Original Article

Dualism and support for the welfare state

José Fernández-Albertos^{a,*} and Dulce Manzano^b

^aInstitute for Policies and Public Goods, CSIC, C/Albasanz, 26-28. Madrid 28037, Spain.

^bComplutense University of Madrid (Sociology VI), C/Rector Royo Villanova s/n. Madrid 28040, Spain.

*Corresponding author.

Abstract This article investigates the determinants of citizens' preferences for the size of the welfare state. Previous studies have shown that individuals in lower socioeconomic positions express stronger support for welfare state expansion. We argue that this support declines in dual labor markets (those in which there is a significant portion of the labor force not enjoying the working conditions of standard workers) because welfare state intervention is less redistributive as social protection policies tend to benefit the well-protected sectors of the labor force. As a result, the relationship between the socio-economic attributes of individuals and their views of the welfare state is conditional on the structure of the labor market. We use evidence from the European Social Survey to substantiate empirically this claim and find that in dual labor markets economically disadvantaged groups are less willing to expand the welfare state, and that the mechanism underlying this finding indeed appears to be the less redistributive nature of welfare state intervention in these contexts.

Comparative European Politics advance online publication, 4 August 2014;

doi:10.1057/cep.2014.32

Keywords: welfare state; labor market; redistribution; public opinion; dualism; policy preferences

Introduction

A growing line of research within the comparative welfare state literature focuses on understanding the determinants of preferences for social policies in modern societies. One central approach has explored the role of economic self-interest in the formation process of these preferences and has linked attitudes toward the welfare state to the economic positions of individuals (Svallfors, 1997, 2003; Iversen and Soskice, 2001; Rehm, 2009; Rehm *et al.*, 2012). In particular, this approach has argued and empirically confirmed that lower socioeconomic groups tend to advocate for a larger welfare state.¹ We argue that the structure of the labor market mediates

this relationship. As a large portion of welfare state benefits in advanced economies depend on the individual's job position and labor trajectory, individuals of the lower social classes are less sympathetic to an expansion of the welfare state in segmented labor markets (that is, labor markets with highly protected standard employment and a significant percentage of unemployment people and/or workers in non-standard employment, see Rueda, 2005; Häusermann and Schwander, 2012). In these contexts, welfare state intervention is expected to be less redistributive as many social protection policies benefit the well-protected sectors of the labor force. As a result, those at the bottom of the income distribution – holding more pro-redistributive preferences – need not be those supporting the welfare state, as they tend to be outsiders in the labor market (low-pay, low-protected workers). The article offers, therefore, a comprehensive theory of preferences for the welfare state that relies on the interplay of micro-level factors determining the socioeconomic positions of individuals and context-level factors like the degree of dualism in the labor market.

Consistent with this account, we document with cross-national survey data that the relationship between the socioeconomic traits of citizens that determines their preferences for redistribution – income, education level and labor market status – and their support for the welfare state changes in dual labor markets. People with lower income and educational attainment, who favor redistribution, do tend to be in favor of welfare state expansion almost everywhere, but their support becomes substantively weaker in countries with dual labor markets. Furthermore, we show that those with more vulnerable positions in the labor market welcome welfare state expansion in non-dual labor markets, but quite less so in dual ones.

The article is structured as follows. After reviewing the relevant literature, we lay out our theoretical argument. Next, we discuss the construction of our indicator of labor market dualism. Then we analyze individual preferences in 21 European countries using the fourth wave of the European Social Survey (ESS) to see whether dualism conditions the relationship between the socioeconomic positions of individuals and their support for the welfare state.

Dualism and the Socioeconomic Determinants of Support for the Welfare State

Most of the empirical work on the political-economy determinants of social policies has conventionally focused on testing hypotheses at the macro-level regarding the impact of economic, institutional or political variables (that is, economic development, inequality, globalization, deindustrialization, democracy or the political strength of left parties) on social expenditure. The theoretical expectations of this research are typically built upon the assumption that the demands of public welfare respond to the economic interests of individuals. A prominent presumption of this literature states

that relatively poorer people will demand a higher level of expenditure impelled by the redistributive consequences of these policies (Meltzer and Richard, 1981; Perotti, 1993, 1996; Alesina and Rodrik, 1994).² In this vein, the power-resources theory posits that lower-income citizens form the core base of support of the welfare state, and that the variation in the size of the welfare state relates to differences in the degree of political and organizational strength of the working class (Stephens, 1979; Korpi, 1983; Esping-Andersen, 1990).

More recent contributions have suggested additional economic motives driving preferences over social policies. Individuals may see welfare policies as providing insurance rather than redistribution. If the insurance dimension of social policies dominates, high-income individuals are expected to demand *more* generous social protection systems, as they have more to lose than low-income earners when faced from labor market-related risks (Moene and Wallerstein, 2003). For similar reasons, others have argued that workers with more specific skills (as well as their employers) will demand ample social protection plans because they are more vulnerable during adverse conditions affecting labor markets given that the portability of their skills is lower across firms or sectors (Iversen and Soskice, 2001; Cusack *et al.*, 2006). In line with these approaches, recent research has explored how the risk profile associated with different types of workers help explain variation in social policy preferences (Häusermann, 2010; Rehm, 2011).³

Educational attainment has been also highlighted as a significant socioeconomic attribute of individuals shaping their attitudes toward the welfare state. Two distinct but not mutually exclusive analytical mechanisms can lead to the hypothesis that education is negatively related to redistributive preferences: one is that more educated people have a much lower significant risk of falling into poverty – and therefore a lower probability of being the recipients of redistributive policies. A second possibility is that education enhances the prospects of upward mobility. As more educated people expect to be upwardly mobile, they believe that they are less likely to benefit from welfare redistributive policies (Alesina and Giuliano, 2011).

The empirical studies on public opinion toward the welfare state consistently show that low levels of income and socioeconomic status are related in developed countries with preferences for more generous social insurance and greater welfare state intervention (Hasenfeld and Rafferty, 1989; Iversen and Soskice, 2001; Scheve and Stasavage, 2006). In the same vein, and using occupation as the criterion for classifying social class, Svallfors (1997, 2004) finds that lower social classes tend to be more in favor of welfare state intervention.⁴ There are thus not only powerful theoretical reasons to expect that the most materially disadvantaged individuals of the society, who have stronger preferences for redistribution, should also be among the more vigorous defenders of the welfare state expansion. The available individual-level evidence gives strong support to this contention.⁵

However, we argue that preferences for redistribution do not translate automatically into a greater support for the welfare state, and that the effect of individuals'

socioeconomic positions on their attitudes toward the welfare state crucially depends upon the redistributive nature of welfare policies.

Welfare state interventions typically include publicly provided services such as education or health, income transfers or social security programs, all of them aimed to the production of wellbeing. These social policies can be characterized, depending upon their design, as more or less redistributive.⁶ The *redistributive nature* of welfare programs refers to the extent to which these policies benefit the poor relative to the better-off. The more welfare state interventions benefit disproportionately the economically disadvantaged groups and equalize the distribution of wellbeing, the more progressive these interventions are.⁷ To be sure, the overall effect of welfare interventions in advanced democracies is generally progressive (the post-tax and post-transfers distribution of income is always more equal than the pre-tax and pre-transfers one). However, the progressivity of specific welfare policies depends crucially on its design. There are plenty of examples of state interventions that are distributionally neutral or even regressive, such as public spending on tertiary education, subsidies to home ownership or certain types of contributory pensions. In fact, a very influential sociological line of research has argued for this reason that the particular design of social policies, and not the sheer size of the state, is the defining feature of the different welfare regimes (Esping-Andersen, 1990; Korpi and Palme, 1998).

One of the main ~~form~~ state interventions in the provision of welfare takes the form of social protection policies, that is, policies aimed at addressing individuals' labor market-related risks. In principle, all workers have some probability of losing their incomes due to the realization of unforeseen circumstances like layoffs, accidents or illnesses or, in the case old-age, they will all surely face a loss of market income. As a result, the distributional consequences of public insurance programs cannot be assumed to be inherently progressive or pro-poor.⁸ In fact, the *ex ante* demand for protection might be unrelated to socioeconomic conditions. It has even been argued that middle- and high-income workers may prefer even more generous insurance programs, as labor market risks are direr for these individuals (Iversen and Soskice, 2001; Moene and Wallerstein, 2003). The historical evidence shows in fact that a crucial driving force behind the building of the modern social security systems in capitalist industrialized societies has been to accommodate the demands and preferences of certain firms and of high-skill and specific-skill employees, and not precisely the economically worse-off (Hall and Soskice, 2001; Mares, 2003).⁹

In a typical European social security system, the social protection scheme normally requires a minimum period of contribution to become a beneficiary and provides benefits that tend to be proportional to past contributions. This in-built penalty to low-income earners implies that the greater the divide between (better-off) workers that contribute, and therefore benefit, from the system and (worse-off) workers that do not, the less redistributive these social security programs will be. As welfare state intervention becomes less redistributive, the relationship between a person's level of income or education and her support for the welfare state should

be expected to weaken: many low-income individuals will grow skeptic toward a welfare state that protects others' interests, while some middle- and high-income individuals will welcome these welfare state interventions, precisely because of their non-redistributive properties. We argue that this phenomenon is particularly relevant in dual labor markets. Note that the net effect of all welfare state interventions might well continue to be redistributive, as other policies (public health, targeted social benefits and so on) do have heavily progressive consequences. Our claim is just that as labor-market protection policies are in these contexts *less* progressive, the overall effect of welfare state intervention becomes *less* redistributive.

The dualization of the labor market refers to the division of the labor force into two segments: the *insiders*, defined as those 'workers occupying highly protected jobs', and the *outsiders*, defined as 'a group of workers who are either unemployed or precariously employed' (King and Rueda, 2008, p. 280; Emmenger *et al.* 2012). Following the political-economy account offered in Rueda (2005, 2006, 2007) and King and Rueda (2008), the emergence of such division in several OECD countries was the result of the use of temporary and part-time contracts by employers in countries with generous employment protection laws for standard workers. Given an extensive need for 'cheap labor' in the post-industrialist developed world,¹⁰ the economies that protect standard employment (jobs with permanent and full-time contracts), increased the supply of non-standard employment (jobs with temporary and part-time contracts) as a way to satisfy this need.

The division of the workforce between insiders and outsiders not only affects the extent of employment protection that these two groups enjoy. It is often the case that non-standard jobs are concentrated in low-skilled activities and are poorly paid in comparison to the standard sectors of the labor market. In addition, temporary and part-time employment is disproportionally punished by the social security system, which requires certain eligibility conditions based on a minimum period of contribution and provides benefits proportional to past contributions. In dual labor markets, this typical European social protection scheme becomes less progressive as it provides more generous benefits to workers with more uninterrupted labor careers and relatively higher wages, and penalizing or outright excluding temporary workers who have not able to contribute enough in the past.

Regarding individual preferences, this discussion implies that the strength of the relationship between income or education and support for the welfare state intervention should be conditional on the structure of the labor market. In principle, individuals in lower socioeconomic positions (that is, low-income and low levels of education), who express stronger preferences for redistribution, should be also the more vigorous defenders of the welfare state expansion, which on the whole tends to equalize incomes. However, we argue that the intensity of this support varies with the degree of dualization in the labor market. In dual economies, low-income earners and people with low education have a higher probability of being employed in the non-standard sector of the labor market and are more likely to have less stable labor

biographies. As a result, they are less likely to qualify for social protection and when they do, they will tend to receive less generous benefits (which are often tied to contributions). Under these circumstances, they will be hesitant to support enthusiastically the welfare state, as they are often excluded from the privileges conferred to better-paid, standard workers.¹¹ To be sure, other welfare state policies confer significant benefits to these groups, so the overall attitude toward the welfare state is unclear; our only claim is that in dual labor markets, the fact that a crucial pillar of the welfare system becomes less pro-poor should reduce the degree of support toward the welfare state among the worse-off. Thus our main working hypothesis: the negative association between a person's level of income or education and her preferences for the size of the welfare state intervention becomes weaker as the degree of dualism in the labor market increases. In addition, we should also expect that non-standard workers (that is, those under fixed-term and part-time contracts) and the unemployed should advocate a more interventionist welfare state in the less dualized economies, but much less so in highly dualized ones.

Empirical Analysis

The empirical analysis is divided into two parts. First, using individual-level data from a cross-country survey, we test whether the presence of dual labor markets has any effect on the relationship between socioeconomic status and welfare state support. After showing that the degree of dualism does indeed seem to mediate the relationship between income and education and views toward the welfare state, in the second part we propose two ways of testing whether the mechanisms underpinning that finding are consistent with our theoretical framework. We first show that, at the aggregate level, the welfare state is indeed less redistributive in countries with high degrees of dualism. And second, we show that, once individual preferences for redistribution are taken into account, the interactive effect between socioeconomic characteristics and dualism decreases significantly, suggesting that it is indeed the less redistributive nature of the state in dual labor markets what drives low-income individuals' welfare state skepticism in these countries.

Dualism and preferences for the welfare state

The most important empirical implication of the theory developed in the previous section is that the relationship between socioeconomic status and support for the welfare state at the individual level should be *weaker* in countries with dual labor markets.

To test this contention, we analyze the Fourth Wave of the ESS, conducted in the Fall of 2008 in 27 European countries. Two features make this survey particularly appropriate to evaluate our main hypothesis. First, this ESS wave focuses on views

toward the welfare state, including questions that enable us to measure preferences for welfare state expansion as well as for redistribution. Second, it was administered to national representative samples of a rather heterogeneous group of countries, with markedly different labor market institutions and varying degrees of dualism.

The main measure of welfare state support we use is the response to the following question, where support for the welfare state has to be weighed against its monetary costs.¹²

Many social benefits and services are paid for by taxes. If the government *had* to choose between increasing taxes and spending more on social benefits and services, *or* decreasing taxes and spending less on social benefits and services, which should they do? Choose your answer from this scale, where 0 means that government should decrease taxes a lot and spend much less in social benefits and social services, and 10 means that government should increase taxes a lot and spend much more on social benefits and services.

To measure the degree of dualism in the labor force, we construct a new indicator that better captures the two different dimensions of this phenomenon overlooked by more standard indicators.¹³ Analytically, dualism refers to the fact that a subset of the labor force enjoys a lower degree of social protection as a result of its labor market status. A general indicator of dualism must reflect therefore two things: how discriminated against the excluded workers are in terms of social protection, and how large is the subset of the labor force population that do not enjoy the social rights recognized to standard workers. If discrimination is significant, but virtually no one falls into the ‘discriminated’ group, the dualism measure should not rank high. Likewise, dualism is low whenever a large portion of the labor force does not belong to the ‘standard worker’ category, yet the consequences of not belonging to this group in terms of social protection are minimal. As a result, our preferred measure of dualism should be greater when both the discrimination suffered by non-standard workers and the size of this group are high.¹⁴

Our constructed measure of dualism is thus composed of two elements. First, to grasp the degree of protection linked to labor market status, we use the employment protection of labor (EPL) index developed by the OECD, normalized from 0 to 1.¹⁵ This index takes high values if there are strong requirements to dismiss permanent workers both individually and collectively,¹⁶ and if temporary forms of employment are highly regulated. Second, to measure the size of the group of non-standard workers, we take the proportion of the labor force unemployed and under fixed-term contracts.¹⁷ Finally, we compute the dualism index by simply multiplying the values of the EPL index and the percentage of non-standard workers in the labor force. This results in a variable with a theoretical range from 0 to 100, in which higher values denote a more dual labor market. Figure 1 checks the validity of this measure by comparing it with a standard indicator used in the literature: the percentage of fixed-term contracts. Although these two variables are strongly correlated, they are not perfectly equivalent.

Given the structure of the data (individual observations clustered in 21 countries with different degrees of dualism), we estimate a series of multilevel models with random intercepts for country of the following form:

$$WS_{ij} = \beta_{0j} + \beta X_{ij} + \lambda_1 Z + \lambda_2 Z * Dualism + e_{ij}$$

Subscripts refer to individual i living in country j . X is a vector of micro-level characteristics of the individual¹⁸ that are expected to affect her preferences for welfare state spending through a vector of coefficients β , and e is the error term. Z refers to a vector of individual's characteristics that we expect to affect welfare state support differently in different labor market contexts. On the basis of our discussion, these characteristics include the level of income, education and position in the labor market. To test for the presence of these context-specific effects, variables in Z are also interacted with the degree of dualism in the country. We expect thus λ_1 to be negative (in non-dual economies, the better-off should be the more averse to welfare state intervention), and, crucially, λ_2 to be positive: as dualism in the labor market increases, the effect of a higher socioeconomic status should become *less negative*.

Finally, because the degree of dualism of the labor market is a country-specific variable, we include this variable in the second-level equation. As a result, the country intercepts ($\beta_{01}, \beta_{02}, \dots \beta_{0j}$)¹⁹ are given by this expression:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} Dualism + u_{0j}$$

Table 1 presents the first set of results. Model (1) presents the results when only income and individual-level controls are included in the specifications (that is, λ_2

Figure 1: Temporality and dualism.

Table 1: Explaining welfare state support (multilevel models with random effects by country)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Income	-0.0041* (0.0017)	-0.016** (0.0035)	—	—	—	—	—	—	—
Dualism	—	-0.0078 (0.0060)	—	-0.00056 (0.0056)	—	-0.0072 (0.0057)	—	-0.00073 (0.0056)	-0.0026 (0.0059)
Income×Dualism	—	0.00085** (0.00027)	—	—	—	—	—	—	—
Economic difficulties	—	—	0.0082 (0.0051)	0.037** (0.011)	—	—	—	—	0.028* (0.011)
Economic difficulties×Dualism	—	—	—	-0.0022** (0.00081)	—	—	—	—	-0.0018* (0.00085)
Education secondary	—	—	—	—	0.0047 (0.014)	-0.083** (0.028)	—	—	-0.059* (0.028)
Education tertiary	—	—	—	—	-0.016 (0.015)	-0.057* (0.029)	—	—	-0.016 (0.030)
Education secondary×Dualism	—	—	—	—	—	0.0065** (0.0017)	—	—	0.0053** (0.0018)
Education tertiary×Dualism	—	—	—	—	—	0.0037* (0.0019)	—	—	0.0019 (0.0021)
Non-standard	—	—	—	—	—	—	0.023 (0.012)	0.088** (0.027)	0.080** (0.027)
Employer	—	—	—	—	—	—	-0.074** (0.016)	-0.14** (0.033)	-0.14** (0.033)
Non-active	—	—	—	—	—	—	0.044** (0.0093)	0.090** (0.019)	0.082** (0.020)
Non-staandard×Dualism	—	—	—	—	—	—	—	-0.0039* (0.0019)	-0.0033 (0.0019)
Employer×Dualism	—	—	—	—	—	—	—	0.0056* (0.0024)	0.0058* (0.0024)
Non-active×Dualism	—	—	—	—	—	—	—	-0.0043** (0.0015)	-0.0035* (0.0016)
Political interest	0.025** (0.0053)	0.025** (0.0059)	0.019** (0.0046)	0.016** (0.0053)	0.020** (0.0047)	0.015** (0.0054)	0.019** (0.0046)	0.018** (0.0053)	0.017** (0.0054)

Table 1: (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Effort	-0.057** (0.0042)	-0.059** (0.0047)	-0.047** (0.0038)	-0.053** (0.0042)	-0.047** (0.0037)	-0.053** (0.0042)	-0.045** (0.0038)	-0.051** (0.0042)	-0.050** (0.0043)
Trust	0.021** (0.0020)	0.022** (0.0023)	0.020** (0.0017)	0.019** (0.0020)	0.020** (0.0017)	0.019** (0.0020)	0.020** (0.0017)	0.019** (0.0020)	0.020** (0.0020)
Immigration control	-0.030** (0.0057)	-0.048** (0.0066)	-0.029** (0.0050)	-0.044** (0.0059)	-0.029** (0.0050)	-0.043** (0.0059)	-0.028** (0.0050)	-0.043** (0.0059)	-0.043** (0.0059)
Immigration is bad	-0.025** (0.0023)	-0.028** (0.0026)	-0.024** (0.0020)	-0.027** (0.0023)	-0.024** (0.0020)	-0.027** (0.0023)	-0.024** (0.0020)	-0.029** (0.0023)	-0.029** (0.0023)
Left	0.036** (0.0020)	0.044** (0.0023)	0.032** (0.0018)	0.043** (0.0021)	0.032** (0.0017)	0.044** (0.0021)	0.032** (0.0018)	0.043** (0.0021)	0.042** (0.0021)
Woman	0.020* (0.0087)	0.017 (0.0096)	0.026** (0.0077)	0.025** (0.0086)	0.027** (0.0077)	0.025** (0.0086)	0.017* (0.0078)	0.015 (0.0088)	0.015 (0.0088)
Age	0.0035** (0.00026)	0.0036** (0.00028)	0.0032** (0.00022)	0.0036** (0.00025)	0.0032** (0.00023)	0.0036** (0.00026)	0.0029** (0.00024)	0.0032** (0.00026)	0.0034** (0.00028)
Constant	0.97** (0.051)	1.10** (0.090)	0.93** (0.046)	0.96** (0.082)	0.94** (0.047)	1.06** (0.084)	0.94** (0.045)	0.97** (0.081)	0.98** (0.087)
N	32021	26203	41118	32219	41317	32324	40739	32004	31830
χ^2	1335.7	1437.8	1388.8	1537.5	1404.2	1553.8	1436.3	1601.4	1610.2
σ_u	0.19	0.18	0.19	0.17	0.19	0.17	0.19	0.17	0.17
σ_e	0.77	0.76	0.77	0.76	0.77	0.76	0.77	0.76	0.76

* $P < 0.05$, ** $P < 0.01$.

Note: Standard errors in parentheses.

and γ_{01} are constrained to be zero). Very much in line with the literature and our expectations, interest in politics, believing less in the idea that effort should be rewarded with higher incomes, social trust, age, pro-immigration attitudes and left ideology are positively associated with greater support for welfare state expansion. As expected, income is negatively associated with support for the welfare state, although the coefficient is barely significant. The important findings are revealed in Model (2) (and subsequently in Models (4), (6) and (8)) in which the full specification, including λ_2 , is estimated. Model (2) tests whether the degree of dualism changes the effect of income levels on welfare state support. The positive and highly significant interaction coefficient strongly indicates that it does: as dualism increases, the negative effect of higher incomes on welfare state support vanishes. This is consistent with the prediction outlined before.

It is revealing how the raw coefficient on income varies as the interaction with dualism is included in the estimation. Bearing in mind that the raw coefficient in the interacted models can be interpreted as the effect of that variable in a perfectly non-dual economy (that is, when dualism equals zero), we can compare these coefficients with those reported in Model (1) to see how the effect of the income variable differs in a completely non-dual economy with respect to the full sample. As expected by our theory, the raw coefficient on income becomes four times larger in absolute magnitude (from -0.004 to -0.016). In other words, the effect of the level of income on welfare state preferences is substantively stronger in the absence of a dual labor market.

Models (3) and (4) conduct the same exercise but using as an indicator of the economic position of the individual the subjective economic wellbeing experienced by the respondent (*economic difficulties*), instead of her self-reported income level.²⁰ Once dualism and its interaction are included in the estimation (Model (4)), the raw coefficient on economic difficulties is positive and significant (higher values in this variable indicate a worse economic situation for the respondent), and the interaction is negative and significant. Individuals facing greater economic strains are more likely to support welfare state expansion, but much less so in dual labor markets. Models (5) and (6) show a similar empirical pattern for education levels: individuals with secondary and tertiary education (compared with those with primary education or less) are less likely to support the welfare state, but again, the interaction terms, both positive and significant, indicate that this effect evaporates under high levels of dualism.

Models (7) and (8) explore the relationship between labor market status²¹ and welfare state support, and test for our corollary hypothesis regarding non-standard workers. We conjectured that, as dualism makes the welfare state to operate in ways that harm (or benefit less) labor market ‘outsiders’, the unemployed and those working under non-standard contracts would be much less supportive of its expansion in dual economies than in non-dual ones. This is exactly what the negative and significant interaction coefficient in Model (8) indicates. A similar interactive effect is found for those inactive in the labor force. One possible interpretation is

that some of the inactive in dual labor markets are in fact ‘outsiders’, that is, individuals leaving the labor market because of the precarious conditions that the labor market offers to them.²² Finally, Model (9) includes all previous interactions in the specification and confirms the previous results, even though the fact that now many of the covariates are collinear weakens the statistical significance of some coefficients.

To grasp the substantive effects of these findings, Figure 2 plots the marginal effect of a one-unit change in each independent variable on welfare state support, for different degrees of dualism in the labor market, along with 95% confidence intervals.

Under low levels of dualism, a higher level of income or education is associated with less support for the welfare state, while perceptions of economic vulnerability and being a non-standard worker have the opposite effects. These results fit perfectly with the standard political-economy accounts reviewed before on how socioeconomic factors are expected to shape attitudes toward the welfare state. However, and in line with our theory, under high levels of dualism, all these effects vanish. In dual labor markets, lower incomes, perceptions of personal economic situation, the level of education and labor market status are no longer associated in any

Figure 2: Marginal effects of socioeconomic characteristics on support for the welfare state under different degrees of dualism, with 95% confidence intervals. Marginal effects based on Models (2), (4), (6) and (8) from Table 1.

Table 2: Robustness to alternative measure of dualism

	(1)	(2)	(3)	(4)
Percentage of fixed term contracts	0.00051 (0.0066)	0.0043 (0.0061)	-0.0046 (0.0062)	0.0037 (0.0060)
Income	-0.0040 (0.0038)	—	—	—
Income × Fixed term	-0.000058 (0.00028)	—	—	—
Economic difficulties	—	0.030*** (0.011)	—	—
Economic difficulties × Fixed term	—	-0.0018** (0.00086)	—	—
Education secondary	—	—	-0.11*** (0.032)	—
Education tertiary	—	—	-0.066* (0.034)	—
Education secondary × Fixed term	—	—	0.0086*** (0.0021)	—
Education tertiary × Fixed term	—	—	0.0038 (0.0024)	—
Non-standard	—	—	—	0.039 (0.028)
Employer	—	—	—	-0.12*** (0.037)
Non-active	—	—	—	0.091*** (0.020)
Non-standard × Fixed term	—	—	—	-0.00092 (0.0021)
Employer × Fixed term	—	—	—	0.0039 (0.0026)
Non-active × Fixed term	—	—	—	-0.0040*** (0.0015)
<i>N</i>	28962	37443	37593	37118
χ^2	1354.4	1429.3	1454.8	1484.6
σ_u	0.20	0.19	0.19	0.19
σ_e	0.77	0.77	0.77	0.77

* $P < 0.10$, ** $P < 0.05$, *** $P < 0.01$.

Notes: Standard errors in parentheses. Control variables from Table 1 also included in the estimation (coefficients not reported).

statistically significant way with stronger preferences for the welfare state (in terms of the graph, the confidence intervals of the marginal effect of all these variables at high levels of dualism include zero).²³

Tables 2 and 3 present two sets of robustness checks. First, in Table 2 instead of our preferred measure of dualism we use a more conventional measure: the

Table 3: Robustness to country-level covariates

	(1)	(2)	(3)	(4)
Income	-0.13 (0.088)	—	—	—
IncomexDualism	0.0014*** (0.00038)	—	—	—
Economic difficulties	—	1.28*** (0.26)	—	—
Economic difficultiesxDualism	—	-0.0039*** (0.0011)	—	—
Education secondary	—	—	-1.35 (0.88)	—
Education tertiary	—	—	-2.65*** (0.92)	—
Education secondaryxDualism	—	—	0.011*** (0.0030)	—
Education tertiaryxDualism	—	—	0.0084*** (0.0031)	—
Non-standard	—	—	—	1.01 (0.62)
Employer	—	—	—	-0.66 (0.80)
Non-active	—	—	—	0.79* (0.45)
Non-standardxDualism	—	—	—	-0.0054** (0.0026)
EmployerxDualism	—	—	—	0.0029 (0.0033)
Non-activedualism	—	—	—	-0.0066*** (0.0019)
Log GDP per capita	0.067 (0.15)	0.24* (0.14)	-0.026 (0.15)	0.15 (0.14)
Gini	1.45 (1.21)	2.13** (1.07)	1.34 (1.13)	1.62 (1.06)
Unemployment	-0.012 (0.028)	-0.018 (0.023)	-0.0090 (0.025)	-0.018 (0.023)
IncomexLog GDP per capita	0.0094 (0.0076)	—	—	—
IncomexGini	0.086 (0.059)	—	—	—
IncomexUnemployment	-0.0021 (0.0013)	—	—	—
Economic difficultiesxLog GDP per capita	—	-0.11*** (0.022)	—	—
Economic difficultiesxGini	—	-0.50*** (0.16)	—	—
Economic difficultiesxUnemployment	—	0.0037 (0.0038)	—	—
Education secondaryxLog GDP per capita	—	—	0.13* (0.072)	—
Education tertiaryxLog GDP per capita	—	—	0.23*** (0.077)	—

Table 3: (Continued)

	(1)	(2)	(3)	(4)
Education secondary×Gini	—	—	-0.19 (0.50)	—
Education tertiary×Gini	—	—	0.71 (0.52)	—
Education secondary×Unemployment	—	—	-0.0033 (0.012)	—
Education tertiary×Unemployment	—	—	-0.0038 (0.013)	—
Non-standard×Log GDP per capita	—	—	—	-0.068 (0.054)
Employer×Log GDP per capita	—	—	—	0.026 (0.069)
Non-active×Log GDP per capita	—	—	—	-0.070* (0.039)
Non-standard×Gini	—	—	—	-1.01** (0.43)
Employer×Gini	—	—	—	0.72 (0.54)
Non-active×Gini	—	—	—	0.0039 (0.30)
Non-standard×Unemployment	—	—	—	0.014 (0.0095)
Employer×Unemployment	—	—	—	0.010 (0.011)
Non-active×Unemployment	—	—	—	0.0061 (0.0063)
<i>N</i>	26203	32219	32324	32371
χ^2	1445.5	1572.0	1578.7	1637.5
σ_u	0.17	0.16	0.16	0.16
σ_e	0.76	0.76	0.76	0.76

* $P < 0.10$, ** $P < 0.05$, *** $P < 0.01$.

Notes: Standard errors in parentheses. Control variables from Table 1 also included in the estimation (coefficients not reported).

proportion of fixed-term contracts in the labor force. Although the interactions in Models (1) and (4), still rightly signed, lose statistical significance, Models (2) and (3) show that the effect of perceptions of economic vulnerability and level of education on support for the welfare state is significantly mediated by the degree of temporality in the labor market.²⁴

Table 3 conducts a different type of robustness check. Given that dualism is a second-level variable, and that there is a only limited number of second-level units in the sample, it could be that the interactive effects of dualism could be just showing that socioeconomic variables have different effects on welfare state support depending on some other national-level variables correlated with dualism. To test for that possibility, Table 3 introduces a battery of these variables (the log of per capita

GDP, the degree of inequality measured by the Gini index and the unemployment rate²⁵) along with the respective interactions with the socioeconomic and labor market status indicators, and finds no evidence that the previous results suffer from omitted variable bias. In all four models, the substantive effects remain unaltered after the introduction of all the second-level controls and interactions: the interaction coefficients between dualism and individual-level variables are rightly signed and statistically significant. It is also interesting to see the mediating effects of the new added variables. According to the interactive coefficients, the relationship between economic vulnerability and welfare state preferences is weaker not only in countries with dual labor markets, but also in wealthier and more unequal ones. Interestingly, the results also suggest that more educated people oppose less the expansion of the welfare state in richer countries (Model (3)), and that non-standard workers are less supportive of the welfare state when inequality is high (Model (4)).

Testing for mechanisms

After showing that the impact of income, economic vulnerability, education and labor market status blurs in contexts of higher dualism, we now turn to a test of the precise mechanisms that account for these findings. In our account, the reason why dualism makes more vulnerable individuals to prefer less welfare state expansion is that welfare policies become less progressive in dual economies. Is it the case that the varying redistributive character of the welfare state across labor markets what lies behind our previous results? We test this in two steps. We first test the assumption that, at the national level, the welfare state redistributes less from high- to low-income individuals in more dual economies. Next, at the individual level, we try to uncover the mechanism that explains the weaker association between socioeconomic status and welfare state preferences in dual labor markets. According to our theoretical account, the reason why the more vulnerable individuals are less favorable toward welfare state expansion is because, in these contexts, they perceive the state to act less in their benefit. We test whether that is the case by looking at how does the mediating effect of dualism changes once individual preferences for redistribution are taken into account.

Do countries with dual labor markets have less progressive welfare states? Figure 3 presents the association between our measure of dualism and two different indicators of welfare state redistribution.²⁶ The scatterplot in the left represents in the vertical axis the rate of reduction of poverty (defined as household earnings below 50 per cent of the median income) between pre- and post-fisc income, as measured in the OECD Income Inequality Database. Perhaps more intuitively, this index can be interpreted as the proportion of poor people that are lifted out of poverty as a result of the intervention of the state raising taxes and transferring subsidies.

Figure 3: Dualism and welfare state redistribution.

Note: See text for definitions.

Source: Income data from OECD Income distribution dataset, observation for mid-2000s. Public social spending as a percentage of GDP from OECD Social Expenditure data set, observation for 2007 (latest year).

The assumption that dualism reduces the redistributive nature of the welfare state seems to be a valid one: welfare state intervention does tend to reduce poverty *less* in countries with dual labor markets, although the relationship is largely driven by one outlier, Spain. Note, however, that this variable measures redistribution *outcomes*, which are affected not only by the redistributive design of social policies, but also by the magnitude of welfare state intervention, which varies a great deal across countries. One country might have very redistributive welfare policies yet achieve very little redistribution because the state is small, whereas the other might achieve greater redistribution in spite of being more distribution-neutral because it intervenes more. A better measure of the redistributive nature of the welfare state is represented in the vertical axis of the scatterplot in the right: the ratio between public social spending as a proportion of GDP (taken from the OECD Social Expenditure data set) and the post-fisc reduction of poverty represented in the left graph. This ratio now measures the percentage of pre-fisc poor that are lifted out of poverty as a result of a 1-point increase in public spending as a percentage of GDP. The negative relationship between dualism and the redistributive impact of the welfare state is now stronger, and robust to the exclusion of Spain, which remains nevertheless extreme in the two dimensions.

The degree of welfare state-led redistribution at the national level appears to be correlated with the degree of dualism in the labor market, but is this lack of progressivity what lies behind the welfare state skepticism of worse-off individuals in dual labor markets? We argued before that the more disadvantaged sectors of society should always want redistribution and that their support for the welfare state depends upon the

Figure 4: Dualism and country-level correlation between support for the government's role in reducing income differences and welfare state support.

redistributive nature of welfare policies. If the reason why socioeconomic characteristics are more weakly associated with welfare state preferences under dualism is because welfare state interventions are less redistributive in these countries, then once we introduce individual preferences for redistribution as a right-hand variable in the estimation, we should expect two effects. First, the association between preferences for redistribution and welfare state support should be mediated by dualism: those favoring greater reductions in income differences between the rich and the poor should be less favorable to welfare state expansion when dualism is high. Figure 4 plots the bivariate correlation coefficient at the country level between the belief that the government should reduce income differences and support for the welfare state against the dualism indicator, and suggests that this is indeed the case.²⁷

Second, if the channel through which a lower socioeconomic status translates into more skepticism toward the welfare states in dual economies is that the state redistribute less in these contexts, the introduction of redistribution preferences in the estimation should be accompanied by a significant reduction of the interaction effects between the socioeconomic variables and the degree of dualism in the labor market. This is exactly what we found in Table 4. As expected, the interaction between redistribution preferences and dualism is negative and highly significant, and compared with the results presented in Table 1 before, the magnitude of all the remaining interaction coefficients decreases.²⁸ In order to visualize this, Figure 5 plots the reduction in magnitude of all the interaction coefficients. All five

Table 4: Results after the inclusion of redistribution preferences

	(1)	(2)	(3)	(4)
Preference for redistribution	0.080*** (0.0050)	0.082*** (0.0046)	0.082*** (0.0046)	0.080*** (0.0046)
Dualism	-0.0087 (0.0061)	-0.0028 (0.0057)	-0.0085 (0.0057)	-0.0026 (0.0057)
Income	-0.010*** (0.0035)	—	—	—
Income × Dualism	0.00069** (0.00027)	—	—	—
Economic difficulties	—	0.019* (0.011)	—	—
Economic difficulties × Dualism	—	-0.0018** (0.00081)	—	—
Education secondary	—	—	-0.074*** (0.028)	—
Education tertiary	—	—	-0.029 (0.029)	—
Education secondary × Dualism	—	—	0.0059*** (0.0017)	—
Education tertiary × Dualism	—	—	0.0031 (0.0019)	—
Non-standard	—	—	—	0.080*** (0.027)
Employer	—	—	—	-0.13*** (0.033)
Non-active	—	—	—	0.084*** (0.019)
Non-standard × Dualism	—	—	—	-0.0040** (0.0019)
Employer × Dualism	—	—	—	0.0051** (0.0024)
Non-active × Dualism	—	—	—	-0.0041*** (0.0015)
N	26091	32056	32160	31843
χ^2	1685.2	1856.8	1878.1	1907.1
σ_u	0.18	0.17	0.17	0.17
σ_e	0.76	0.76	0.76	0.76

* $P < 0.10$, ** $P < 0.05$, *** $P < 0.01$.

Notes: Standard errors in parentheses. Control variables from Table 1 also included in the estimation (coefficients not reported).

coefficients become smaller, three lose about a third of its size and three even become statistically insignificant. This strongly suggests that the reason why the economically disadvantaged are less supportive of the welfare state in dual labor markets is because they perceive it to be less progressive.

Figure 5: Reduction of the interaction coefficients of socioeconomic variables with dualism (in percentage of original magnitude) after the inclusion of preferences for redistribution in the estimation.

Conclusions

We have argued that the structure of the labor market is a key contextual factor shaping individual preferences toward the welfare state. The dominant approach suggests that individuals in lower socioeconomic positions express stronger preferences for welfare state expansion. Yet most European social security systems provide welfare benefits as a function of previous contributions. In dual labor markets, this implies that these systems tend to disproportionately protect workers under standard permanent contracts. As individuals with low levels of income and education tend to be overrepresented among outsiders (that is, non-standard employees and the unemployed), higher levels of dualism will make them less supportive of welfare state expansion. Dualism in the labor market weakens therefore the ‘natural’ association between socioeconomic status and welfare state preferences.

The article provides two types of evidence in support of this theory. Using individual level data from the ESS, we show that low levels of income, low levels of education and a precarious labor market position are associated with greater welfare state support, but dramatically less so in dual labor markets. Second, we provide evidence consistent with the fact that these findings are the result of the mechanisms highlighted by our theory: countries with more dual labor markets do seem to redistribute less from the rich to the poor, and once individual preferences from redistribution are taken into account, the mediating role of dualism in the link between socioeconomic characteristics and support for the welfare state diminishes greatly.

Labor economists have long studied the economic consequences of dualism in the labor market, but the results presented here suggest that the consequences of dual labor markets might go well beyond the economic realm. As dualism changes the redistributive character of welfare state interventions, the social coalitions underpinning social policies should be expected to change accordingly. The consequences of this coalitional change on the social support for and against different social policies in dual economies should be the subject of further research.

About the Authors

José Fernández-Albertos is a Permanent Research Fellow at CSIC. He holds a PhD in Political Science from Harvard University (2007), and is MA (2002) and doctor-member (2007) from the Juan March Institute. His most recent publications include *Economic Crisis, Globalization, and Partisan Bias: Evidence from Spain*, *International Studies Quarterly*, *The Lack of Conflict over the Welfare State in Spain*, *South European Society and Politics*, *Exchange Rate Regime Preferences of the International Sector: Firm-Level Evidence*, *Economics Letters*.

Dulce Manzano is Assistant Professor of Sociology at the Complutense University of Madrid. She holds a PhD in Political Science from the Autónoma University of Madrid (2007). She was a postdoctoral fellow (in political economy and comparative politics) at the Juan March Institute. Her most recent publications include *The Lack of Partisan Conflict over the Welfare State in Spain*, *South European Society and Politics*, *Partisanship, Inequality and the Composition of Public Spending on Education*, *Political Studies*.

Notes

- 1 A number of non-economic factors have also been stressed in the specialist literature. One that has prompted considerable scholarly attention is race or ethnicity (Alesina and Glaeser, 2004; Alesina and Giuliano, 2011). In societies where ethnic and economic divisions overlap so that the poor tend to be concentrated in one racial group, people seem to be less altruistic with members of the other ethnic group. Agents prefer less redistribution when the majority of the targeted population belongs to a different ethnicity. Individual's beliefs have also been considered important underlying motives of her social policy preferences. Beliefs over the role of effort versus luck in the process of social stratification as well as the degree of general trust in the fair behavior of most people have been confirmed to exert an effect on preferences for redistribution (Alesina and Giuliano, 2011). Individuals are more prone to support social policies if they believe that socioeconomic achievement in life is mainly the product of luck and if they think that most people try to be honest in general. Kaltenthaler and Ceccoli (2008) argue that a person's attitude toward risk in life should be related with her position regarding government intervention in the economy. They offer evidence indicating that the less risk accepting a person is, the more likely she will believe that government should take greater responsibility in providing citizens' wellbeing.

- 2 A direct hypothesis from the median-voter model is that greater income inequality increases demands for redistribution and thereby the generosity of redistributive programs. Kenworthy and McCall (2008) test the empirical validity of the individual-level causal links of this hypothesis by studying changes over time in public opinion within a small sample (eight) of affluent nations observed during the 1980s and 1990s. Their study casts doubts on the idea that people's perceptions of the actual degree of inequality drive their attitudes toward redistribution and that these attitudes shape the redistributive level of several social policies.
- 3 The empirical research on preferences for social policies in modern societies has found in fact evidence supporting the expected relationships between income, the position in the labor market or the specificity level of skills, on the one hand, and attitudes toward welfare policies, on the other (Svallfors, 1997; Iversen and Soskice, 2001; Cusack *et al.*, 2006; Amable, 2009; Alesina and Giuliano, 2011). On the stability of these social policy preferences across countries and its impact on social policy outcomes, see Brooks and Manza (2006, 2007).
- 4 We also provide empirical proofs confirming that lower-income and less-educated individuals tend to be the strongest advocates of expanding the welfare state.
- 5 This claim does not contradict the fact that high-income individuals may also favor an expansion of the welfare state because of its insurance-related effects.
- 6 Although policies can redistribute resources toward higher-income individuals, we use the term redistributive policy for a policy that redistributes resources from the rich to the poor.
- 7 Although redistribution and progressivity are not, strictly speaking, synonymous, we use them interchangeably throughout the article, meaning changes in the distribution of income that produce a reduction of overall income differences.
- 8 Certainly, as these earnings replacement transfers are received by those who have suffered a reduction or a complete loss of their salary, they have a progressive impact on the *ex post* income distribution that resulted from the realization of the abovementioned risks. Yet *ex ante* these social protection policies are not necessarily more beneficial for workers in lower socioeconomic positions.
- 9 Although the general aim of social security systems is to provide workers with insurance against the loss of income, the particular design of these protection systems certainly makes them more or less redistributive. To assess the redistributive effects of a social insurance policy, we might look at two aspects of its institutional structure following the typology of insurance programs proposed by Korpi and Palme (1998): the bases of entitlement and the benefit-level principle. The first aspect refers to the criteria used to determine who is eligible to receive protection transfers. Social security systems tend to base eligibility on need, citizenship in the country or contribution. The second aspect deals with the criteria establishing the benefit levels and, consequently, the replacement rate of lost income. Normally the level of transfers goes from a means-tested minimum amount, to a flat-rate transfer given to all citizens, and to benefits proportional (in different degree) to previous earnings. As the insurance system relies more on contributions and organizes the provision of earnings-related benefits using a rising replacement rate, it tends to be more neutral regarding its redistributive consequences.
- 10 By 'cheap labor', King and Rueda (2008) mean employment with low pay, low benefits and low protection.
- 11 Rueda (2005, 2006, 2007) has pioneered the study of the conflict between labor market insiders and outsiders, exploring the consequences of this divide for labor market policies and social democratic party platforms. For a comparative study of the phenomenon of dualization, see the collection of articles in Emmenger *et al.* (2012).
- 12 We believe this type of measures captures in a more precise way the differences in individual's support for the welfare state particularly in the European context, where very few people would advocate reduction in social benefits, unless the cost of its provision in terms of taxes is explicitly taken into account.
- 13 Nevertheless, we show that our empirical results are robust to the use of these standard indicators.
- 14 Thus, an extreme dual economy is characterized by the existence of a small elite of employees well protected from unemployment. On the contrary, the least dual economy should be one in which either

all workers belong to the standard permanent sector or labor regulations do not privilege permanent over fixed-term workers regarding prospects of employment.

- 15 All the data is taken from the OECD in 2008 (see www.oecd.org/employment/protection).
- 16 Although the index also incorporates information regarding the degree of protection of temporary workers, the aggregate indicator predominantly measures the degree of labor market rigidity applicable to standard workers. As a result, this index could be safely be interpreted as a measure of the relative degree of protection of 'insiders' versus 'outsiders'.
- 17 Note that this definition of 'outsider' differs from the notion of labor market informality in the context of a developing country.
- 18 These include the ideological orientation of the respondent, her degree of social trust, political interest, the belief that income reflects effort rather than luck, attitudes toward migration, age and gender. See Table A1 in the Appendix for a list of all the variables included in the analyses, its definitions and descriptive statistics.
- 19 These country intercepts capture the cross-country variation in the overall level of support for the welfare state, therefore capturing the potential effect of the actual size of the welfare state (a nation-level variable) on the general support for its expansion. This enables us to focus on the within-country, inter-individual variation, which is the relevant one given our hypotheses.
- 20 This question asks the respondent how difficult is it to live on his/her present income. The main advantage of this variable over income is that the sample size expands, not only because the response rate for this variable is much higher than for income, but also because ESS did not ask about income in one country, Slovakia. In order to maximize the number of countries and observations, we use this measure of financial difficulties instead of the more standard income variable: the income variable is not available for Slovakia, and given the low response rate in many countries, the sample size shrinks considerably. As we shall show in Table 2, the use of the more standard income category variable does not yield different results.
- 21 We measure labor market status of the householder through a set of dummy variables taking the value of one if she/he is a non-standard worker (that is, a worker with a part-time, fixed-term contract or unemployed), non-active or employer. When these three variables are included in the analysis, the reference category represents standard employees: those with permanent full-time contracts.
- 22 As one reviewer rightly pointed out, this suggests that there might be 'outsiders' not included by our measure of dualism, as they do not participate in the labor force. In our data it is not possible to know precisely how many among the 'inactive' fall into that category. However, it is reasonable to believe that the number of 'inactive outsiders' (workers that drop out of the labor market as a result of the poor employment opportunities they face) is correlated with the number of 'active outsiders' (the ones included in our measure). If that is the case, our measure of dualism is unlikely to be biased.
- 23 The marginal effect of secondary education at high levels of dualism is actually positive *and* significant. This is consistent with some studies that have found that more educated people have stronger preferences for the welfare state in some countries. There are several reasons that could explain this finding: people with higher levels of education directly benefit from the involvement of the state in the provision of certain services (public education is the most obvious example, but not exclusively), or people with more specific skills demand higher levels of social protection (Iversen and Soskice, 2001). What is remarkable in these results is that these arguments seem to dominate under high levels of dualism. These are precisely the settings under which, according to our account, the opposite hypothesis that individuals with low levels of education should support welfare state expansion matter less.
- 24 Recall that, in line with our previous discussion, this is only an imperfect measure of dualism that does not take into account how differently treated by labor laws are standard and non-standard workers – a key element in the definition of dualism.
- 25 Another potential candidate to include in the set of national-level covariates could be the specific welfare regime type. However, this is inherently problematic for two reasons. First, the small number of

- cases and the high proportion of Central and Eastern Europe countries (difficult to classify in the standard categorizations of this literature) makes the results highly dependent on arbitrary decisions on how countries are classified. Second, and perhaps more importantly, the structure of the labor market is itself a key characteristic of the welfare regime itself (Esping-Andersen, 1990). Given the small number of second-level units, this would cause insurmountable problems of collinearity in the estimation.
- 26 For a more systematic analysis of the redistribution effects of different welfare states, see Bradley *et al* (2003).
 - 27 The data set includes all countries in the European Social Survey for which the dualism variable can be computed.
 - 28 Note how sizeable these reductions are taking into account the overtly generalistic measure of preferences for redistribution used (On the whole, do you think it should or should not be the government's responsibility to reduce income differences between the rich and the poor? Strongly disagree/Somewhat disagree/Neither agree nor disagree/Somewhat agree/Strongly agree).

References

- Alesina, A. and Rodrik, D. (1994) Distributive politics and economic growth. *Quarterly Journal of Economics* 109(2): 465–490.
- Alesina, A. and Glaeser, E. (2004) *Fighting Poverty in the US and Europe: A World of Difference*. Oxford, UK: Oxford University Press.
- Alesina, A. and Giuliano, P. (2011) Preferences for redistribution. In: J. Benhabib, A. Bisin and M.O. Jackson (eds.) *Handbook of Social Economics*. Amsterdam, the Netherlands: Elsevier, pp. 93–131.
- Amable, B. (2009) The differentiation of social demands in Europe. The social basis of the European models of capitalism. *Social Indicators Research* 89(3): 391–426.
- Bradley, D., Huber, E., Moller, S., Nielsen, F. and Stephens, J. (2003) Distribution and redistribution in postindustrial societies. *World Politics* 55(2): 193–228.
- Brooks, C. and Manza, J. (2006) Why do welfare states persist? *The Journal of Politics* 68(4): 816–827.
- Brooks, C. and Manza, J. (2007) *Why Welfare States Persist. The Importance of Public Opinion in Democracies*. Chicago, IL: University of Chicago Press.
- Cusack, T., Iversen, T. and Rehm, P. (2006) Risk at work: The demand and supply sides of government redistribution. *Oxford Review of Economic Policy* 22(3): 365–389.
- Emmenegger, P., Häusermann, S., Palier, B. and Seelib-Kaiser, M. (eds.) (2012) *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.
- Hall, P.A. and Soskice, D. (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. New York: Oxford University Press.
- Hasenfeld, Y. and Rafferty, J.A. (1989) The determinants of public attitudes toward the welfare state. *Social Forces* 67(4): 1027–1048.
- Häusermann, S. (2010) *The Politics of Welfare State Reform in Continental Europe: Modernization in Hard Times*. Cambridge, USA: Cambridge University Press.
- Häusermann, S. and Schwander, H. (2012) Varieties of dualization? Labor market segmentation and insider-outsider divides across regimes. In: P. Emmenegger, S. Häusermann, B. Palier and M. Seelib-Kaiser (eds.) *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Iversen, T. and Soskice, D. (2001) An asset theory of social policy preferences. *American Political Science Review* 95(4): 875–893.
- Kaltenthaler, K.C. and Ceccoli, S.J. (2008) Explaining patterns of support for the provision of citizen welfare. *Journal of European Public Policy* 15(7): 1041–1068.

- Kenworthy, L. and McCall, L. (2008) Inequality, public opinion and redistribution. *Socio-Economic Review* 6(1): 35–68.
- Korpi, W. (1983) *The Democratic Class Struggle*. London: Routledge & Kegan Paul.
- Korpi, W. and Palme, J. (1998) The paradox of redistribution and strategies of quality: Welfare state institutions, inequality, and poverty in the western countries. *American Sociological Review* 63(5): 661–687.
- King, D. and Rueda, D. (2008) Cheap labor: The new politics of ‘bread and roses’ in industrial democracies. *Perspectives on Politics* 6(2): 279–297.
- Mares, I. (2003) *The Politics of Social Risks*. Cambridge, USA: Cambridge University Press.
- Meltzer, A. and Richard, S. (1981) A rational theory of the size of government. *Journal of Political Economy* 89(5): 914–27.
- Moene, K.O. and Wallerstein, M. (2003) Earnings inequality and welfare spending. A disaggregated analysis. *World Politics* 55(4): 485–516.
- Perotti, R. (1993) Political equilibrium, income distribution, and growth. *Review of Economic Studies* 60(4): 755–776.
- Perotti, R. (1996) Growth, income distribution, and democracy: What the data say. *Journal of Economic Growth* 1(2): 149–187.
- Rehm, P. (2009) Risk and redistribution. An individual-level analysis. *Comparative Political Studies* 42(7): 855–881.
- Rehm, P. (2011) Risk inequality and the polarized American electorate. *British Journal of Political Science* 41(2): 363–387.
- Rehm, P., Hacker, J.S. and Schlesinger, M. (2012) Insecure alliances: Risk, inequality, and support for the welfare state. *American Political Science Review* 106(2): 386–406.
- Rueda, D. (2005) Insider-outsider politics in industrialized democracies: The challenge to social democratic parties. *American Political Science Review* 99(1): 61–74.
- Rueda, D. (2006) Social democracy and active labour market policies: Insiders, outsiders, and the politics of employment promotion. *British Journal of Political Science* 36(3): 385–406.
- Rueda, D. (2007) *Social Democracy Inside Out: Partisanship and Labor Market Policy in Industrialized Democracies*. Oxford: Oxford University Press.
- Scheve, K. and Stasavage, D. (2006) Religion and preferences for social insurance. *Quarterly Journal of Political Science* 1(3): 255–286.
- Stephens, J. (1979) *The Transition from Capitalism to Socialism*. London: Palgrave Macmillan.
- Svallfors, S. (1997) Worlds of welfare and attitudes to redistribution: A Comparison of eight western nations. *European Sociological Review* 13(3): 283–304.
- Svallfors, S. (2003) Welfare regimes and welfare opinions: A comparison of eight western countries. *Social Indicators Research* 64(3): 495.
- Svallfors, S. (2004) Class, attitudes and the welfare state. *Social Policy and Administration* 38(2): 119–138.

Appendix

Table A1: Descriptive statistics and definitions

	<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Definition</i>
Dualism	40314	12.0	7.27	0.98	29.3	Own elaboration (see text)
Log GDP per capita	43351	10.22	0.32	9.42	11.19	Log of per capita GDP 2008. OECD National Accounts
Unemployment	43351	6.61	2.22	2.55	11.32	Unemployment rate, OECD National Accounts
Gini	43351	0.30	0.04	0.24	0.49	Gini coefficient, mid-2000s, OECD Income Distribution Database
Welfare	37144	5.17	2.09	0	10	If the government had to choose between increasing taxes and spending more on social benefits and services, or decreasing taxes and spending less on social benefits and services, which should they do? 0 = Less taxes and benefits ... 10 = More taxes and benefits
Age	40225	47.6	18.5	15	123	—
Woman	40305	0.53	0.50	0	1	—
Effort	39652	3.36	1.08	1	5	Large differences in people's income are acceptable to reward differences in talents and efforts (1 = Disagree, 5 = Agree)
Trust	40222	4.92	2.51	0	10	In dealing with people, 0 = you can't be too careful ... 10 = Most people can be trusted
Immigration control	39150	2.59	0.91	1	4	Allow people from poor countries outside Europe to come and live in the country? 1 = Allow many, 2 = Allow some, 3 = Allow few, 4 = Allow none
Immigration is bad	38705	5.18	2.28	0	10	Is your country made a better or a worse place to live by people coming to live here from other countries? 0 = Better place ... 10 = Worse place
Political interest	40231	2.38	0.90	1	4	Interest in politics (1 = Not at all interested ... 4 = Very interested)
Income	30825	5.56	2.75	1	10	After tax household income, country deciles
Economic difficulties	40048	1.03	0.85	0	3	Subjective description of household's income: 3 = Very difficult to live on present income, 2 = Difficult to live on present income, 1 = Coping on present income, 0 = Living comfortably on present income)

Education secondary	40753	0.58	0.49	0	1	—
Education tertiary	40753	0.25	0.43	0	1	—
Preference for redistribution	39697	3.85	1.03	1	5	It is the government's responsibility to reduce income differences 1 = Strongly disagree, 5 = Strongly agree
Left	35365	4.90	2.16	0	10	Ideology (0 = Extreme right ... 10 = Extreme left)
Non-active	40314	0.45	0.50	0	1	Non-active
Employer	40314	0.074	0.26	0	1	Employer or self-employed
Non-standard worker	40314	0.14	0.34	0	1	Employee without permanent contract or unemployed
Income	30825	5.56	2.75	1	10	After tax household income, by country deciles