional redistributive preferences by affecting the saliency of nationalism” in Spain. In his model, both regional and nation-wide political parties use heresthetics to shape preferences for inter-regional redistribution, finding that subnational (national) nationalism is associated with preference for lower (higher) levels of inter-regional redistribution. More recently, Balcells et al. (2015) take on a similar issue to explore the inner mechanism at work in the formation of preferences for inter-regional redistribution. In particular, the authors make use of an experiment within survey data, also in Spain, to find support to the effect of the information about relative regional wealth on individual-level preferences for inter-regional redistribution. This effect increases when individuals learn the true position of their region in the income scale compared to the others. However, neither Balcells et al. (2015) nor Amat (2012) find an effect of individual income on preferences for inter-regional redistribution, suggesting the prevalence of regional-level factors.<sup>3</sup> This latter finding, in turn, reinforces the previous finding by Amat (2012) on the relationship between the saliency of nationalism and preferences for inter-regional redistribution.

Once the determinants of preferences for inter-regional redistribution are accounted for, the analysis of the political economy of partisan preference under this very theoretical framework seems a “natural” step forward. As commented above, previous studies offer evidence that regional wealth shapes preferences for inter-regional redistribution, and that the strength of the link between the two is affected by the strategies followed by political actors aimed at influencing individual choice. Yet, the resulting way this process translates into partisan preferences under this framework remains unexplored. This paper explores the relationship between individual- and regional-level income and inequality on partisan preferences.

## 3 Background and hypotheses

### 3.1 Background: Spain

This paper focuses on one single country—Spain, which has proven a fruitful test bed for models exploring preferences for inter-personal (Fernández-Albertos and Manzano, 2012) and inter-regional (Amat, 2012; Balcells et al., 2015) redistribution.

The translation of preferences for inter-personal and inter-regional redistribution into political choice is far from straightforward. On the one hand, the rhetoric strategies followed by political actors should be connected to the actual economic geography of the political union. In other words, political platforms should represent more or less clear combinations of preferences for inter-personal and inter-regional redistribution, which will result in a particular weight given to each dimension in the political space. On the other hand, voters’ final choice for a political platform is not only affected by the heresthetics performed by political actors, but also by the institutional framework—e.g., the electoral system.

Regarding the first question, recent research (Fernández-Albertos and Manzano, 2012) shows that partisan differences over inter-personal redistribution in Spain are far from obvious. However, once the authors differentiate between redistribution policies and the size of the welfare state, those who lean toward the state-wide left main party (Partido Socialista Obrero Español, PSOE) favor more redistribution, while those leaning right (Partido Popular, PP) support less inter-personal redistribution.

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<sup>3</sup>Amat (2012) includes individual income class in his models as controls variables but the effects are not

Table 2: Coefficient of variation in regional wealth and inequality in Spain, 1998-2011. *Source:* OECD Regional Database; Spanish Household Budget Survey (HBS), Instituto Nacional de Estadística (INE).

	COEFFICIENT OF VARIATION	
	GDP/capita	Gini index
1998	0.224	0.068
1999	0.230	0.066
2000	0.232	0.073
2001	0.230	0.059
2002	0.221	0.083
2003	0.210	0.063
2004	0.204	0.071
2005	0.198	0.066
2006	0.197	0.071
2007	0.195	0.079
2008	0.195	0.067
2009	0.204	0.075
2010	0.204	0.091
2011	0.209	0.084

A similar problem can be found when trying to distinguish both parties regarding their position on inter-regional redistribution. Despite the dramatic increase in the level of decentralization of public expenditures during the last years in Spain, “the bulk of transfers in the Spanish welfare state remain under control for the central government” (Beramendi, 2012), which largely depend on regional fiscal flows from richer to poorer regions. As Beramendi (2012) also points out, “the redistributive nature of fiscal flows translates directly into the geography of inequality”. This can be observed in Table 2, which extends Beramendi’s data to a longer period: income differences between regions have been and still are larger than inter-personal inequality within regions. Figure 1 plots the relationship between relative levels of regional wealth and inequality, where each data point represents one region-year observation.<sup>4</sup> Data show that all combinations of relative wealth and inequality levels can be found in Spain. In addition, the temporal dimension of these data lets also observe that there are no dramatic changes of status in neither relative GDP per capita or inequality among regions in time. Therefore, variation in inequality is much smaller than variation in regional wealth, which is likely to bring inter-regional redistribution to the center of political conflict among regions.

Nevertheless, previous literature has supported the idea that the two main state-wide parties in Spain (the leftist PSOE and the right-wing PP) have used similar strategies to make the national dimension more salient—i.e., to mobilize Spanish nationalism under certain conditions of political confrontation (Maravall, 2008; Fernández-Albertos, 2002). Moreover, it is assumed that “there are no significant differences between the two main statewide parties in their general support for high levels of inter-regional redistribution” (Amat, 2012). However, amidst the continuous debate over regional fiscal flows in Spain (León, 2007; Espasa and Bosch, 2010), the center-left state-wide PSOE (and even more the leftist IU) has been traditionally seen by Spanish voters as more friendly to the decentralization of powers to regions (autonomous communities, AC) than the center-right Partido Popular, more eager to (re)centralize political power in Spain (Maravall, 2008; Alonso et al., 2013a). Recent analyses that explore the elite preferences for decentralization in the two main state-wide parties conclude that “the territorial cleavage is more relevant to accounting for heterogeneity in preferences among Socialist representatives”

discussed.

<sup>4</sup>Both measures have been normalized to have mean 1, so that values below 1 indicate regions that are poorer or less unequal than the average, and values above 1 mean the opposite.

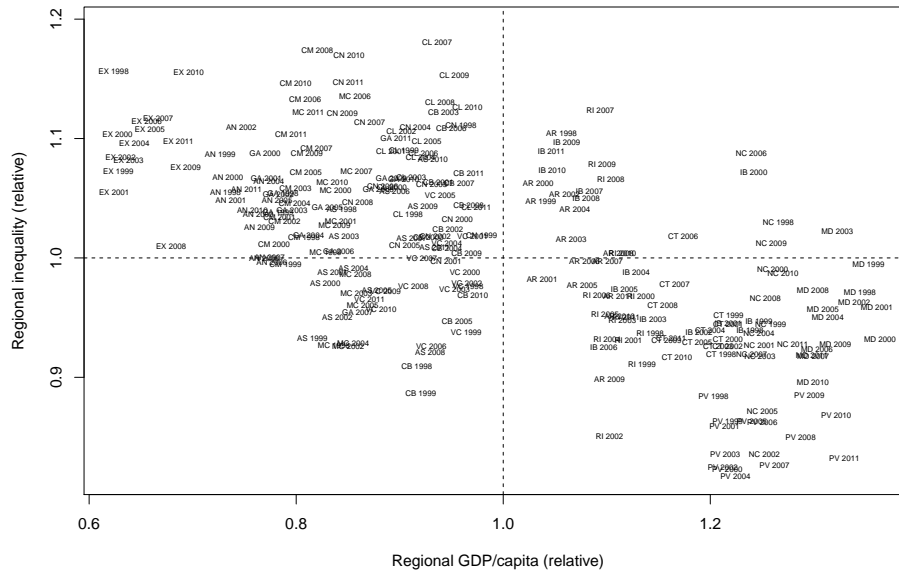


Figure 1: Relationship between regional wealth and inequality in Spanish regions, 1998-2011. *Source:* OECD Regional Database; Spanish Household Budget Survey (HBS), Instituto Nacional de Estadística (INE).

(León, 2015). Actually, when we observe data on the position of these two parties regarding the (de)centralization of political power expressed in their manifestos, differences arise, both at the regional and national level.

Figure 2 shows data from the Regional Manifestos Project (Alonso et al., 2013b) regarding the positions of both main parties in a center-periphery scale. In particular, it plots the position of both state-wide parties at different regional elections and at one national election. The last two lines of the plot show the difference between both parties in their framework manifestos for regional and national elections, respectively. The center-periphery scale captures the position of a party on the center-periphery cleavage defined in both *identitarian* and *competential* terms (Alonso et al., 2013b; Alonso and Gómez, 2011; Alonso et al., 2012). The competential component deals with the distribution of power between the periphery and the center, while the identitarian element “deals with the processes of nation-building and nation-preserving” of both state-wide and peripheral nationalist parties (Alonso et al., 2013b). A larger positive score in the scale is associated with positive statements regarding the autonomy of regions.

To conceptualize the level of inter-regional redistribution defended by a party in Spain, I rely on party positions in this center-periphery scale. In the Regional Manifestos Project dataset, the average score of regional parties in the center-periphery dimension is 10.75, while the scores for the state-wide left (PSOE) and right (PP) are 2.73 and 0.42, respectively.<sup>5</sup> Typically peripheral nationalist parties seek to increase the political power of their regions, thus increasing both regional authority over their own resources, and more restrain over inter-regional transfers. On the other side of the scale, a state-wide centralist party will seek to maximize the power in the

<sup>5</sup>I am using the `rmp_28.11.2012` dataset, downloaded from the project’s website.

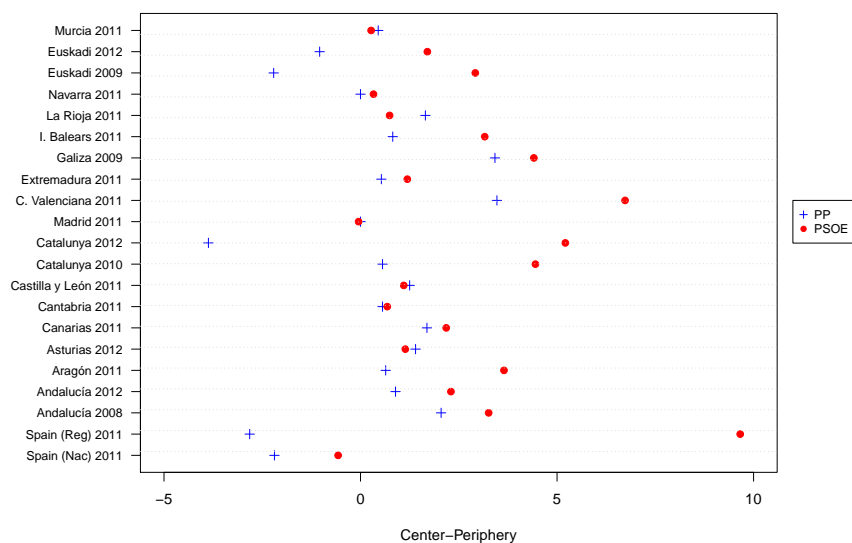


Figure 2: Positions of regional and statewide PP and PSOE on the center-periphery tension. *Source:* Regional Manifestos Project

hands of the central state at the expense of regions, and will also pursue the centralization of decisions over inter-regional transfers.

According to this, and despite the differences between state-wide left and right are only modest in this dimension, I assume that the state-wide right is more associated with the centralization of inter-regional transfers (i.e., less regional control over regional resources), and in turn with higher inter-regional redistribution. The state-wide left, in contrast, will be associated with slightly higher levels of regional decentralization and therefore with slightly lower levels of inter-regional redistribution. Of course, regional parties champion decentralization and the decrease of inter-regional redistribution.

Finally, in Spain decisions over inter-regional fiscal flows are made at the central level, and therefore the effect of the interaction between individual-level income and the regional economic geography on party preference should be better observed in national-level legislative elections. However, due to the electoral institutional framework set up in Spain during its transition to democracy, in most cases voters have incentives to support large state-wide parties (Colomer, 2005).

### 3.2 Hypotheses

According to the previous framework, everyone in poorer regions benefits from maximizing transfers from richer to poorer regions (i.e., maximizing  $T$ ). So, the first general pattern we expect to observe is that:

Hypothesis 1      All else equal, people in poorer regions tend to support less leftist parties than people in richer regions.



Due to the redistributive effects of inter-regional fiscal flows—i.e., the unbalance between inter-regional and inter-personal transfers—, and given the electoral institutional constraints, all income classes in richer regions will on average prefer the Spanish left to the Spanish right. The rich in richer regions (RR) because there is much more to lose from the maximization of inter-regional transfers (i.e., when  $T \rightarrow 1$ ) than to gain from the minimization of inter-personal transfers ( $t \rightarrow 0$ ). The poor in richer regions (PR) will also prefer the left to the right because they face no actual dilemma: although their first option would be to support a regional nationalist left party to maximize inter-personal redistribution within the region and minimize inter-regional transfers, their second-best option in state-wide legislative elections (given electoral institutional constraints) is the Spanish left, which historically combines higher levels of inter-personal redistribution ( $t \rightarrow 1$ ) with more decentralization and therefore a higher level of regional control over regional resources (slightly less inter-regional transfers). In contrast, all groups in poorer regions will present the opposite pattern. On the one hand, the better-off in poorer regions (RP) will face no dilemma whatsoever: the Spanish right platform offers them all they need in terms of keeping inter-personal redistribution low ( $t \rightarrow 0$ ) and pushing for more centralization and therefore higher levels of inter-regional transfers ( $T \rightarrow 1$ ) that will benefit their regions at the expense of richer regions. On the other hand, the poorer among the poorer (PP) will have a dilemma between their two main options. If they vote for the Spanish left, they ensure higher levels of inter-personal distribution ( $t \rightarrow 1$ ), but leftist governments can relax inter-regional transfers. If they vote for the main Spanish right platform, the worse-off will support a program of lower taxes for the richer, but they will ensure higher levels of centralization and therefore the maximization of rent extraction from the richer regions to the poorer ones. Given the redistributive effects of regional fiscal flows, there is much more to gain from the latter than to lose from the former, and therefore support for the left among manual workers will be much lower in poorer regions than in richer regions. Hence our second hypothesis.

Hypothesis 2                      All else equal, regional wealth will trigger voter coalitions across classes (thence superseding class-based coalitions) within regions.

In the face of inequality (or relative lack thereof), some classes face different dilemmas. For instance, the better-off in richer regions (RR) may present different preferences depending on the level of inequality within their region. From the previous hypothesis we expect that (without taking into account inequality), the need to preserve the central government from extracting regional wealth makes them support the Spanish left over the right, despite their class interest. However, if their region is much more equal than the average (and therefore they support high levels of inter-personal redistribution), they might switch their preferences from left to right to attenuate inter-personal redistribution (and therefore make their regions less equal). On the other hand, at increasing inequality (therefore at lower levels of inter-personal redistribution), they will prefer reducing inter-regional transfers (i.e., support for the left) despite the expectation of higher taxes in the future.

In contrast, the rich in poorer regions will face no inequality dilemma. The more unequal their region, the stronger the reasons for the richer in poorer regions to vote for rightist platforms: they would counter the likely mobilization of the poor (due to higher inequality), will not fight household inequality ( $t \rightarrow 0$ ), but will keep inter-regional transfers high ( $T \rightarrow 1$ ). The Spanish right is their preferred option, always.

Nor the worse-off in richer regions will face an inequality dilemma. If inequality increases in richer regions, the poor in those regions will have even stronger preference for a leftist platform than they would in more equal scenarios, for a leftist platform will increase inter-personal transfers keeping inter-regional transfers controlled. On the other hand, inequality will pose a dilemma to the worse-off in poorer regions. With increasing inequality, they have two options.

On the one hand, they might engage in the mobilization of the poor state-wide and therefore join the other worse-off classes across regions in their support for a leftist platform that fights inequality through higher taxes to the rich. On the other hand, they might not engage with the poor in a state-wide class-based coalition, but with the rich in their region and support the rightist platform that will ensure high levels of inter-regional transfers, despite minimizing inter-personal redistribution. Given the preminent role of regional fiscal flows in redistribution in Spain, our hypothesis is that their regional wealth position will have a stronger effect than their individual position within their region, and therefore the support to rightist parties among the poor in poorer regions will increase with inequality.

Hypothesis 3            All else equal, the level of inequality, combined with regional wealth will trigger voter coalition across classes within regional groups, also superseding class-based coalitions across regions.

In a very relevant contribution to the factors that influence redistributive outcomes, Lupu and Pontusson (2011) found that it is actually not inequality *per se* what shapes aggregate preferences for redistribution, but its structure. Specifically, the authors focus on the pivotal role fo the middle-income groups, who will switch their preferences on redistribution depending on the existing income distance between them and both the lower and upper income groups of society. They build on the literature on social affinity and empathy (Kristov et al., 1992; McPherson et al., 2001) and its effects on preferences for redistribution Alesina et al. (2001). This way, on the one hand, Lupu and Pontusson (2011) show that when the distance between the 50th and the 10th percentiles increases, the degree of affinity between the middle-income groups and the poorer will decrease, and therefore the former will cease to support redistribution (thus joining the preferences of the upper income groups). The effect of regional wealth on top of the structure of inequality should be also evident among the poorer. According to Lupu and Pontusson (2011), proximity between the middle and the poorer earners can work both ways: a small distance between the middle and the poorer will make the poor more affine to the middle income groups and therefore be less supportive of redistribution.

This model, however, does not take into account the effect of the economic geography in shaping these preferences. According to the model tested here, the effect of the structure of inequality should trigger changes in preferences when these can be accomodated with regional interests. That is, middle income groups will react more clearly to larger distances towards the poor by supporting less redistribution when this aligns with their regional interests, but not when it doesn't. Therefore, we expect the middle income groups in poorer regions to increase their support to the national right at larger distances between the 50th and the 10th percentiles. This way, they would favor less interpersonal redistribution *but* more inter-regional transfers. On the other hand, this effect among middle earners in richer regions should be far less clear or inexistent, because there is much less to gain from lower taxes than lower inter-regional transfers.

Regarding the effect of changes in the structure of inequality in the lower income scale on the poorer, the same logic should hold. At low distance, manual workers in poorer regions should relax their support to redistribution, but when their income increasingly lags behind that of the middle income groups, they will face a dilemma: either support more redistribution and vote left, or support more inter-regional transfers and vote right. This dilemma does not exist among manual workers in richer regions, as the left incarnates one single solution to the need to increase interpersonal redistribution and decrease inter-regional transfers.

Hypothesis 4            When the distance between the middle-income individuals and the poor is smaller, the median group should be more favorable to redistribution. But when the distance increases, the middle income groups will join the upper

income preferences and support the right. This effect should be stronger for middle-income groups in poorer regions than in richer ones, given the need of the latter to minimize inter-regional transfers at all costs.

At the higher end of the income scale, effects of changes in the structure of inequality should also depend on the wealth of regions. In the original model by Lupu and Pontusson (2011) (without regional wealth differences), at short distance between the richer and the median group, the preferences of the richer and the middle income group should get closer: the richer would be less resistant to redistribution (vote left) and the median would become less favorable to it (vote right). When the P90/P50 distance increases, however, the median should favor more redistribution (left). According to the social affinity model, as their distance to the richer gets wider the middle income groups should empathize less with the richer and more with the poorer. However, the limits of affinity in this case are shaped by regional wealth, and therefore the support for more redistribution among the middle income group will be stronger in richer regions, because the national left will better align class and regional interests, while in poorer regions vote for the national right (maximizing regional transfers) will still be preferable than the left. Therefore:

Hypothesis 5                      When the distance between the middle-income and the rich is smaller, the middle-income groups align with the preferences of the richer (i.e., the distance between left and right should be smaller), but when the distance increases they will favor more redistribution (i.e., vote left). The effect should be stronger in richer regions than in poorer ones because class interests of the middle income group align with regional interests (the left minimizes inter-regional transfers).

## 4 Data and methods

### 4.1 Data

Our data come from three different sources. First, we use survey data from monthly political surveys from the Spanish Centro de Investigaciones Sociológicas (CIS). CIS carries out eleven general political surveys each year (monthly, except August), averaging 2,486 respondents per survey (around 27,350 per year). In order to ensure sufficiently large subsamples for each income group and region, we pooled all monthly surveys in the 1998-2011 period, totalling 165 surveys and 383,020 respondents.<sup>6</sup>

The response variable is categorical and measures the type of party respondents recalled having voted in the last general parliamentary Spanish election. This variable has three categories, *left*, *right*, and *regional*. The classification of the major state-wide parties (those who present candidates in most Spanish electoral districts) along the left-right ideological scale is quite straightforward. There is little dissent among scholars (Klingemann et al., 2006) and citizens (CIS, 2012) that the Partido Socialista Obrero Español (PSOE) and Izquierda Unida (IU) are on the left, and the Partido Popular (PP) is on the right. At the moment where data were gathered (until 2011), there was only one other smaller state-wide party, Unión, Progreso y Democracia (UPyD), which was perceived by citizens as a center party leaning slightly to the left (CIS, 2012), and has been classified as a left party. On the other hand, regional parties are those who only present candidates in specific parts of the territory. According to this criterion, therefore, in the period under study there was only one right-wing state-wide platform (PP), three left-wing parties (PSOE, IU, and UPyD), and 15 relevant regional parties (see Table 8 in

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<sup>6</sup>CIS surveys are freely available in its website from 1998 on.

the Appendix). Due to reported abstention or fail to answer,<sup>7</sup> the analyses take into account the voting preferences of 234,164 individuals (61.1% of the sample). Table 3 shows the distribution of platform choice among survey respondents in my data.

Table 3: Distribution of class and vote preferences among respondents.

<i>Type of party</i>	%
National left	52.99
National right	37.87
Regional	9.14

The main individual-level predictor is social class. The CIS monthly surveys do not contain data on individual income. Following previous studies on class voting in Spain (Caínzos, 2001; Carabaña, 2001; Polavieja, 2001; González, 2009; Orriols, 2013), I created a class-based classification of individuals based on their occupation according to the simplified and widely used Erikson–Goldthorpe–Portocarero (EGP-5) schema (Goldthorpe et al., 1987; Goldthorpe and Heath, 1992; Goldthorpe, 1999). When respondents were unemployed, they were coded according to their last occupation.<sup>8</sup>

Table 4 presents the distribution of the class variable among respondents. The higher class (Goldthorpe and McKnight, 2004) is the *service class* (also known as *salariat*), which includes managerial and professional occupations, higher and lower. The *self-employed* category is quite self-explanatory (though it includes small employers), while the classification provides two distinct *intermediate* classes: the so-called white-collar (routine non-manual employees), and the blue-collar intermediate (supervisors of manual workers and lower grade technicians). Finally, the *manual workers* category includes both skilled and unskilled working class employees.

Table 4: Distribution of class and vote preferences among respondents.

<i>Class</i>	%
Salariat	16.75
Self-employed	11.74
Intermediate (blue-c)	1.66
Intermediate (white-c)	12.60
Manual workers	57.25

On the other hand, we measure the economic geography of 17 Spanish regions (all except Ceuta and Melilla), between 1998 and 2011, with variables that are described in Table 5. Regarding GDP per capita, data come from the OECD Regional Database<sup>9</sup> and the variable has been scaled yearly with mean equal to 1. Regions with values higher than 1 on a particular year are richer than the average of that year. All inequality measures have been calculated from the Household Budget Survey (HBS) carried out by the Spanish Instituto Nacional de Estadística (INE), and are based on differences in annual household total expenditures (Goerlich and Mas, 1999).<sup>10</sup>

P90/P50 expresses the distance between the richer and the middle-income groups, and is measured as the ratio between the 90th and the 50th expenditure percentiles. P50/P10 expresses

<sup>7</sup>An average of around 8% of respondents who affirmed to have voted failed to identify a particular party.

<sup>8</sup>I used R to classify respondents into classes from their occupation. The R code is available upon request.

<sup>9</sup>[http://stats.oecd.org/Index.aspx?datasetcode=REG\\_DEMO\\_TL2](http://stats.oecd.org/Index.aspx?datasetcode=REG_DEMO_TL2)

<sup>10</sup>[http://www.ine.es/en/prensa/epf\\_prensa\\_en.htm](http://www.ine.es/en/prensa/epf_prensa_en.htm)

Table 5: Descriptive statistics of the data.

Statistic	N	Mean	St. Dev.	Min	Max
GDP/capita (relative)	238	1.000	0.211	0.625	1.365
P90/P50	238	2.170	0.187	1.720	2.922
P50/P10	238	2.260	0.264	1.718	3.310
Gini index (relative)	238	1.000	0.073	0.817	1.181

the distance between the middle-income groups and the poorer, and is measured as the ratio between the 50th and the 10th percentiles. Table 5 shows that there is more variation in the lower end of the income scale, with instances where the middle-income group is 3.3 times richer than the 10th percentile, while the maximum difference between the middle-income group and the 90th percentile is 2.9.

Finally, the Gini index is also based on household expenditures and was calculated for each region and year, and scaled afterwards to have mean equal to 1. Regions with values higher than 1 are more unequal than the average in a particular year.

## 4.2 Methodology

Given that the response variable is a unordered polytomous measure (vote for leftist, rightist, or regionalist parties), the basic model is a multinomial logistic regression model on partisan preferences. In a first model we just regress class on partisan preferences pooling all data, as a sanity check for class voting. In the rest of models, we let slopes vary by region. By controlling for regional fixed effects we can absorb the effect of living in regions with strong distinct national identities on the results. In all models, time is controlled for through a continuous variable with equal intervals that ranges from 0 to 1, 0 indicating the first year of the data (1998), and 1 the last one (2011).

In subsequent models, we let both slopes and intercept vary through interactions between the categorical individual-level predictor (class) and regional-level variables such as GDP per capita, and the different measures of inequality. In all models, the *salarial* (predictor) and vote to the *left* (response) are taken as the reference categories. Given that the different measures of inequality are quite correlated with each other, separate models are fitted for each of them. The models discussed here do not include other individual-level variables than class. Despite this being a common practice among class voting scholars (Manza et al., 1995; Gavin, 1996; Nieuwbeerta, 1996; Evans, 1999a; Goldthorpe, 1999; Nieuwbeerta and De Graaf, 1999; Weakliem and Heath, 1999b,a; Fairburn and Haslett, 2005; Jansen et al., 2013), it serves the purpose of reducing unnecessary noise in models that already include several relevant predictors and complex interactions (Achen, 2002, 2004), perhaps at the expense of model explanatory power (King, 1986). In-text tabular results are provided for the models including GDP per capita and the Gini index, but given that most models include double and triple interactions, these can be (and are) better presented and discussed through graphical displays of predicted marginal effects (Gelman and Hill, 2007). The rest of tables can be seen in the Appendix.

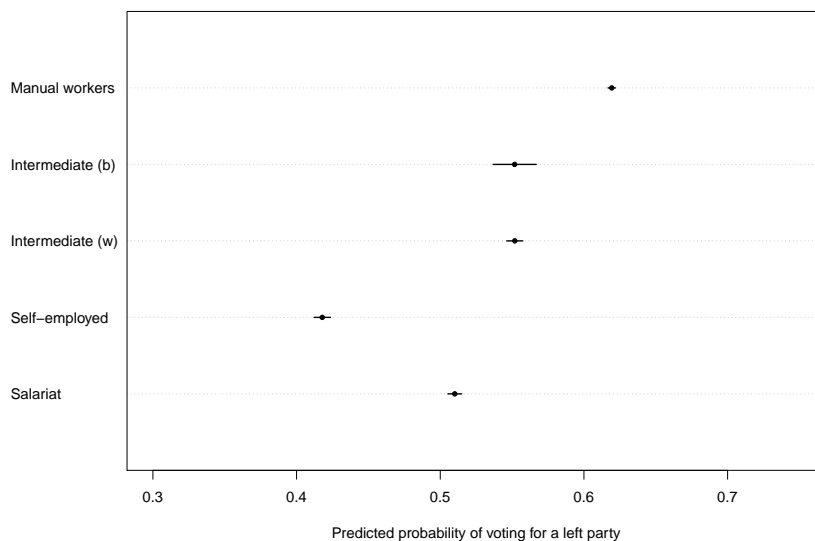


Figure 3: Predicted probability of voting for a left party by social class, 1998-2012. Pooled data with no controls (95% confidence intervals).

## 5 Main empirical results

The first model we fit includes only the individual-level predictor (social class), and tests the general persistence of class voting in Spain. Figure 3 plots the probability of voting the state-wide left for each social group, without any further controls. As shown in the recent literature on class voting in Spain (Orriols, 2013), manual workers overall present a higher probability to vote for the left than any other group, especially the salariat and the self-employed. In subsequent models we include regional-level economic factors.

### 5.1 Class and economic geography

Table 6 presents the results of the multinomial logistic regression model of voting preferences on class and regional GDP per capita. In the first specification (Model 1), we want to capture only the effect of regional relative wealth controlling only for time and regional effects to test our first hypothesis. As expected, individuals living in comparatively richer regions are more likely to vote for the left than any other type of party. Figure 4 shows the predicted probability of vote each type of party at different levels of relative regional wealth. The vertical dashed line (relative GDP per capita equal to 1) marks the predicted probability of vote to each type of party for individuals living in regions with average GDP per capita, and at this level vote for the left is more likely than vote for the right. Significantly, though, left voting is markedly more sensitive to changes in regional wealth than right voting (the line is steeper).

The second and third specifications include class as a predictor and interact class with regional wealth to test our second hypothesis. When GDP per capita is included as a control variable (Model 2 of Table 6), all classes present significant higher support to the national left compared to the salariat, except the self-employed, suggesting a class-based voter coalition pattern with

Table 6: Effect of individual-level class and regional wealth in partisan preferences.

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	regional (1)	right (2)	regional (3)	right (4)	regional (5)	right (6)
<i>Social class</i> [Ref. Salariat]						
Intermediate (b)			-0.431*** (0.062)	-0.247*** (0.037)	-1.079** (0.504)	-0.532*** (0.184)
Intermediate (w)			-0.161*** (0.029)	-0.228*** (0.017)	-0.020 (0.198)	-0.187** (0.081)
Manual workers			-0.633*** (0.022)	-0.523*** (0.013)	0.098 (0.150)	-1.052*** (0.061)
Self-employed			0.0003 (0.032)	0.300*** (0.017)	-1.848*** (0.214)	0.036 (0.087)
GDP/capita	-4.046*** (0.274)	-0.885*** (0.153)	-4.070*** (0.283)	-0.902*** (0.159)	-3.981*** (0.303)	-1.226*** (0.166)
Time	-0.218*** (0.009)	-0.201*** (0.005)	-0.218*** (0.010)	-0.199*** (0.005)	-0.220*** (0.010)	-0.199*** (0.005)
Intermediate (b) x GDP/capita					0.567 (0.438)	0.276 (0.180)
Intermediate (w) x GDP/capita					-0.127 (0.175)	-0.044 (0.077)
Manual workers x GDP/capita					-0.657*** (0.134)	0.536*** (0.059)
Self-employed x GDP/capita					1.738*** (0.193)	0.243*** (0.089)
Constant	-0.273 (0.209)	-0.040 (0.116)	0.148 (0.217)	0.260** (0.121)	-0.012 (0.247)	0.588*** (0.131)
Region effects		Yes		Yes		Yes
Akaike Inf. Crit.	379,108.6	379,108.6	355,713	355,713	355,343.7	355,343.7

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

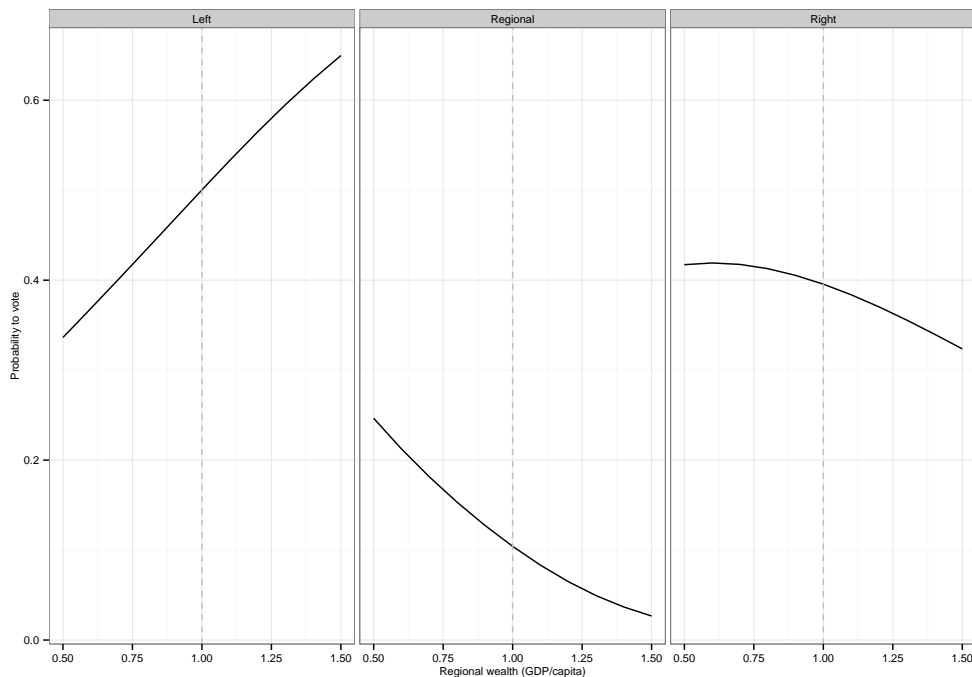


Figure 4: Effect of regional GDP per capita on voting preferences.

two groups: the salariat and the self-employed, on the one hand, with higher support for rightist and regional parties; on the other hand, manual workers and intermediate employees with higher supports to the left.

However, when we interact class and regional wealth to capture the conditional effects of regional wealth on each class voting behavior, results point in the opposite direction. Figure 5 provides a visual explanation of the phenomenon through the predicted probabilities to vote for each type of party for all classes and at different levels of regional GDP. Let's focus on the two extreme class positions, the salariat and manual workers: in regions that are poorer than the mean (values of the  $x$  axis below 1), the richer are more likely to vote for the right than any other party, while manual workers are more likely to vote for the left. However, as these two classes of individuals live in richer regions, and especially when these are richer than the average, the probability to vote for the right (left) decreases (increases) across classes.

Overall the results suggest that regional wealth operates a coalescing effect on all classes: differences in preferences are wider across regional wealth levels than across classes within regions. Hence, the support to the left in wealthier regions overcomes class division, and the same holds for the support to the right in poorer regions. In other words, at higher levels of regional wealth *all* classes increase their support to the national left and decrease their support to the right.<sup>11</sup> In contrast, the rich and the poor across regions present a sharp contrast: while the probability that manual workers vote for the left in national elections does not reach 0.5 in the poorer regions, it gets almost to 0.65 in richer regions. On the other extreme of class division, the richer in the poorer regions present a probability to vote for a right party around 0.5, while this probability is

<sup>11</sup>Notice also that the effect of regional wealth on the vote to the right among manual workers is milder than in the other classes. This explains the positive coefficient of the interaction between manual workers and regional wealth on the vote to the right in Table 6.



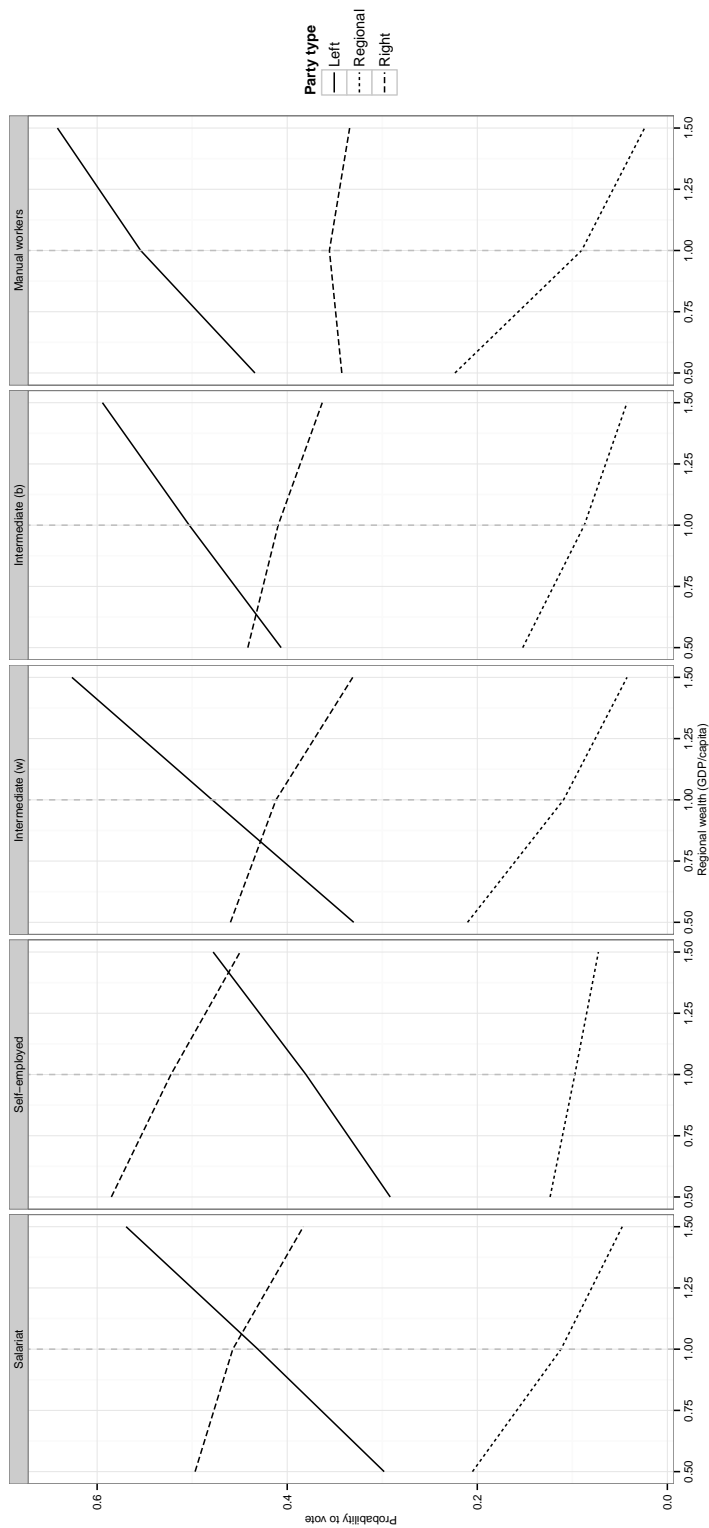


Figure 5: Effect of regional wealth and class in voting preferences.

under 0.4 among the rich in richer regions. Actually, the model predicts that in extremely richer regions even the self-employed (the most left-reluctant class) are more likely to vote for the left than the right or regional parties.

Let's now turn to inequality. Our third hypothesis predicts that inequality, combined with regional wealth will trigger voter coalition across classes within regional groups, superseding class-based coalitions across regions. Table 7 presents the results of the logistic regression model of left vote on class and inequality, measured with the Gini index. The first specification includes class as the main predictor and controls for regional wealth and inequality, while the second and third specifications include double and triple interactions to capture, first, the separate effect of inequality in class vote, and the effect of regional wealth *and* inequality *and* class on vote preferences.

Again, when no interaction is included, the inclusion of inequality on top of regional wealth does not change much: at increasing levels of inequality and controlling for regional wealth, all classes (but the self-employed) are more likely to vote for the left than the salariat, thus favoring more interpersonal redistribution. This pattern, though, changes when regional inequality is interacted with class and regional wealth, the result of which can be better observed in Figure 6. Now the three rows of panels represent three types of region in terms of relative wealth: poorer than the mean (0.5), average (1), and richer than the average (1.5). Besides, the  $x$  axis in each panel indicates different levels of regional inequality (Gini index), with value 1 indicating the mean. Therefore, each panel represents the estimation of voting probabilities for one class in one particular type of region at different levels of regional inequality.

This complex structure of Figure 6 lets us observe how individuals of the same class react differently to inequality depending on the type of region (in terms of GDP per capita) they live in. The first column of plots, for instance, represents the behavioral pattern of the salariat in poorer, average, and richer regions. The results show that for average regions in terms of wealth (relative GDP per capita=1, middle row of panels), the level of inequality does not have a great effect on the vote of the salariat. It's in richer and poorer regions that inequality makes a difference. Beramendi's model predicted that inequality would shape the preferences of the poorer in poorer regions so that they would seek the maximization of the tax base and interregional transfers, while the richer would face the dilemma between centralizing the control of interpersonal redistribution and maximizing inter-regional transfers (Beramendi, 2012). Results in Figure 6 show, though, that the rich and the poor will follow different strategies to face inequality, strongly depending on the relative position of their region in terms of wealth. While the richer in poorer regions (upper-left panel) will react to increasing inequality by widely supporting the Spanish rightist platform—which will strengthen centralization of regional transfers and reduce interpersonal redistribution—the richer in richer regions present the opposite pattern: support for the right will decrease drastically as inequality increases. The same pattern occurs at the other end of the class division, with manual workers in poorer regions aligning with the richer of their region when inequality increases (thus decreasing their support to the left), instead of aligning with manual workers in richer regions, who will increase their support to the left with inequality. This alignment between the richer and the poorer at different levels of regional wealth is represented in Figure 7 predicting their vote for the Spanish left. In sum, as expected in Hypothesis 3, regional wealth homogenizes class behavior within regions and therefore supersedes class voting.

We now turn to the effect of the structure of inequality. Beginning with the lower end of the income scale, Table 9 tests the effect of a variation in the distance between the middle-income groups (P50) and the poorer (P10). We observe, first, that an increase in the distance between the middle-income and the poorer groups (in Model 2, without the interaction between class and relative GDP/capita) has an effect on both manual workers and the self-employed, but in different directions. As suggested by the theory, the self-employed, who benefit from a wider

Table 7: Effect of class and regional relative income and inequality on partisan preferences.

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	regional (1)	right (2)	regional (3)	right (4)	regional (5)	right (6)
<i>Social class</i> [Ref. Salariat]						
Intermediate (b)	-0.432*** (0.062)	-0.247*** (0.037)	1.544* (0.931)	-0.137 (0.544)	-17.279*** (1.715)	1.732 (3.516)
Intermediate (w)	-0.161*** (0.029)	-0.228*** (0.017)	-0.317 (0.399)	-0.364 (0.257)	-7.877** (3.790)	1.058 (1.610)
Manual workers	-0.634*** (0.022)	-0.523*** (0.013)	-1.357*** (0.307)	0.354* (0.192)	-11.176*** (2.773)	4.699*** (1.194)
Self-employed	-0.0003 (0.032)	0.300*** (0.017)	3.696*** (0.464)	0.031 (0.266)	-8.472** (4.096)	4.583*** (1.622)
Inequality (Gini)	-1.232*** (0.270)	0.242** (0.118)	-1.150*** (0.364)	0.655*** (0.192)	-5.620** (2.496)	9.711*** (1.116)
GDP/capita	-4.415*** (0.293)	-0.876*** (0.159)	-4.497*** (0.294)	-0.884*** (0.159)	-8.146*** (2.247)	8.884*** (1.112)
Time	-0.216*** (0.010)	-0.199*** (0.005)	-0.220*** (0.010)	-0.198*** (0.005)	-0.219*** (0.010)	-0.202*** (0.005)
Intermediate (b) x Inequality			-2.083** (0.980)	-0.114 (0.540)	16.610*** (1.499)	-2.432 (3.500)
Intermediate (w) x Inequality			0.161 (0.415)	0.135 (0.256)	7.680** (3.654)	-1.279 (1.592)
Manual workers x Inequality			0.757** (0.318)	-0.869*** (0.191)	11.317*** (2.677)	-5.831*** (1.182)
Self-employed x Inequality			-3.795*** (0.478)	0.243 (0.261)	6.665* (3.958)	-4.803*** (1.602)
Intermediate (b) x GDP					16.716*** (1.336)	-2.828 (3.458)
Intermediate (w) x GDP					6.729** (3.224)	-1.383 (1.553)
Manual workers x GDP					10.005*** (2.370)	-5.582*** (1.161)
Self-employed x GDP					7.865** (3.535)	-5.526*** (1.607)
Inequality x GDP					3.877* (2.212)	-10.080*** (1.098)
Intermediate (b) x Inequality x GDP					-16.729*** (1.529)	3.303 (3.503)
Intermediate (w) x Inequality x GDP					-6.743** (3.149)	1.387 (1.566)
Manual workers x Inequality x GDP					-10.819*** (2.321)	6.256*** (1.172)
Self-employed x Inequality x GDP					-6.237* (3.470)	6.070*** (1.617)
Constant	1.703*** (0.401)	-0.013 (0.178)	1.665*** (0.464)	-0.419* (0.233)	5.899** (2.572)	-9.224*** (1.143)
Region effects		Yes		Yes		Yes
Akaike Inf. Crit.	355,688.1	355,688.1	355,498.9	355,498.9	355,168.8	355,168.8

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

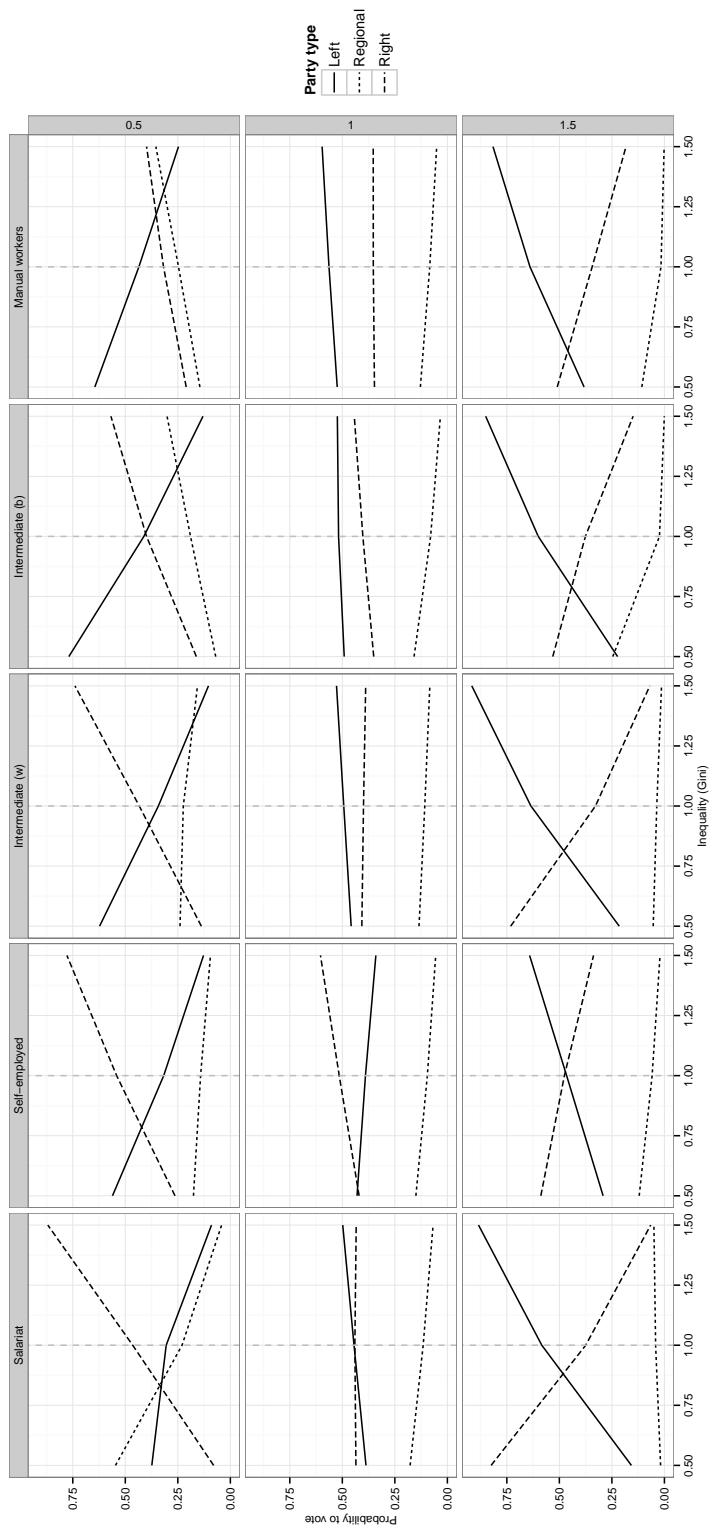


Figure 6: The effect of regional wealth and inequality on vote preference among all classes.

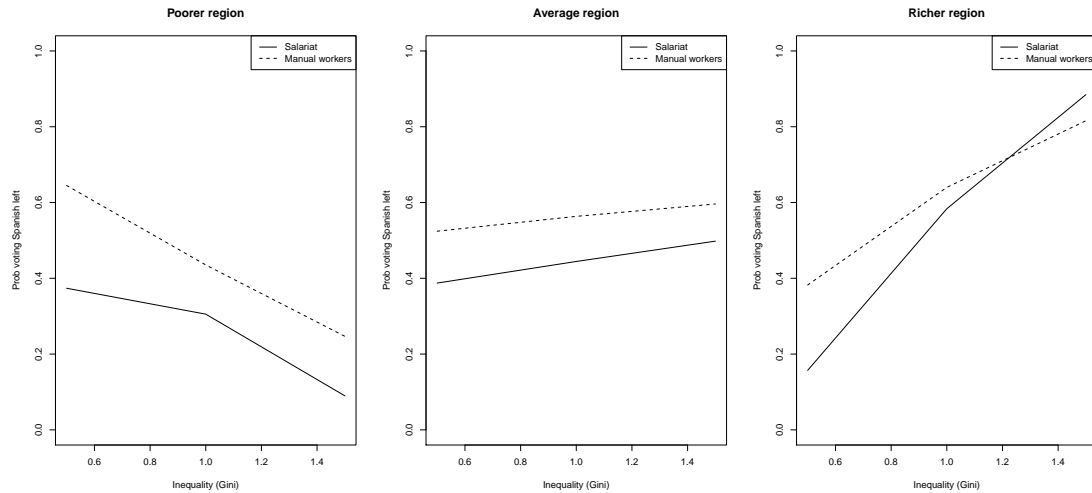


Figure 7: The effect of regional wealth and inequality in the vote for the Spanish left among the poorer and the richer.

gap between them and the poorer groups, are more likely to prefer right-wing parties than the national left or regional parties. On the contrary, manual workers will mostly support national left parties. The other intermediate groups don't present clear effect on this. However, when this measure of inequality interacts with relative regional income (better observed in Figure 8), the coalition of voters within regions breaks-up in richer and poorer regions. In richer regions, as the self-employed get farther from the manual workers their support to the left will decrease, in favor of either the state-wide right or regionalist parties, while the effect of this measure of inequality on the salariat is not very different from the one produced by the Gini index. In poorer regions, the within-region coalition break-up will be led by the manual workers: as their income gap with the middle-income groups increase, their support to the state-wide left will also increase. However, changes in the P50/P10 ratio will have no distinct effect among the working class of the richer regions.

A slightly different thing happens when it's the difference between the affluent (P90) and the middle income groups (P50) that we take into account (Table 10). When the ratio between the richer (P90) and the median income groups (P50) increases (i.e., the richer are much richer than the middle income groups), the self-employed and the blue-collar intermediate groups don't present significant differences between voting the national left or right, but they present much lower levels of support to regional parties. The salariat, on the contrary, presents higher support for the state-wide left (Model 2, coefficient of P90P50). On the other hand, manual workers also react to increasing differences in the upper half of income distribution, with lower likelihood to support the national right. When regional wealth is taken into account (see Figure 9), the support of middle-income groups and manual workers to the state-wide right in poorer regions is far less pronounced, suggesting, again, a break-up of the voter coalition. This change is led, again, by the self-employed and the manual workers. In average or richer regions, the results indicate that changes in the structure of inequality in the upper side of the income scale produce the same effects than those produced by the standard measure of the level of inequality (Gini index)—i.e., a voter coalition to support state-wide left parties.

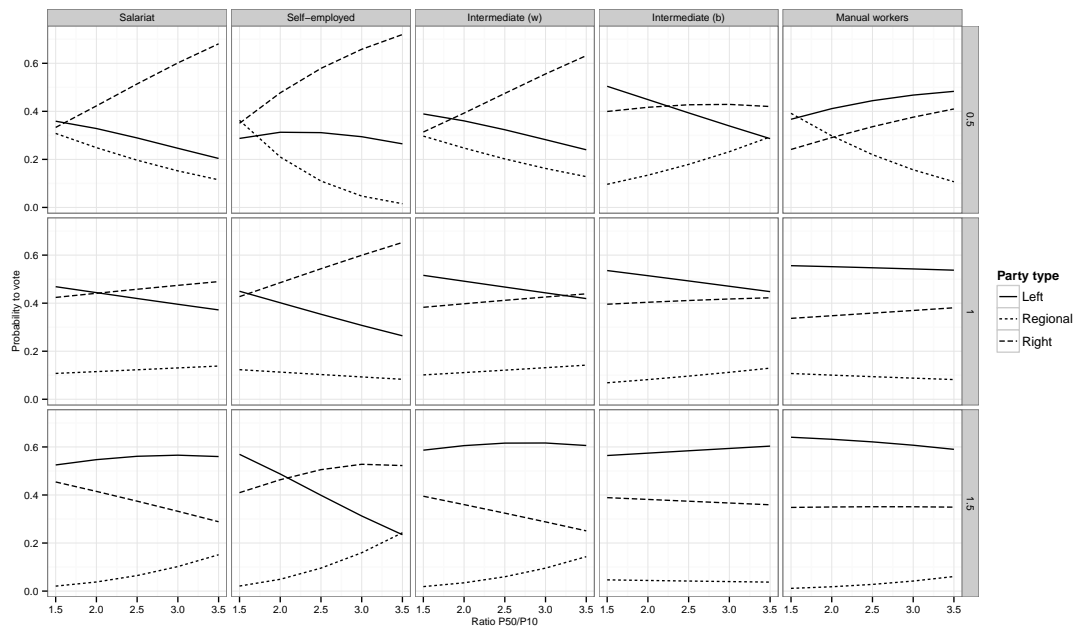


Figure 8: Effect of regional wealth and the distance between the middle income and poorer groups (P50/P10 ratio) on vote preferences among all classes

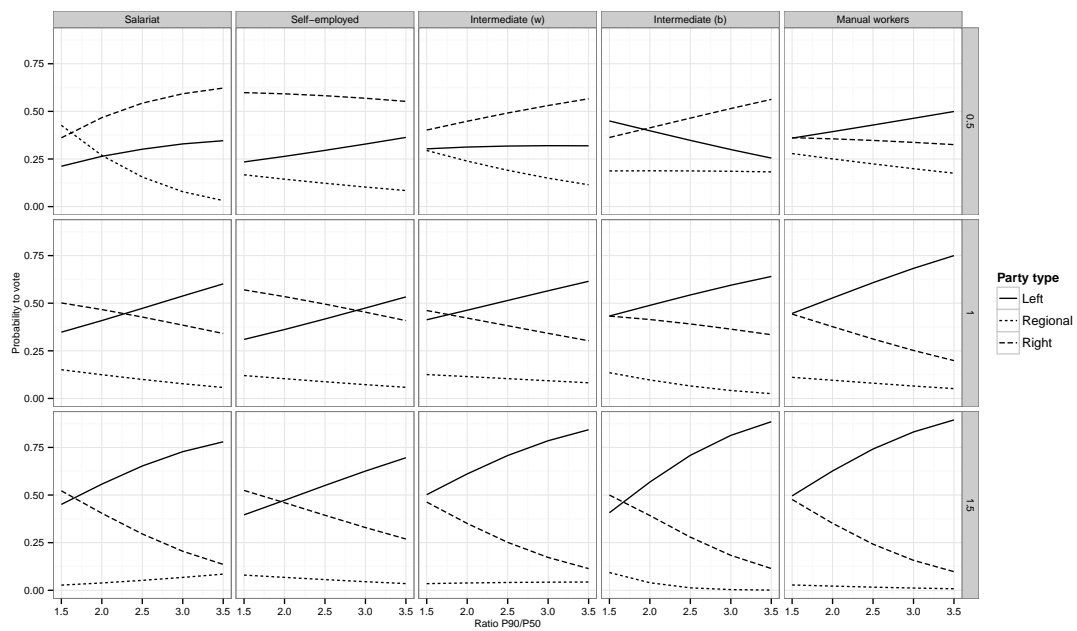


Figure 9: Effect of regional wealth and the distance between the rich and the middle income groups (P90/P50 ratio) on vote preferences among all classes

## 6 Conclusions

This paper has shown how regional economic geography in a decentralized union shapes class-based party preferences, providing evidence from survey data in Spain. Despite the rebirth of interest in the role of social class as an explanatory factor of voting preferences in the last decade, the reappraisal of this classic notion has barely affected the basic theoretical mechanism linking social class and vote. However, a growing volume of political economy research on the redistributive and political effects of welfare states has questioned the unidirectional causal mechanism of classic class voting supporting the view that voter preferences are actually endogenous to party competition. At the same time, another strand of research has found empirical support to the notion that the economic and political geography of political unions influence political actors' preferences on inter-personal and inter-regional redistribution and its institutional arrangement. In particular, this paper builds on the model by Beramendi (2012) in which individual income and the geography of wealth and inequality shape preferences for redistribution and fiscal structures under decentralization. However, the paper makes a step beyond and explores how the fragmentation of social class mobilization due to the effect of economic geography affects partisan preferences.

The paper tests two kinds of hypothesis. In the first two, economic geography is operationalized simply as differences in relative regional income. Results support the basic political economic models that predict that, on the one hand, (1) people living in richer regions will present higher levels of support to the state-wide left (i.e., less inter-regional redistribution) than those living in poorer regions; on the other hand, (2) that economic geography operates a powerful coalescing mechanism among social classes within regions. In particular, when controlling for relative regional income, all classes in regions sharing the same relative position (say, all classes within richer regions) tend to homogenize their partisan preferences. Furthermore, all classes in richer regions tend to support the state-wide left (higher levels of decentralization), while all classes in poorer regions will support the state-wide right, thus higher levels of centralization of regional transfers. These results echo those found by previous authors studying the determinants of preferences for inter-regional redistribution (Amat, 2012; Balcells et al., 2015).

The second group of hypotheses adds inequality in to test the effect of relative regional income. In the original model Beramendi (2012) expected inequality to change the preferences of income groups even controlling for regional income. Due to the strong redistributive effects of Spanish inter-regional fiscal flows, we didn't expect the level of regional inequality to have a distinct effect but to strengthen the powerful effect of regional income in shaping partisan preferences. With the support of graphical devices, I have shown how individuals of the same class react differently to inequality depending on the relative income position of the region they live in. The results show that it's in richer and poorer regions that inequality makes a difference. While the richer in poorer regions react to increasing inequality by widely supporting the state-wide rightist platform (strengthening centralization of regional transfers and reducing interpersonal redistribution), the richer in richer regions will decrease their support for the right as inequality increases. The same pattern occurs at the other end of the class spectrum, with manual workers in poorer regions aligning with the richer of their region when inequality increases (thus decreasing their support to the left), instead of aligning with manual workers in richer regions, who will increase their support to the left with inequality. Therefore, in the third hypothesis we also found evidence that regional wealth homogenizes class behavior within regions and therefore supersedes class voting.

Following literature on the effect of inequality on preferences for redistribution (Lupu and Pontusson, 2011), we tested two additional hypotheses measuring inequality in alternative ways. The basic idea is that what shapes aggregate preferences for redistribution is not the level of

inequality but its structure, in which middle income groups will have a pivotal role. Specifically, the model predicts that middle income groups will switch their preferences on redistribution depending on the existing income distance between them and both the lower and upper income groups. Actually, results show that the structure of inequality matters more than the level of inequality, even controlling for relative regional income. On the one hand, when the gap between the median and the poorer groups increases, the coalition of voters within regions found in the previous models breaks-up in both richer and poorer regions. In richer regions, as the self-employed get farther from the manual workers their support to the left will decrease and the one to the right will increase. In poorer regions, the within-region coalition will be broken by the manual workers, who will increasingly support the state-wide left as the income gap between them and the median group increases. With changes in the gap between the median and the poor, therefore, a class-based coalition among manual workers will be more likely.

When we observe the income gap between the median and the upper income group, results are less compelling. Controlling for relative regional income, changes in the distance between the median and upper groups has a less pronounced effect in poorer regions, suggesting another break-up of the voter coalition. In average or richer regions, the evidence found indicates that changes in the structure of inequality in the upper side of the income scale echo the ones produced by the level of inequality.

The implications of the findings reported in this paper are varied. First, the account of class voting with no reference to economic geography is in perfect accordance with the current literature in the field. Second, the effect of relative regional income position seems essential to understand how individual income measures such as class operate under political decentralization or federalism. The effect of economic geography is, in this sense, pervasive across classes. In particular, regional income homogenizes partisan preferences in a way that supersedes class-based coalitions of voters, even under different conditions of inequality. This, in turn, intends to be a relevant contribution to the class voting literature. Thirdly, this article intends to dialogue with previous political economic research suggesting that the evolution of the *Estado de las Autonomías* and the fiscal structure that determines regional fiscal flows in Spain provides a structure of incentives for political actors that promotes the deactivation of the class-based cleavage (Fernández-Albertos and Manzano, 2012) and the continuous activation of the territorial divide (Amat, 2012; Balcells et al., 2015). These authors have been most successful in shedding light on the determinants of preferences for redistribution, individual and regional. I hope this article is a valuable contribution towards a more comprehensive theory of the way powerful individual and economic geographical determinants shape partisan preferences.

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## A Party classification and models

Table 8: Classification of Spanish political parties.

Left	Right	Regional
Partido Socialista Obrero Español (PSOE)		
Izquierda Unida (IU)		
Unión, Progreso y Democracia (UPyD)	Partido Popular (PP)	
		Amaiur Bloque Nacionalista Galego (BNG) Coalición Canaria (CC) Chunta Aragonesista (CHA) Compromís-Q Convergència i Unió (CiU) Eusko Alkartasuna (EA) Esquerra Republicana de Catalunya (ERC) Foro de Ciudadanos (FAC) Geroa Bai (GB) Herri Batasuna (HB) Nafarroa Bai (NaBai) Partido Andalucista (PA) Euzko Alderdi Jeltzalea-Partido Nacionalista Vasco (EAJ-PNV) Unió Valenciana (UV)

Table 9: Effect of class, relative regional income and the inequality difference between the middle income (P50) and the poor (P10) on partisan preferences.

	Model 1		Model 2		Model 3	
	regional (1)	right (2)	regional (3)	right (4)	regional (5)	right (6)
<i>Social Class</i> [Ref. Salariat]						
Intermediate (b)	-0.430*** (0.062)	-0.246*** (0.037)	0.337 (0.596)	0.185 (0.337)	-10.500** (4.484)	0.910 (1.831)
Intermediate (w)	-0.164***	-0.230***	-0.322	-0.277*	-0.751	-0.084
Manual workers	-0.029 (0.029)	-0.523*** (0.017)	-0.236 (0.267)	0.098 (0.154)	2.296 (1.984)	1.127* (0.822)
Self-employed	(0.022)	(0.013)	(0.206)	(0.115)	(1.500)	(0.607)
P0.50/P0.10	0.001	0.301***	2.180***	0.011	5.721***	1.705**
	(0.032)	(0.018)	(0.305)	(0.158)	(2.206)	(0.856)
	-0.428***	-0.265***	-0.227**	-0.124***	-2.250***	0.483**
GDP/capita	(0.054)	(0.025)	(0.089)	(0.048)	(0.573)	(0.239)
	-4.452***	-1.003***	-4.547***	-0.992***	-9.053***	0.367
Time	(0.290)	(0.159)	(0.290)	(0.159)	(1.219)	(0.548)
	-0.259***	-0.225***	-0.263***	-0.224***	-0.259***	-0.224***
	(0.011)	(0.006)	(0.011)	(0.006)	(0.011)	(0.006)
Intermediate (b) x P0.50/P0.10			-0.352	-0.192	4.120**	-0.626
Intermediate (w) x P0.50/P0.10			(0.274)	(0.148)	(1.883)	(0.812)
			0.073	0.020	0.290	-0.049
Manual workers x P0.50/P0.10			(0.122)	(0.068)	(0.848)	(0.364)
			-0.182*	-0.274***	-0.809	-0.960***
Self-employed x P0.50/P0.10			(0.094)	(0.051)	(0.644)	(0.269)
			-0.988***	0.116*	-3.202***	-0.818**
			(0.138)	(0.068)	(0.946)	(0.379)
Intermediate (b) x GDP/capita					9.392**	-0.965
					(3.881)	(1.785)
Intermediate (w) x x GDP/capita					0.398	-0.150
					(1.738)	(0.783)
Manual workers x x GDP/capita					-1.614	-1.416**
					(1.321)	(0.583)
Self-employed x x GDP/capita					-4.593**	-2.033**
					(1.950)	(0.855)
P0.50/P0.10 x GDP/capita					2.016***	-0.730***
					(0.511)	(0.232)
Intermediate (b) x P0.50/P0.10 x GDP/capita					-3.899**	0.544
					(1.657)	(0.808)
Intermediate (w) x P0.50/P0.10 x GDP/capita					-0.202	0.050
					(0.755)	(0.355)
Manual workers x P0.50/P0.10 x GDP/capita					0.260	0.868***
					(0.575)	(0.264)
Self-employed x P0.50/P0.10 x GDP/capita					2.681***	1.093***
					(0.849)	(0.385)
Constant	1.420*** (0.274)	0.944*** (0.138)	1.045*** (0.313)	0.622*** (0.164)	5.443*** (1.361)	-0.459 (0.562)
Region effects		Yes		Yes		Yes
Akaike Inf. Crit.	355,566.500	355,566.500	355,423.800	355,423.800	355,019.700	355,019.700

Note: \* p<0.1; \*\* p<0.05; \*\*\* p<0.01

Table 10: Effect of class, relative regional income and the inequality difference between the affluent (p90) and the middle-income (p50), on partisan preferences.

	Model 1		Model 2		Model 3	
	regional (1)	right (2)	regional (3)	right (4)	regional (5)	right (6)
<i>Social Class [Ref. Salariat]</i>						
Intermediate (b)	-0.430*** (0.062)	-0.246*** (0.037)	1.827** (0.773)	-0.458 (0.441)	-14.012*** (1.050)	-2.292 (2.708)
Intermediate (w)	-0.164***	-0.230***	-0.573*	-0.380*	-5.698*	-0.320
Manual workers	(0.029)	(0.017)	(0.325)	(0.212)	(2.990)	(1.220)
	-0.635***	-0.523***	-1.015***	0.196	-6.940***	0.336
Self-employed	(0.022)	(0.013)	(0.255)	(0.157)	(2.238)	(0.909)
	-0.00003	0.300***	2.226***	0.365*	-9.246***	1.589
P0.90/P0.50	(0.032)	(0.018)	(0.389)	(0.207)	(3.269)	(1.233)
	-0.492***	-0.358***	-0.476***	-0.191***	-3.513***	1.199***
GDP/capita	(0.058)	(0.030)	(0.107)	(0.065)	(0.895)	(0.364)
	-4.368***	-0.948***	-4.365***	-0.952***	-10.148***	1.941**
Time	(0.287)	(0.159)	(0.287)	(0.159)	(1.715)	(0.791)
	-0.207***	-0.189***	-0.207***	-0.189***	-0.210***	-0.191***
Intermediate (b) x P0.90/P0.50	(0.010)	(0.005)	(0.010)	(0.005)	(0.010)	(0.005)
			-1.087***	0.096	6.160***	0.770
Intermediate (w) x P0.90/P0.50			(0.371)	(0.201)	(0.475)	(1.233)
			0.195	0.070	2.531*	0.053
Manual workers:P0.90/P0.50			(0.154)	(0.097)	(1.349)	(0.555)
			0.183	-0.330***	3.231***	-0.615
Self-employed x P0.90/P0.50			(0.120)	(0.072)	(1.011)	(0.413)
			-1.047***	-0.033	3.406**	-0.722
Intermediate (b) x GDP/capita			(0.183)	(0.094)	(1.478)	(0.561)
					13.954***	1.510
Intermediate (w) x GDP/capita					(0.911)	(2.685)
					4.473*	-0.050
Manual workers x GDP/capita					(2.590)	(1.198)
					5.828***	-0.503
Self-employed x GDP/capita					(1.946)	(0.898)
					8.583***	-1.485
P0.90/P0.50 x GDP/capita					(2.870)	(1.248)
					2.704***	-1.534***
Intermediate (b) x P0.90/P0.50 x GDP/capita					(0.781)	(0.359)
					-6.418***	-0.532
Intermediate (w) x P0.90/P0.50 x GDP/capita					(0.498)	(1.235)
					-2.048*	0.011
Manual workers x P0.90/P0.50 x GDP/capita					(1.178)	(0.551)
					-2.999***	0.457
Self-employed x P0.90/P0.50 x GDP/capita					(0.886)	(0.413)
					-3.174**	0.806
Constant	1.494*** (0.271)	1.109*** (0.140)	1.449*** (0.331)	0.750*** (0.188)	7.942*** (1.309)	-1.889** (0.574)
Region effects		Yes	Yes	Yes	Yes	Yes
Akaike Inf. Crit.	355,530.000	355,530.000	355,417.800	355,417.800	355,096.100	355,096.100

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01