DISTRIBUTION AND REDISTRIBUTION:

THE SHADOW OF THE NINETEENTH CENTURY

Torben Iversen
Department of Government
Harvard University

David Soskice
Department of Political Science, Duke University

and

Nuffield College, Oxford University

A previous version of this paper was presented at the Annual Meetings of the American Political Science Association, August 31 - September 3, Philadelphia, 2006. We would like to thank Sven Beckert, Suzanne Berger, Tom Cusack, Charles Maier, Peter Gourevitch, Robert Hancke, Jurgen Kocka, Cathie Jo Martin, Kathleen Thelen, Daniel Ziblatt, and three anonymous reviewers for many helpful comments. We are particularly grateful to Peter Hall who gave us detailed comments on all parts of an early version of this paper.
Abstract:

We present an alternative to Power Resource Theory as an approach to the study of distribution and redistribution. While we agree that partisanship and union power are important, we argue that both are endogenous to more fundamental differences in the organization of capitalist democracies. Specifically, center-left governments result from PR consensus political systems (as opposed to majoritarian systems), while strong unions have their origins in coordinated (as opposed to liberal) capitalism. These differences in political representation and in the organization of production developed jointly in the early twentieth century and explain the cross-national pattern of distribution and redistribution. The clusters have their origins in two distinct political economic conditions in the second half of the nineteenth century: One in which locally coordinated economies were coupled with strong guild traditions and heavy investment in co-specific assets, and one in which market-based economies were coupled with liberal states and more mobile assets.
1. Introduction

Why do advanced democracies cluster into some that are highly inegalitarian and redistribute very little and others that are highly egalitarian and redistribute a great deal? Related, why do some economies rely a great deal on free market exchange while others are permeated by a dense network of non-market regulations and organizations? As Korpi reminds us in a recent World Politics article, explaining this diversity, and its persistence, is a main task for anyone interested in understanding the workings of modern capitalism. This article presents a systematic response to Korpi’s challenge, rooted in an historical analysis of the political and economic institutional foundations of modern capitalism.

Korpi argues that power resource theory (PRT) provides the most convincing account of the variation in institutions and outcomes. He and others see the clustering of countries on distribution and redistribution as a function of the organizational strength of the working class. A rich literature in this tradition documents how the size and structure of the welfare state is related to the historical strength of the political left, mediated by alliances with the middle classes. Korpi goes on to suggest that the recent attempts to emphasize the role of employers or production regimes (including some of our own work) are either causally spurious, historically flawed, or easily accommodated within the power resource framework.

We disagree and see some important limitations to the power resource approach that the alternative outlined in this paper avoids. First, if it is true that the welfare state is built on the shoulders of an unwilling capitalist class, it is hard to understand the continued enthusiasm of capitalists to invest in economies with large, “de-commodifying” welfare states. As argued by Lindblom, Przeworski, and others, economic performance under capitalism depends on the cooperation of capital. And, the

---

1 Korpi 2006.
3 Korpi, 2006, p. 171.
4 2006, p. 192.
5 Lindblom 1980.
6 Przeworski 1986.
remarkable fact about the observed relationship between social spending, investment, and national income across advanced democracies is that there is none. Among contemporary democracies, the countries with the largest welfare states are no poorer than countries that spend much less. Since it has no theory of production or growth, if we want to understand how capitalism has thrived in large redistributive welfare states, power resource theory is no help.8

Second, although there is mounting evidence for a fairly strong relationship between left partisanship and redistribution,9 there is no explanation in PRT for why the left is strong in some countries and not in others. This variation is only weakly related to unionization,10 and unionization is itself as much in need of explanation as partisanship. Moreover, if we use a simple left-right conception of politics, as advocated by PRT, there are strong theoretical reasons to expect governments to be centrist. Although Downs applied his argument only to majoritarian two-party systems, the median voter theorem also applies to unidimensional models of legislative politics in multiparty systems. Essentially, no proposal or coalition can get majority support that deviates from the position of the median legislator.11 PRT does not explain why the median voter theorem is systematically violated, and paradoxically therefore has no account of why partisanship should matter.

Perhaps then redistribution is a function of the preferences of the median voter? One of the most cited papers in the political economy literature by Allen Meltzer and

---

7 See Lindert 1996; Wilensky 2006; Pontusson 2005.
8 It is true that the literature in the PRT tradition, including some of Korpi’s own work, makes the claim that left governments pursue policies that will “compensate” capital for redistribution. But PRT cannot have it both ways. If capital is fully compensated then there is no conflict of interest (or capital is in the end all-powerful). If it is not, then investments in countries with large welfare states should be lower. The alternative that we present in this paper is that some sectors of capital benefit under the structural-institutional and political conditions that also lead to large welfare states, while others suffer. We identify these structural-institutional conditions and hence also the composition of capital. In this formulation the main line of conflict is not between labor and capital but between different segments of capital and labor.
9 See, for example, Hicks and Swank 1992; Huber and Stephens 2001; Kwon and Pontusson 2005.
10 Iversen and Soskice 2006.
11 See Laver and Schofield 1990.
Scott Richard argues precisely that. Their key result is that if mean income is held constant, and there is a typical right-skewed distribution of income, a higher level of inequality is associated with a lower median income and more demand for redistribution. The implication is that equality in the distribution of market income should be negatively correlated with government redistribution. But as noted in the first paragraph the reverse is true. Data for advanced democracies consistently show equality in market income to be associated with high redistribution.

Figure 1 illustrates this “Robin Hood paradox” for a sample of countries where we have good data on redistribution from the Luxembourg Income Study. Redistribution is measured here by the percentage reduction in the poverty rate (left axis) and in the gini coefficient (right axis) from before taxes and transfers to after taxes and transfers (based on income for working age households). Individual market inequality is measured by d5/d1 and d9/d5 earnings ratios for full-time workers. The most relevant measure from the perspective of the Meltzer-Richard model is the d9/d5 ratio, which should be a good proxy for the market income of the median relative to the mean. Yet the overall relationship is the reverse of the predicted, and this turns out to be true regardless of the particular measure we use for either market inequality or government redistribution. Whether this means that the Meltzer-Richard model is fundamentally wrong is hard to say because it may be that the causal mechanism in the model is swamped by other effects (and it is also a problem that we do not have individual income as opposed to wages). For our purposes the key points are simply that redistribution is negatively related to labor market inequality and that this relationship cannot be explained by the Meltzer-Richard model. The exceptions to the negative relationship are France (relatively high inequality and redistribution) and Switzerland (relatively low inequality and redistribution).

13 See Bénabou 1996; Perotti 1996; Lindert 1996; Alesina and Glaeser 2004, and Moene and Wallerstein 2001. Milanovic 2000 finds a positive relationship between inequality and redistribution to the poor in a sample of countries that includes transition economies. Milanovic uses inequality in household income, not inequality in earnings, which is the focus of this paper. Household income inequality is strongly affected by households without income and therefore says very little about individual labor market inequality. Besides, Milanovic is explicit that the results do not confirm the Meltzer and Richard’s median voter model because the median voter turns out not to benefit more from redistribution in countries with high household inequality.
redistribution), and we comment briefly on these cases below. Italy is also an outlier on the gini measure, but the pre-fisc gini measure in this case is net of taxes and therefore likely under-estimates the true scope of redistribution.

[Figure 1 about here]

The alternative explanation that we outline in this paper not only solves the Robin Hood puzzle, but explains why some countries are dominated by center-left, and others by center-right, governments. Moreover our approach explains why this has not undermined the incentives of employers to invest in the economy. Our alternative builds on much of the work that Korpi criticizes.\textsuperscript{14} As in Estevez-Abe et al. and Cusack et al.\textsuperscript{15}, we emphasize the complementarities between economic, political, and social institutions and provide a comprehensive causal explanation for the contemporary patterns of distribution and redistribution going back to the late 19th century.

Very briefly, our argument is that the economies of the last half century with a relatively egalitarian distribution of income and high levels of redistribution were organized economically before industrialization and before the franchise in more coordinated ways (especially in terms of guilds and rural cooperatives) than economies with high inequality and little redistribution. And even before the breakthrough of democracy these non-liberal countries had (limited) systems of representation whose consequences were not too different from current systems of proportional representation (PR). During the early 20th century the coupling between economic coordination and PR became institutionalized under universal suffrage, and this, we argue, produced the correlation between distribution and redistribution illustrated in Figure 1. Unions and left parties certainly played a role in this process, as argued by Korpi, but we can only understand this role if we take into account the organization of the economy and why employers in some cases had an interest in cross-class collaboration. The strength of the left is in some measure a function of the institutional choices made by employers and the

\textsuperscript{14} In particular Hall and Soskice 2001; Swenson 2002; Mares 2003; and Iversen 2005.
\textsuperscript{15} Estevez-Abe et al. 2001; Cusack et al. 2007.
right in the 1920s and earlier. More critically from our point of view, institutions that promoted equality in the distribution of wages co-evolved with institutions that promoted redistribution, thus producing the pattern we observe today.

In developing our argument we begin by explaining the positive relationship between distributorial equality and redistribution. We propose in section 2 that the correlation is indirect: Two factors, the electoral system and the degree of economic coordination each impact on both distribution and redistribution. Proportional representation (PR) promotes both distributive equality and especially redistribution; so does coordinated capitalism with an even greater impact on distribution. PR promotes center-left coalitions; and coordinated capitalism, by encouraging investment in co-specific skills, reinforces both median voter and business support for wage compression and strong welfare state insurance.

The positive correlation between distributorial equality and redistribution is in turn explained by a positive correlation between PR and coordinated capitalism. Using a composite measure of PR\(^{16}\) and two measures of non-market coordination,\(^{17}\) Figure 2 illustrates how countries cluster into a PR-coordinated group and a majoritarian-uncoordinated group (even if there are some questions about where Ireland and France, according to one of the measures, belong). Because coordinated capitalism and PR determine distribution and redistribution, a full account of the correlation between the two pulls us back into the nineteenth century where these institutions became linked up in the process of industrialization and democratization. We argue that these historical

---

\(^{16}\) The proportionality of the electoral system measure in the last column is a composite index of two widely used indices of electoral system. One is Lijphart’s measure of the effective threshold of representation based on national election laws. It indicates the actual threshold of electoral support that a party must get in order to secure representation. The other is Gallagher’s measure of the disproportionality between votes and seats, which is an indication of the extent to which smaller parties are being represented at their full strength. The data are from Lijphart 1984.

\(^{17}\) One (marked by triangles) is Hall and Gingerich’s 2004 measure of nonmarket coordination, based on the existence of coordinating institutions in industrial relations and the corporate governance system. The other (marked by squares) is Hicks and Kenworthy’s 1998 index of cooperation, which measures the extent to which interactions between firms, unions, and the state are cooperative as opposed to adversarial.
origins, and the process of institutional co-evolution they set in motion, cannot be understood as a simple function of power resources.

In this paper we outline a historical explanation of the positive correlation between PR and coordinated capitalist systems based on Cusack, Iversen and Soskice.18 We then revisit power resource theory and point out that our explanation is fundamentally different from power resource theory because it is not the power resources on the left that have caused the institutional differences that we observe. Employers and the right did not choose PR because it feared the power of the left, but because of the opportunities this representative system created for collaborative arrangements with labor. Once in place PR and center-left dominance increased redistribution beyond the ideal point of employers, but it was a price they were willing to pay to realize the economic potential of their enterprises. We also discuss the implications of our argument for understanding changes in inequality and redistribution over time. In particular, we argue that the rise in inequality starting in the 1980s is due to changes in technology that affects the bargaining power of low-skilled workers – not to an overall decline in the power of the left.

2. The positive relation between distributional equality and redistribution.

In this section we argue that the positive correlation between distributional equity and redistribution is not the result of a direct causal relation (one way or the other). As noted above, the best known candidate causal explanation, Meltzer-Richard, implies a negative correlation.19 We suggest instead that two factors, the extent of consensus in the political

18 Cusack, Iversen and Soskice 2007.
19 Moene and Wallerstein 2001 derive a positive relation based on an insurance argument. But though elegant the implication that there is a positive relationship between income and preferences for spending in the relevant interval around the median voter cannot in our view
system and the degree of non-market economic coordination, have both impacted in similar ways on both distribution and redistribution. As we illustrated above, and as Gourevitch has documented in greater detail, political systems with proportional representation (PR) are strongly correlated with coordinated market economies or CMEs.\textsuperscript{20} In the next section we sketch an historical account of why that should be so. Here the focus is on the relationships between PR and coordination on the one hand and distribution (D) and redistribution (R) on the other. These relationships emerged as a result of developments in the early 20\textsuperscript{th} century -- industrialization in particular – which caused electoral systems to diverge depending on the organization of economic activities in place around the turn of the previous century. The argument follows the rough causal sketch in Figure 3.

2.1 Coordinated Economies

The more the organization of firms and economic institutions facilitate the coordination of economic activity, especially wage-setting and skill-formation, the more likely the political economy is to promote both distributive equality and redistribution.\textsuperscript{21} We look at two mechanisms through which this occurs and which have been the subject of considerable research.

2.1.1 Social policy preferences and redistribution. There is a substantial amount of literature which argues that one of the comparative advantages of CMEs is that they provide incentives for employees and companies to invest in industry, occupation and/or company specific assets. A key condition for employee preparedness to make such

---

\textsuperscript{20} Gourevitch 2003.
\textsuperscript{21} For detailed evidence see Hicks 2000, chs. 5-6; and Swank 2002, ch. 3.
investments is that there are adequate protections in the event of company or industry failure. As argued in Estevez-Abe et al.\textsuperscript{22}, some combination of three types of protection are directly involved: First, wage protection is needed to guarantee that relative earnings in the industry or occupation do not fall; this protection normally takes the institutional form of coordinated wage bargaining.\textsuperscript{23} Second, employment protection reduces the likelihood that companies dismiss employees. Third, unemployment protection in the form of high replacement rates and conditions on acceptable reemployment is important, and the more so to the extent that company level employment protection is reduced. Of these three protections the third, protection of income in the event of unemployment, impacts most directly on redistribution and can be conceived more broadly as a protection of income, not only when workers are forced into unemployment but also into jobs where their skills are not fully employable. Any social insurance system that helps maintain a certain level of expected income regardless of adverse employment conditions – including health insurance and public pensions -- serves as a protection of specific skills.\textsuperscript{24}

There is an important contrast here with LMEs, especially in the last 30 years. The institutional framework in LMEs has not permitted major programs of investment in specific skills. Vocational training, whether in professional schools (law, engineering) or community colleges, provides relatively general skills which enable movement across company and industry boundaries as well as retraining. And while skill-specificity and consequent long tenure in CMEs can limit mid-career labor markets, labor markets in LMEs are becoming more flexible over time. Portable skills mean that employment insecurity is less of a concern, and that more people can use their market power to gain adequate insurance against illness and old age.

\textit{Business social policy preferences and redistribution}. Governments decide on replacement rates, and in doing so they respond to pressure from organized interests. Organized labor will naturally support unemployment protection. But against widely held

\textsuperscript{22} Estevez-Abe et al. 2001.

\textsuperscript{23} We shall see that this is not the only use of coordinated wage bargaining.
views, the pioneering work of Peter Swenson, Cathie Jo Martin and Isabela Mares has provided a wealth of historical evidence that employers are not necessarily advocating a minimal welfare state. In CMEs the combination of strong employer organizations and their acceptance of the case for non-minimal replacement rates has meant that there is a floor to replacement rates as well as duration of benefits. There may be more than one reason why employers should want non-minimal replacement rates. An important argument is that they are necessary for persuading employees to invest in deep specific skills. Of course, actual replacement rates are also influenced by government partisanship; CMEs tend to have more than average left of center governments, so business associations in CMEs may well call for reductions in replacement rates (we will return to this point below). The critical point is that organized business in CMEs has not engaged, nor had the motivation to engage, in promoting the wholesale dismantling of the welfare state.

Organized business in LMEs has played a different role. Concerned to promote unilateral management control within companies, its interest has been in flexible labor markets and weak unions. For both reasons, having a minimal welfare state has been important to it. However, organized business has been weaker in LMEs than in CMEs. This reflects the lack of business coordinating capacity in LMEs. It also reflects, as we will see, political systems based on majoritarian elections and single party governments, which undermine the incentives of parties to cater to business interests. Thus, although business has been anti-welfare state in LMEs, its impact has been blunted by its lack of political power. The exception is the US, where weak party discipline and power-sharing between executive and legislature enable business in effect to promote a minimal welfare state agenda through individual members of Congress.

---

24 Iversen 2005.
26 At least in recent decades, though see Swenson for the US in the interwar period.
27 Martin 2006.
Voters’ social policy preferences and Redistribution. Employees with specific skills have an interest in wage and unemployment protection, and insofar as skills are firm-specific also in employment protection. In Iversen and Soskice\textsuperscript{28} we show the relatively weak conditions (especially on risk aversion) that have to be satisfied in order for specific skills workers to vote for more redistributive spending at given levels of income. Using ISSP comparative surveys we show that this is indeed the case. In so far as CMEs encourage investment in specific skills, therefore, we expect voters in CMEs to prefer higher replacement rates than voters with the same income level in LMEs. This translates into higher actual spending and redistribution assuming that political parties are able to commit to long-term platforms that insure currently employed against future loss of income. As we argue below, such commitment capacity tends to be greater in PR electoral systems where, unlike majoritarian systems, winning the next election is not everything, and where parties can ally themselves openly with groups (such as unions) that promote long-term social spending.\textsuperscript{29} The empirical correlation between vocational training activity (as a measure of specific skill) and redistribution through taxes and transfers is illustrated in Figure 4.

\[\text{Figure 4 about here}\]

2.1.2 Coordinated/centralized wage bargaining and Distribution. Why should coordinated economies be more associated with egalitarian market distribution of income? The basic argument is that coordinated economies encourage collective and coordinated wage bargaining, and that collective, centralized and coordinated bargaining lead to more egalitarian outcomes.\textsuperscript{30} The relationship is illustrated in Figure 5.

\[\text{Figure 5 about here}\]

\textsuperscript{28} Iversen and Soskice 2001

\textsuperscript{29} See also Iversen 2005, ch. 4.

\textsuperscript{30} See Freeman 1980; Wallerstein 1999; and Rueda and Pontusson 2000 for evidence.
The explanation for coordinated bargaining in CMEs has several components. The first is well known and related to the macroeconomic need for a competitive real exchange rate. The second links to the insurance function of “wage protection” for employees with deep specific skills at the company and/or industry level. If workers are to focus their investment in human capital in specific skills they need some guarantee that their earnings will not drop dramatically relatively to those of other occupations. Hence the support of skilled unions for wage coordination across different bargaining units (or for centralized wage bargaining).

The next question is then why coordinated bargaining should lead to a more compact distribution of earnings. A key reason has to do with the nature of inter-union bargaining. Loosely speaking, effective bargaining requires that union threats of action are credible; this in turn requires that there is wide support within the bargaining unit for the union’s position; and that in turn implies that the bottom half of the workforce is not unrewarded. Another way of phrasing this is that unions representing different income groups have to consent to the bargaining proposal of the union central before it can be credibly proposed to employers. This gives low wage unions the capacity to demand their fair share of any agreement, as long as low-skilled labor is a complement to skilled labor in production.31 The more centralized the wage-bargaining system and the more encompassing the bargaining unit, the more compact the resulting distributional outcomes (we discuss recent decentralization trends in collective bargaining in section 4).

2.1.3 Summary. CMEs have positive effects relative to LMEs on both the extent of redistribution and the degree of distributional equality. Both voters and business in CMEs have interests in higher replacement rates on average. And business has a more substantial influence on government in CMEs via corporatist arrangements. As Moene and Wallerstein have emphasized,32 we need to more pay attention to the insurance function of the welfare state rather than simply the redistributive function. That is the argument in 2.1.1 Because CMEs have a comparative advantage in the creation of

specific skills, there is an insurance need for high replacement rates, and these in turn reinforce the comparative advantage of companies in international competition.

CMEs equally have more centralized and coordinated wage-bargaining than LMEs. An important reason for this is the insurance function which wage protection offers those with specific skills who get locked into companies or occupations. Moreover CMEs need effective employee representation at the plant and company level; but this raises the danger of competitive wage-bargaining in the absence of centralized and/or coordinated unions. And for reasons explained in 2.1.2 the more centralized is collective bargaining the greater the distributional equity.

2.2. PR Political Systems

As Gourevitch has pointed out, and as Figure 1 above illustrated, electoral systems with proportional representation are closely linked statistically to coordinated market economies. It is also related to corporatist forms of interest representation. In section 3 we seek to explain why that is the case. In this sub-section we discuss the consequences of PR systems for distribution and redistribution.

Three linkages from PR to R and D seem of particular importance. In the first place, PR electoral systems in advanced economies have a bias towards left of center governments over the period since the Second World War; this is almost the inverse of majoritarian systems (see Table 1). We sketch in 2.2.1 an analytic argument as to why this may be the case and why it will lead to an increase in redistribution. The second linkage is via the educational system. Standard microeconomic theory says that the relative wages of two individuals will be equal to the ratio of their marginal productivities, absent any influences which might result from market imperfections, including collective bargaining. Since the ratio of marginal productivities is closely related to the human capital ratio, the distribution of educational attainments will play a

---

33 The insurance function operates of course in LMEs as well, but with a greater weight of general skills less insurance is needed.
34 Hall and Soskice 2001.
35 Gourevitch 2003
36 Katzenstein 1985.
large part in determining the underlying distribution of earnings from employment. We show in 2.2.2 that the electoral system is correlated with the educational attainments of low income groups and argue that there is a good reason why this should be the case.

[Table 1 about here]

2.2.1 Electoral systems and redistribution: the PR bias towards center-left governments. Table 1 shows the data on government partisanship in advanced economies between 1945 and 1998, derived from Cusack and his associates.37 The scale is a composite index of three expert surveys of the left-right position of political parties in each country. The partisanship of the government is a weighted average of the ideological position of each party times its proportional share of government seats.38 Note we compare this measure to the position of the median legislator (which is defined as the left-right position of the party with the median legislator). This should take account of any factor that may shift the whole political spectrum in one direction or another – such as the possibility identified in section 2.1.1. that the demand for “left” policies is greater in specific skills countries.

What accounts for this surprising relationship? We sketch out here an argument developed in detail elsewhere.39 There are three income groups in an economy, L, M and H. Under PR there are three parties, L, M and H, each representing one of the groups and sharing the respective group’s goals (“representative” parties). M is formateur and has to choose a coalition partner. The key intuition is that a party is less capable of looking after its interest if it is excluded from the coalition. Since M benefits more from taxing an unprotected H than from taxing an unprotected L, M will choose L as coalition partner. This can be modeled in a number of different ways; the only bargaining structure which

37 Cusack and Engelhardt 2002.
38 We excluded governments that were coded as centrist by the one expert survey (Castles and Mair) which explicitly identified parties as such.
39 Iversen and Soskice 2006
is excluded is a take-it-or leave-it offer from $M$. The basic point is that it pays $L$ and $M$ to form a coalition and take resources from the excluded $H$ party, rather than $H$ and $M$ forming a coalition to take resources from an excluded $L$. PR systems therefore tend to privilege center-left coalitions and such coalitions will redistribute more than center-right coalitions.

Majoritarian systems operate quite differently. The three parties are replaced by two, a center-left ($LM$) and a center-right ($MH$) party, both competing for $M$. If both parties could commit to an $M$ platform, then each would win 50% of the time. But they cannot: $M$-voters believe that there is some possibility that an $LM$ government will be tempted to move left and an $MH$ government to move right. The fundamental bias in majoritarian systems arises because, under reasonable assumptions, $M$ has less to fear from an $MH$ government moving right than from an $LM$ government moving left. The former leads to lower benefits going to $M$ but also to lower taxes on $M$, while the latter implies higher taxes on $M$ with the proceeds redistributed to $L$. Parties will try to deal with this problem by electing strong leaders who are willing and capable of ignoring the pressures from the party base (“leadership parties”). But as long as platform commitment is incomplete, there will be a center-right bias.

Note that the insights of this model are completely lost in one-dimensional models such as Meltzer-Richard’s, or indeed power resource theory. The reason is that these models artificially impose a symmetry on the distributive game where the interests of $M$ are always equally well aligned with the interests of $L$ and $M$. With three parties in a PR system this means that $M$ is equally likely to ally with $H$ as it is to ally with $L$. Likewise, in a majoritarian system, any deviation from an $M$ platform is equally

---

40 If $M$ can make a take-it-or-leave it offer, it can enforce $M$’s ideal point on either $L$ or $H$. But this is not the reality of most coalition formation where counter-offers are invariably both made and considered.

41 Note that since the $LM$ party is at an electoral disadvantage it has a greater need and incentive to elect centrist leaders than the $MH$ party. If this holds, the distribution of wins and losses will be more even, but the political spectrum will be shifted to the right. The contrast between the centrist Clinton and the rightist G. W. Bush is a case in point.
threatening to \( M \) whether it comes from the center-left or the center-right party (e.g., the center-left party is forced to share with \( M \) even if \( L \) sets policies).

There is one important qualification to our argument. The center-left bias of PR systems is less pronounced in countries with large Christian Democratic parties. Among the latter, the proportion of center-left governments, measured as in Table 1, reduces to 57 percent, whereas it is 63 percent for the sample as a whole. This also implies that for PR countries without strong CD parties, notably Scandinavia, the center-left advantage is more pronounced: 71 percent. The reason for this difference, we believe, has to do with the cross-class nature of CD parties. Because these parties include constituencies from L, M, as well as H, differences in distributive preferences between these groups have to be bargained out within the party. This produces a more center-oriented platform than we would usually associate with a center-right party, and this in turn makes CD parties more attractive coalition partners for “pure” center, or middle class, parties. The logic that leads center parties to ally with the left is therefore broken, and in countries (such as Germany and Italy) where CD and center parties have at times held a majority of seats, the influence of the left has been reduced. Where such CD-center majority coalitions have not been feasible, as has often been the case in Belgium and the Netherlands, we observe frequent coalitions between CD and left parties, producing a unique blend of policies where transfers are high and somewhat redistributive, but some of these nevertheless are directed to those with high incomes (H).

2.2.2. Electoral systems and educational outcomes. The center-left bias in PR systems increases redistribution of income towards lower income groups, by comparison with majoritarian systems. Using analogous reasoning electoral systems will also affect the distribution of educational spending, and educational outcomes in turn affect the distribution of income.

Center-left governments have an incentive to spend more on L’s education than do center-right or middle of the road governments in majoritarian countries. And they have a lesser incentive to spend on H’s education. The model in Iversen and Soskice
assumes that policies are limited to redistributive transfers.\textsuperscript{43} But a similar argument can be run with the three groups competing for expenditure on education for their own group.\textsuperscript{44} Indeed, if $H$ opts for private education, and if there are positive externalities for $M$ from educational expenditure on $L$ (for example, economies of scale in school buildings), then $M$ has an increased incentive to opt for an $LM$ coalition.\textsuperscript{45}

Ansell and Busemeyer have recently documented that left governments spend relatively more on primary and secondary education than right governments,\textsuperscript{46} which benefits low income groups more than high income groups. Boix has likewise shown that the left governments spend more on public education than right governments.\textsuperscript{47} Ansell demonstrates that similar effects can be attributed to PR electoral systems, though Iversen and Stephens show that this is less true in PR countries where Christian Democratic parties are strong.\textsuperscript{48}

The limitation of these results is that they do not speak directly to the skills acquired by students, which could vary with the effectiveness of educational institutions across countries. However, the OECD and Statistics Canada have run an international adult literacy survey in the years 1995-8\textsuperscript{49}, which does consider more directly the level and distribution of skill acquisition. We confine our attention to the advanced economies included in the survey.\textsuperscript{50} The survey conducted three tests, testing writing, comprehension and quantitative skills. Figure 6 summarizes the results. The top bars (using top scale) show the percentage of adults who have not completed an upper secondary education but have high scores on document literacy. The bottom bars (using

\textsuperscript{42} Manow and Kersbergen 2009
\textsuperscript{43} Iversen and Soskice 2006.
\textsuperscript{44} Iversen and Stephens, 2008.
\textsuperscript{45} Though note too that this weakens the center-right bias in majoritarian systems, since a left deviation is less frightening for $M$.

\textsuperscript{46} Ansell 2008; Busemeyer 2007.
\textsuperscript{47} Boix 1998
\textsuperscript{48} Iversen and Stephens 2008.
\textsuperscript{49} OECD 2000.
\textsuperscript{50} Flanders has been included for the sake of completeness, but linguistic ability testing in Flemish and internal migration may account for lower than expected performance.
bottom scale) show the percentage of adults taking the test who get the lowest score, averaged across the three test categories\textsuperscript{51}.

[Figure 6 about here]

Compared to majoritarian systems at the top of the figure, it can be seen that the PR countries have far fewer adults who get the lowest scores, and they also tend to produce higher scores among those with little formal education. There is therefore a prima facie case that the electoral system is an important determinant of the compactness of the skill distribution. Since PR and coordination are co-linear, it is of course also possible that the pattern is related to the prevalence of vocational training in CMEs. Indeed we argue below that this is likely to be a reinforcing factor and related to the fact that PR and corporatist representation are linked: in addition to affecting distributive coalition formation PR also permits consensus bargaining over regulatory policies -- typically through legislative committees closely linked to bureaucratic agencies with union and employer representation. A key regulatory area is the structure and curriculum of the school system, which intersects the vocational training systems directly and indirectly. PR and corporatist bargaining thus provide organized interests influence over the educational system and indirectly therefore also distribution.

3. Patterns of industrialization and representation in the late 19th century

PR systems and CMEs explain at least partially both distributive equality and redistribution (with the qualification we noted concerning Christian democracy). In turn, PR systems are strongly positively correlated with CMEs. It is this correlation that is key to explaining the clustering of countries into relatively egalitarian ones with high redistribution and relatively inegalitarian ones with low redistribution. The historical origins of this correlation are the focus of this section.

\textsuperscript{51} A more detailed analysis of the literacy data is provided in Iversen and Stephens 2008.
Specifically, we need to answer the following set of questions. First, what explains why some countries adopted proportional representation in the early 20th century? (As is well-known, almost all advanced countries which have PR today adopted PR early in the twentieth century; before that electoral systems were largely majoritarian, some with run-offs.) Second, why had the same countries developed at least proto-coordinated institutions at the national level by the same period? And third, what explains the different coalitional patterns across these same PR countries – dividing roughly the Scandinavian from the Continental (or Christian Democratic) welfare states?

In answering these questions we claim that it is economic interests that are the ultimate drivers. In doing so we go against the accepted wisdom of comparative political science of the last thirty plus years: Since Rokkan’s analysis of around 1970, Cusack et al. is to our knowledge the only serious challenge to the view that social cleavages (religious, territorial and ethnic) explain PR. And since Esping-Andersen’s analysis in 1990 it has also been generally accepted that these same cleavages, in particular the religious, help explain patterns of welfare states – at least between Scandinavian and Continental European countries. We believe that this reflects a failure of both political scientists and historians to work on the bridge between party politics and the economic interests that are embedded in production systems; and also the failure of economists seriously to consider the possibility that systems of representation are complements to systems of production.

Two of the books on which we most rely to make our argument are Thelen – on the development of training systems – and Herrigel – on decentralized production regions. Yet key though they are neither of them mentions religion, nor party politics except in passing. Another book which has proved of great value to us by Manow and van Kersbergen on religion and the welfare state, focuses on the role of political parties and religion, but largely neglects detailed discussion of production systems. Based on

---

53 Cusack et al. 2007
54 Esping-Andersen 1990
56 Herrigel 1995.
Cusack et al.\textsuperscript{58}, in this section we attempt to link the development of party politics and electoral systems with the representation of economic interests. We emphasize its inevitably tentative nature at this stage, but believe it points to a major historical research agenda.

### 3.1. Economic interests and systems of representation

We first want to stress the need to analyze PR systems more broadly than has been customary. There are two quite different analyses of PR in the existing literature: on the one hand, PR has been analyzed by Huber and Stephens\textsuperscript{59}, Iversen and Soskice \textsuperscript{2006}\textsuperscript{60}, Manow and van Kersbergen\textsuperscript{61}, and implicitly by Baron and Ferejohn\textsuperscript{62}, in terms of minimum winning coalitions – an approach going back to the theoretical work of Riker.\textsuperscript{63} By contrast to this exclusionary view of PR, a quite different inclusionary approach, that of “consensus” bargaining, has been promoted by Lijphart\textsuperscript{64}, Crepaz 1998\textsuperscript{65}, Powell 2000\textsuperscript{66}, and Colomer 2006\textsuperscript{67}, among others. The focus here is on the effectiveness of PR in enabling Pareto improvements in welfare.\textsuperscript{68} Here we follow Cusack et al.\textsuperscript{69} in arguing that PR systems typically embody both approaches. But they relate to different policy areas: The minimum winning coalition logic determines distributive outcomes, so that after PR adoption what matters for the redistributive aspects of the welfare state is the governing coalition. We argued in the last section that PR will be biased to the center-left, though we also noted how a centrist coalition involving a Christian democratic party

\textsuperscript{57} Manow and van Kersbergen 2009.
\textsuperscript{58} Cusack et al. 2007.
\textsuperscript{59} Huber and Stephens 2001.
\textsuperscript{60} Iversen and Soskice 2006.
\textsuperscript{61} Manow and van Kersbergen 2009.
\textsuperscript{62} Baron and Ferejohn 1989.
\textsuperscript{63} Riker 1962.
\textsuperscript{64} Lijphart 1984.
\textsuperscript{65} Crepaz 1998.
\textsuperscript{66} Powell 2000.
\textsuperscript{67} Colomer 2006.
\textsuperscript{68} Rogowski 1989.
\textsuperscript{69} Cusack et al. 2007.
might exclude the social democrats and thus generate a welfare state with less redistribution. The precise nature of coalitions is discussed further in the third part of this section.

The consensus aspect of PR is reflected inter alia in the strength of opposition parties in legislative committees.\(^{70}\) This relates to regulatory politics if there is general agreement that a wider range of interests, represented by government and opposition parties, should have a role in decision-making. Our basic contention is that this arises in corporatist-type societies in which associational activities are widespread and in which investments in co-specific assets are important.\(^{71}\) This is the case, as for example, in major schemes of vocational training, when many different agents (workers, companies, unions, business associations) make serious investments which depend upon commonly agreed regulatory frameworks. Under such circumstances political systems which can systematically exclude particular interests (as is the case under majoritarian systems) are inimical to the development of co-specific assets and institutions to regulate these. The last part of the 19\(^{th}\) and the first part of the 20\(^{th}\) century was a period of intense economic institution building at the national level, and these issues were of great importance for the construction of the political system.

The core argument of this section takes industrialization as the key independent variable. Throughout the period we consider local economic networks were developing into national networks, just as labor was moving into industry from agriculture and from artisan or unskilled pre-industrial work in the towns.\(^{72}\) At the same time entrepreneurs

\(^{70}\) Powell 2000.
\(^{71}\) Iversen 2005.
\(^{72}\) Some of the literature on corporatism (especially Katzenstein 1985) and PR (especially Rogowski 1987) also emphasize the importance of economic openness. Yet openness per se is not particularly strong correlated with the distinctions we make in this paper. Australia, New Zealand, and Ireland are small countries which developed liberal economic institutions and majoritarian political institutions (with some qualifications in the case of Ireland). Germany and (northern) Italy, on the other hand, are large countries that developed coordinated capitalism with PR. However, Katzenstein’s argument may be read to mean that specialization is important for the development of corporatism, and our argument is entirely consistent with that view. We also believe that the international economy reinforces the institutional differences we discuss through the mechanism Hall and Soskice 2001 call “comparative institutional advantage” – viz. the process by which institutions that are complements to particular types of production are
and financers grew up both from the bourgeoisie and perhaps state officialdom and from small scale artisan owners and farmers and independent peasants.

The argument rests on the quite different impact industrialization had on economies depending on two related dimensions of those economies: one that refers to the organization of production and the organization of the state. Specifically, we observe the following patterns across these two dimensions:

i) Pre-industrial rural and urban local economic system: All the states which subsequently emerged as PR/coordinated states had locally coordinated rural and urban economies with some mixture of rural cooperatives and regulated artisan systems; peasants owned or had tenure over their land. We will argue that both Scandinavian and Continental states apart from France fit into this description; and that their differences arise from the nature of rural and urban production systems in the two areas. By contrast, those states which emerged as majoritarian/liberal had large independent farms and landless agricultural labor, and/or rural communities with low entry and exit costs, and weakly- or unregulated artisan systems.

ii) The pre-existing structure of the state: All the states which subsequently emerge as PR/coordinated states were originally Ständestaaten, with functional representation of economic interests, while none of the Majoritarian/liberal states were.

We use these two dimensions to explain the origins of liberal, continental and Scandinavian systems of representation, the task of the following three sections. We stress that the three systems are ideal types in the Weberian sense that they highlight key differences while ignoring numerous similarities and finer distinctions. In particular, since all three types blend in elements from others, we implicitly downplay sectoral differences. Even though the artisan sector in 19th century America was smaller and less well organized than in most of continental Europe this does not imply that no company, especially in the Midwest and Northeast, was able to draw on the sector to develop skill-intensive product market strategies. It does imply, however, that these firms were in a comparative disadvantage in doing so and that this undermined their capacity to impose reinforced as countries can specialize through international trade. We return to this issue in Section 4.
their institutional preferences on the rest of industry. Likewise, there were large continental European companies in the coal and steel industry (in the Ruhrgebiet especially) which relied heavily on unskilled workers as in Britain. These firms consequently did not share the concerns of other employers in developing a cooperative training and industrial relations system, but they did not have the organizational power to prevent such developments. Our argument implies sectoral differences in interests, but our account in this brief paper focuses on those that were advantaged by the structural and institutional conditions we highlight and that came to dominate institutional developments.

3.1.1. Liberal economies and majoritarian political systems. In the liberal case local economies were relatively uncoordinated historically: guild traditions were weak and their power limited or non-existent; the acquisition of craft skills was haphazard, formal certification did not exist and the supply of craft skills was relatively low; equally in agriculture, farming was dominated by large farmers, so the agricultural labor force was largely a dependent one of landless workers; alternatively, in areas such as the American West, small farmers had low entry and exit costs, making embedded long-run cooperation rare.

The consequence of these local arrangements was twofold. The absence of local coordination implied an absence of major areas of co-specific assets. Hence as local economic networks became regional or national, there was no corresponding push to develop coordinating mechanisms at the national level to manage investment in co-specific assets by different economic groups.

The second consequence was that the industrial labor force as it developed could not call on a major pool of craft workers, nor was there an available mechanism for training. The industrial workforce in these liberal economies was relatively unskilled. This impacted on the form which unions took: Since it was very difficult in this pre-Fordist world to build effective unions from unskilled workers, unions were largely craft-based.
Union strategies also depended on the organization of employers. The liberal state was anti-corporatist and businesses consequently found it difficult to develop strong self-disciplining associations. This in turn meant that businesses were nervous of investing heavily in training workers in transferable skills. Because employers associations could not sanction individual employers who stepped out of line, it was not possible to force unions into becoming highly disciplined bodies themselves, with whom they might negotiate on a long-term basis. Instead the interest of craft unions was to reduce the supply of skills to maximize their bargaining power and to control job content within companies to prevent dilution of skill needs by substitutions of unskilled labor. Because union discipline was not easy to maintain, craft unions were at risk of fragmentation, especially where labor market conditions were heterogeneous. This reinforced the political interest of employers in deregulated labor markets and minimizing welfare and unemployment benefits in order to weaken the power of unions. To circumvent job control employers, especially in America, introduced technologies which reduced the need for skilled labor.

There is an important political distinction to be made at this point between the US and other liberal economies. In the latter with centralized political systems skilled workers (Disraeli’s “respectable working men”) were median voters and the state underwrote legal protection for unions. But the decentralized nature of the American polity, with economic competition between states and labor law at state level, and lack of Federal or even state control over the means of violence – autonomous local police forces as well as private companies such as Pinkertons – allowed employers a free hand to crush unions. But in both environments the consequence of these mutually reinforcing centrifugal incentive structures between unions and employers during this critical formative period for labor market arrangements was to put the liberal economies firmly onto the zero-sum game, or minimal winning coalition, trajectory.

From the discussion of this subsection, two conclusions emerge. First, the industrialized economy which developed in the nineteenth and early twentieth centuries was liberal and uncoordinated, without encompassing unions and strong business associations. Second, there was no pressure for a political system which represented
group interests and which allowed longer-term consensus agreements to be made, hence no pressure for PR. Business had no need for a consensus political system from which an institutional framework labor market regulation and skill formation might develop; on the contrary they saw unions as a threat to their autonomy. The split of interests between skilled workers and unskilled workers meant that the working class representation which developed during this period paid no attention to the socialist notion of a unified working class, still less to expanding skills (by contrast to the social democratic parties of the continent).

Our central contention, contra-Rokkan, is that PR and consensus-based political systems were chosen when economic interests were organized and when major societal framework understandings needed to be legally embedded. When that was not the case, as in the liberal economies, majoritarian systems protected the right and the middle classes against the left.

Rokkan instead saw the choice of PR as the reflection of deep social cleavages. It is appropriate to finish this subsection by noting that such deep cleavages were equally present in the Anglo-Saxon world at this time. There were religious cleavages in England (between the dissenting churches and the Anglican established church – with almost equally sized congregations), in the US between Catholics, Anglicans and Lutherans, in Australia between Catholics and Anglicans, let alone in Ireland. Moreover in both New South Wales and Ireland Catholic education had been sharply attacked. There were major ethnic divisions in the US, Ireland and Australia. And, within the right, England was divided socially, religiously and territorially, between the dissenting, urban, industrial class and the Anglican, rural, landowners and tenant farmers. None of these divisions played a role in hindering the continuation of majoritarianism.

3.1.2. Continental States: Proportional Representation and Coordination. We now turn to explain the adoption of PR and economic proto-coordination in the continental states during the period of the late 19th and early 20th centuries. We also want to explain the post-PR adoption pattern of coalitions: in these states Christian Democratic parties played a major role in most coalitions, generating a particular welfare state that we
discussed earlier – so-called conservative, Christian democratic, or continental welfare states.\textsuperscript{73}

The first major difference in the starting points from those in the liberal economies relates to agriculture and urban economic life. Both peasantry and artisans operated within locally coordinated frameworks. Peasants owned or had strong tenure on their land, and the artisan urban sector was formally or informally regulated\textsuperscript{74}. Moreover there was substantial skilled artisan and small-scale industrial work in the peasant countryside. This is also true of the Scandinavian states to be discussed in the next subsection. Indeed the important common consequence for all these non-liberal states – continental and Scandinavian – was that more or less effective and more or less formalized artisan training systems existed. These implied that a larger proportion of the work force had craft skills than was the case in the liberal economies. Thus industrialization in all these economies could draw on a potentially large supply of skilled workers.

This had in turn, as Thelen\textsuperscript{75} has insightfully noted, major implications for the development of union strategies. For, while unions initially developed along craft lines, they could not build strategies based on the control of the supply of skills since these were monopolized by the artisan sector. Nor (given that unions could not control how craft skills were defined) could they build strategies based on the control of job content. In both continental and Scandinavian economies, therefore, union strategies developed differently from those of craft unions in liberal economies. Over time and not without considerable conflict unions saw a common interest with industrial employers in extending the training system and deepening the skills of workers – effectively breaking the monopoly on training of the artisan sector. But for companies to use skilled workers effectively required that workers behaved cooperatively and without costly monitoring; for then skilled workers could be given responsibility, and there would be no danger to

\textsuperscript{73} The French welfare state has much in common with this, but its genesis is quite different. So it is excluded from this group of states.

\textsuperscript{74} There are exceptions on land ownership, including East Prussia and the Mezzogiorno, as well as the Ruhr region in West Prussia.

\textsuperscript{75} Thelen 2004.
the company of hold-up. Consequently, while most companies were initially deeply hostile to unions, union strategy gradually evolved into one of offering cooperation in exchange for collective bargaining rights. This in turn required that unions were in a position to discipline their members effectively.

Here a second exogenous factor enters the argument. Governance in the continental and Scandinavian states derived from a Ständestaat or corporative state tradition in which government operated partially through groups (estates). Although the original interests represented through the Ständer were pre-capitalist (landowners, small-holders, guilds, the church, and so on), the Ständestaat can be thought of as at the institutional origin of neo-corporatist regimes.\(^76\) Thus little constraint was put on associational activity in developing industries – putting them in line with the way in which handwork and agriculture was organized. This is in turn reflected in the different ways in which liberalism was interpreted outside the Anglo-Saxon world and France in the 19\(^{th}\) century.

As Swenson has argued, organized industry in these economies put strong pressure on unions to structure themselves so as to be able to discipline their membership.\(^77\) This was the price which the unions had to pay for representation and collective bargaining. Thus unions centralized, even if internally they remained organized across crafts until the 1920s or later.\(^78\) Moreover, as skill formation in industry became part of the industrialization agenda, unions and industry became the representative partners in massive investment in co-specific assets. And with such investments came the need and demand for related developments in the welfare state and employee representation within the company. While many of these positive-sum issues were primarily negotiated out between industry and unions, they were also put into legal frameworks. For this reason business and the unions were deeply concerned to be represented politically in a consensus-based regulatory process.

\(^{76}\) Crouch 1993.
\(^{77}\) Swenson 1991.
\(^{78}\) Kocka 1986.
If business could have bargained everything out with the unions though some form of what Schmitter\textsuperscript{79} has called state corporatism this may have been its preferred option. But it could not prevent democracy, at least for awhile, and then the right representing business had a strong reason to favor proportional representation. Even if it could see that a majoritarian system would guarantee a focus on the redistributive needs of the middle classes, thus pushing out the redistributive claims of low income groups. Business wanted a sweep of labor market and training reforms that would help modernize the economy, and it had no guarantee that the median voter would support these reforms or that the unions would be cooperative in such a setting.

These developments also had profound implications for the political left which led social democracy to have different strategic interests to left parties in liberal states. For social democratic parties in both continental and Scandinavian countries represented the whole working class in ways which for example the British Labor Party did not. This was because they had an interest, as did their social democratic union counterparts, in extending skills throughout the working class. Yet this strategy would hardly have been compatible in the long run with a majoritarian electoral system: for a social democratic party would be unable to pursue an egalitarian strategy with any hope of capturing middle class voters. Thus the political left in non-liberal countries had a double interest in proportional representation: it could be a part of minimum winning coalitions without having to focus on middle class voters, and it allowed the indirect presence of unions – representing co-specific skilled workers – in a consensus-based regulatory framework.

We want to stress that the adoption of PR did not in our view present a sharp break with previous forms of representation. When economic interests were locally rooted, not only was most regulation local, but the single member district systems that preceded PR had ensured essentially proportional representation of local interests at the national level by politicians who had a strong incentive to cater to their own local constituencies. It was because industrialization threatened the continuation of a consensus-based negotiation over regulatory issues -- threatening, in effect, to turn locally based SMD systems into majoritarian national-level systems – that PR was

\textsuperscript{79} Schmitter 1979.
adopted in some countries. This did not require exceptional rational forecasting: once the move to the national level of industry and politics made it apparent that the pre-existing majoritarian institutions of representation were producing stark disproportionalities, PR was a natural choice to restore representivity. Contrary to the impression from the literature, this did not involve intense conflict or position-taking by organized interests. Political parties representing these interests (both on the right and the left) for the most part agreed on the move to PR. PR was everywhere adopted with the support of center-right parties and with near unanimity.\textsuperscript{80} It is possible that the distributive consequences of PR were not fully understood on the right, but with the exception of France there were no reversals of the electoral system even though the center-right everywhere enjoyed subsequent periods of majorities.

Scandinavian and continental countries had much in common in their Ständestaat and guild backgrounds, but continental countries differed from the Scandinavian in one key respect.\textsuperscript{81} In the continental countries the peasant dominated countryside was \textit{more closely integrated} into the urban economies than in the Scandinavian.\textsuperscript{82} If the formerly strongly feudalized areas (mentioned in footnote 2) are excluded, something like these patterns seem to be traceable a long way back in history.\textsuperscript{83} Hechter and Brustein use the term “petty commodity production” areas to describe the continental pattern and “sedentary pastoral” the Scandinavian, and they begin their account in the 12\textsuperscript{th} century.\textsuperscript{84} While a great deal more work is needed to pin down the connections, the petty commodity production areas seem clearly related to the decentralized production regions identified by Herrigel in South and West Germany.\textsuperscript{85} Herrigel pointed to the most notable of these districts in Germany, but we can imagine that on smaller scales they were widespread in the areas of western Europe where autonomous urban centers had dominated non-feudal surrounding country-sides.

\textsuperscript{80} Blais 2005.
\textsuperscript{81} No work that we know of has taken this route, so we should both caution, and perhaps encourage, the reader that more historical research is needed to fill out the argument we are tentatively putting forward
\textsuperscript{83} Katzenstein 1985.
\textsuperscript{84} Hechter and Brustein 1980.
Guilds were sometimes but not always integrated in these networks, and there was substantial putting-out of work to small farms; there was also significant development of rural artisans; most generally the production process of goods could be spread over many different locations. Hechter and Brustein\textsuperscript{86} also emphasize the integration of farms and towns, and they emphasize the dispersion of ownership and the lack of a rigid class structure. As Herrigel makes clear, these urban-rural networks are in fact complex co-specific asset groups:

‘The [producers] are absolutely dependent upon one another…they essentially engage in highly asset-specific exchanges every time they engage in an exchange…Producers in the decentralized industrial order are part of a thick network of specialized producers that is much more than the sum of its parts. The institutions they create to govern their activities … constitute important fora to engage in negotiation and to establish understanding regarding…their individual and collective interests.’\textsuperscript{87}

We want to argue that the urban rural networks of the continental coordinated economies created in the catholic Christian Democratic parties political coalitions which tied together lower income groups (largely peasant) with higher income artisan and small producer groups. The regions Herrigel identifies are largely in the South and West of Germany, as are the major areas of Catholicism – though they were by no means universally catholic (neither Saxony, pre-1871 Kingdom, nor North Wurttemberg were catholic). In Switzerland there were some predominantly strong rural cooperative cantons, but all were protestant.\textsuperscript{88} Austria and Belgium were largely catholic countries. In the Netherlands the catholic community was separated economically and socially from the protestant, and urban-rural networks characterized both. What is important for our argument is the assumption that in broad terms many of these networks were confined to catholic areas. This matters for how we understand the support of Christian democratic parties for PR, as well as their distinct approach to the welfare state.

In the standard Rokkan story, which is used by Esping-Andersen and others to

\textsuperscript{85} Herrigel 1995.
\textsuperscript{86} Hechter and Brustein 1980.
\textsuperscript{87} Herrigel 1995, 29.
\textsuperscript{88} Rokkan 1970.
separate out a distinct welfare state type, Christian democratic parties are a reflection of the Kulturkampf against the Catholic church, especially over education, which led to a deep division between Catholics and other social forces on the right in continental European states. So deep was the distrust by Catholics for non-Catholics on the right, that though both groups were anti-socialist they were unable to combine in a single right-wing political movement. Therefore right-wing parties chose proportional representation, and whenever Christian democrats participated in governments they were under the influence of the church to choose a welfare state that would prevent the rise of socialism and promote Catholic values of the family.

Yet, while Christian democratic parties did indeed emerge from the Kulturkampf, it was clearly not a sufficient condition for their creation: Christian democratic parties did not appear in either France or the then independent self-governing crown colony of New South Wales in both of which catholic education was fiercely attacked by their respective governments. A necessary condition for founding a highly organized Christian democratic party, we surmise, was that the Catholic adherents were already members of organized economic groups, which was the case in neither France nor New South Wales. The Kulturkampf may also have been a necessary condition for the emergence of Christian Democratic parties but not for their persistence since they remained strong long after the attack on the Church had subsided. Indeed, if all that held Catholics to Christian Democratic parties was their priest we might have expected Christian Democratic parties to have remained responsive to their hierarchies. But in fact Christian Democratic parties were fighting largely successfully for their independence from the Church by the 1890s. The idea that they would have accepted social policies from the Church against the interests of their voters is not persuasive. Nor is it necessary: Compellingly, Kalyvas further shows that the different Christian Democratic parties were organizing themselves by the turn of the twentieth century as representative parties with committees for different economic interests – as indeed they are still organized. And the Catholic welfare state, with its emphasis on insurance fits well as a negotiated outcome between these interest.
The reason that Catholics with different economic interests remain with a party which is Catholic largely only in name is explained, we submit, by the interdependencies of these economic interests. The rural-urban, peasant-artisan-small employer-merchant co-specific asset network acted, if our hypothesis is correct, to create a peasant-Mittelstand constituency which had an incentive to remain within the Catholic party. Another way of putting this, very consistent with Manow and van Kersbergen, is to see the Christian Democratic party as a negotiating community with a range of different economic interests in terms of income levels and hence redistribution, but a common interest in sharing and managing co-specific assets. Moreover, as local and regional networks developed in part into national networks, and as regulations over a wide range of issues germane to these urban-rural networks were increasingly set at the national political level as well as regional and local ones, so the importance of supporting a party capable of representing these co-specific asset groups grew in significance.

The intra-party Christian Democratic compromise played down redistribution because of its cross-class nature, and focused instead on insurance and agricultural protection. Yet, as compared to traditional liberal and conservative parties, Christian Democratic parties were clearly much more favorably disposed towards the welfare state, precisely as we would expect given the structure of economic interests they represented. As we noted in section 2, this moderate position made Christian democratic parties attractive coalition partners with more traditional middle class, or center, parties. So long as Christian Democratic parties could govern with these parties, redistribution remained moderate. Only when centrist parties were too weak to ensure a majority, as has been the case during periods in the Netherlands and Belgium after WWII or indeed Weimar, they formed coalitions with Social Democrats, and then we see more redistribution as a consequence (though relatively insurance-based compared to the Scandinavian). This logic is entirely consistent with our coalitional model of redistribution, whereas for PRT Christian democracy is a residual category with no obvious linkage to power resources or economic interests.

89 Kalyvas 1996.
90 Manow and van Kersbergen 2009.
3.1.3. Scandinavian states: Proportional Representation, Coordinated Institutions and Agrarian Social Democratic Coalitions. We have already set out much of the argument for the adoption by Scandinavian economies of PR, since the incentive structures for unions and business developed in a similar way to those in the continental economies. This too explains why economic coordination was important in both groups of economies. Moreover, as in the continental economies, the nature of the broad framework agreement as it evolved through this period reinforced social democratic parties as representing the whole working class. They believed that skill formation should be universal rather than seeing themselves as representing de facto skilled workers as was the case for the major left parties in the liberal economies and in France. Thus social democracy in Scandinavia as in the continental countries stood for redistribution by comparison to counterparts in the liberal economies. Skilled workers remained important in social democratic parties, nonetheless; and their basic stance was one which favored income related benefits rather than universalism.

Our claim is that the major difference with the continental economies lay in the nature of the agricultural sector. While Scandinavian peasants owned their own land and coordinated activities as in the continental countries, Scandinavian agriculture did not have the same tight links and dependency upon urban economies. Instead, the agricultural communities were tightly knit and heavily invested in co-specific asset relationships within autonomous rural cooperative frameworks. There was thus not the same logic in Scandinavia to support a peasant-Mittelstand party. Instead the logic of co-specificity led to agrarian parties from which the occasional large landowner was excluded. In these agrarian parties, by contrast to Christian Democratic parties, homogeneous economic interests reinforced co-specific assets. The economic interests of peasants as discussed above favored redistribution. And because of the nature of agricultural uncertainty, agrarian parties were more predisposed to egalitarianism and universality than the social democratic parties.

Thus the coalitions which emerged after PR linked social democracy with
agrarian parties and hence to both redistribution and universalism.

3.2. Recasting the relationship between PR, business, and the left

Our account of the origins of electoral institutions is very different from the dominant ones, which, in one form or another, builds on work by Stein Rokkan. Consistent with power resource theory, these accounts suggest that PR emerged as a result of a strong left. But if one examines the historical data there is in fact no relationship between the electoral support of the left and the adoption of PR.91 This is also true if one examines the interaction of left strength and divisions on the right, as in Boix92, and it can be easily illustrated (see Table 2). Countries with a dominant right party were no more likely to retain majoritarian institutions than countries that did not (compare the columns). The table also shows that the countries in bold where support for left parties was strong before the adoption of PR (or universal male suffrage in cases that remained majoritarian) were as likely to remain majoritarian as were countries without a strong left.

[Table 2 about here]

The critical variable, we maintain, was the organization of production and labor at the eve of the national industrial revolution (indicated on the left in Table 2). Where guilds and agricultural cooperatives were strong, employers well organized and highly coordinated, and unions organized along industry lines, both right and left parties ended up supporting PR as a political mechanism to protect their mutual investments in co-specific assets. Where guilds and agricultural cooperatives were weak, employers poorly organized and coordinated, and unions divided by crafts, the right opposed PR in order to protect their class interests.

91 Cusack et al 2007.
92 Boix 1999.
4. Long-run dynamics

We have argued in this paper that economic and political institutions co-evolved over long stretches of time, creating a remarkable persistence in the comparative patterns of inequality and redistribution. The high equality, high redistribution economies today appear to be the same during most of the 20th century and even earlier. Yet while the cross-national rankings may not have changed very much there are large changes in inequality and redistribution over time. The government today plays a much greater role in redistributing income than at the beginning of the previous century. Likewise wage dispersion has waxed and waned, falling from the 1930s and then showing a sharp upturn since the late 1970s. How do we explain these changes?

Our answer focuses on the interaction between the structure of skill investments, political institutions, and technological change. In this section we provide a brief sketch of these interactions for the purpose of illustrating the kind of explanations that our approach invites.

4.1. Redistribution over a century

Figure 7 shows the trends in social spending as a share of GDP for 16 advanced democracies beginning in 1880 (we only include countries that were democracies during the entire period). Note that before the 1920s the government did not play much of a role in the provision of social insurance or redistribution. What arrangements existed were largely “private” ones and operated through the guilds, the church, the burgeoning unions, and the emerging industrial relations system. But with massive industrialization, urbanization, and expansion of the franchise came demand for insurance against risks that could no longer be addressed through decentralized, private arrangements. It is our contention that the role of universal suffrage and left parties cannot be separated from either the design of democratic institutions (PR vs. majoritarian institutions) or the structure of production (CME vs LME).
Seen in this light it is remarkable that starting with the adoption of PR in western European countries in the 1920s, the trajectory of social spending began to diverge. By the end of World War II (or at least by the 1950s) there was an almost complete separation of PR and majoritarian countries with the former spending notably more than the latter. It is easy to confirm this econometrically using a fixed effect model with a lagged dependent variable and time dummies. Controlling for the size of the electorate, the elderly population, and GDP per capita, PR has a strong and statistically significant effect on spending.93

Yet the entire gap between PR and majoritarian countries today cannot be attributed to the accumulated effects of the introduction of PR in the 1920s. Instead, the string of social reforms introduced since the 1920s can sensibly be seen as conditioned by electoral institutions, with differences being reinforced through international specialization. On the first point, since risks tend to be concentrated at the middle and lower end of the income distribution,94 and because PR favors the center-left, we would expect the response to shocks to be more pronounced in PR countries. These “shocks” include major upheavals such as the industrial revolution, the Great Depression, World War II, and so on. Indeed, if we interact PR with a set of decade dummies representing the (unobserved) exogenous shocks, the results indicate that PR countries respond much more aggressively to pressures for protection against social risks.95 This pattern is

93 The estimated parameter for the PR dummy is 1.213 (s.e.=0.539) and for the lagged dependent variable 0.855 (s.e.=0.062). The result stands in contrast to a recent paper Aidt, Dutta, and Loukoianova 2006 who finds no effect of PR on spending in 12 European countries from 1830-1938. But they only have data for central government spending and without separating out social spending.

94 Cusack et al 2006.

95 The model is

$$y_{i,t} = \lambda y_{i,t-1} + (\sum \delta_i D_t) (1 + \beta_1 PR_i) + \beta_2 PR_i + \sum \gamma_k X_{i,t}^k + \alpha_i + \epsilon_{i,t},$$
probably magnified by cross-national differences in the structure of skills since, as we have argued, PR countries are associated with specific skills production systems and high demand for insurance. Here the role of specialization also enters the story because trade allows countries to specialize in production where they have a comparative advantage, which implies that differences in skills and their associated institutions of social protection will grow. In this sense we agree with the literature that assigns an important role to the international economy in explaining social welfare regimes.

There is one exception to the general pattern, which is highlighted in Figure 7: France. France adopted PR after WW II but changed back in 1958 under the Fifth Republic. The shift to PR was associated with a jump in spending, but there was no subsequent reversal. To understand this it must be recalled that France developed along a distinct path where large companies dominated the skill formation process and where workers became closely tied to their workplace as a result of highly firm-specific skills. Even though unions were weak and management enjoyed unilateral control over hiring and firing, and even though most governments in France have been center-right, the middle class appears to expect and demand high levels of social insurance from the state. Certainly it is hard to explain the large welfare state in France by the strength of the left.

4.2. Wage compression and (post-)Fordism, 1930s to today.

There appears to be a long-run U-shaped evolution in wage, or pre-fisc income, inequality in a majority of OECD countries: First a decline from 1920s until the middle of the century followed by a sharp increase starting in the 1970s. It also appears that periods of compression have been characterized by smaller differences in inequality across countries, while periods of greater dispersion have been marked by greater differences.

where  \( y \) refers to social spending,  \( D \) to the time dummies, and  \( i \) indexes countries,  \( t \) time, and  \( k \) a set of control variables  \( (X_i) \). The model is estimated using non-linear least squares. The model described in the previous paragraph sets  \( \beta_1 = 0 \).

\(^{96}\) Atkinson 2003.
Significant changes in dispersion notwithstanding, the cross-national ranking of countries appears to have been quite stable, at least in the postwar period. The correlation between pre-tax d5/d1 ratios for the 1970s and 1990s is .97 for nine countries where data are available (OECD, undated), and using evidence for pretax income inequality, the correlation between the 1950s and 1990s is .92 for 10 countries. This persistence is notable because the 1980s and 1990s were decades of dramatic increases in wage inequality in some countries. In other words, while inequality changes quite dramatically over time the ranking of countries does not.

This conclusion is much harder to corroborate for the prewar period where comparable data are scarce. Tax return data have recently become available for top incomes in a number of countries, and there has been considerable volatility in these over time. But top incomes include a large component of capital income and inequality at the lower end of the income scale appears to be much more stable. As Roine and Waldenström conclude based on the Swedish tax data:

"The income share going to the lower half of the top decile (P90-P95), which consists mainly of wages, has been remarkably stable over the entire period [between] 1903 and 2004." 100

Based on this type of evidence we may conjecture that country rankings were also relatively stable in the prewar period. Still, we need to account for the U-shaped change in the wage distribution over time – a change that appears to have occurred everywhere to some degree. PRT would point to changes in unionization rates and the level of centralization of bargaining institutions. Certainly these variables are correlated with wage compression. But why did unions become stronger and more centralized in this period?

Our perspective roots union power in co-specific assets. Changes over time,

97 See Piketty 2005; Piketty and Saez 2006.
98 Scheve and Stasavage 2007.
100 Roine and Waldenström 2008, 367.
including institutional change, are in large measure a reflection of changes in technology. The notable move towards centralized bargaining and compression of inter-occupational wages that occurred across OECD countries from the 1950s until the end of the 1970s must be understood in the context of the spread of Fordist mass production, which generated strong complementarities between skilled and semi-skilled workers and gave the latter a level of bargaining power they heretofore had lacked.102

Correspondingly, our explanation for the sharp rise in wage inequality in the 1980s and 1990s is that the complementarities between skilled and unskilled workers were undone by the widespread application of the microprocessor as well as the segmentation of the occupational structure caused by deindustrialization. Unlike the old assembly line, low-skilled workers in the new types of production are not strong complements to skilled workers and therefore cannot easily extract rents from skilled workers. In relatively fragmented bargaining systems such as the British this has meant a loss in power of semi-skilled unions with union membership declining as a consequence. In some northern European countries with highly centralized systems the changes have caused skilled workers and their employers (especially in the engineering sector) to break out of the centralized systems.103

Yet in all the countries where skilled workers and employers had made major investments in co-specific assets, wage coordination was re-established at the industry or sectoral levels, with a more marginal position for semi-skilled workers. The central role that unions continue to play in these counties is explained by the fact that skilled workers are still co-owners of major production assets that are irreplaceable for employers. This is less true in countries like Britain and the US and has resulted in a more widespread collapse of union membership. While this collapse was furthered by partisan attacks on the organizational foundation of unions, as PRT would point out, such attacks were made possible by the liberal underpinnings of the economy.

Finally, it is important to consider the dimensions of distribution and redistribution together. It is precisely in liberal countries where the decline of unions was

102 Wallerstein 1990 models this situation by assuming that members of different unions are complements in production.
most severe that a majoritarian political system militated against political coalitions that could compensate for rising inequality though redistribution. By contrast, in coordinated economies with PR systems, especially of the social democratic variety, the rise in labor market inequality was less dramatic and the political system facilitated the formation of redistributive coalitions that could compensate losers through the welfare state and active labor market policies.

5. Co-evolving systems: welfare states, varieties of capitalism and political institutions.

In this concluding section, we draw out the central aspects of our approach to distribution and redistribution and more generally to welfare states and the analysis of power and institutions. There are points of contact with Korpi’s explanation of Power Resources Theory, but our work is different in its micro analysis, in its understanding of modern welfare states, and in its historical account of their origins. At a quite fundamental level we suggest how the power balance between employers and workers, as well as among workers, cannot be taken as exogenous but instead reflects differences in the level and type of investments economic agents have made in the economy. Because PRT takes power as the starting point, it cannot explain why it varies across time and space. This is true both in the analysis of economic institutions, such as unions and coordinated wage bargaining, and in the analysis of political institutions, such as strong left parties and PR. We have to treat these institutions as endogenous to the structure of production and investments in economic assets. And these differences in turn depend on economic, welfare and political institutions, which themselves depend on earlier patterns of investment, and so on: varieties of capitalism, welfare states and political institutions thus co-evolve.

103 See Pontusson and Swenson 1996 and Iversen 1996 for related accounts.
More specifically, the main elements of our approach can be summarized as follows:

(1) *Welfare states as skill insurance systems in varieties of capitalism.* Most fundamentally, in our perspective welfare states are the insurance systems which accompany the different nature of skill formation in different varieties of capitalism. The institutions of coordinated economies encourage widespread investment in *deep co-specific skills*, where the co-specificity covers companies, sectors and/or occupations. Hence, such systems require unemployment insurance and pensions offering high replacement rates as in Scandinavian or Continental welfare states.

The institutions of liberal economies encourage by contrast widespread investment in general or mobile skills. Since reinsertion into employment is relatively easy after separations or to supplement pensions the need for state-provided insurance is low, and Liberal safety-net welfare states are the consequence. This is an argument about high *horizontal* mobility between firms and industries; it does not imply that vertical mobility between income groups is high. In fact, investment in high general education, such as college degrees, is an insurance against permanent income loss and hence poverty. In such a system, there will be little sense of commonality of interests between the middle class and the poor. This conclusion is reinforced when we look beyond insurance and consider the welfare state as a system of redistribution, discussed below in (4).

(2) *Wage coordination as regulation of co-specific assets.* Union centralization and/or coordinated wage bargaining plays a major role in our argument – as it does in Power Resources Theory – in determining the equality of the earnings distribution (D). But for us this derives from the different nature of skills in different varieties of capitalism. Groups of workers are strong when they can credibly threaten to hold up employers. This is a consequence not of employment or skills *per se* – employers can in principle replace workers with general skills at low cost – but of skills which are costly to replace and whose withdrawal is costly to the employer in lost production. Thus *co-specific* skills cause particular problems for employers; and for employers to invest in them, they need the assurance that wages will be set *outside* the company, whether across
the industry or more widely, hence disciplined unions and industry or economy-wide bargaining. Clearly, this requires solutions to collective action problems, and in our account such solutions were only possible in countries which had initially been organized into strong guilds and Ständestaaten (see 6 below).

Workers with co-specific assets also have an insurance need for strong unions and coordinated wage bargaining. For they need to know that the return on their investment in co-specific assets is not going to be eroded by employer hold-up or more generally by changing demand patterns. Hence we see coordinated wage bargaining and egalitarian distributions as stemming in part from an insurance need of co-specific asset investment by both employers and workers in coordinated economies.104

In part wage compression also reflects the relative power of workers with different skills. When skilled and semi-skilled labor are strong complements in production, even small groups of workers have the capacity to cause serious interruptions in production. Semi-skilled workers in that situation in effect become co-owners of a specific asset (specialized machinery), and they gain bargaining power as a consequence. The most prominent example of this logic is the rise of Fordist mass production, where interruptions anywhere in the assembly line could shut down the entire production process. Not surprisingly, this is a period with falling wage dispersion across countries. Conversely, the end of Fordism in the 1980s was associated with a rise in wage inequality as the complementarities between semi-skilled and skilled workers unraveled.

(3) **Implications for consensus and majoritarian political systems.** We also argue that the type of political system is central to our analysis. Empirically, coordinated market economies cluster with strong welfare states and consensus political systems; and liberal market economies cluster with weak welfare states and majoritarian political systems. This clustering follows directly from our logic of the set of rules and understandings governing the production and maintenance of skills and their insurance.

---

104 Reinforcing this is the fact that in coordinated economies, employers and unions have the capacity to, and share an interest in, resolving the negative externalities of uncoordinated bargaining on inflation or competitiveness, because otherwise higher unemployment is needed to stabilise inflation or the real exchange rate.
Whatever that set of rules and understandings, its framework is underwritten by the political system. Where skills are co-specific assets, multiple actors – business, labor and handwork organizations covering many different sectors of the economy – will only be prepared to invest in them if they are represented directly, as well as indirectly via political parties, in their political regulation. Hence a consensus system of political regulation is necessary for co-specific skill formation to be widely viable. In practical terms this means proportional representation of different parties in legislative institutions, especially parliamentary committees, which are themselves closely integrated with a bureaucracy where major interest groups enjoy direct representation (“corporatism”).

(4) The partisan and redistributional consequences of political systems.
Proportional representation has two aspects which the literature has traditionally kept apart: the consensus (or inclusive) regulatory politics explained in (3) above, and a minimum winning coalition (or exclusive) politics of redistribution. As explained in section 2, the politics of redistribution in PR systems favors the center-left, at least in a simple three party – Left, Center, Right – legislature. If the Center cannot govern by itself it will prefer a Center-Left coalition to impose high taxes on an excluded Right.

But this makes the precise pattern of coalition partners centrally important for understanding redistribution in PR systems. And it points to the critical importance of understanding parties in terms of the economic interests of the groups they represent, rather than social cleavages. PR permitted a center-left alliance between social democrats and independent peasants in Scandinavia, allowing substantial redistribution as well as insurance. By contrast – we suggest tentatively – the linkage of the economic interests of independent small-holding peasants, parts of the handwork sector and small business was behind the success of Christian democracy in a range of countries, and this enabled center-Christian Democratic alliances with insurance but less redistribution.

Our analysis also explains why the relation between redistribution and center-left governments needs to be mediated by electoral systems. With a majoritarian system, where a center-left party has to credibly commit to a median voter platform, center-left governments – such as Blair’s – will imply low redistribution. This is of course in
addition to the fact that majoritarian systems are less likely to produce center-left governments.

(5) Choosing political systems. The type of capitalism determines national political systems. In our argument embryonic patterns of capitalist industrialization – the presence or absence of coordinated co-specific investments at different territorial levels, and whether or not co-specificity linked town and country – predate and explain the choice of national political systems. Proportional representation (consensus) as opposed to the retention of majoritarian systems in the early twentieth century was adopted by countries with coordinated co-specific investment systems as industrialization pushed the centre of gravity of economic networks to the national level from the local and regional; it reflected the need for national representation as standard-setting increasingly took place at the national level instead of the local and regional.105

In most cases PR was chosen by the center and right (the left not having a full franchise). Given the redistribuational consequences of PR in (4), its choice implied that the center and right put the positive representational benefits above the redistributive costs. It mattered for this calculation that redistribution simultaneously serves insurance purposes, which is a precondition for investment in skills that employers in coordinated systems rely on (see 1 above). In particular, redistributive policies that reduce the loss of income in the event of adverse shocks to firms or industries are at the same time forms of income insurance.

(6) Origins. Section 3 explains the origins of the quite different broad arrangements which start to emerge at the end of the nineteenth century and build up over the next decades for the structuring of labor markets and skill formation – on the one hand, the essentially deregulated systems of the liberal economies, and on the other the more regulated systems permitting workforce cooperation and systematic skill-formation in the coordinated economies. In the deregulated liberal case, there is a zero-sum game between fragmented craft unions and hostile employers, with neither side strongly organized. In the regulated coordinated case, broad framework agreements gradually emerge between increasingly centralized business and union organizations.
The observer in the mid nineteenth century would not necessarily have predicted these divergences: embryonic unions were everywhere craft unions, and companies were almost everywhere hostile to them. Why then this ultimately fundamental divergence? In our view, which draws heavily on Thelen\textsuperscript{106} and Crouch\textsuperscript{107}, both on the union side and on the employer side there were key differences between the liberal and the coordinated world: In the liberal world the possibility of sustained collective action did not exist on either side; that reflected the dominance of a liberal state tradition and the absence of a serious guild tradition. In addition, consequence of the absence of guilds and of the demise or non-existence of a widespread independent but collectively-organized peasantry, the labor force available to meet the demands of industrialization was primarily unskilled. Thus industrializing companies in the liberal economies built their operations with a bias towards unskilled and semi-skilled labor. The skilled workers that employers needed were likely to be craft union members. But neither individual businesses nor unions could solve the collective action problems needed for more regulated labor markets and skill formation systems, and neither side had a strong incentive to do so: hence business strategies towards skills focused either on developing technologies which minimized the use of skills or on excluding unions or on minimizing their power within plants.

By contrast in the economies which became nationally coordinated, collective action was encouraged by the background traditions of guilds and Ständestaaten\textsuperscript{108}, as well as the coordination in decentralized industrial districts. While late industrialization may be a part of the story\textsuperscript{109}, Herrigel’s work makes it plain that it is only one part.\textsuperscript{110} Given that collective action is possible, both employers and unions have incentives to develop a coordinated solution to specific skill formation and workplace cooperation. In addition in our argument pre-industrial localized traditions of skill formation are important. This is because an effective guild system implied that industrializing

\textsuperscript{105} Herrigel 1995 points in Germany to a similar phenomenon structuring federalist institutions.
\textsuperscript{106} Thelen 2004.
\textsuperscript{107} Crouch 1993.
\textsuperscript{108} Crouch, 1993.
\textsuperscript{109} Gerschenkron 1966.
companies could call on a ready supply of skilled labor, thus having an incentive to focus on skill-biased production – at least if they could solve the problems of hold up associated with skilled workers. An effective guild system also removed the incentive for embryonic unions to attempt to control the supply of skills or to control their job content. Thus both employers and unions had a joint incentive to exchange skilled workforce cooperation for collective bargaining, and ultimately for joint engagement in creating a skill formation system fashioned for the needs of industry.

In relation to the perspective sketched in this paper, a view which focuses on left power as the fundamental exogenous determinant of high redistribution and of egalitarian distribution of income seems inadequate. We have important points in common with Korpi, and we see Power Resources Theory as the catalytic intellectual development behind welfare state analysis. But in our view business and its political representation is as important as labor in understanding strong welfare states. Note, though, that this implies that an approach which is largely “employer-centered”, highly influential though it has been on our thinking, is also incomplete (Swenson, Mares, Martin). Although Crouch was looking at the origins of different systems of industrial relations, his broad conclusion in relation to corporatist systems is echoed by ours: The advanced countries with strong welfare states today are those in which economies were locally coordinated a century and a half ago; and whose state tradition was one of functional representation and limited autonomy of government to different interests.

110 Herrigel 1996.
111 Thelen 2004.
Bibliography


OECD (undated). *OECD Electronic Data Base on Wages*. 

54


Figures and tables

Figure 1. Inequality and redistribution (ca. 1970-1995)

Notes: For each country there are four markers. Squares are for the d9/d5 earnings ratio; circles for the d5/d1 earnings ratios. Each marker identified by a country label refers to the reduction in the poverty rate (left axis), which is the percentage reduction of the poverty rate (the percentage of families with income below 50 percent of the median) from before to after taxes and transfers. Right below each labeled marker is a marker for the corresponding reduction in the Gini coefficient (right axis) from before taxes and transfers to after. The redistribution measures for Italy is from after taxes to after taxes and transfers. The data are limited to the countries included in Bradley et al. (2003).

Sources: OECD Electronic Data Base on Wages (undated); Bradley et al (2003) based on the Luxembourg Income Study.
Figure 2. PR and non-market coordination

Figure 3. A sketch of the causal argument.

Distributional equality (D) \[\rightarrow\] \[\leftarrow\] \[\rightarrow\] \[\rightarrow\] \[\leftarrow\] Redistribution (R)

Equality of educational distribution \[\rightarrow\] Coordinated wage bargaining \[\rightarrow\] Specific assets/skill system \[\rightarrow\] Organized labor and business social policy preferences

Center-left governments/corporatism \[\leftarrow\] Coordinated wage bargaining

Adoption of PR electoral system \[\sim1920\] \[\leftarrow\] Coordination of economic activity \[\sim1900\]
Figure 4. Vocational training and redistribution

Notes: Poverty reduction is defined the same way as in Figure 1. Vocational training intensity is the share of an age cohort in either secondary or post-secondary (ISCED5) vocational training. The data are limited to the countries included in Bradley et al (2003).

Figure 5. Earnings Equality and Centralization of Wage Bargaining

Notes: Wage equality is measured as the ratio of gross earnings (including all employer contributions for pensions, social security etc.) of a full time worker at the bottom decile of the earnings distribution relative to the worker at the median (d1/d5 ratios). Figures are averages for the period 1977-1993 computed from the OECD Electronic Data Base on Wages (undated). Centralization is measured as the one divided by the number of unions at different bargaining levels weighted by relative union size (“concentration”) and then transformed into a single number depending on the importance of different bargaining levels (“centralization of authority”). The index is from Iversen (1998). Centralization data are not available for Australia and New Zealand.
Figure 6. The percentage of adults with poor literacy scores (bottom scale), and the percentage of adults with low education and high scores (top scale). 13 OECD countries, 1994-98.

Notes: The top bars (using top scale) show the percentage of adults who have not completed an upper secondary education but have high scores on document literacy. The bottom bars (using bottom scale) show the percentage of adults taking the test who get the lowest score, averaged across three test categories.

Source: OECD/Statistics Canada Literacy study (OECD/HRDC, 2000)
Figure 7. Social spending in 16 industrialized democracies, 1880-1990.

Notes: Filled circles indicate PR electoral institutions, triangles indicate majoritarian institutions. The figures for 1940 are estimates using the growth in total general government non-military spending from 1930 to 1940 (the correlation between general government spending and social spending is 0.92). The observations marked with an x are for France. The other countries for which data are available are Austria, Australia, Belgium, Britain, Canada, Denmark, Finland, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, and United States.

Table 1. Electoral system and the number of years with governments farther to the left or to the right than the median legislator (1945-98).

<table>
<thead>
<tr>
<th>Electoral system</th>
<th>Government partisanship</th>
<th>Proportion of right governments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Left</td>
<td>Right</td>
</tr>
<tr>
<td>Proportional</td>
<td>291</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>(9)</td>
<td></td>
</tr>
<tr>
<td>Majoritarian</td>
<td>116</td>
<td>226</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(7)</td>
</tr>
</tbody>
</table>

*Note:* Excludes governments coded as centrist on the Castles-Mair scale.

Source: Cusack and Engelhardt 2002.
Table 2. Type of economy, party dominance on the right and electoral system

<table>
<thead>
<tr>
<th>Organization of production and labor</th>
<th>Single right party dominance?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No guilds / cooperatives, weak employer coordination, and craft unions</td>
<td>United Kingdom, United States</td>
</tr>
<tr>
<td>Guilds/ cooperatives, employer coordination, and industrial unions</td>
<td>Belgium, Denmark, Greece, Switzerland, Italy</td>
</tr>
<tr>
<td>Ambiguous cases</td>
<td>France, Japan</td>
</tr>
</tbody>
</table>

Notes: *Italicized* countries retained majoritarian institutions. Bolded countries had left parties with above median electoral strength in the last election before the adoption of PR, or, in the cases where countries remained majoritarian, the first election under universal male suffrage. Referring to the same elections, single party dominance is measured by the percentage lead of the largest party over the next largest party. The “right party dominance” cut-off point is the value that would produce a number of countries with a dominant right party that is equivalent to the number of countries (7) that actually remained majoritarian.