Dualism and political coalitions:

Inclusionary versus exclusionary reforms in an age of rising inequality

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Abstract

Deindustrialization and the decline of Fordism have undermined the economic complementarities that existed between skilled and semi-skilled workers. The result has everywhere been a decline in coordinated wage bargaining and unionization rates, and a notable rise in labor market inequality. Yet, the political responses have been very different. In some countries rising inequality has been exacerbated by complete deregulation of labor and product markets; in others regulations remain extensive while insider-outsider divisions have been allowed to grow deeper; in still others governments have compensated losers to a considerable extent through increased transfers and active labor market policies. This paper argues that the three paths of reforms reflect differences in underlying political coalitions, which can be analyzed in a two-dimensional policy space consisting of employment regulation and redistribution. Coalitional patterns are a function of the pre-existing industrial relations institutions and the party and electoral system. The argument helps explain the observed patterns of reforms and inequality across advanced democracies.
1. Introduction

During the past two decades advanced democracies have experienced a striking increase in wage inequality and a rise of dualism in the labor market. A key question for this paper is whether, and to what extent, the state has responded to these developments by providing compensation and new opportunities for those who have been most affected. Because the industrial relations and employment protection systems are no longer a guarantor for the welfare of low-end workers, solidarity and equality increasingly depend on the capacity of the political system to forge inclusive alliances that will counteract inequalizing changes in the economy. And such capacity appears to vary a great deal across countries.

The issue can be illustrated with some data on redistribution from the Luxembourg Income Study (see Figure 1). The graph shows the percentage reduction in income inequality -- measured as the gini coefficient for households headed by a working-age adult – from before taxes and transfers to after. The dots are individual observations for the 15 advanced democracies for which data are available, while the solid lines show the evolution of redistribution over time for three clusters of countries (after interpolating values for years with no data).¹

Not surprisingly the Nordic countries stand out for their high levels of redistribution throughout the period, and they seem to have followed a broadly counter-cyclical macroeconomic pattern with a peak of about 40 percent at the end of the recession in 1994 and a subsequent decline to about 35 percent in 2000, which is roughly where these countries started out in the late 1980s. More surprisingly, perhaps, although the continental European countries all have large welfare states they are on average no more redistributive than the Anglo-Saxon countries. Redistribution in these countries also remains fairly constant throughout the period, and actually drops slightly from the mid-1990s to about 20 percent in 2000. Two countries buck the trend (indicated by dashed blue lines): Belgium and the Netherlands. The former has exhibited consistently high and even rising levels of redistribution on par with the Scandinavian countries, while the latter moves from high to medium levels of redistribution during the 1980s – the most dramatic instance of change observed in the sample.

A broad measure of redistribution such as the one used in Figure 1 clearly does not capture the full extent to which policies help ensure more equitable and integrated labor markets. It does not show exactly who in the income distribution benefit and it also fails to take into account the effects of government policies on the pre-fisc income distribution. Public education, active labor market programs, and public employment all affect the primary distribution of income, and this is not captured by the redistribution

¹ In the cases of Belgium, France, Italy pre-fisc income is after taxes, but since very little redistribution takes place through the tax system anywhere except the US, it probably does not matter much. The overall pattern is also almost indistinguishable from the one in Figure 1 if these three countries are excluded.
measure. Nevertheless, the pattern in the figure is consistent with the findings in this paper for a range of specific policy areas. Many countries in continental Europe, despite having large, entrenched welfare states, have not responded nearly as aggressively to labor market shocks as the Nordic countries have. In fact, similar to the pattern in Figure 1 policies in these countries do not differentiate themselves clearly from those in liberal countries, and labor market stratification has risen very notably as a consequence. Unlike the liberal countries, however, the core skilled workforce continues to be highly protected and inequality is manifesting itself mainly in the form of severe insider-outsider divisions.

Existing explanations of this divergence emphasize the role of economic institutions and the (changing) interests and coalitions of organized groups. This paper also emphasizes institutions and coalitional politics, but it makes a case for the critical importance of political institutions and electoral coalitions. Differences in both the electoral system and the political party system create very different incentives for coalition-building, and this in turn produces systematically different responses to rising inequality in the labor market. The patterns of (re-)alignments cannot be understood without reference to the organization of the economy and the industrial relations system, but the main focus of this paper is the mediating role played by the political system.

2. Relationship to existing work

The causes of the rise in inequality and the associated divergence in government responses have been subject to a proliferating literature and debate in the field (e.g., Rueda 2005; 2008; Kenworthy and Pontusson 2005; Martin and Thelen 2008; Iversen & Stephens 2009). Our paper builds on that literature, but it also departs from it in important ways.

The work by Pontusson (2005) and Kenworthy and Pontusson (2005) on government responses to growing inequality is very close in spirit to what this paper is trying to do. Based on a modified Meltzer-Richard framework (Meltzer and Richard 1981), Kenworthy and Pontusson argue that rising inequality leads to voter demands for more redistribution, although the extent to which this is true depends on the capacity of the left to mobilize voters (turnout). Based on this intuitively attractive idea, and a careful analysis of LIS data, the authors reach the optimistic conclusion that “[i]n contrast to widespread rhetoric about the decline of the welfare state, redistribution increased in most countries … , as existing social-welfare programs compensated for the rise in market inequality. “

The emphasis that Kenworthy and Pontusson (2005) place on the willingness of governments everywhere to compensate for rising inequality stands in contrast to the conclusions we reach in this paper. In particular, where we emphasize the Nordic countries as distinct in terms of solidaristic policy responses, Kenworthy and Pontusson note that “the Nordic welfare states do not, as a group, stand out as particularly

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2 It is not intuitively obvious why this is the case, but we will demonstrate it below.
responsive to market inequality”, and where we see a lack of responsiveness in many continental European welfare states, Kenworthy and Pontusson conclude that the “continental European welfare states tend to be comparatively responsive to increased market inequality—certainly much more so than their American and British counterparts.”

Part of the reason for this difference is data. Where they look largely at distributive outcomes we look at specific policy areas. Another difference is methodological. Kenworthy and Pontusson define redistribution as the gini of before taxes and transfers household income minus the gini of after taxes and transfer income. But this definition produces a bias that exaggerates the association between rising pre-fisc income inequality and redistribution.

To see this assume the standard Meltzer-Richard assumptions of a proportional tax, t, and a lump-sum benefit, b, received by all. Since the tax is proportional, the after-tax (but before transfers) gini is equal to the pre-fisc gini: $G_{AT} = G_{Pre}$. All people receive the same income from the state, b, so the gini for that portion of total income is 0: $G_b = 0$. The after tax and transfer (post-fisc) gini is now simply a weighted sum of the pre-fisc gini and the transfer income gini where the weight is determined by the tax rate: $G_{Post} = (1-t) \cdot G_{Pre} + t \cdot G_b = (1-t) \cdot G_{Pre}$. Using Kenworthy and Pontusson’s definition of redistribution we then have that $R = G_{Pre} - G_{Post} = t \cdot G_{Pre}$. The important implication of this result is that any increase in pre-fisc inequality will result in a proportional increase in redistribution, the magnitude of which is determined by the tax rate. This is largely what Kenworthy and Pontusson find empirically since all countries in the sample raise redistribution, but larger welfare states (with larger t) tend to do so to a greater extent. The problem is that this relationship obtains even if there are no changes in policy (in the Meltzer-Richard model the relevant policy is the rate of taxation).

The solution is to measure redistribution as a percentage reduction in the gini from before taxes and transfers to after taxes because then $R = t$ (simply divide through by $G_{Pre}$). Now redistribution will only change if policies change. There is still a presumption that rising inequality will produce more redistribution since changes in the unemployment rate, the number of poor people eligible to receive benefits, etc., will “automatically” drive up redistribution (which would count as a “policy” change in this conceptualization). But the relationship will be weaker and leave more room for policy divergence. This is borne out by the data since the correlation between changes in pre-fisc inequality and changes in redistribution drops from .75, using Kenworthy and Pontusson’s absolute measure, to .49 using the relative measure. This does not invalidate Kenworthy and Pontusson’s analysis – which is primarily to show that governments are responsive to the economic plight of the electorate – but it explains why our conclusions differ on some key issues.

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3 For simplicity we ignore any efficiency costs of taxation and assume that all tax revenues are returned as transfers.
4 This is only true when the transfer is a flat-rate benefit.
5 A formal proof is available upon request.
6 In a more complicated model one could expand policies to include the degree to which taxes and benefits are redistributive, but the problem would persist.
At the theoretical level we depart from a Meltzer-Richard framework by allowing targeted benefits, which turns the policy space into a multidimensional one and enables coalitions that differ from the preferences of the median voter (Iversen and Soskice 2006). Specifically, we argue that center-left coalitions are much more likely to produce policies that compensate low-end workers, and such coalitions are either facilitated or inhibited by the electoral and electoral system.

This argument, however, runs up against another prominent view in the literature, most forcefully advanced by David Rueda (Rueda 2005; 2008), namely that left parties are dominated by insiders who have greater political resources and see no interest in strong government responses to economic shocks that mostly affect “outsiders.” In rather stark contrast to Kenworthy and Pontusson, Rueda implies a lack of responsiveness by both left and right governments to rising inequality.

Rueda is right to highlight the growing importance of conflicts between insider and outsider interest, but from the coalitional perspective adopted in this paper, whether the interests of actual and potential outsiders are represented by social democratic parties, and by governments, depends on the incentives politicians have to forge coalitions that are more or less inclusive of “outsider” interests. These incentives are outside the scope of Rueda’s argument. The political coalition argument thus implies a more institutionally contingent view on the emergence of insider-outsider divisions. Such divisions, in our treatment, are endogenous to the political system.

The emphasis in this paper on the importance of coalitional politics is echoed in recent work by Thelen (2004), Martin and Thelen (2008), Palier and Thelen (2008), and Hall and Thelen (2009). Most relevant for this paper is the argument presented in Martin and Thelen (2008), which bridges the divide between continental Europe and Scandinavia through a comparative analysis of Denmark and Germany. The explanation for the dualist tendencies in the German case is that an industry-based industrial relations system and a segmented and contribution-based social protection system combine to create a strong coalition between large (mostly industrial) employers and core skilled workers in defense of existing institutions. The response of deindustrialization and intensified international competition has therefore been to shore up existing institutions by outsourcing low-skilled work, deregulating temporary and part-time labor markets, while maintaining and even building out existing protections for the core workforce.

In Scandinavia, by contrast, a tradition of macrocorporatist coordination, universal social benefits, and, above all, a large public sector have facilitated relatively inclusive coalitions, which in turns explains policies of activation and compensation that have helped avert dualism and stark inequalities in the labor market. As Martin and Thelen argue, “[s]tate policy is key to forging and sustaining broad national coalitions that link—rather than separate — diverse interests”, and a large public sector has resulted in an assertive class of state managers with both the interests and the means to compel cooperation from private actors in the implementation of employment and active labor market policies (see also Martin 2004, which contrasts Denmark to Britain).
Our intension here is not to reject this “macrocorporatist” interpretation of coalition building, but to suggest that it must be understood in the context of the party system and partisan coalition politics. As Martin and Thelen emphasize, the public sector in Scandinavia is compelled by government policies to play a pivotal role in the activation and direct employment of “outsiders”. The public sector has thus become saddled with the responsibility of implementing policies that necessitate public-private partnership, but these policies have their origins in compromises between political parties in the governing coalition. The “preferences” of the public sector therefore cannot easily be separated from the preferences of the government.

This is also true in the more direct sense that the large Scandinavian service states are themselves the outgrowth of past political decisions by governments to push policies that preserve a high level of employment, equality, and opportunities for women to balance work and family (Huber and Stephens 2000; Iversen and Rosenbluth 2006). It is striking, for example, that Denmark almost doubled the number of public employees as a share of the working age population from 11.3 percent in 1970 to 22.1 percent in 1999, while the share in Germany hardly changed from 6.5 to 7.5 percent. With this in mind it is difficult to treat the public sector as an exogenous variable, even though Martin and Thelen are undoubtedly right that a large public sector has an independent effect on the composition of policies and coalitions once it is in place.

3. The rise and fall of solidarism in the labor market

When Philippe Schmitter answered his own question: “still the century of corporatism?” affirmatively in 1979 virtually all advanced countries had influential unions, a relatively compressed wage structure, and at least attempts to coordinate wages at the national level. Schmitter attributed this “trend toward corporatist intermediation” to the economic imperatives of mature capitalism, but he was not very specific about what those imperatives were. Iversen (1999) argued that there were two key preconditions for strong unions and centralized bargaining: complementarities of skilled and semi-skilled workers in production and accommodating, Keynesian full employment policies. Both of these preconditions disappeared with the decline of Fordism, the rise of services, and the turn towards monetarism in the 1980s.

The importance of complementarities in production for wage setting is brilliantly explained in a largely overlooked article by Wallerstein (1990). Here Wallerstein argues that if skilled and unskilled workers are strong complements in production, each of the unions representing these workers have bargaining leverage over the other. In the absence of coordinated bargaining, each union has an incentive to bargain first in anticipation of the other union then having to restrain wages in order to prevent the overall wage bill and unemployment from rising too much. Since neither union can guarantee itself to be the wage leader, this is inefficient, and Wallerstein argues that the solution has been for unions in that setting to bargain together in a centralized and solidaristic manner.

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7 We here follow the lead of Katzenstein (1985) who emphasizes the importance of the political systems, especially PR, for understanding the operation of corporatism.
Although he does not discuss it, Wallerstein’s model also has implications for unionization, especially among low-skilled, because hold-up power over production provides a strong impetus for unionization. Once unions are formed, workers have an incentive to join them to share in the benefits they can offer their members. While power resource theory assumes that unions become strong when many workers join them, the reverse logic -- that workers join unions because they are strong -- is equally important.

Wallerstein’s logic is also salient for understanding the decline in both centralization and unionization, which we associate with the decline of Fordism and deindustrialization (see also Iversen 1998). Because Fordist mass production relies on both skilled and unskilled workers in a continuous production process where interruptions are costly (as exemplified by the continuous assembly line), different skill groups make up complementary factors in the production function. We do not mean to imply that Fordism was a uniform technology used identically everywhere. It took more or less skill-intensive forms, and economies of scale were important to different degrees in different countries, etc. But in one crucial respect Fordism had the same effect everywhere: It empowered semi-skilled unions to bargain for higher wages relative to skilled workers. This both enabled, and was reinforced by, governments pursuing Keynesian full employment policies. The notable move towards centralized bargaining and compression of inter-occupational wages from the 1950s until the end of the 1970s must be understood in this context.

By the same token, the sharp rise in wage inequality in the 1980s and 1990s is at least in part a result of the complementarities between skilled and unskilled workers being undone by the widespread application of the microprocessor as well as by the segmentation of the occupational structure caused by the shift from manufacturing to services. The breakdown of Fordism caused a disintegration of semiskilled and skilled work, now symbolized by the breakup of the assembly line and the emergence of more skill-intensive and discontinuous production processes. Deindustrialization, including outsourcing of services that were previously provided in-house by industrial firms, has similarly severed the production ties between low- and high-skilled workers by creating a segregated tier of low-skilled service sector jobs. In both fragmented and industry-based systems, this has meant a severe loss in power of semiskilled unions, and union membership and bargaining coordination have declined rapidly as a consequence (Lange and Scruggs 2002; Visser 2006). Wage-setting in the Nordic countries has also become more decentralized (with the notable exception of Norway), but unionization rates among the semi-skilled have remained high, in part because of a large unionized public sector (Visser 2006).8

It is important to note that in all coordinated market economies where skilled workers and employers have large investments into co-specific assets, wage coordination has been reestablished at the industry or sectoral levels, but now with a much more marginal role for semiskilled workers. The continued importance of unions in these counties is explained in part by the fact that skilled workers are still co-owners of major production

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8 Here we are back to the argument by Martin and Thelen (2006) about the importance of the public sector.
assets, which are irreplaceable for employers. This is much less true in countries like Britain and the U.S., which have seen a more widespread collapse of union membership.

The role of skills and complementarities in production is also important in explaining employment-based social protection. The most obvious example here is job protection, but it also applies to social protection systems which guarantee benefits for particular occupations through employer contributions. Employment-related protection of this sort is part of the social insurance system, and it reduces the risks of investing in skills that are specific to a particular firm or occupation (Estevez-Abe et al 2001). Such protection is invariably benefitting skilled workers disproportionately, but, just as in the case of wage setting, whether semi-skilled workers share in those benefits depends on the extent of complementarities between skilled and semi-skilled workers. When and where these are strong, using Wallerstein’s logic, semi-skilled workers are more likely to be covered by protections for the same reasons that they are more likely to have leverage in collective wage bargaining. Such protection is invariably benefitting skilled workers disproportionately, but, just as in the case of wage setting, whether semi-skilled workers share in those benefits depends on the extent of complementarities between skilled and semi-skilled workers. When and where these are strong, using Wallerstein’s logic, semi-skilled workers are more likely to be covered by protections for the same reasons that they are more likely to have leverage in collective wage bargaining.9 Social protection through the employment system is thus more encompassing, or solidaristic, in production systems that rely heavily on specific skills and where complementarities are strong between skilled and semi-skilled workers. By the same token, effective protection for semi-skilled workers has declined with the decline of Fordism and deindustrialization, exacerbating the inequalizing effects of greater wage dispersion.

4. Political systems and coalitional dynamics

As the scope for integration and solidarism in the industrial relations system diminishes, the importance of public policies in providing compensation and opportunities through education, retraining and public employment increases. Such policies in turn depend on the political system and the extent to which inclusive coalitions of skilled and semi-skilled workers are encouraged. In this section we apply the Iversen-Soskice (2006) theory of political coalition formation to employment protection and redistribution. We then turn to the effect of coalitional dynamics on the political responses to the collapse of Fordism and the transition to a service economy.

4.1. Preferences and institutions

Imagine a two-dimensional policy space as illustrated in Figure 2. The x-axis shows the preferred level of protection through redistributive transfers and retraining, while the y-axis shows the preferred level of protection through labor market regulations, especially legislated employment protection. Now distinguish four economic classes: i) low-skilled, low-income workers, ii) specific-skills, middle-income workers, iii) middle-income technical and semi-professional workers, and iv) high-income professionals (“upscale groups” in Rueda’s terminology).

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9 Indeed, employment protection is often subject to collective bargaining.
Following Iversen and Soskice (2001), these groups are essentially distinguished by their level and specificity of skills, where the former determine income and preferences for redistribution and the latter determine exposure to risk and preferences for social insurance. But we also allow for differences in the size and preferences of these groups depending on the organization of the economy. Although the specifics differ by country, we use the broad distinction between CMEs and LMEs to suggest that specific skills play a greater role across all occupations in the former than in the latter, and that more workers are employed in specific skill intensive occupations in the former than in the latter. These differences are indicated in the figure by the differences in spatial locations and group sizes, where solid circles represent occupations in CMEs and shaded ovals do the same for LMEs.

In terms of preferences, low-skilled workers unambiguously benefit from redistributive transfers and therefore have reason to support them. They may or may not benefit from employment protection because although such regulation can improve their security in the labor market, they can also have significant costs in terms of job opportunities. In particular, regulatory preferences among low-skill workers depend on the extent to which they are complements to high-skill workers in production. Assuming that skilled workers benefit from regulation, and that skilled and unskilled workers are strong complements in production, unskilled workers are also likely to benefit from them. There is thus not necessarily a conflict of interest between skilled and low-skilled workers in this policy dimension.

This is also true in social policies. As explained above, strong complementarities between skilled and unskilled workers in production underpin centralized and solidaristic wage bargaining, and wage compression in the labor market reduces the conflict over redistribution through the welfare state. Moderately high social spending in this situation serves as protection against the loss of specific skill investments, while such spending simultaneously addresses the redistributive interests of lower-paid worker (although there is clearly a conflict of interest over the insurance versus redistributive aspects of spending). The overlap in interest between (specific) skilled and semi-skilled workers (the top center of Figure 2) is what characterized the Fordist industrial economies during the “Golden Age” up until around 1980. Wage compression through the industrial relations system went hand in hand with relatively high social protection through the welfare state (Huber and Stephens 2001).

But with deindustrialization and the retreat of Fordism the bargaining power of semi-skilled workers declined in the industrial relations system, at the same time as the employment costs of labor market regulations for these workers rose (this change is indicated in the figure by the thick black downward--pointing arrow). This is consistent with Rueda’s (2005; 2008) evidence that labor market outsiders are less concerned about job protection than insiders.\(^\text{10}\) Note, however, that there is not an irreconcilable conflict of interest so long as job opportunities for the semi-skilled do not depend on deregulation of employment protection for core, skilled workers -- as opposed to deregulation of labor

\(^{10}\) But the differences are not large. On a ten-point scale Rueda (2006) reports that “insiders” score a little higher than 6.4 and “outsiders” a little less than 5.9.
markets for semi-skilled workers only. Because industrial production in many coordinated market economies depend on the supply of workers with deep firm-specific skills, it makes little sense to break down protections for these workers. We know that coordinated economies are spectacularly successful in high value-added manufacturing exports, and job protection for core workers is a complement to this success. Because of the segmentation of labor markets for skilled and semi-skilled workers it is possible to selectively deregulate the latter without undermining the comparative institutional advantage of the former. This is perhaps where the economic analysis departs most clearly from Rueda’s.

Yet there is undeniably a conflict of interest over redistribution and active labor market policies. Semi-skilled workers no longer benefit from employment protection and with the loss of such protection, and with growing wage inequality, they look to the state for compensating transfers and opportunities for (re-)training. As semi-skilled workers become more marginal in the industrial relations system their interest in redistribution becomes more distinct and centered on compensation through the state (as suggested by their shift to from the top-center of Figure 2 to the bottom-right). This, in our view, is the most important change from the first three decades after the war to the present.

To complete the analysis of interests we only need to note that professionals with high general skills who are well positioned in the external labor market have reason to oppose redistribution (since they are net contributors) as well as regulations of semi-skilled labor markets, which raise the prices on services. High-educated professionals are thus at the bottom left-hand corner in Figure 2 (although one can allow for some cross-national differences in the extent to which professions have specific skills). In LMEs lower-level professions will differ only in the extent to which they have an interest in redistribution, and because these economies have institutions that do not support extensive investments in specific skills the space essentially collapses to a single dimension, especially after the 1980s. Only a small group of skilled industrial workers with extensive firm-specific training remain. By contrast, although the number of industrial workers has declined in CMEs, they remain important, and many technicians and semi-professionals in these countries are trained in skills that are specific to firms and industries.

4.2. Hypothesizing coalitions and policies

With interests defined by income, occupation, and production system, coalitions are now shaped by the political system -- in particular the electoral system and the structure of the party system. Specific skills countries all have PR electoral institutions (with the partial exception of Japan), while general skills countries all have majoritarian institutions. We have argued elsewhere (Iversen and Soskice 2006) that majoritarian systems favor center-right, and PR systems center-left, governments. In PR systems this is because parties that

\[ \text{Figure 2 about here} \]

\[ \text{In the same location we will also find employers of low-skilled workers, mostly in services. But our focus here is on mass politics.} \]
represent low- and middle-income groups have a common interest in excluding upper income groups with high taxable capacity. Although right parties have an incentive to offer center parties a better deal, they cannot do so credibly if there is a cost of switching bargaining partners.\footnote{The proof is available from the authors.}

The model can easily accommodate multiple dimensions because bargaining always takes place between pairs of parties (the minimum number needed for a majority). In Figure 2, a center-left coalition would correspond to an alliance between low skilled and (specific) skilled workers, possibly with support from the middle group of technicians and semi-professionals (the dotted triangle denoted C-1). In the golden age of welfare state development the compromise between these groups involved highly regulated labor markets coupled with a large welfare state and relatively high levels of redistribution. In the post-industrial era it involves continued labor market protections of skilled workers, coupled with high compensation and opportunities for (re-)training of low-skilled workers.

The bargain can be characterized formally if we assume utility functions where the bliss points are given by the preferred levels of job protection and redistribution. Assume for simplicity that specific-skill workers and semi-professionals are represented by one center party (without an absolute majority), while semi-skilled workers are represented by a left party. Rubinstein bargaining theory now implies that the two parties split their policy differences, measured in utility. As discussed above, there may not be much conflict over job protection if labor markets are segmented, so both skilled and semi-skilled groups agree to deregulate markets for semi-skilled workers only – typically markets for part-time and temporary employment. The real compromise is then over redistribution, where the tax proceeds from the excluded group (here high-income professionals) is divided evenly.\footnote{It is possible assume that those inside the coalition are also taxed. This is the more complicated case covered in Iversen & Soskice (2006).}

There is an important caveat to this analysis, however: the role of Christian democracy. Major Christian democratic parties are all found in PR electoral systems and like other parties under PR Christian democratic parties are representative in the sense that the various groups supporting these parties have a voice in setting the party platform. What is distinctive of Christian democratic parties is that they represent coalitions of different economic interests, including skilled workers, technicians, and upper-middle class professionals. Manow and van Kersbergen (2009) argue that Christian democratic parties should be understood as “negotiating communities” with a range of different economic interests in terms of income levels and hence redistribution but also with a common interest in sharing and managing co-specific assets.

Manow and van Kersbergen imply that the Christian democratic compromise tends to play down redistribution because of its cross-class nature. Instead there is an incentive to focus on social insurance (and, before the dominance of industry, agricultural protection). Compared to traditional liberal and conservative parties, Christian democratic parties are
much more favorably disposed toward the welfare state, even as redistribution is downplayed. This places Christian democratic parties close to the center of the political spectrum and make them attractive coalition partners with more traditional middle class, or center, parties. So long as Christian democratic parties can garner a majority with these parties, redistribution will be moderate. Only when centrist parties are too weak to ensure a majority, as has been true during periods in the Netherlands and Belgium, do they have a reason to form coalitions with social democrats. When that occurs, we see more redistribution as in the PR countries without strong Christian democratic parties.

The critical implication of this analysis for our purposes is that a large Christian democratic party enables coalitions across the center that effectively excludes representatives of groups who are in precarious labor market positions. Such a coalition would correspond to C-2 in Figure 2 between skilled workers and different groups of professionals. The result would be policies that maintain high protections for core, full-time workers while allowing uncompensated deregulation of temporary and part-time employment. Again, the degree to which Christian democracy has this effect depends on the feasibility of coalitions with center parties. The distinct patterns of redistribution for Belgium and the Netherlands in Figure 1 are a consequence of the occasional government participation of social democratic parties in these two countries. Where Christian democratic parties are very dominant the only viable avenue for social democratic parties is to moderate and effectively abandon their poor (“radical”) constituencies. This is the kind of social democratic parties Rueda has in mind.

Turning to majoritarian systems, which are empirically associated with liberal market economies, the two-dimensional space in Figure 2 essentially collapses into a single dimension of high-income professionals, middle income semi-professionals, and low-skilled workers. Since government formation in majoritarian systems are typically decided directly by elections (as opposed to coalition bargaining), this makes it essential for parties to credibly appeal to middle income groups. To do so in turn requires parties with constituencies who are either to the center-left or center-right to vest power in a moderate (centrist) leader – what Iversen and Soskice (2006) call leadership parties. The problem for the middle class voter is that if the leader cannot control the party, it may deviate either to the left or to the right. Here the center-left party presents a particular threat since the left may cut benefits and raise taxes on the middle class whereas the right will be inclined to cut benefits and taxes simultaneously (assuming that regressive taxation is not possible). This produces a center-right bias with an effective coalition of middle and upper-middles classes (denoted C-3 in Figure 2). It is from this perspective we should understand the lack of appetite for redistribution in LMEs with majoritarian institutions, even among nominally “left-of-center” parties (consistent with Rueda’s analysis).

It needs to be reiterated that although the main “cleavage” in policies towards the poor is between PR countries without strong Christian democratic parties and all others, this does not mean that differences in the electoral system are unimportant among the latter. Cross-class Christian democratic parties have facilitated compromises between skilled industrial

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14 As noted France may be different because it has traditionally relied heavily on a core labor force of worker with high and specific skills. These workers have a high demand for both employment and social protection.
workers and professionals – the type of negotiated intra-party compromise that is all but impossible in encompassing, but leadership-centered, parties in majoritarian systems. During the Golden Age when the interests of skilled and semi-skilled workers were well-aligned, the latter consequently benefited from Christian democratic social policies designed mainly to protect the former. But with the breakdown of solidarism in the industrial relations system, semi-skilled workers become increasingly dependent on targeted redistribution, and here there is little political support to find except in systems that include the left. The coalition argument thus explains why all PR countries continue to resemble each other in terms of a generous welfare state, but also why they diverge in terms of their responses to rising labor market dualism.

5. Testing the argument

In this section we use quantitative data to show that the combinations of economic and political institutions are associated with distinct public policies and outcomes, especially those that most directly affect potential outsiders. We begin with employment protection where the evidence is very clear, with a simple interpretation. We then turn to the more complicated issue of compensation.

5.1. Employment protection

Figure 3 shows the pattern of changes in the level of legal employment protection (OECD’s EPL index) for 18 OECD countries from the mid-1980s to the mid-2000s. OECD uses the strictness of procedures and costs involved in dismissing individual workers, as well as the procedures involved in hiring workers on fixed-term or temporary work agency contracts. While the measure for regular work is essentially an indicator for the legal difficulty and costs of firing workers, the measure for temporary workers is an indicator for how difficult is for employers to employ workers on flexible, fixed term contracts. They are therefore not directly comparable, but we can compare the extent of changes over time, which is what Figure 3 does.

Note that there is very little movement in terms of protection of regular employment. Countries cluster closely around the 45-degree line, although there were slight reductions in Austria (2003) and Finland (the latter following the collapse of trade with the Soviet Union and mass unemployment) and some tightening in Australia (1996) and Germany (2004). But the overall cross-national pattern does not change: the liberal countries – Australia, Canada, Ireland, New Zealand, the UK, and the US – are at the bottom, while

15 The measure for regular employment is the most elaborate and includes indicators for just cause for dismissals, required length of advance notice, mandated severance pay, compensation for unfair dismissals, the rights of employee representatives to be informed about dismissals, and the rights of workers to challenge dismissals in the courts.
most of the corporatist or coordinated countries are at the top. Switzerland is an exception, but this is largely because the index does not include measures of protection against collective dismissals, which is only available for the second period. On this indicator Switzerland has the third highest score.

With few exceptions, countries with high protection for regular workers also have high barriers against the use of temporary contracts in the mid-1980s. The obvious outlier here is Japan which has always featured a highly dual labor market with extensive protections for core, skilled workers, and almost none for temporary and part-time unskilled workers (Song 2009). But while the Japanese situation was an exception in the 1980s, it now seems to have become the norm. At least there has been a pervasive deregulation of temporary employment, which often extends to part-time workers and de facto often also low-skilled workers more generally because these are far less likely to be protected against collective dismissals. The Netherlands was one of the first countries to deregulate temporary and part-time employment (beginning with the Wassenaar accord in 1982), but it is notable that with the striking exception of France every other coordinated market economy has followed suit, while liberal market economies have remained deregulated (the exception is New Zealand, but the new regulations do not change its position as a highly deregulated economy).

There is thus a clear pattern of convergence towards the liberal countries in regulation of temporary employment. From the perspective of our argument, the cause is the breakdown of complementarities between skilled and semi-skilled workers. There no longer any strong advocates for job protection of these workers, either in the industrial relations system or in the political system. For core, skilled workers, on the other hand, very little has changed.

5.2. Compensation

The inherited “golden age” association of high job protection with high social benefits is clearly evident in Figure 4, which plots countries according full-time job protection and overall social spending ($r=.72$). Loosely speaking, we can interpret this association as a function of the skill-intensity of work and the organizational power of skilled workers as discussed in the previous section. This has not changed much, but the decline of regulation of temporary and part-time employment, combined with a notable stretching of the wage structure, raises the question whether governments have stepped in to compensate and assist these workers through transfers and investment in public education.

Figure 4 seems to suggest that this might have happened to some extent. All countries have increased social spending, and it is notable that PR countries have done so to a greater extent than majoritarian countries. But as Clayton and Pontusson (1998) point out, spending increases may not be able to keep up with the increases in needs, and many workers have become much more exposed to risks of job loss and falling wages. More importantly, total spending says nothing about the distribution of spending and the extent to which those whose job protection has declined are being compensated.
As argued above one important area is education and retraining. When skilled and semi-skilled workers are no longer complements in production, the latter come to depend much more for their welfare on ability to acquire useful skills, as well as on outright transfers from the state or guarantees of employment. As indicators of transfers we use unemployment benefits and overall social spending, each as a percent of GDP.\textsuperscript{16} As measures of the level of government investment in general skills and in the upgrading of existing ones we use public spending on general primary and secondary education and on active labor market programs (ALMP), both as a percentage of GDP.\textsuperscript{17} Finally we include a measure of public employment as a percentage of the working age population to capture the extent to which the public sector is used as an employment creation devise.\textsuperscript{18}

Since we are interested in patterns of government responses to economic “shocks” -- the decline in Fordism, deindustrialization, and rising inequality -- our strategy is to look for changes in these policies conditional on the structure of economic and political institutions. There is a now well-established econometric approach to do this based on non-linear regression (see Blanchard and Wolfers 2000; Persson and Tabellini 2005, Cusack et al. 2007). The core idea is to estimate the effects of unobserved economic changes on policy variables, but differentiating the direction and strengths of the effects by (largely invariant) institutional variables. This permits the inclusion of fixed effects, which eliminate all unobserved country-level variation and focus all attention on difference in government responses over time. The setup is particularly well suited to testing the effects of institutions on government responses to shocks.

The shocks are assumed to be common across countries -- at least in the sense of affecting all countries similarly over some period of time -- and they are captured by a set of annual time dummies, $D_t$, that are interacted with two measures of the political-institutional environment. One is PR electoral institutions and, among PR countries, those with and without a strong Christian democratic party.\textsuperscript{19} Both are hypothesized to affect the structure of coalitions and hence policies. Strength of Christian democracy is captured by the share of votes cast for Catholic and Christian democratic parties as recoded by Huber, Ragin, and Stephens (2004). To simplify the interpretation of the results for each

\textsuperscript{16} The data are from the OECD \textit{Social Expenditure Statistics}. Online Database Edition.
\textsuperscript{17} The data on ALMP spending are from OECD \textit{Social Expenditure Statistics}, Online Database Edition; the data on public educational spending are from OECD, \textit{Education at a Glance}, OECD 2007.
\textsuperscript{18} The data are from Thomas Cusack, \textit{Data on public employment and wages for 21 OECD countries}, Science Center Berlin.
\textsuperscript{19} The classification of France and Japan is ambiguous because they have production systems that rely on firm-specific skills, yet feature electoral systems that in the case of France is unambiguously majoritarian and in the case of Japan deviates significantly from PR. Like other countries they have both been coded by their electoral system, even though the combination of the electoral and production systems, which concentrate influence on insiders, suggests that they are politically more akin to PR with strong Christian democracy. As it turns out the results do not change substantively if these two cases are recoded.
country-year, the CD variable is dichotomized as either high (over 15 percent of the vote) or low (equal to or less than 15 percent of the vote), although this is not important for the substantive results. Formally:

\[ S_{i, t} = (1 + \beta_{PR} \cdot PR + \beta_{CD} \cdot CD) \left( \sum \delta_t \cdot D_t \right) + \sum \gamma_k \cdot X_{i, t}^k + \lambda \cdot S_{i, t-1} + \alpha_i + \varepsilon_{i, t}, \]

where \( S \) refers to government spending in some policy area, \( i \) indexes countries, \( t \) time period, and \( k \) a set of control variables (\( X_{i, t}^k \)). The key parameters are the betas because they capture the extent to which political-institutional differences mediate the effects of common unobserved shocks on spending. If there are no institutional effects then \( \beta_{PR} = \beta_{CD} = 0 \) and policies are entirely a function of the control variables plus the set of time- and country-specific effects. Since the model includes country-fixed effects all stable institutional (or structural or cultural) differences are absorbed into these.

The model includes a fairly standard set of control variables that have been argued in the literature to affect government spending:\(^{20}\)

- GDP per capita (in 2000 prices). Here the hypothesis is that demand for social insurance and services is income elastic (“Wagner’s law”). \textit{Source:} Penn World Tables (PWT), Mark 6.2.

- Economic openness (exports plus imports divided by output). This captures the argument that exposure to international markets leads to more demand for spending (Cameron 1978; Garrett 1998; Rodrik 1998). \textit{Source:} OECD, \textit{STAN Structural Analysis}, Online Database Edition.

- Female labor force participation. Female entry into the labor market will tend to create new demand for social services (Huber and Stephens 2000). Note, however, that “family services” are not captured by our spending measures, so it is unclear whether such spending might “spill over” into other types of spending (by enabling expansionary coalitions) or be “compensated for” by lower spending in order areas due to budget constraints. \textit{Source:} OECD, \textit{Labor Force Statistics} (various years).

- The size of the dependent population. Some social spending, mostly pensions, are targeted to age groups who do not participate in the labor market, and we control for the “automatic” effects of demographic changes by including separate variables for the size of the young (under 15) and old (over 65) populations (as shares of the total population). The size of the retired population may also have consequences for political demand for spending in other areas. \textit{Source:} Huber, Ragin, and Stephens (2004).

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\(^{20}\) We also tried to treat public employment as and exogenous variable as in Martin and Thelen (2008). We included public employment, both as an independent variable and as a conditioning variable in explaining overall social spending. But while public employment, not surprisingly, is positively associated with spending, it does not have any effect on how aggressively governments respond to shocks, and the effects of both PR and Christian democracy remains
Unemployment (as share of population). The positive effect of unemployment on unemployment spending is obvious (although it need not affect other spending, and can even reduce it with tight budget constraints). Although it can be argued that unemployment is a shock that we want to capture, we are not interested in the effect of the sheer size of the unemployed population. Instead, we want to know if shocks affect the generosity of spending. Including this control ensures "conservative" estimates. Sources: OECD, Labor Force Statistics (various years) for unemployment; Penn World Tables (PWT), Mark 6.2 for population.


Past spending ($S_{i, t-1}$). All budgetary processes are highly path-dependent, and a lagged dependent variable is included to eliminate this effect. Sources: Same as dependent variables.

The results of running the five regressions (one for each dependent variable) are reported in the appendix. These show that PR countries are always different from majoritarian countries at a statistically significant level (usually at a .05 or .01 level) and that PR countries with strong Christian democratic parties are always different from other PR countries. The effects are illustrated in two different ways in Figure 5 and 6. In Figure 5 the bars show the estimated government response to "shocks" by taking the difference between the largest and smallest values on the time dummies as the measure of "shock." For the four of the five variables the smallest value is in the beginning of the period while the peak is reached in early to mid-1990s. This conforms to the fact that the previous recession bottomed out in 1993-94. Public education is different, however, because the peak is all the way back in 1975 and the valley is reached in 1990. Education spending therefore does not seem to respond much to shocks, which is perhaps not surprising since it takes a long time for educational investments to affect labor market conditions. Nevertheless, public educational investments may have played an important role in averting deep insider-outsider divisions, and there is reason to think that they have been driven by the same coalitions that cause distinct cyclical policies.

[Figure 5 about here]

The pattern across policy areas is very similar and shows that PR countries with weak Christian democratic parties respond much more aggressively to shocks than other countries. This is particularly evident for active labor market policies and unemployment

21 This is done by regressing the dependent variable on all the time and country fixed effects and then taking the difference between the largest and smallest value on the time dummies.
benefits – precisely the policy areas that are most directly benefitting outsiders or those at high risks of becoming outsiders. Most strikingly, for a given shock that raises ALMP spending, governments in PR countries respond five to six times more aggressively than majoritarian countries in terms of spending commitments, and most of this difference is due to countries where Christian democracy is weak. But there are also sizable differences in public employment policies and overall social spending, and PR countries without strong Christian democratic parties also react to shocks by spending more on public education (the difference to majoritarian countries is significant at a .02 level). But in the area of education, as already noted, spending seems driven much less by the business cycle than by longer-term dynamics.

It was expected that PR countries with strong Christian democratic parties would respond less aggressively to shocks that put non-core workers most at risk. We also know from much existing research that these countries are loath to raise public employment. But the lack of clear differentiation between these countries and majoritarian systems across all policy areas is perhaps surprising considering the long-standing generosity of the welfare state in these countries (e.g., Esping-Andersen 1990, Huber and Stephens 2001). For example, total social spending in the mid-2000s was virtually indistinguishable across PR countries with and without strong Christian democratic parties (the former spending an average of 26.4 percent and the latter an average of 26.9 percent of GDP – compared to only 19.6 percent in liberal majoritarian countries). As discussed above, the results also seem to contrast with those of Kenworthy and Pontusson on inequality and redistribution.

Yet, our results are unambiguous and consistent across policy area, and they strongly suggest that continental European countries have been thoroughly unresponsive to the needs of an increasing number of low-paid, insecure workers. In fact, risk and income redistribution do not occur in these countries to any significantly greater extent than in the liberal, majoritarian countries. The reason, we have argued, is that ruling coalitions systematically exclude the interests of “outsiders.” But it is only with the breakdown of institutionalized protection through the industrial relations system that this has become empirically obvious. Before, it was hidden behind high levels of wage compression, shared job protections, and employment-related social insurance. This is still true to some extent – labor markets in all coordinated market economies are still less unequal than in liberal countries – but the contrast to the Nordic countries in terms of government policies of compensation is striking.

Lack of responsiveness to outsiders should not be taken to mean that there is a convergence towards the welfare states of liberal majoritarian countries. First, the interests of skilled workers continue to be well represented in both the industrial relations system and in the political system, and these interests are still supporting an effective social protection system for these workers. Second, responding aggressively to shocks does not necessarily imply long-term increases in spending. This, combined with the fact that demographic changes are similar across countries, explains why the differences in the evolution of spending between systems are smaller than the differences in the way governments respond to shocks.
The latter point is illustrated in Figure 6, which shows that changes in spending across different types of political systems as predicted by the actually observed shocks and changes in all control variables between 1981 and 2000 (exceptions are noted at the bottom of the figure). It is immediately obvious that the differences between systems are not as distinct as in Figure 4. Still, PR systems without strong Christian democratic parties (the Nordic countries) lead spending increases in every category, followed by other PR countries (except in overall spending).

In one area, spending on public education, the differences between groups of countries are greater when we look at long-term as opposed to short-term effects. While spending has been increasing in the Nordic PR countries, there has been a striking drop in both majoritarian and Christian democratic countries. This is not mainly driven by responses to any acute problems in the labor market, as noted above, but it may be potentially very important for the evolution of labor market inequality. This is partly because public education on primary and secondary education directly raises skills and wages at the low end. But it is also potentially important because the effects of the role of vocational training may have changed.

Research has long emphasized two sources of wage equality: coordinated collective wage bargaining and a well-developed vocational training system. Yet the two institutions may have been conducive to equality only in combination. As coordinated bargaining decline and wage dispersion increase employers will want a reduced intake in the vocational training system, and unless such a decline is made up for by higher public investment in general education, insider-outsider divisions will deepen as more young people are selected out of the training system. The increase of investment in public employment in the Nordic countries, but not in the continental European countries, thus helps account for the greater success in avoiding insider-outsider divisions (Iversen and Stephens 2008).

we have treated public employment has been treated as an endogenous variable, caused by rather than causing inclusive political coalitions and proactive public policies. But it could also be affecting policies as argued by Martin and Thelen (2008). To test this we included public employment on the right-hand-side, both as an independent variable and as a conditioning variable in explaining overall social spending. In this formulation public employment, not surprisingly, is positively associated with spending, but it does not have any effect on how aggressively governments respond to shocks, and the effects of both PR and Christian democracy remains. 22

6. Conclusion

22 It is possible that because public sector employment has been changing over time it is difficult for the non-linear model (which assumes constant effects) to estimate the conditioning effect correctly. The point here is simply to confirm that the effects of PR and Christian democracy cannot be reduced to the differences in these countries between the sizes of their public sectors.
The end of Fordism and the rise in low-skill services have undermined solidaristic wage policies and inclusive coalitions in the industrial relations system. It is associated with a decline in unions and coordinated wage bargaining, as well as with a notable rise in inequality and dualism in the labor market. We have suggested in this paper that the policy responses to these problems reflect cross-national differences in economic and political institutions and the differences in political coalitions that they give rise to.

Broadly speaking, the alliance that used to exist between low- and high-skilled workers in the industrial relations system, which was heavily dependent on complementarities in the production system, has collapsed. Much of the difference in outcomes across countries, in terms of income inequality, insider-outsider divisions, and economic performance can now be accounted for by differences in the (institutionally induced) patterns of political coalitions.

In the already deregulated liberal market economies, majoritarian political systems provide little incentive for political parties to redistribute to those who are hurt by rising wage dispersion and risks. Rather, the political incentive in these systems is to concentrate benefits on the middle class. This creates high levels of inequality, both before and after taxes, but because labor markets are flexible there are no pervasive insider-outsider divisions in the economy.

In the continental European and Nordic countries the common policy response has been to deregulate the labor markets for temporary and part-time employment. But as our results clearly show, there are very notable differences in the extent to which such deregulation has been accompanied by compensatory transfers (unemployment benefits in particular) as well as policies to activate unemployed and increase investment in public education.

Beneath this contrast are important differences in political coalitions. In countries with proportional representation and weak Christian democratic parties, center-left coalitions that include potential outsiders are much more prevalent than in PR countries with strong Christian democratic parties. Without such parties there is a common interest of the center and the left in excluding right parties who represent the largest taxable capacity. With strong Christian democratic parties, on the other hand, because these are based on cross-class coalitions that offer different groups a say over policies inside the party they draw skilled workers away from the left and can offer themselves up as attractive coalition partners for traditional center parties. This combination effectively excludes outsiders from political representation.

We have made a point of underscoring the political-institutional differences between the Nordic and continental European countries and the divergence in outcomes that these differences have given rise to. Yet, there are several future scenarios that suggest the possibility for more convergent policy changes.

One is that the coalition centered on “core” workers in the continental European countries simply becomes too small to be electorally viable. This possibility is closely tied to the
transformation of the traditional family and the possibility that women will vote against Christian democratic parties. Because it is much harder for women to commit to continuous careers, they are overrepresented among outsiders and many would potentially benefit from public policies that emphasize employment, general education, and retraining – as well as more accommodating family policies. Yet, they face competing incentives to support policies that protect the jobs and incomes of the core skilled male labor force in so far as they married to male insiders. A great deal therefore depends on the stability of the traditional male-breadwinner family in these countries. If women become seriously worried about their options outside the marriage, due to rising divorce rates, then the continental insider coalition will be hard to sustain (Iversen and Rosenbluth, forthcoming).

A very different, and gloomier, prospect is the breakup of inclusive coalitions in the Nordic countries as a result of conflicts over immigration. There is an uneasy balance between a liberal immigration policy and a generous welfare system for those who are in low paying jobs, unemployed, or in otherwise precarious labor market positions. Since immigrants are disproportionately represented in this vulnerable group they easily become targets of xenophobic political attacks on the right. Such attacks draw low-income voters away from the left and also create an issue for the right that can be used to trade off policy concessions on economic issues that are important to the middle class. This suggests the possibility of a discontinuous break in the pattern of center-left coalitions, and it may lead to less solidaristic policies in the future.
References


Appendix: Regression results

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<tr>
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<th>Total Social spending</th>
<th>Spending on active labor market policies</th>
<th>Spending on public education</th>
<th>Spending on unemployment</th>
<th>Public sector employment</th>
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Notes: Standard errors are in parentheses.

The estimating equation is

\[ S_{i,t} = (1 + \beta^{PR} \cdot PR + \beta^{CD} \cdot CD) (\sum \delta_t \cdot D_t) + \sum \gamma^k X^k_{i,t} + \lambda \cdot S_{i,t-1} + \alpha_i + \epsilon_{i,t}, \]

where \( S \) refers to government spending in some policy area, \( i \) indexes countries, \( t \) time period, and \( k \) a set of control variables (\( X^k_{i,t} \)). Time and country dummies are omitted.
Figures and tables

Figure 1. Redistribution across time in three groups of countries.

*Notes:* Redistribution is measured as the percentage reduction in the gini coefficient from before to after taxes and transfers. The countries are: *Continental Europe* (blue): Belgium, France, Germany, Italy, Netherlands, Switzerland; *Nordic countries* (yellow): Denmark, Finland, Norway, Sweden; *Anglo-Saxon countries* (black): Australia, Canada, Ireland, UK, US (Ireland is included here although it is in fact not an Anglo-Saxon country).
Figure 2. Policy preferences and coalitions

Notes: The solid circles indicate the approximate size and spatial position of different occupational groups in CMEs in the 2000s. The shaded ovals indicate the same for LMEs.
Figure 3. Changes in the regulation of regular (circles) and temporary (triangles) employment, mid-1980s to mid-2000s (45-degree line indicates no change).

Notes: Blue arrows indicate increase in regulations; red arrows a decrease in regulation.

Source: OECD Indicators on Employment Protection - annual time series data 1985-2008
Figure 4. Employment protection and social spending, mid-1980s to mid-2000s.

Notes: Squares indicate employment protection for regular employment; triangles indicate regulation of temporary employment. Both measures are from the OECD and they are scaled to have a mean and standard deviation of 1 in the mid-1980s. Social spending is OECD’s composite measure of all spending on social protection. The arrow indicates movement from the mid-1980s to the mid-2000s. Liberal-majoritarian countries include Australia, Canada, France, Ireland, the UK, New Zealand, and the US; coordinated-PR countries are divided into ones with strong Christian democratic parties (Austria, Belgium, Italy, Germany, Netherlands, and Switzerland in green) and those without strong Christian democratic parties (Denmark, Finland, Norway, and Sweden in red). Japan is not included in any of the groupings.
Figure 5. Responses to unobserved shocks across different political systems, 1981-2000.

Notes: The bars show the predicted expansion of spending (measured as a percent of GDP) as a result of the largest observed common “shock” from 1981-2000 (because of data limitations the period is 1987-2000 in the case of unemployment, and 1981-1995 in the case of public employment). The estimates are based on the results reported in Table A1 in Appendix A.
Figure 6. Predicted changes in spending, 1981-2000.

Notes: The bars show the predicted changes in spending (measured as a percent of GDP) as a result of all observed changes in demographic and economic variables and all unobserved shocks in the period 1981-2000 (because of data limitations the period is 1987-2000 in the case of unemployment, and 1981-1995 in the case of public employment). The estimates are based on the results reported in Table A1 in Appendix A.