DISTRIBUTION AND REDISTRIBUTION:

THE SHADOW OF THE NINETEENTH CENTURY

Torben Iversen
Department of Government
Harvard University

David Soskice
Department of Political Science
Duke University

A previous version of this paper was presented at the 2006 Annual Meetings of the American Political Science Association, August 31 - September 3, in Philadelphia. We would like to thank Sven Beckert, Suzanne Berger, Charles Maier, Peter Gourevitch, Cathie Jo Martin, and Daniel Ziblatt, and in particular Peter Hall, for many helpful comments.
Abstract:

Walter Korpi (World Politics 2006) argues that Power Resource Theory (PRT) remains the most promising approach to the study of why some democracies are more egalitarian and redistributive than others. While we agree that left partisanship and union power are important, we argue that they are endogenous. Specifically, center-left governments result from PR consensus political systems and strong unions from coordinated capitalism. By contrast majoritarian systems have had a center-right bias, and liberal capitalism has generated deregulated labor markets and weak unionization. These differences in systems of political representation and in the institutional frameworks governing labor markets developed jointly in the early twentieth century. They emerged from two distinct political economic origins which can be traced back to the second half of the nineteenth century. On the one hand, locally coordinated economies with guild traditions, and on the other market-based liberal economies.
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 (Korpi 2006), explaining this diversity, and its persistence, is a main task for anyone interested in understanding the workings of modern capitalism.

Korpi argues that power resource theory (PRT) provides the most convincing account of this pattern. 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 1983, 1989, 2006; Esping-Andersen 1990; Stephens 1979; Huber and Stephens 2001). 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 (2006, 171) 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 (1980), Przeworski (1986) and others, economic performance under capitalism depends on the cooperation of capital. And, the remarkable fact about the observed relationship between spending, investment, and national income in advanced democracies is that there is none (Lindert 1996; Pontusson 2005). Among contemporary democracies, the countries with the largest welfare states are no poorer than countries that spend much less. If we want to understand how capitalism has thrived in large redistributive welfare states, power resource theory is simply no help.
Second, although there is mounting evidence for a fairly strong relationship between left partisanship and redistribution (see, for example, Hicks and Swank 1992; Huber and Stephens 2001; Kwon and Pontusson 2005), there is no explanation in PRT for why the left is strong in some countries and not in others. Such strength is only weakly related to unionization (Iversen and Soskice 2006), and unionization is itself left as an unexplained variable. Moreover, if we use a simply 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 (Laver and Schofield 1990). PRT does not explain why the median voter theorem is systematically violated.

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 Scott Richard (Meltzer and Richard 1981) argues precisely that. Their key result is that if one holds mean income constant, and with a standard right-skewed distribution of income, higher levels of inequality is associated with a lower median income and more demand for redistribution. The implication is that an equal distribution of market income and government redistribution should be negatively correlated. But as noted in the first paragraph this is not the case. Data for advanced democracies consistently show equality in market income to be associated with high redistribution (Bénabou 1996; Perotti 1996; Lindert 1996; Alesina and Glaeser 2004, Moene and Wallerstein 2001). Figure 1 illustrates this “Robin Hood paradox” for a sample of countries.

[Figure 1 about here]

The alternative that we outline in this paper not only solves this puzzle, but explains why some countries are dominated by center-left governments. Moreover our approach explains why this has not undermined the incentives of employers to invest in the
economy. Our alternative is rooted in a varieties of capitalism framework (Hall and Soskice 2001) and builds on much of the work that Korpi criticizes (in particular Swenson 2002 and Mares 2003). As in Estevez-Abe et al. (2001), 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.

In brief, we argue 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 that functioned in a manner 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 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. This co-evolution resulted in a remarkable persistence in the comparative patterns of inequality and redistribution: The high equality, high redistribution economies today appear to also be the ones with these traits during most of the 20th century and even earlier.  

1 Although very long time series do not exist, comparing data on income inequality and government spending for the 1950s and 1960s to the 1980s and 1990s reveals high levels of persistence in both. The cross-time correlation for income inequality is .92 for 10 advanced democracies and .84 for a larger sample of 38 countries -- including democracies and non-democracies, as well as developed and less developed countries. For total government spending (an imperfect measure of redistribution), the correlation is .85 for 20 OECD countries.
In developing our argument we begin by explaining the positive relationship between distributional 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 the generation of specific skills, reinforces both median voter and business support for wage compression and strong welfare state insurance.

The positive correlation between distributional equality and redistribution is in turn explained by a positive correlation between PR and coordinated capitalism. Using a composite measure of PR\(^2\) and two measures of non-market coordination,\(^3\) 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.

[Figure 2 about here]

---

2 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).

3 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.
Section 3 offers a historical explanation of the positive correlation between PR and coordinated capitalistic systems based on Cusack, Iversen and Soskice (2007). The argument is that the countries in which there is now a high degree of coordination, and in which economic coordination was beginning to move to the national level as industrialization developed through the second half of the nineteenth and the start of the twentieth centuries, had previously been primarily coordinated at the local and regional levels. Locally coordinated economies favored the development of specific assets, and the choice of PR – occurring in most of these economies between 1910 and 1925 – reflected the need for local and regional economic interests to ensure representation at the national level to protect and regulate these assets. Despite its redistributive consequences, the choice of PR was largely a choice by the center and right. They could have subsequently reversed the choice in light of its distributive consequences, since even in countries with a strong left, the center and right parties have held a legislative majority in most of the 20th century. But they did not. PR is no accident.

In section 4 we revisit power resource theory. We 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. Had that been the sole motivation in designing electoral institutions PR would have emerged only by mistake. But employers and the right deliberately chose PR because of the opportunities this representative system created for collaborative arrangements with labor in which common interests, especially in the regulation and expansion of specific human capital, could be effectively attended to. Once in place, PR and center-left dominance undoubtedly 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.

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. Moene and Wallerstein (2001) derive a positive relation based on an insurance argument, but though elegant it rests on an implausible assumption\(^4\).

Instead we suggest that two factors, the extent of consensus in the political 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 (Gourevitch 2003). 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. 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. We look at two mechanisms through which this occurs and which have been the subject of considerable research.

\(^4\) Moene and Wallerstein (2001) assume that benefits are targeted to the non-employed and that risk aversion is sufficiently high for the relationship between income and preferences for spending to be positive in the relevant interval around the median voter.
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 investments is that there are adequate protections in the event of company or industry failure. As argued in Estevez-Abe et al (2001), 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. 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 it 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 (Iversen 2005).

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 eliminate 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 demand adequate insurance against illness and old age.

---

5 We shall see that this is not the only use of coordinated wage bargaining.
Business social policy preferences and Redistribution. Governments decide on replacement rates. In doing so they respond to pressure from organized interests. Unions will naturally support unemployment protection. But against widely held 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 (Swenson 2002; Martin 2000; Mares 2003). 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. We will rest here with the argument that they are necessary for persuading employees to invest in deep specific skills. Of course, actual replacement rates are also influenced by government partisanship; as will be seen, CMEs tend to have more than average left of center governments; so business associations in CMEs may well call for reductions in replacement rates. 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\(^6\). 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 government, which undermines the incentives of parties to cater to business interests (Martin 2006). 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 congressmen.

\(^6\) At least in recent decades, though see Swenson for the US in the interwar period.
**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 (2001) we show the relatively weak conditions (especially risk averseness) 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 equal incomes in LMEs. This translates into higher actual spending and redistribution if political parties are able to commit to long-term platforms that insure currently employed workers (who are more likely to be politically decisive) 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 (see also Iversen 2005, ch. 4). The empirical correlation between vocational training activity (as a measure of specific skill) and redistribution through taxes and transfers is illustrated in Figure 4.

![Figure 4 about here]

**2.1.2 Coordinated/centralized wage bargaining and Distribution.** Why should coordinated economies be more associated with egalitarian distribution of income? The basic argument is that coordinated economies encourage collective and coordinated wage bargaining, and that collective, centralized and coordinated bargaining leads to more egalitarian outcomes (Wallerstein 1999; Rueda and Pontusson 2000). The relationship is illustrated in Figure 5.

![Figure 5 about here]
The explanation has several components. Coordinated economies privilege bargaining procedures in which the locus of bargaining is above the company level, so that there can be some degree of coordination across bargaining units. There are two reasons for this. 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. One reason has to do with the nature of union bargaining, which has been shown to lead to more compact distributions (Freeman 1980). 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 in turn that the bottom half of the workforce are 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 effectively advanced 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 (Iversen 1999). The more centralized the wage-bargaining, the more encompassing the bargaining unit, and the more compact the resulting distributional outcomes (we will address recent changes in collective bargaining institutions in section 4).

The second reason is this: Suppose that all that coordinated bargaining did was to keep relativities constant, so that if \( N \) individuals start off with real wages \([w_1, w_2, \ldots, w_N]\), they will have real wages \([kw_1, kw_2, \ldots, kw_N]\) after a certain period of time. Now imagine a decentralized system starting off with the same real wage vector, and that the wages of each individual after the same period are drawn from a non-degenerate random distribution with mean \( kw_i \). Then the distribution of the second group will be wider than
that of the first over time since some will have wages below \( kw_1 \) and some above \( kw_N \). Thus, the equality of the distribution of individual incomes will depend on the degree of coordinated wage bargaining.

### 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 (2003) have emphasized, 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,\(^7\) 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 (Hall and Soskice 2001); 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 (Gourevitch 2003). 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.

---

\(^7\) The insurance function operates of course in LMEs as well, but with a greater weight of general skills less insurance is needed.
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 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 (Cusack and Engelhardt 2002). 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.\(^8\) 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.

\(^8\) We excluded governments that were coded as centrist by the one expert survey (Castles and Mair) which explicitly identified parties as such.
What accounts for this surprising relationship? We sketch out here an argument developed in detail elsewhere (Iversen and Soskice 2006). 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 is excluded is a take-it-or-leave-it offer from M\(^9\). 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. Thus the upshot is that PR systems tend to privilege center-left coalitions and that such coalitions 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 electors 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, ceteris paribus, M has less to fear from an MH government moving right than from an LM government moving left. Under reasonable assumptions 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 platform commitment can never be complete.\(^{10}\)

\(^9\) 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.

\(^{10}\) 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
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 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 has 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 redistributive, but some of these nevertheless are directed to those with high incomes (H).

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.
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. If so, 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 (2006) assumes that policies are limited to redistributive transfers. But a similar argument can be run with the three groups competing for expenditure on education for their own group (Iversen and Stephens, forthcoming). 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 coalition11.

Ansell (2005) has recently documented that left governments spend relatively more on primary and secondary education than right governments, which benefits low income groups more than high income groups. Boix (1998) has likewise shown that the left governments spend more on public education than right governments. Ansell demonstrates that similar effects can be attributed to PR electoral systems, though Iversen and Stephens (forthcoming) show that this is less true in PR countries where Christian Democratic parties are strong.

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 (OECD 2000), which does consider more directly the level and distribution of skill acquisition. We confine our attention to the

11 Though note too that this weakens the center-right bias in majoritarian systems, since a left deviation is less frightening for M.
advanced economies included in the survey.\textsuperscript{12} 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 bottom scale) show the percentage of adults taking the test who get the lowest score, averaged across the three test categories\textsuperscript{13}.

[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.

3. Patterns of industrialization and representation in the late 19\textsuperscript{th} 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 the focus of this section.

Specifically, we need to answer the following set of questions. First, what explains why some countries adopted proportional representation in the early 20\textsuperscript{th} century? Second, why had the same countries developed at least proto-coordinated

\textsuperscript{12} Flanders have been included for the sake of completeness, but it is likely that linguistic ability among adults is limited as a result of internal migration.

\textsuperscript{13} A more detailed analysis of the literacy data is provided in Iversen and Stephens (forthcoming).
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? One country is difficult to place, France. So a fourth issue to explain is French exceptionalism.

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 1970 (Rokkan 1970), Cusack et al. (2007) is the only serious challenge to the view that social cleavages (religious, territorial and ethnic) explain PR. And since Esping-Andersen’s analysis in 1990 (Esping-Andersen 1990), it has been further generally accepted that these same cleavages, in particular the religious, help explain patterns of welfare states – at least between Scandinavian and Continental. 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 embedded in production systems. Two of the books on which we most rely to make our argument are Thelen (2004) – on the development of training systems – and Herrigel (1998) – on decentralized production regions. Yet neither of them mentions party politics, nor religion. Another book which has proved of great value to us, Manow and van Kersbergen (2007) on religion and the welfare state, focuses on the role of political parties and religion, but largely neglects detailed discussion of production systems. In this section we attempt to link the development of parties with the representation of economic interests: inevitably tentative historically at this stage, it points to a major historical research agenda.

3.1. Economic interests and systems of representation

Following Cusack et al. (Cusack, Iversen and Soskice 2007) we stress the need to analyze PR systems more broadly than has been customary. Two quite different analyses of PR are put together in that article: on the one hand, PR has been analyzed by Huber and Stephens (2001), Iversen and Soskice (2006), Manow and van Kersbergen (2007), and
implicitly by Baron and Ferejohn (1989), in terms of minimum winning coalitions – an approach going back to Riker (1962). By contrast to this exclusionary view of PR, a quite different inclusionary approach, that of “consensus” bargaining, has been promoted by Lijphart (1984), Crepaz (1998), Powell (2000), Colomer (2006), among others. The focus here is on the effectiveness of PR in enabling Pareto improvements in welfare (Rogowski 1989). Here we follow Cusack et al. (2007) in arguing that PR systems typically embody both approaches. But they deal with 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 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. 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 economies in which investments in co-specific assets are important (Iversen 2005). 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 19th and the first part of the 20th 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. Through the period we consider local economic networks developed into national networks, just as simultaneously labor moved into industry from agriculture and
artisan or unskilled pre-industrial work in the towns. At the same time entrepreneurs and financiers 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 one that refers to 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 cooperative 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 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, the task of the following three sections.

3.1.1. Liberal economies and majoritarian political systems. In the liberal case (see Figure 7) 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; with some exceptions an independent land-owning peasantry did not exist.
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 had a major effect on the form which unions took: Since it was almost impossible 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 political structure of the liberal state was anti-corporatist. Thus businesses found it difficult to develop strong self-disciplining associations. This 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 control/reduce the supply of skills to increase their bargaining power and 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, minimizing welfare and unemployment benefits in order to weaken the power of unions. Industrially it favored the introduction of technologies which reduced the need for skilled labor.

The consequence of these mutually reinforcing centrifugal incentive structures between unions and employers during this critical formative period for labor market...
arrangements was to place the liberal economies firmly into the zero-sum game, or minimal winning coalition, camp. 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.

This lack of business and union interest in participation in cross-class collective action to develop a cooperative system of industrial relations, still less a certified system of skill formation, and the prior inability of both unions and business to coordinate to solve collective action problems in a sustained way, impacted directly on the political system. In the first place such legislation as there was (in the UK Factory Acts regulating in particular women and children’s work and safety) was designed to be enforced by the state through inspectors and ultimately through the courts.

The second implication is more interesting. 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). Typically labor had a partial representation within other parties at the national level; in this, craft unions played a significant part in order to prevent or minimize anti-union legislation; while there were small socialist organizations (ILP, IWW, Knights of Labor) they were without great influence; and these parties kept skills and training off the agenda, devolving it to the market place. Thus politically, labor was not a unified working class in national politics. It was highly segmented, and earnings differentials between craft workers and those in the large underclass (the “great residuum” as it was known to the late Victorian middle classes in London) meant that the aristocracy of labor was unlikely to vote for redistribution to the poor.

It is appropriate to finish this section by noting that across the Anglo-Saxon world at this time there were deeply important social cleavages. There were religious cleavages in England (between the dissenting churches and the Anglican established church), 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. Our argument is that these social cleavages did not cover important co-specific asset groups which demanded to be included in consensus representation at the national level in the early 20th century as industrialization pushed economic networks up to the national level from the regional and the local.

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, the Christian Democratic party played a major role in most coalitions, generating a particular welfare state as discussed earlier – so-called conservative, Christian democratic, or continental welfare states.\footnote{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.}

The broad historical functioning of this group of countries is set out in Figure 8. The first major difference in the starting points from those in the liberal economies in Figure 8 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\footnote{There are exceptions on land ownership, including East Prussia and the Mezzogiorno, as well as the Ruhr region in W Prussia.}. 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 (2004) 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 unions saw a common interest with industrial employers in extending the training system and deepen the skills of workers. 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 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 tradition in which government operated partially through groups (estates); the Ständestaat can be thought of as at the origin of neo-corporatist regimes (Crouch 1993). 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 19th 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 (Swenson 1991). 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 (Kocka 1986). Moreover, as skill formation in industry became part of the industrialization agenda, unions and industry became the representative partners in massive investment in specific assets; with such investments came the need 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.

Thus the right representing business had a strong reason to favor proportional representation, even if it could see that a majoritarian system would focus on the redistributive needs of the middle classes and thereby push out the redistributive claims of low income groups. For business had no guarantee that the median voter would support the sweep of labor market and training arrangements that it wanted, 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 were interested, as were their social democratic union counterparts, in extending skills throughout the working class. Yet this strategy was hardly compatible 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.

Scandinavian and continental countries had much in common in their Ständestaat and guild backgrounds. Why the subsequent differences? We want to develop here an explanation, based on economic interests, of the differences in party systems which were
created in the late nineteenth century and ultimately in the coalitional patterns which were their consequence.

Continental countries differed from the Scandinavian in one key respect. In the continental countries the peasant dominated countryside was more closely integrated into the urban economies than in the Scandinavian (Herrigel 1996, Hechter and Brustein 1980). If the formerly strongly feudalized areas (mentioned in footnote 2) are excluded, something like this pattern seems to be traceable a long way back in history. Hechter and Brustein use the term “petty commodity production” areas to describe it, and they begin their account in the 12th century (Hechter and Brustein 1980). While a great deal more work is needed to pin down the connections, these areas seem clearly related to the decentralized production regions identified by Herrigel in South and West Germany (Herrigel 2000). Herrigel pointed to the most notable of these districts in Germany, but we can imagine that on smaller scales they were widespread, and throughout the areas of western Europe where autonomous urban centers had dominated non-feudal surrounding country-sides. 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 (1980) 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.’ (Herrigel, 29, 1996)

These regions were by no means universally catholic. In Germany neither Saxony (pre-

---

16 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.
1871 Kingdom), nor North Wurttemberg were catholic, though much of the other areas of decentralized production, covering the south and south-west of Germany seem to have been. In Switzerland there were some predominantly strong rural cooperative cantons, but all were protestant (Rokkan 1970). 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 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 explanation 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* was not a necessary condition for the persistence of Christian Democratic parties, 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 for their independence from the Church already by the 1890s, and had clearly defined themselves as independent by the 1920s (Kalyvas 1996). Compellingly, Kalyvas further shows that the different Christian Democratic parties were organizing themselves as representative parties with committees for different economic interests – as indeed they are still organized.

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 (2007), 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 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. As we noted in section 2, this moderate position made Christian democratic parties attractive coalition partners with “pure” middle class, or center, parties. So long as Christian Democratic parties could govern with these parties, redistribution remained moderate. When centrist parties were too weak to ensure a majority, as has been the case during periods in the Netherlands and Belgium after WWII, then they formed coalitions
with Social Democrats, with more redistribution as a consequence (though these countries still remain 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.

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 (see Figure 9). 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.

[Figure 9 about here]

3.2. Conclusion: 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 (Cusack et al 2007). This is also true if one examines the interaction of left strength and divisions on the right, as in Boix (1999), and it can be easily illustrated with some numbers (see Table 2). Countries with a dominant right party were no more likely to retain majoritarian institutions than countries that did not. The table also shows that countries (bolded) 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 (noted 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. The difference between Scandinavia and the other continental European countries was mainly one of how the peasantry was incorporated into the political system. In the former they were independently organized in rural cooperatives and formed their own parties; in the latter they were to a greater extent integrated into rural-urban networks and became part of a Christian Democratic coalition. This difference in the party system affected the dynamics of coalition-formation in PR systems, and hence the level and structure of social spending.

4. 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 between employers and workers, as well as among workers, cannot be taken as exogenous variables, 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. 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 basically, 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\(^\text{17}\) (Estevez-Abe et al 2001, Iversen 2005).

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. Whatever that set of rules and understandings, it is underwritten by the political system. Where skills are co-specific assets, multiple actors – business, labor and handwork organizations covering

\(^{17}\) 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
many different sectors of the economy – will only be prepared to invest in them if they are represented directly, and 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 redistribuational 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. 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 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 level, 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.

In most cases PR was chosen by the center and right (the left not having a full franchise). Given the redistributional 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

---

18 Herrigel points in Germany to a similar phenomenon structuring federalist institutions (1996).
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 (2004) and Crouch (1993), 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 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 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 (Crouch, 1993), as well as the coordination in decentralized industrial districts. While late industrialization may be a part of the story (Gerschenkron 1966), Herrigel’s work makes it plain that it is only one part (1996). 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 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 (Thelen 2004). 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. This also implies that an approach which is largely “employer-centred”, highly influential though it has been on our thinking, is 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.
Bibliography


Iversen, Torben and John Stephens. (Forthcoming). “Partisan Politics, the Welfare
State, and Three Worlds of Human Capital Formation.” *Comparative Political Studies*, forthcoming.


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

Notes: Poverty reduction 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. The d9/d5 ratio is the earnings of a worker in the top decile of the earnings distribution relative to the earnings of a worker with a median income.

Sources: Luxembourg Income Study and OECD.
Sources: Proportionality of electoral system: Lijphart (1994); non-market coordination index (triangles): Hall and Gingrich (2004); cooperation index (Hicks and Kenworthy ).
Figure 3. A sketch of the causal argument.

\[
\begin{align*}
\text{Distributional equality (D)} & \rightarrow \text{Redistribution (R)} \\
\text{Equality of educational distribution} & \leftarrow \text{Center-left bias} \\
\text{Coordinated wage bargaining} & \rightarrow \text{Specific assets/voting for insurance} \\
\text{Electoral system (PR)} & \rightarrow \text{Coordination (CME)} \\
\end{align*}
\]
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. Source: UNESCO (1999).
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 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 Employment Outlook (1991, 1996). 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).
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.
Figure 7. Liberal economies late 19\textsuperscript{th} and early 20\textsuperscript{th} centuries.

**Agriculture industry cleavage (protection).** But no positive-sum national regulatory issues over ind skills, artisan or peasant regulation. Non co-specific asset world.

- **Non-socialist labor parties** or lab repres in non-Labor parties; skill depoliticized, devolved to market
- Fragmented craft unionism; control skill supply and job content; zero-sum game with business
- No state incentives for business coordination

- Large farm, non specialization, model, dependent lab
- Majority unskilled workforce as industry develops
- Agriculture: landless rural labor force
- Urban: unregulated artisans + large unskilled workforce
- State: parliamentary, non-corporatist
Figure 8. Continental states late 19th and early 20th centuries (excluding France)

- **Christian Democratic Party** cross-class representation
- **Social Democratic Party, industrial working class**
- **Industry Unions**, grouping crafts: incentive exchange cooperation for collective bargaining rights

- **Decentralized industrial regions**
- **Majority skilled workforce as industry develops**
- **Coordinated heavy industry; state encouragement**

- **Agriculture**: independent coordinated peasants linked to urban economy
- **Urban**: Guild (or functionally equivalent) traditions
- **State**: staendestaat tradition; “liberal” officials
Figure 9. Scandinavian states late 19\textsuperscript{th} and early 20\textsuperscript{th} century
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 (9)</td>
<td>171</td>
</tr>
<tr>
<td>Majoritarian</td>
<td>116 (1)</td>
<td>226 (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><strong>United Kingdom</strong>, United States</td>
</tr>
<tr>
<td>Guilds/ cooperatives, employer coordination, and industrial unions</td>
<td><strong>Belgium, Denmark, Greece, Switzerland, Italy</strong></td>
</tr>
<tr>
<td>Ambiguous cases</td>
<td></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.