

Dualization, crisis and the welfare state

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Labour market dualization (an increasing separation between insiders and outsiders) has become an influential feature of many OECD economies since 1980s. This paper argues that dualization mitigates the generosity of the welfare state in a significant way. It also investigates the relationship between dualization and policies that protect and insure against unemployment. The compensating role of social policy is shown to be limited in cases where dualization is more significant. The paper then focuses on the relationship between dualization and the welfare state during the present crisis. It emphasizes the influence of insider–outsider differences on both the nature of unemployment and the responsiveness of social policy during the Great Recession.

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Labour market dualization (an increasing separation between insiders and outsiders) has become an influential feature of most OECD economies since the 1980s. While a politically significant portion of insiders enjoys high levels of employment protection, an increasingly numerous group of outsiders are unemployed or in precarious employment. Why, one may ask, does this matter? In

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this paper, I argue that it matters to the politics of crisis management. Insiders enjoy high levels of employment protection that minimize their vulnerability to unemployment. Because they are an important electoral constituency, their preferences are taken into consideration by governments of all partisan origins. Welfare state policy is inevitably connected to the protection of people from unemployment. As such, an effective welfare state is the main defence between the dramatic unemployment increases characterizing an economic crisis and poverty. Without the support of insiders, however, governments have fewer incentives to promote generous social policy. I will show below that dualization has mitigated the generosity of the welfare state in a significant way. The consequences of the present economic crisis are therefore potentially more dramatic than we imagine. The Great Recession really is different, because the buffering power of social policy is not as significant as in the past. I argue that we will be able to assess the likely consequences of this and future crises only by understanding the relationship between insider protection and the responsiveness of the welfare state.

This paper's main argument addresses two important topics in the comparative political economy literature of industrialized democracies. First, advanced industrialized economies have not converged towards a neoliberal labour market model characterized by labour market flexibility and limited social protection (as recommended by, for example, [OECD, 1994](#)). Rather, a trend towards a structural segmentation differentiating labour market insiders and outsiders is discernible across many of these economies, although its translation into economic (and social) outcomes varies across countries. Secondly, advanced economies exhibit strong variation in the distributive implications of policy areas (such as labour market and social protection regulation). Continental European economies rely on different aspects of labour market regulation to circumvent labour costs in the private service sector ([Eichhorst and Marx, 2012](#)). In distributional terms, social protection systems in continental European economies can exacerbate, rather than mitigate, labour market divides ([Häusermann and Schwander, 2012](#)). An analysis of the role labour market dualization plays in the development of these patterns can contribute to a more systematic explanation of labour politics and redistributive outcomes.

An emphasis on the importance of dualization does not mean ignoring other factors that have contributed to the transformation of the welfare state since the 1980s. A decrease in the generosity of social policy is a phenomenon common to all industrialized democracies. There are several reasons for this. Economic changes (such as deindustrialization and the shift from manufacturing to services)² and demographic ones (new social risks emerging from the ageing of the

²See [Iversen and Cusack \(2000\)](#) and [Esping-Andersen \(1999\)](#).

population, the decline of traditional family structures and declining birth rates)³ present new challenges for the welfare state, while globalization and (for some countries) European integration limit the degrees of freedom enjoyed by governments.⁴ Until the 1980s, many OECD countries had relied on policies to reduce labour supply to combat unemployment. These included early retirement initiatives and the use of incapacity and sickness benefits as valid substitutes for other social benefits. Early retirement schemes have been particularly popular in continental Europe (Ebbinghaus, 2006). But, in the era of permanent fiscal austerity, solutions relying on the promotion of labour market exit became much more difficult, and cost containment emerged as a top priority (Pierson, 2001).

The challenges summarized above have been present, to some degree, in all industrialized democracies. The national strategies to address these challenges, however, have been quite diverse. The rest of this paper will show that dualization is an important factor explaining this diversity. The paper proceeds as follows. Section 1 theorizes dualization and its effects, proposes a measure for it and describes its patterns in OECD countries. This section aims to present a simple argument abstracting away from more complex partisan, coalitional and electoral factors. Section 2 is an exploration of the empirical implications of the theoretical claims. It investigates the relationship between dualization and policies that protect and insure against unemployment. If dualization protects insiders and mitigates the responsiveness of the welfare state to unemployment, the compensating role of social policy should be limited in cases where it is significant. I explore the relationship between dualization and labour market policy responses to unemployment from 1985 (the earliest point for which data are available) to 2007 (the year before the crisis). Section 3 focuses on the relationship between dualization and the welfare state during the present crisis. It shows first that insiders have been comparatively protected from unemployment during the crisis. More importantly, just like the previous section, it demonstrates the influence of insider–outsider differences on labour market policy. Even during the Great Recession, when instability and risk are widespread, dualization contributes significantly to the policy responses to unemployment. The final section presents the conclusions.

1. Theorizing dualization

There are several ways of thinking about dualization in industrialized democracies. They represent different emphases on factors such as employment status, access to

³On the relationship between new social risks and the welfare state, see, for example, Taylor-Gooby (2004).

⁴See, for example, Ferrera and Hemerijck (2003) and the contributions in Pierson (2001).

benefits and protection, political representation, citizenship, etc.⁵ For the purpose of this paper, I follow Rueda (2005 2006 and 2007) in understanding the division between insiders and outsiders to be essentially related to the unemployment vulnerability of different actors in the labour market. I understand insiders to be workers with highly protected jobs. Factors such as the nature of employment protection legislation, a company's firing and job search costs, insiders' production process skills and attained levels of company investment and the behaviour of unions contribute to the level of protection that characterizes 'insiderness'. Insiders are sufficiently protected by the level of security in their jobs to feel less threatened by increases in unemployment. Outsiders, on the other hand, are either unemployed or hold jobs characterized by low levels of protection and employment rights, lower salaries and precarious levels of benefits and social security regulations.⁶

Recent work in comparative political economy has identified the increasing political and economic relevance of the distinction between insiders and outsiders.⁷ In this vein, the focus of the present paper turns our attention to unemployment and its connection to the provision of protection and insurance through the welfare state. The starting point of the analysis is that higher levels of insider protection are correlated with weaker demands for protection and therefore with less generous social policy. Of course, insiders always face *some* probability of losing their jobs (when the firms they work for become economically unviable, for example), but since insiders have fewer reasons to believe that unemployment will affect them personally, I expect them to find unemployment compensation less appealing. An increase in the resources dedicated to benefits for the unemployed represents a higher tax burden for insiders, or a diversion of resources that could be spent on public services that insiders benefit from.

The argument summarized above abstracts away from a number of factors emphasized in alternative explanations of welfare state generosity. Three frameworks are particularly relevant. They emphasize (a) factors not related to dualization, (b) the role of government partisanship on dualization and social policy and (c) the role of coalitions and electoral dynamics on dualization and social policy. The first approach is perhaps the less problematic one. As mentioned in the previous section, by emphasizing the relevance of dualization, I do not mean to suggest other factors are irrelevant. The evolution of the welfare state since 1980s has been influenced by a number of important determinants (deindustrialization, the shift

⁵See Davidsson and Naczyk (2009) for a more detailed analysis.

⁶See Rueda (2007: chapter 2), for a more detailed explanation of the differences between insiders and outsiders.

⁷See, for example, Rueda (2005), Mares (2006), Martin and Thelen (2007), Rueda (2007), Iversen and Stephens (2008), Palier and Thelen (2010), and the contributions to Emmenegger (2012).

from manufacturing to services, new social risks, globalization, European integration, etc.). In the empirical analyses below (and to the extent that I am able to), I try to isolate the influence of dualization as a distinct contributor to the responsiveness of labour market policy to unemployment. I believe the evidence shows that dualization does indeed significantly complement existing explanations.

The second and third alternatives are more interesting because they address dualization head on. Regarding the second approach, Rueda (2007) emphasizes the role of government partisanship on dualization and policy. Looking at a longer time period than this paper, he examines the extent to which social democratic governments promote policies that further employment for the unemployed as opposed to job security for the employed insiders. He finds that social democratic parties have become staunch supporters of insider interests—at the expense of outsiders demanding active labour market policies (ALMPs).

Regarding the third approach, Iversen and Soskice (2011) convincingly argue that dualization in the labour market produces different policy outcomes depending on the structure of party and electoral systems. Theoretically, they emphasize the preconditions for coalitions to include lower income workers (outsiders). After Fordism, in majoritarian systems, all parties have incentives to cater to the interests of insiders. Also after Fordism, in proportional representation systems with weak secular Right parties, dualization is most influential (insiders are most powerful and Left parties are less redistributive); while in proportional representation systems with strong secular Right parties, dualization is less influential (insiders are less powerful and Left parties are less redistributive).⁸

While the argument in this paper is compatible with these last two approaches, it de-emphasizes government partisanship, coalitions and electoral considerations. I argue that in those countries where insiders are insulated from unemployment, the responsiveness of labour market policy to unemployment will be limited. It is possible that the intermediation of government partisanship or coalitional factors would refine the general findings presented below. However, while I control for some of these factors in the empirical analysis below, I leave these topics for further research.

Once dualization is accepted as the theoretical focus of an analysis of the responsiveness of policy to unemployment, the remaining challenge is to measure it empirically. In spite of the abundance of work using insider–outsider differences as a concept, there is very little guidance in the literature about how to measure dualization *per se*. Although there are many impressionistic and case-specific treatments of dualization, it is difficult to find systematic measures that would allow us to assess whether particular countries are more dualized than others (or whether these national differences have changed over time).

⁸See Lindvall and Rueda (forthcoming) for a complementary view of the Swedish case.

In this paper, I propose that there are two main factors affecting dualization: the level of employment protection enjoyed by insiders and the lack of pro-outsider labour market policies. These two variables emerge directly from the consideration of unemployment vulnerability as the most important distinction between insiders and outsiders. For insiders to feel less concerned about unemployment, I argue, they must enjoy a high level of employment protection legislation and for outsiders not to be the focus of labour market policy.

An emphasis on employment protection implies that, with significant cross-country variation, dualization emerged as an important development by the end of the 1970s. In many OECD countries, firms accepted highly restrictive tenure and severance pay arrangements starting in the late 1960s—see [Blanchard and Summers \(1986\)](#) and [Bentolila and Bertola \(1990\)](#). Most employment protection legislation was enacted during the late 1960s and in many cases, it was strengthened during the early 1970s. Commenting on the initial wave of legislation in the late 1960s, [Blanchard and Summers \(1986\)](#) argue that this process was influenced by a pattern of stability and growth which allowed firms to consider employment protection as relatively costless. Excessive hiring was judged an error that could be easily corrected in, at most, a few months. Bentolila and Bertola point out that the post-Oil Shock crises contributed to a further reinforcement of legislation in France and the UK, among other countries, around 1975 (1990, p. 394). Most analysts also agree that these later developments were influenced, to a considerable degree, by social unrest and union activism.⁹ It is in any case clear that by the end of the 1970s a proportion of labour in many OECD countries had become significantly insulated from unemployment by restrictive legislation that did not exist before.¹⁰

While it is clear that dualization in the OECD did not start exactly in 1985, the availability of data makes it impossible for us to explore it in a systematic way before this date. Figure 1 summarizes the available data on regular employment protection legislation in 1985 (the earliest available observation)¹¹ and 2007 (the year before the crisis). Employment protection legislation is measured as an indicator

⁹These are not the only explanations for the increase in employment protection experienced by a number of OECD countries at this time. [Esping-Andersen \(1999\)](#) argues that Catholic political culture is one of the sources of strict job security regulations (but [Emmenegger, 2011](#) finds no evidence for this).

¹⁰This explanation of the development of employment protection in the OECD is consistent with that emerging from the work of [Allard \(2005\)](#). Allard has created a historical series based on the OECD's employment protection legislation indicator (OECD, 1999, Chapter 2). Her indicator provides a picture of 'fairly unregulated labour markets in the OECD overall during the 1950s and early 1960s, with sharp increases in regulation clustered in the 1964–1978 period' (p. 8).

¹¹This is the case for all countries except New Zealand. In New Zealand, the series starts in 1990.

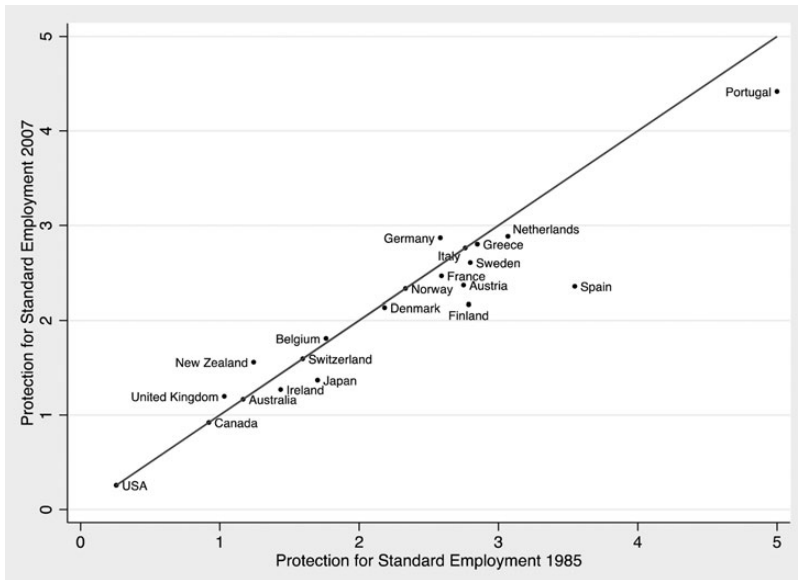


Figure 1 Regular employment protection, 1985 and 2007.

summarizing the main aspects of individual dismissal protection for workers with regular contracts.¹²

Figure 1 makes clear the existence of significant cross-national differences in the levels of protection for standard employment. In terms of the variation across countries, there are four groups in the sample. The first group, comprising some of the liberal market economies, has the lowest levels of insider employment protection. The USA (0.257 in both years) is the country where the smallest amount of protection is provided to insiders, followed by Canada and the UK (with indexes around 1 in both years). Australia can also be included in this group, with still quite low standard of employment protection (1.167 in both years). A second group with standard employment protection indexes between 1.2 and 2 can be identified. These intermediate levels of insider protection are found in Ireland, New Zealand, Japan, Switzerland and Belgium. In this group, Ireland has a relatively low level of standard employment protection (1.437 in 1985 and 1.27 in 2007),

¹²See OECD (2013) for more information. The OECD indicator used in this paper incorporates three aspects of dismissal protection: '(i) procedural inconveniences that employers face when starting the dismissal process, such as notification and consultation requirements; (ii) notice periods and severance pay, which typically vary by tenure of the employee; and (iii) difficulty of dismissal, as determined by the circumstances in which it is possible to dismiss workers, as well as the repercussions for the employer if a dismissal is found to be unfair (such as compensation and reinstatement)' (Venn 2009, p. 6).

while Belgium has the highest (1.762 in 1985 and 1.81 in 2007). The third and largest group includes those countries with insider employment protection levels between 2 and 3. They are Denmark, Norway, Finland, Austria, France, Sweden, Italy, Germany, Greece and the Netherlands. In this group, Denmark has a relatively low level of standard employment protection (2.183 in 1985 and 2.135 in 2007), while the Netherlands has the highest (3.068 in 1985 and 2.885 in 2007). Spain and Portugal form its own group with the very highest levels of insider protection. Spain is the less extreme case (with an index of 3.548 in 1985 that declines to 2.357 by 2007). Portugal starts the series in 1985 with an index of insider protection of 5 and ends it with a still extremely high 4.416.

But perhaps the most remarkable characteristic of Figure 1 is the stability of insider employment protection over time. While trade and capital account liberalization and privatization of state-owned enterprises swept across the globe in the 1980s, standard employment protection remained extraordinarily constant.¹³ To emphasize the lack of temporal variation, Figure 1 includes a red 45° line signifying no change. It is clear that the cases cluster around this line. Only in Spain and Portugal have extremely high levels of insider employment protection in the 1980s become less high ones in the 2000s (but these two countries still remain within the group characterized by the highest levels of insider employment protection). Other countries experiencing change (increases in Austria and Finland, decreases in New Zealand and Germany) do so in a marginal fashion.

The second factor affecting insider vulnerability to unemployment does not affect 'insiderness' but 'outsiderness'. There are two kinds of labour market policies that are relevant to insider–outsider divisions: passive labour market policies (PLMPs) provide unemployment compensation, whereas active labour market policies (ALMPs) are aimed at reducing unemployment by shaping the supply, demand and mobility of labour. I argue that, to the degree that they are protected from unemployment, insiders have little incentive to support either policy. Dualized labour markets will therefore be characterized by high levels of employment protection and low levels of labour market generosity. The reason for this is perhaps most clear when focusing on ALMPs. The unambiguous objective of ALMPs is to benefit outsiders. Unlike other policies whose goals may be difficult to distinguish in insider–outsider terms, ALMPs are designed to produce stable employment for those who do not possess it. Insiders with low vulnerability to unemployment pay for ALMP but do not perceive themselves to be likely recipients of its generosity. More importantly, the generosity of ALMPs weakens the bargaining position of insiders.¹⁴ I propose that, in addition to a high level of employment

¹³A flexibilization of labour market legislation took place in the 1980s, but in most cases it affected entry into (not exit from) the labour market (see, for example, Bentolila and Bertola, 1990 and, particularly, Rueda *et al.*, 2013, unpublished manuscript).

protection legislation, the existence of a buffer against economic downturns made up of unemployed and precariously employed outsiders will make insiders feel less concerned about unemployment. To the extent that ALMPs succeed in bringing outsiders into standard employment, they affect the unemployment vulnerability of insiders.¹⁵

The two dimensions of dualization emphasized above are captured in Figure 2. The figure summarizes the available data on protection legislation for standard employment and active labour market policy generosity from 1985 to 2007. The measure for protection legislation for standard employment has been described above. The generosity of active labour market policy is measured as the ratio of active labour market policy to GDP over the ratio of the unemployed to the labour force.¹⁶ This seems a reasonable way to assess the generosity of the welfare state: when unemployment-related policies rise faster as a proportion of the total size of the economy than the unemployment rate, for example, this measure of generosity will increase.

Figure 2 provides the country averages for regular employment protection legislation and active labour market generosity from 1985 to 2007. The red lines dividing the figure into quadrants reflect the sample means for the two measures. The picture for dualization that emerges from using these variables is an interesting one. While Rueda (2005 and 2007), using a more systematic analysis and a longer time series, has shown that more protected insiders are successful in demanding less generous labour market policies (particularly when the Left is in power), Figure 2 shows that different combinations of protection for standard employment and ALMP generosity exist. The lower right quadrant represents the highest levels of dualization (where high regular employment protection legislation coincides with low active labour market policy generosity). Spain, Portugal, Greece, Italy, France and Austria belong in this group. The lower left panel is one with low levels of dualization caused by low levels of insider protection, which are matched by low levels of ALMP generosity for outsiders. The USA, Canada, the UK and Australia are part of this group (with slightly higher levels of ALMP generosity and so are New Zealand, Ireland and Belgium). The higher right quadrant combines relatively high insider protection with generous levels of ALMP. Sweden, Denmark and the Netherlands

¹⁴The potential negative effects of these policies can be illustrated by looking at wages. ALMPs will, if successful, promote the entry into employment of individuals who can underbid insiders' wage demands. See Saint-Paul (1997) and Calmfors (1994).

¹⁵While a similar argument about their pro-outsiderness could be made about passive policies, it is less straightforward that PLMP generosity weakens the bargaining position of insiders. I therefore use ALMP generosity as my measure of pro-outsider labour market policy in the rest of the paper. But it is important to point out that all the results reported in this paper are in fact corroborated by using a measure of PLMP generosity instead.

¹⁶I follow the lead of a number of other authors. See, for example, Iversen and Cusack (2000).

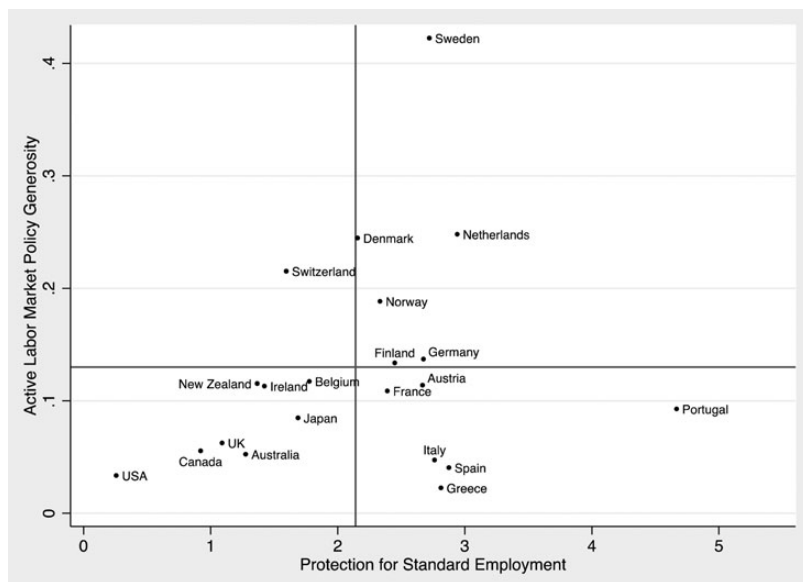


Figure 2 Regular employment protection and ALMP generosity (1985–2007).

are in this group (and, with lower levels of ALMP generosity, so are Finland and Germany). Switzerland, finally, is an outlier, belonging on its own to the quadrant characterized by low levels of insider protections but generous ALMP.

Two things should be emphasized before concluding this section. First, if we were to use passive rather than active labour market policy, the dualization picture described above would not be significantly different. Secondly, it is certainly the case that dualization is the result of political processes (see, for example, Rueda, 2007: Chapters 4 and 5 or Iversen and Soskice, 2011), but the relationship between powerful insiders and high levels of standard employment protection is self-reinforcing. As shown by the temporal stability in Figure 1, insider employment protection (once present) becomes institutionalized. Because dualization protects some workers against unemployment very effectively (while discriminating against others), its implications for the nature of the welfare state are momentous. We turn to some of these implications next.

2. Dualization and protection against unemployment before the crisis

The previous section has argued that dualization makes insiders less likely to demand protection and insurance against unemployment. Because of the political importance of insiders, the compensating role of social policy is therefore expected to be limited in cases where dualization is significant. I will explore the implications

of this argument by analysing the direct effects of dualization after 1985 (but before the present crisis). If this paper's hypothesis is correct, we should observe that those countries exhibiting higher levels of dualization in Figures 1 and 2 also experienced lower responsiveness of social policy to unemployment.¹⁷

To analyse the effects of dualization, I will explore the responsiveness of labour market policy to unemployment. Our measure includes passive as well as active labour market policy. Passive labour market policy consists of unemployment benefits. These include all public cash expenditures to the unemployed (both insurance and assistance), redundancy payments out of the public budget as well as some early-retirement 'pension' expenditure to unemployed beneficiaries before they reach the standard pensionable age. ALMPs include spending on public employment services and administration, labour market training, school-to-work youth programmes and employment programmes for the disabled.¹⁸

The measure of dualization used in the analysis combines the level of employment protection for standard employment explained above (the OECD indicator of dismissal protection for workers with regular contracts) and active labour market policy generosity. I summarize these two dimensions into an aggregate index of dualization. I do this simply by standardizing the two dimensions (so they are in comparable metrics) and calculating the ratio of employment protection over ALMP generosity.¹⁹ I also transform the standardized variables so that the minimum value is 0 (i.e. so that there are no negative values that could affect the calculation of the ratio). Unemployment is the harmonized rate (measured as a percentage of the civilian labour force) and change is measured annually.²⁰

¹⁷An analysis of the effects of dualization before 1980s would obviously strengthen the findings below, but the unavailability of employment protection data for standard employment before 1980s makes this unfeasible.

¹⁸Unless explicitly noted, all data in this part of the paper are from *Armingeon et al. (2012)*.

¹⁹A different understanding of protection for standard employment would argue that it promotes investments in firm-specific skills and thus can be a component of a training system conducive to upskilling and low youth unemployment (*Estevez-Abe et al. 2001*). This may help explain why some countries with high employment protection appear to also have a low incidence of outsidership, as well as generous active and passive labour market policies. In some countries, especially in Scandinavia, such 'inclusive' training systems may reflect inclusive political systems (*Iversen and Soskice, 2011*). This clearly does not hold for all countries, however. In Southern Europe, for example, employment protection is associated with ungenerous policies toward outsiders (hence also with high scores on the dualization index). Creating a ratio of employment protection over labour market generosity allows us to distinguish among these cases. As an illustration, in 1990s the resulting dualization index is 0.38 in Sweden, 1.19 in the UK and 9.0 in Spain.

²⁰These figures are from the author's own calculations using data from OECD.Stat (extracted in July, 2013).

Although not emerging directly from my main claims, there are a number of variables that need to be included in the analysis because of strong theoretical reasons to believe that they affect the policy outcomes I am interested in analysing. They are:

Left government and union density²¹: Rueda (2007) finds that Left parties promote insider interests at the expense of outsider support. And the power of labour (captured here as union density) has been argued to influence the generosity of labour market policy (see, for example, Huber and Stephens 2001).

Proportionality of the electoral system²²: an influential literature has argued that the nature of the electoral system affects the policies promoted by governments. More specifically, Iversen and Soskice (2006) propose that proportionality allows Left governments to promote more generous social policy. As mentioned above, Iversen and Soskice (2011) also relate proportional representation (in the presence of weak secular Right parties after Fordism) to dualization.

Trade and capital openness²³: there is a large literature suggesting that growing levels of international openness, integration and interdependence result in more limited social policy. This is the case because of the inability of Left parties to produce policies that do not conform to market forces.²⁴

Government debt and deficit²⁵: government debt and deficit levels are introduced into the analysis as a measure of the limitations affecting a government's choice of policy. The general argument is that governments with more debt and higher deficits have fewer resources at their disposal and that this affects spending strategies.²⁶

GDP growth²⁷: most analyses of economic policy include a measure of economic growth. In this paper, this is particularly relevant because we want to explore the range of social policy governments can promote irrespective of whether beneficial macroeconomic conditions exist.

²¹Left government is measured as the social-democratic (and other left parties) percentage of total cabinet posts, weighted by days. Union density is measured as net union membership as a proportion of wage and salary earners in employment (see Visser, 2011).

²²This variable is measured as the index of disproportionality proposed by Gallagher (1991).

²³Trade openness is measured as total trade (sum of import and export) as a percentage of GDP. Capital openness is measured as index for openness in capital account transactions.

²⁴See, for example, Moses (1994) and Scharpf (1991).

²⁵These variables are measured as gross government debt (financial liabilities) and annual deficit (government primary balance) as a percentage of GDP.

²⁶One interpretation of the policy changes of the early 1980s, for example, is that many governments had reached unsustainable levels of public debt (Schwartz 1994).

²⁷This variable is measured as percentage change in real GDP from previous year.

Regarding the estimation model, given the expectation of different unemployment effects on labour market policy responsiveness conditional on dualization levels, I want to introduce into the analysis dualization, change in unemployment and their interaction. While the level of unemployment will also be included in the analysis, the theoretical focus of this paper is the relationship between changes in unemployment and changes in labour market policy (in other words, the responsiveness of social policy to changes in unemployment). For this kind of dynamic relationship, I will develop an error correction model with country random effects. As argued by De Boef and Keele (2008), error correction models limit the number of restrictions imposed on dynamic specifications and (in addition to being suited to co-integrated time series) can therefore be used with stationary data to great advantage.

I run the following model:

$$\Delta Y_{it} = \beta_0 + \beta_1 Y_{it-1} + \beta_2 \Delta X_{it} + \beta_3 X_{it-1} + \beta_4 D_{it} + \beta_5 \Delta X_{it} * D_{it} + \beta_6 \Delta Z_{1it} + \beta_7 Z_{it-1} + \dots + \beta_{n-1} \Delta Z_{nit} + \beta_n Z_{nit-1} + \varepsilon_{it}$$

where ΔY_{it} represents the change in labour market policy in country i at time t , β_0 represents a general intercept, Y_{it-1} is the 1-year lag of labour market policy, ΔX_{it} is change and X_{it-1} is the 1-year lag of unemployment, D_{it} is the level of dualization, Z_1 to Z_n are the control variables (measured both as change and as 1-year lags), β_1 to β_n are the slopes of the explanatory variables and ε_{it} denotes the errors.

An error correction model allows us to estimate short-run effects (captured by the change explanatory variables) and long-run effects (captured by the lags of the explanatory variables).²⁸ The short-run impact (i.e. the immediate effect on social policy of a unit change in unemployment) is the theoretical focus of this paper. I will therefore not dedicate much attention below to the long-run effects of any of the variables.²⁹

As the equation above makes clear, the analysis treats dualization as an institutional variable with limited temporal variation. This approach is justified when considering the discussion of Figure 1 in the previous section. Unlike the other variables, therefore, dualization is not introduced into the analysis as changes and 1-year lag but as contemporary levels. It is important to emphasize once again that, while the estimates are in the form of an error correction model, the

²⁸The calculation of the long-run multiplier involves both the estimate for the lag of an explanatory variable and the estimate of the lagged dependent variable. See De Boef and Keele (2008, p. 191) for details.

²⁹Error correction models also allow us to derive equilibrium conditions and estimate error correction rates, which, given the paper's emphasis on short-run effects, will also not be the focus of the analysis below.

Table 1 Welfare state responsiveness: effects of unemployment change on labour market policy change (1985–2007)

Lag of labour market policy	0.028*** (0.011)	0.035** (0.015)
Change in unemployment	0.250*** (0.036)	0.176*** (0.034)
Lag of unemployment	−0.005 (0.004)	−0.007* (0.004)
Dualization	0.003 (0.002)	0.008** (0.004)
Change in unemployment*dualization	−0.011*** (0.002)	−0.009*** (0.002)
Change left government		−0.000 (0.001)
Lag left government		−0.000 (0.000)
Change union density		0.033* (0.020)
Lag union density		0.000 (0.001)
Change disproportionality of electoral system		−0.007* (0.004)
Lag disproportionality of electoral system		0.001 (0.002)
Change capital openness		−0.008 (0.060)
Lag capital openness		0.051** (0.021)
Change trade openness		−0.002 (0.004)
Lag trade openness		−0.000 (0.000)
Change real GDP growth		−0.0150 (0.010)
Lag real GDP growth		0.008 (0.009)
Change government debt		0.011* (0.006)
Lag government debt		−0.000 (0.000)
Change deficit		−0.026*** (0.010)
Lag deficit		−0.004 (0.007)
Intercept	−0.026 (0.028)	−0.128* (0.076)
<i>n</i>	396	389

Random-effects GLS regression results with standard errors robust to panel correlation. Numbers are estimated coefficients; numbers in parentheses are robust standard errors.

*If significant at 90% level, **if significant at 95% level, ***if significant at 99% level.

main focus of this paper is the interaction between the short-run effects of unemployment and (mostly institutional) dualization levels.

Table 1 presents the results in two columns.³⁰ The first one contains a simple error correction model including only the variables of interest (unemployment and dualization). The second one adds all control variables. Given the structure of direct effects and interactions, very little can be said about the effects of unemployment change and dualization at this moment. The table suggests that the direct effect of unemployment change is positive and significant in both the

³⁰The countries for which data are available are Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK. It should also be noted that while the OECD Employment Protection for Permanent Employment index, labour market policy measures and the harmonized unemployment figures are available for most countries starting in 1985, data availability varies in the countries in this sample. The exceptions are Portugal and Denmark (in these countries the series start in 1986); Australia, Finland and Norway (late 1980s); Germany, Italy and Japan (early 1990s); Austria (in the mid-1990s) and Greece and Switzerland (in the late 1990s). A detailed list of the annual data used in the analysis is available from the author.

Table 2 Welfare state responsiveness: effects of unemployment change on labour market policy change (1985–2007), conditional on levels of dualization

Level of dualization (EPL/ALMP generosity)		
	Low	0.168*** (0.033)
	Medium	0.146*** (0.028)
	High	0.110*** (0.022)

Random-effects GLS regression results with standard errors robust to panel correlation from Table 2. Numbers are estimated average marginal effects of unemployment change; numbers in parentheses are standard errors. Levels of dualization: low = 0.8 (10th percentile in this sample), medium = 3.3 (mean in this sample), high = 7.2 (90th percentile in this sample).

*if significant at 90% level, **if significant at 95% level, ***if significant at 99% level.

simple and the complete models. And the direct effect of dualization is significant and negative only in the simple model. But it is the effect of unemployment change conditional on different dualization levels that interests us (and this will be analysed in more detail below).

Turning to the control variables, within the group of political ones, only change in union density and change in disproportionality have (weakly) significant effects on labour market policy. Left government partisanship, electoral system disproportionality and union density do not have long-run effects (and Left government does not have short-run effects either). Increases in union density and decreases in disproportionality, however, have an immediate positive impact on labour market policy. The estimates for the rest of control variables indicate that deficits and government debt have significant short-run effects on labour market policy, while capital openness has long-run effects. Deficits promote an immediate decrease in labour market policy and government debt a weak increase.

It is this paper's main hypothesis that dualization has affected the willingness of governments to promote protection and insurance through the welfare state. To test this, it is essential to assess the effects of changes in unemployment conditional on different levels of dualization. Thinking back to Figures 1 and 2, the implications for our analysis are straightforward. Low levels of dualization mean that insiders are less protected from unemployment and should therefore be associated with high responsiveness of labour market policy to unemployment. With higher levels of dualization, the relationship between unemployment change and labour market policy responsiveness is expected to be weaker.

Table 2 takes the estimates from the full model in Table 1 and presents the average marginal effects of unemployment change on labour market policy responsiveness conditional on different levels of dualization.³¹ The results in the table represent a remarkable amount of support for this paper's argument, robust to the inclusion of

³¹'Simple' marginal effects are calculated by setting the variables of interest to the chosen values (e.g. the level of dualization) while holding all other variables at one observed value (e.g. the mean values). Average marginal effects, however, are calculated by setting the variables in question to the chosen

all control variables. The results in Table 2 make clear that the responsiveness of the welfare state to unemployment decreases as labour market dualization rises. When dualization is low, the responsiveness of labour market policy to unemployment change is statistically significant and positive. A 1% increase in the unemployment rate is associated with a 0.168 increase in labour market policy as percentage of GDP. Table 2 also makes clear that with high levels of dualization, the effects of unemployment change are much more limited (a 1% increase in the unemployment rate is only associated with a 0.110 increase in labour market policy). This is more than a 31% decrease in the responsiveness of labour market policy to unemployment when switching from a low to a high level of regular employment protection. This difference in the two marginal effects is in fact significant at higher than a 99% level of confidence.³²

3. Dualization and the present crisis

The previous section has focused on the relationship between dualization and labour market policy responsiveness to unemployment in ‘normal’ times; we now turn to times of crisis. I will show first that insiders have been comparatively protected from unemployment even during the present crisis. More importantly, I will present evidence similar to the one in the previous section demonstrating that assessing the effects of dualization contributes significantly to our understanding of policy responses to unemployment (even during the Great Recession, when instability and risk are widespread).

3.1 *Dualization and unemployment*

It is an uncontested fact that the present economic crisis has had and may still have dramatic effects on unemployment in most OECD countries. Table 3 presents data on harmonized unemployment rates for a number of OECD countries from 2007 to 2012. The table makes clear the significance of the problem. All countries except Austria and Germany experience an increase in unemployment from 2007 to 2012. Most importantly, average annual change (starting in 2008) is positive in all cases except Austria and Germany. The average yearly increases in unemployment experienced during the crisis range from the low (below 0.2 in Belgium, Switzerland, Japan, Norway, Finland, Australia and Luxembourg) to the moderate (between 0.2 and 1 in Canada, the Netherlands, Sweden, France, New Zealand, the USA, Denmark, Iceland, the UK and Italy) to the spectacular (Portugal, Ireland, Greece

values while holding all other variables at all their observed values. The final estimates are the average of these predictions.

³²The results in Tables 1 and 2 are confirmed when using a measure for passive labour market policy generosity. Results are available from the author.

Table 3 Harmonized Unemployment Rate during the Crisis

	2007	2008	2009	2010	2011	2012	Average change
Australia	4.37	4.26	5.60	5.22	5.09	5.24	0.17
Austria	4.42	3.83	4.79	4.41	4.15	4.33	-0.02
Belgium	7.46	6.97	7.91	8.30	7.14	7.54	0.02
Canada	6.03	6.13	8.27	8.01	7.45	7.25	0.24
Denmark	3.86	3.50	6.12	7.59	7.80	-	0.98
Finland	6.88	6.39	8.27	8.43	7.81	7.72	0.17
France	8.40	7.87	9.65	9.87	9.71	-	0.33
Germany	8.71	7.56	7.78	7.10	5.95	5.49	-0.64
Greece	8.28	7.65	9.47	12.52	17.65	24.26	3.20
Iceland	-	2.94	7.19	7.60	7.03	6.01	0.77
Ireland	4.70	6.40	11.93	13.82	14.59	14.68	2.00
Italy	6.17	6.80	7.86	8.52	8.47	10.82	0.93
Japan	3.84	3.97	5.05	5.03	4.58	4.34	0.10
Luxembourg	-	2.92	3.18	2.83	3.01	-	0.03
Netherlands	3.50	3.03	3.67	4.45	4.44	5.27	0.35
New Zealand	3.67	4.16	6.13	6.53	6.52	6.91	0.65
Norway	2.55	2.54	3.18	3.59	3.32	-	0.19
Portugal	8.03	7.63	9.52	10.85	12.81	15.74	1.54
Spain	8.30	11.39	18.10	20.16	21.73	25.13	3.37
Sweden	6.12	6.18	8.31	8.57	7.76	7.95	0.37
Switzerland	3.40	3.12	3.85	4.24	3.75	3.87	0.10
U.K.	5.31	5.67	7.61	7.82	8.05	7.90	0.52
U.S.A.	4.62	5.78	9.25	9.63	8.95	8.07	0.69

Harmonized unemployment rate as % of civilian labour force. Source: see footnote 20. Change is measured as average annual change from previous year (2008 to 2012).

and Spain experience the largest increases). It is also clear that the possibility of a double- or triple-dip recession (or the continuation of a jobless recovery) could make the employment situation even worse in many of these countries.

It is also possible to illustrate that existing levels of dualization have had an influence on general changes in unemployment levels during the crisis. Figure 3 contains two variables: dualization before the beginning of the crisis (measured as the dualization index, the ratio of employment protection over ALMP generosity, in 2007) and harmonized unemployment (measured as the average annual change from 2008 to 2012). The figure makes clear that there is an association between the levels of institutionalized dualization and the incidence of unemployment. Highly dualized countries have experienced the highest increases in unemployment.³³

³³In a simple bivariate regression, the level of dualization in 2007 is a significant predictor of annual changes in unemployment at higher than the 99% confidence level. Results are available from the author.

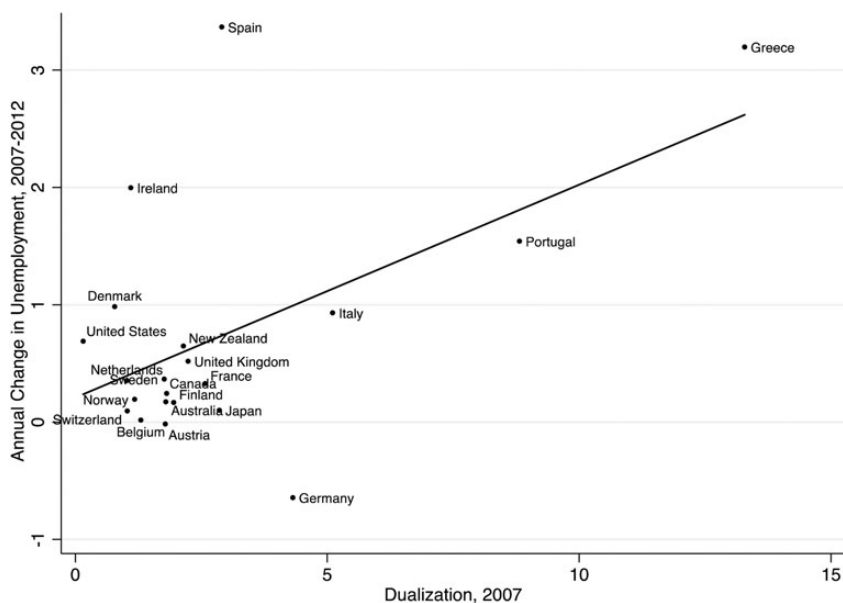


Figure 3 Dualization and unemployment, 2007–2012.

The figures for harmonized unemployment rates in Table 3 and Figure 3 are meaningful, but a strong implication of the argument in previous sections is that levels of existing dualization should insulate insiders (relatively) from the worst effects of the crisis. The employment impact of the Great Recession has varied across different types of workers. While gender has not been a good predictor of the likelihood of losing one's job in this economic crisis (perhaps because of the large proportion of male workers in construction), it is clear that unemployment has been concentrated on outsiders: immigrants, the young, the unskilled and precariously employed (OECD, 2010a). The data are perhaps most telling when looking at young people.

While it is clear that insider–outsider differences cannot be reduced to a distinction between the young and middle-aged, data on the age incidence of unemployment during the crisis are more readily available than other possible measures of outsidership (such as immigration of precarious employment).³⁴ There are good theoretical reasons, moreover, to consider young workers to be most affected by outsidership. In many countries, they have entered a labour market with a strong existing segmentation between those in protected employment and those in flexible

³⁴It is the case that in countries like Spain and Italy, the unemployment consequences of the Great Recession have been concentrated on those with temporary employment. In Spain 85% of job losses affected people with temporary employment (OECD, 2010a, p. 54).

Table 4 Outsider unemployment incidence during the crisis

	2007	2008	2009	2010	2011	2012	Average change
Australia	5.97	5.44	6.95	7.50	7.41	7.66	0.34
Austria	4.78	4.70	5.78	4.88	4.78	4.95	0.03
Belgium	12.28	11.73	15.13	15.10	12.30	12.95	0.13
Canada	6.12	6.53	8.10	7.91	7.95	8.27	0.43
Denmark	4.38	5.38	6.65	7.40	7.60	7.45	0.61
Finland	11.13	11.30	14.40	14.30	13.60	12.65	0.30
France	12.20	12.28	15.55	14.85	14.05	15.13	0.59
Germany	3.95	3.55	3.95	3.25	3.10	3.05	-0.18
Greece	15.13	14.90	16.88	20.93	27.28	31.65	3.30
Iceland	5.65	6.33	9.48	9.73	8.73	8.93	0.66
Ireland	4.95	7.45	13.20	14.90	15.40	16.85	2.38
Italy	15.00	15.30	18.48	20.23	21.53	25.60	2.12
Japan	4.05	3.41	4.21	4.47	3.73	3.88	-0.03
Luxembourg	11.75	13.80	13.35	10.40	12.65	14.10	0.47
The Netherlands	3.48	3.28	3.85	5.10	3.93	5.05	0.31
New Zealand	7.46	8.44	12.18	12.22	12.34	12.34	0.98
Norway	5.53	5.60	6.78	6.30	5.98	5.88	0.07
Portugal	8.75	9.23	10.80	11.65	18.05	22.85	2.82
Spain	10.98	14.50	21.33	23.00	26.30	29.63	3.73
Sweden	14.93	15.83	18.70	18.30	16.98	17.70	0.55
Switzerland	3.90	4.10	4.80	3.20	2.50	2.50	-0.28
UK	10.48	10.80	13.23	13.45	14.93	14.98	0.90
USA	6.79	8.01	9.28	9.81	9.35	9.17	0.48

Change is measured as average annual change from previous year (2008–2012). Outsider unemployment incidence measured as unemployment rate of young people (15–24 years) minus unemployment rate of ‘prime working life’ people (25–54 years).

Source: OECD Labor Market Statistics, extracted August 2013.

employment, they are most affected by a vicious circle of precarious employment and unemployment, they are less likely to be represented by unions, etc.³⁵

Table 4 captures the lower vulnerability of insiders to unemployment by measuring the difference between the unemployment rate of young people (15–24 years) and that of ‘prime working life’ people (25–54 years). The first thing to note about Table 4 is that the average unemployment rate for young people in all OECD countries was higher than for ‘prime age’ workers. But these numbers exhibit a high degree of national variation. Lower than average outsider unemployment incidence occurs in Australia, Austria, Canada, Denmark, Germany, Iceland, Japan, the Netherlands, Norway, Switzerland and the USA. Belgium, Finland, France, Greece, Italy, Spain and Sweden have higher than average levels of outsider

³⁵See Rueda (2007) for a more detailed analysis of this issue.

unemployment incidence.³⁶ Table 4 also reflects a remarkable amount of change over time. In three countries, the average yearly changes in outsider unemployment incidence experienced during the crisis are negative (in Germany, Japan and Switzerland). But the countries where the employment situation for outsiders is getting comparatively better are a minority. All other countries experience average yearly increases in outsider unemployment incidence. These range from the moderate ones in Austria, Norway and Belgium to the very high in Italy, Ireland, Portugal, Greece and Spain.

Most important to this paper's argument, however, is the relationship between the levels of dualization in Figures 1 and 2 and the outsider unemployment incidence levels in Table 4. If this paper's hypotheses about the effect of dualization are correct, we should observe a correlation between dualization and the incidence figures discussed above. As was the case when looking at the general levels of unemployment in Figure 3, the goal is to analyse the influence of dualization at the beginning of the crisis (in 2007) on the incidence of unemployment (in this case, for outsiders).

Figure 4 contains two variables: the dualization index before the beginning of the crisis and outsider unemployment incidence (measured as average annual change for the difference between youth and prime working-life unemployment from 2008 to 2012). The figure suggests a positive relationship between dualization in 2007 and outsider unemployment incidence during the crisis. Countries with high levels of dualization in 2007 (like Portugal, Greece and Italy) also exhibit the highest differences between youth unemployment and prime working-life unemployment from 2007 to 2012. Countries with low levels of dualization in 2007 (such as the USA, the Netherlands, Norway and Switzerland) have the lowest differences between youth unemployment and prime working-life unemployment. The exceptions are Germany (with relatively high dualization but very low outsider unemployment incidence) and Ireland and Spain (with relatively low dualization in 2007 but very high outsider unemployment incidence).³⁷

3.2 *Dualization and protection against unemployment*

How have the countries in our sample reacted to these increases in unemployment? This paper's main argument proposes that dualization makes insiders not only less likely to experience unemployment but also less likely to demand protection and

³⁶Well-known examples of dualization like Spain exhibit particularly dramatic youth unemployment rates (53% in 2012). But even in the case of Sweden, where 'last-in first-out' rules are followed for layoffs, the youth unemployment rates are significantly high (24% in 2012).

³⁷In a simple bivariate regression, the level of dualization in 2007 is a significant predictor of annual changes in unemployment at higher than the 99% confidence level. Results are available from the author.

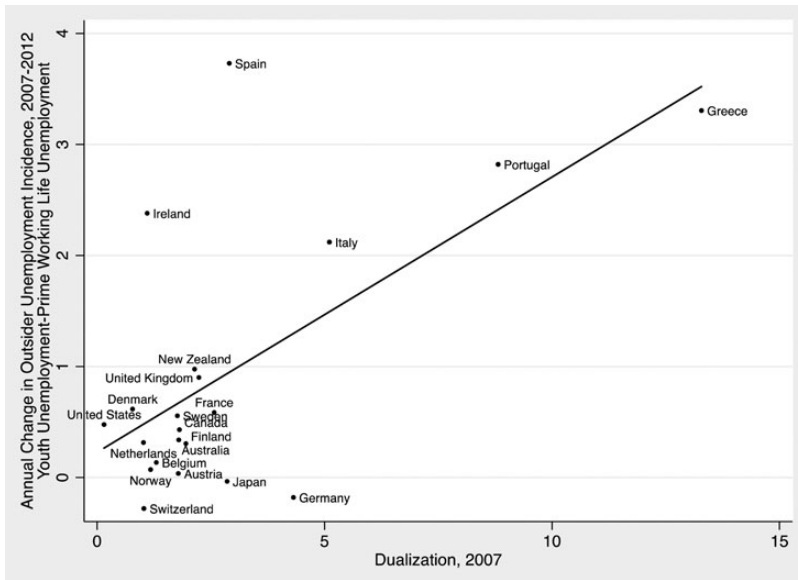


Figure 4 Dualization and outsider unemployment incidence, 2007–2012.

insurance against it. Because of the political importance of insiders, the compensating role of social policy is therefore expected to be more limited in cases where dualization is more significant. If this paper's hypothesis is correct, we should observe that those countries exhibiting higher levels of dualization in Figures 1 and 2 also experienced lower responsiveness of labour market policy to unemployment during the crisis.

As was the case in the previous section's more systematic analysis, I will measure policy responses during the crisis as labour market policy as a percentage of GDP. And, once again, the measure includes PLMPs and ALMPs. Table 5 provides the data for the post-2007 crisis period in the countries in our sample. The levels of labour market policy during the crisis in the countries in our sample exhibit high cross-national and temporal variation. There are countries dedicating few resources to labour market policy (like Australia, Canada, Japan, Luxembourg, New Zealand, Norway, the UK and the USA) and there are countries that spend much more on these policies (like Belgium, Denmark, Ireland and Spain). While some of these countries have high levels of unemployment in Table 3, others do not. In this respect, the numbers that matter most to us are those in the last column in Table 5. These reflect annual change in the resources dedicated to labour market policy during the crisis, averaged through the 2008–2011 period. In this column, we can see that the resources dedicated to these policies have increased most in Ireland, Spain, Denmark, Italy, Belgium and the UK (a

Table 5 Labour market policy during the crisis

	2007	2008	2009	2010	2011	Average change
Australia	0.72	0.78	0.86	0.81	0.80	0.02
Austria	1.90	1.83	2.33	2.24	2.03	0.03
Belgium	3.18	3.27	3.77	3.73	3.68	0.13
Canada	0.83	0.92	1.30	1.12	0.91	0.02
Denmark	2.84	2.58	3.39	3.83	3.91	0.27
Finland	2.29	2.16	2.80	2.84	2.49	0.05
France	2.18	2.03	2.43	2.59	2.34	0.04
Germany	2.03	1.91	2.55	2.27	1.82	-0.05
Ireland	1.56	2.07	3.46	3.94	-	0.79
Italy	1.15	1.28	1.86	1.88	1.78	0.16
Japan	0.46	0.47	0.85	0.63	0.62	0.04
Luxembourg	0.99	1.00	1.43	1.34	1.20	0.05
The Netherlands	2.50	2.35	2.91	2.97	2.74	0.06
New Zealand	0.56	0.62	0.84	0.90	0.69	0.03
Norway	0.76	-	-	-	-	-
Portugal	1.56	1.54	2.08	2.10	1.93	0.09
Spain	2.25	2.70	3.86	4.08	3.71	0.37
Sweden	1.75	1.43	1.84	1.90	1.72	-0.01
Switzerland	1.11	1.00	1.49	1.42	1.12	0.00
UK	0.47	0.52	0.70	-	-	0.12
USA	0.43	1.05	1.26	0.91	0.71	0.07

Change is measured as average annual change from previous year (2008–2011). Labour market policy (passive and active) as a percentage of GDP.

Source: OECD Labor Market Statistics, extracted August 2013.

combination of countries with high and low spending numbers). Labour market policy has increased the least in Austria, New Zealand, Australia, Canada and Switzerland (and in Sweden and Germany, where it has in fact decreased).

While Table 5 illustrates the high variance of labour market policy during the Great Recession, it does not provide any evidence of the link between policy and dualization. I have argued that dualization has affected the willingness of governments to promote protection and insurance through the welfare state, even during times of crisis. To test this, we need to explore the responsiveness of labour market policy to unemployment conditional on different levels of dualization.

Though the availability of data during the present crisis is too limited to allow for more sophisticated analyses, it is possible for us to explore the responsiveness of labour market policy to unemployment change by running a simple regression model including only the variables of interest (unemployment, dualization and their interaction). Given the short time series for all countries in this analysis, I exclude control variables (and the error correction structure).

Table 6 Welfare state responsiveness during the crisis: effects of Unemployment change on labour market policy change (2008–2011)

Change in unemployment	0.240*** (0.033)
Dualization in 2007	0.005 (0.018)
Change in unemployment* dualization	−0.018 (0.012)
Intercept	−0.031 (0.051)
<i>n</i>	73

OLS regression results. Numbers are estimated coefficients; numbers in parentheses are standard errors. *if significant at 90% level, **if significant at 95% level, ***if significant at 99% level.

Table 7 Welfare state responsiveness during the crisis: effects of unemployment change on labour market policy change (2008–2011), conditional on levels of dualization in 2007

Level of dualization	Low	0.226*** (0.026)
	Medium	0.197*** (0.019)
	High	0.148*** (0.040)

OLS regression. Numbers are estimated average marginal effects of unemployment change; numbers in parentheses are standard errors. Levels of dualization: low = 0.8 (10th percentile in this sample), medium = 2.4 (mean in this sample), high = 5.2 (90th percentile in this sample). *if significant at 90% level, **if significant at 95% level, ***if significant at 99% level.

I therefore run the following model:

$$\Delta Y_{it} = \beta_0 + \beta_1 \Delta X_{it} + \beta_2 D_{it} + \beta_3 \Delta X_{it} * D_{it} + \varepsilon_{it}$$

where ΔY_{it} represents the change in labour market policy in country i at time t , β_0 represents a general intercept, ΔX_{it} is the change in unemployment, D_{it} is the level of dualization in 2007, β_1 to β_3 are the slopes of the explanatory variables and ε_{it} denotes the errors.

Table 6 presents the results. As was the case with Table 1, given the structure of direct effects and interactions, very little can be said about the effects of unemployment change and dualization at this moment. The table suggests that the direct effect of unemployment change is positive and significant, while the direct effect of dualization is statistically insignificant.

It is once again the conditional effects of these variables that interest us, and they are presented in Table 7. The table presents the marginal effects of unemployment change on labour market policy responsiveness conditional on different levels of dualization. The results in the table represent some support for this paper's argument. They suggest that the responsiveness of the welfare state to unemployment decreases as labour market dualization rises. When regular employment protection is low, the responsiveness of labour market policy to unemployment change is statistically significant and positive. A 1% increase in the unemployment rate is

associated with a 0.226 increase in labour market policy as percentage of GDP. Table 7 also makes clear that with high levels of dualization, the effects of unemployment change are more limited (a 1% increase in the unemployment rate is associated with a 0.148 increase in labour market policy). While the limited number of observations does not allow for a very precise estimates of the marginal effects (the standard errors are large and they make the difference between low and high dualization statistically insignificant), the point estimates in the table would preliminarily suggest a decrease in the responsiveness of labour market policy to unemployment when switching from a low to a high level of dualization.

4. Conclusions

Inequality is frequently invoked as an explanation for a number of crucial issues in political science. It is often considered a determinant of processes as diverse as the decline of electoral turnout (Verba, Nie and Kim, 1978; Rosenstone and Hansen, 1993), the increase in the support of extreme-right parties (Betz, 1994), or the likelihood of political conflict (see, Lichbach 1989 for a review). The role of the welfare state was understood once as the main buffer between unemployment and inequality. The emergence of the welfare state was inevitably connected to the protection of people from labour market risks. In the words of Baldwin, '(s)ocial insurance provided the tools with which to reapportion and moderate the effects of natural and manmade misfortune' (1990, p. 3). By many accounts, the power of the welfare state as a provider of unemployment insurance in affluent democracies had reached its zenith by the early 1990s. While subject to many ups and downs over time and great cross-national diversity, until this time, few would dispute the centrality of the welfare state as the main line of defence against unemployment.

The inadequacy of government responses to the present economic crisis has brought this issue to the fore. In September of 2009, OECD employment and labour ministers met in Paris to discuss how the job crisis resulting from the Great Recession should be tackled. They agreed that 'the severity of the recession called for decisive and comprehensive actions and endorsed a set of broad guidelines for the labour market and social policy responses that are intended to limit the social costs of the recession while also promoting a return to sound economic growth' (OECD, 2010b, p. 16). And yet already in 2010, the OECD report analysing the concrete labour market reactions to the crisis produced mixed conclusions. Many governments hoped to expand or at least hold constant the resources devoted to PLMP and ALMP compared with those in 2009. But 'countries facing especially large government budget deficits or where an already high unemployment rate is projected to remain stable or decline are more likely to envisage beginning to trim back some of the increases in spending that were taken in response to the crisis' (OECD, 2010b, p. 18). In 2013 and 2014, the commitment to mitigate the

effects of the crisis on unemployment seemed to have grown weaker still. Budgetary concerns and fiscal discipline have replaced unemployment as the main concern in the media (and most academic analyses).

In the previous sections, I have provided some evidence suggesting that the responsiveness of labour market policy to unemployment depends very distinctly on the nature of dualization. When insiders enjoy high levels of employment protection that minimize their vulnerability to unemployment, the responsiveness of the welfare state to unemployment is diminished. This transformation has profound implications for the ability of the welfare state to promote equality. Only by understanding the nature of the relationship between insider–outsider differences and labour market policy we will be able to assess the likely consequences of this and future crises.

References

- Allard, G. (2005) 'Measuring Job Security over Time: In Search of a Historical Indicator for EPL', IE Working Paper WP05-17.
- Armingeon, K., Weisstanner, D., Engler, S., Potolidis, P. and Gerber, M. (2012) *Comparative Political Data Set I 1960–2010*, Bern, Institute of Political Science, University of Bern.
- Baldwin, P. (1990) *The Politics of Social Solidarity*, New York, Cambridge University Press.
- Bentolila, S. and Bertola, G. (1990) 'Firing Costs and Labour Demand: How Bad is Euro-sclerosis?', *Review of Economic Studies*, 57, 381–402.
- Betz, H.-G. (1994) *Radical Right-Wing Populism in Western Europe*, New York, St. Martin's Press.
- Blanchard, O. and Summers, L. (1986) 'Hysteresis and the European Unemployment Problem'. In Fisher, S. (ed.) *NBER Macroeconomic Annual*, Cambridge, MA, MIT Press.
- Calmfors, L. (1994) 'Active Labour Market Policy and Unemployment: A Framework for the Analysis of Crucial Design Features', OECD Working Papers. Paris, OECD.
- Davidsson, J. B. and Naczyk, M. (2009) 'The Ins and Outs of Dualisation: A Literature Review', *Barnett Papers in Social Research*, 2009, 2, University of Oxford working paper.
- De Boef, S. and Keele, L. (2008) 'Taking Time Seriously', *American Journal of Political Science*, 52, 184–200.
- Ebbinghaus, B. (2006) *Reforming Early Retirement in Europe, Japan and the USA*, Oxford, Oxford University Press.
- Eichhorst, W. and Marx, P. (2012) 'Whatever Works: Dualization and the Service Economy in Bismarckian Welfare States'. In Emmenegger, P. et al. (eds) *The Age of Dualization*, Oxford, Oxford University Press.
- Emmenegger, P. (2012) 'Job Security Regulations in Western Democracies: a Fuzzy-Set Analysis', *European Journal of Political Research*, 50, 336–364.

- Emmenegger, P., Häusermann, S., Palier, B. and Seeleib-Kaiser, M. (eds). (2012) *The Age of Dualization*, Oxford, Oxford University Press.
- Esping-Andersen, G. (1999) *Social Foundations of Postindustrial Economies*, New York, Oxford University Press.
- Estevez-Abe, M., Iversen, T. and Soskice, D. (2001) 'Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State'. In Hall, P. and Soskice, D. (eds) *Varieties of Capitalism*, Oxford, Oxford University Press.
- Ferrera, M. and Hemerijck, A. (2003) 'Recalibrating Europe's welfare regimes'. In Zeitlin, J. and Trubek, D. (eds) *Governing Work and Welfare in a New Economy*, Oxford, Oxford University Press.
- Gallagher, M. (1991) 'Proportionality, Disproportionality and Electoral Systems', *Electoral Studies*, **10**, 33–51.
- Häusermann, S. and Schwander, H. (2012) 'Varieties of Dualization? Labor Market Segmentation and Insider-Outsider Divides Across Regimes'. In Emmenegger, P. et al. (eds) *The Age of Dualization*, Oxford, Oxford University Press.
- Huber, E. and Stephens, J. (2001) *Development and Crisis of the Welfare State*, Chicago, University of Chicago Press.
- Iversen, T. and Cusack, T. R. (2000) 'The Causes of Welfare State Expansion: Deindustrialization or Globalization?', *World Politics*, **52**, 313–349.
- Iversen, T. and Soskice, D. (2006) 'Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More Than Others', *American Political Science Review*, **100**, 165–181.
- Iversen, T. and Soskice, D. (2011) 'Dualism and Political Coalitions: Inclusionary Versus Exclusionary Reforms in an Age of Rising Inequality'. Prepared Presented at the Conference on "The Future of Democratic Capitalism", Zürich, Swiss Federal Institute of Technology.
- Iversen, T. and Stephens, J. (2008) 'Partisan Politics, the Welfare State and Three Worlds of Human Capital Formation', *Comparative Political Studies*, **41**, 600–637.
- Lichbach, M. (1989) 'An Evaluation of "Does Economic Inequality Breed Political Conflict?" Studies', *World Politics*, **41**, 431–470.
- Lindvall, J. and Rueda, D. (Forthcoming) 'The Insider-Outsider Dilemma', *British Journal of Political Science*.
- Mares, I. (2006) *Taxation, Wage Bargaining, and Unemployment*, New York, Cambridge University Press.
- Martin, C. J. and Thelen, K. (2007) 'The State and Coordinated Capitalism', *World Politics*, **60**, 1–36.
- Moses, J. (1994) 'Abdication from National Policy Autonomy: What's Left to Leave?' *Politics and Society*, **22**, 125–148.
- OECD. (1994) *OECD Jobs Study*, Paris, OECD.
- OECD. (1999) *Employment Outlook*, Paris, OECD.

- OECD (2010a) *From Crisis to Recovery*, Paris, OECD.
- OECD (2010b) *Employment Outlook: Moving Beyond the Job Crisis*, Paris, OECD.
- OECD (2013) *Indicators of Employment Protection, Annual Time Series Data 1985–2013*, Paris, OECD.
- Palier, B. and Thelen, K. (2010) 'Institutionalizing Dualism', *Politics & Society*, **38**, 119–148.
- Pierson, P. (ed.). (2001) *The New Politics of the Welfare State*, Oxford, Oxford University Press.
- Rosenstone, S. and Hansen, J. M. (1993) *Mobilization, Participation and Democracy in America*, New York, Macmillan.
- Rueda, D. (2005) 'Insider–Outsider Politics in Industrialized Democracies: The Challenge to Social Democratic Parties', *American Political Science Review*, **99**, 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**, 385–406.
- Rueda, D. (2007) *Social Democracy Inside Out*, Oxford, Oxford University Press.
- Rueda, D., Wibbels, E. and Altamirano, M. (2013) 'The Origins of Dualism'. Paper Presented at the CES Annual Conference, Amsterdam (unpublished manuscript).
- Saint-Paul, G. (1997) *Dual Labor Markets*, Cambridge, MA, MIT Press.
- Scharpf, F. (1991) *Crisis and Choice in European Social Democracy*, Ithaca, Cornell University Press.
- Schwartz, H. (1994) 'Small States in Big Trouble', *World Politics*, **46**, 527–555.
- Taylor-Gooby, P. (2004) *New Risks, New Welfare*, Oxford, Oxford University Press.
- Venn, D. (2009). 'Legislation, Collective Bargaining and Enforcement: Updating the OECD Employment Protection Indicators', *OECD Social Employment and Migration Working Paper* 89.
- Verba, S., Nie, N. and Kim, J.-O. (1978) *Participation and Political Equality*, New York, Cambridge University Press.
- Visser, J. (2011) *THE ICTWSS Database: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 34 Countries Between 1960 and 2010; Version 3.0*, Amsterdam, Amsterdam Institute for Advanced Labour Studies AIAS.