Inequality as a Source of Partisan Politics:

A Comparative Analysis of Twelve OECD Countries

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This is a paper about the effects of income inequality on party politics in affluent, industrialized countries. Having devoted a great deal of attention to the political determinants of income distribution in the 1990s, students of comparative political economy have recently begun to address how the distribution of income affects politics and, in particular, government policy (e.g., Moene and Wallerstein 2001, 2003, Bradley et al 2003, Kenworthy and Pontusson 2005, Mahler 2006). To date, virtually all the comparative literature on this topic takes the so-called Meltzer-Richard model (Meltzer and Richard 1980) as its point of departure and investigates the association between inequality and various measures of redistributive government spending. A common conclusion in the literature is that the core proposition of the Meltzer-Richard model—that inequality generates more redistributive government—provides precious little leverage, if any leverage at all, on the problem of explaining why some countries have more redistributive welfare states than others.

We seek to break new ground, theoretically, by elaborating a partisan model of the political effects of inequality or, in other words, by abandoning the Meltzer-Richard premise that the preferences of the median voter determines party policy. In our analytical framework, parties of the Left and the Right draw their core constituencies from different segments of the income distribution and inequality affects the policy preferences of these constituencies differently. In its simplest version, our model predicts that core Left voters want more redistribution and core Right voters want less redistribution as inequality rises. Empirically, our analysis breaks new ground by seeking to explain party positions in electoral campaigns, as measured by the Comparative Manifesto Project, rather than policy outputs. To some significant extent, using election manifestos to measure party positions allows us to bracket the economic and bureaucratic constraints that parties inevitably face in government and thus to focus more directly on party responses to (changes in) voter preferences.

The motivation behind this paper partly derives from McCarty, Poole and Rosenthal's (2006) analysis of the recent polarization of American politics. McCarty, Poole and Rosenthal document that partisanship in congressional roll-call voting declined in the 1950s, held steady through most of the 1960s and 1970s, and then increased sharply from the late 1970s onwards. Allowing for bidirectional causality, they demonstrate that this pattern parallels trends in income distribution in a very striking manner (and also that income has become a better predictor choice of individual party choice as inequality has increased over the last three decades).

Polarization can take several different forms. If Left parties move to the Left and Right parties move to the Right, we observe what we will here refer to as "symmetric polarization." If Right parties move to the Right while Left parties stay put or if both parties move to the Right, but Right parties move farther to the Right than Left parties, we observe "Right-skewed polarization." Conversely, "Left-skewed polarization" represents a third potential scenario. To distinguish among these alternative scenarios, we estimate the effects of inequality on Left-Right positions adopted by the main parties of the Left and the Right in each of the twelve countries included in our analysis.[1]

In seeking to test the implications of our theoretical model, we control for the center of political gravity. It is commonplace to observe that the entire political spectrum is farther to the Left or, in words, that redistributive policies are more hegemonic in some countries (say, Sweden) than in others (say, the US). It is also commonplace to observe that politics in most industrialized countries shifted to the Right or, in other words, that redistributive policies became less hegemonic in the 1980s and 1990s. For reasons that we elaborate below, we do not believe that these broad cross-national differences and trends can be explained in terms of contemporary income-distribution patterns. More modestly, our analysis demonstrates that when we control for the center of political gravity in different countries and different years it become possible to discern common political effects of inequality.

Another important feature of our analysis is that it seeks to distinguish between the effects of wage inequality among full-time employees and the effects of inequality measured in terms of disposable household income. Our theoretical framework posits that the core constituency of Left parties consists primarily of semi-skilled and skilled, but not highly educated, workers in relatively protected (stable) jobs. Typically unionized, this constituency cares more about inequality among labor-market insiders than about inequality between insiders and outsiders (cf. Rueda 2005, 2006). To anticipate, our empirical results indicate that higher levels of wage inequality are associated with more leftist Left parties and have no significant effect on the position of Right parties. By contrast, higher levels of household income inequality are associated with more rightist Right parties and have no significant effect on the position of Left parties.

We argue further that political mobilization of low-income groups conditions partisan responses to inequality. We measure this variable as combination of aggregate voter turnout and union density, expecting higher levels of mobilization to render Left parties more responsive to the preferences of workers at the bottom of the wage hierarchy and to make Right parties less rightist in their response to growing household income inequality. The empirical results reported below strongly confirm these expectations.

The paper is organized into four main sections. The first section articulates our theoretical framework. The second section discusses the dataset we have constructed to test hypotheses generated by this framework and specifies how our variables are measured. The third section presents and discusses the empirical results and the fourth section concludes.

1. Theoretical Framework

We begin by recapitulating the core elements of the well-known Meltzer-Richard model (Meltzer and Richard 1980) and show how partisanship alters the predictions of this model. We then introduce the idea that different forms of inequality have different implications for parties of the Left and the Right and develop the argument that low-income mobilization, as measured by voter turnout and unionization, condition partisan responses to inequality. Finally, we restrict the scope of our theoretical model by arguing that preferences for redistribution shape the spread of party positions around a median position that is determined by a complex of historical factors and cannot be directly derived from (contemporary) preferences for redistribution.

Meltzer-Richard with core constituencies

Like other median-voter models, the Meltzer-Richard model assumes that parties are more or less entirely motivated by winning elections and have no enduring commitment to particular policies. In a two-party system, winning elections requires winning the support of the median voter. As a result, parties will converge on the preferences of the median voter, in their election promises as well as their actual behavior in government. In multi-party systems, the influence of the median voter on government policy will be mediated by inter-party bargaining, but the party that represents the median voter can be expected to be the pivotal in such bargaining, effectively able to determine the composition and policies of coalition governments (cf. Powell 2000).

The Meltzer-Richard model assumes further that government redistribution takes the form of a flat-rate (lump-sum) benefit received by all citizens and financed by a proportional (linear) income tax (cf. also Romer 1975). At 100% taxation, all citizens are brought to the mean

income. All citizens with market incomes below the mean income would favor 100% taxation if it were not for the fact that taxation entails a disincentive effect that reduces the mean income by some unspecified amount. As a result of this disincentive effect, there is a middle group of income earners for whom the deadweight costs of taxation will exceed the value of the benefits provided by the government, even though their market income is below the mean income. Holding the deadweight costs of taxation constant, the amount of redistribution preferred by the median voter becomes a function of the distance between her market income and the average income in the Meltzer-Richard framework.

Because a small number of individuals have very large incomes, the distribution of income in capitalist societies is invariably skewed such that the average income is higher than the median income, but the degree of skew and therefore the distance between the median and the mean varies. Figure 1 illustrates this point with reference to two hypothetical countries with the same mean income. Country B has a more inegalitarian income distribution than country A and, as a result, the distance between the mean income and the median income is greater. By the logic of the Meltzer-Richard model, we would expect the median income income-earner (and voter) to want more redistribution in country B than in country A (d2>d1) and this preference should translate into government policy.

[Figure 1]

Our own analytical framework shares some of the core assumptions (and limitations) of the Meltzer-Richard model. In the first instance, we depart from the Meltzer-Richard model by positing that parties of the Left and the Right have core constituencies to which they are historically and ideologically committed as well as organizationally tied. In emphasizing core constituencies and enduring policy commitments, we build on an extensive literature in comparative political economy that has identified partisan effects on macro-economic policy and social spending (e.g., Hibbs 1987, Garrett 1998).[2] We also draw on the literature on electoral competition and political behavior. As Powell (1982:116) argues, the existence of a relationship

between "strong, continuing expectations about parties and the interests of social groups not only creates easily identifiable choices for citizens, it also makes it easier for parties to seek out their probable supporters and mobilize them at election time." In a similar vein, Aldrich (1995) argues persuasively that parties need party activists and that the parties' median voter may be equally or more influential than the median voter in the electorate as whole.

There is every reason to suppose that the income of the median voter in the Left-party constituency is lower than the mean income and that the income of the median voter in the Right-party constituency is higher than the mean income in all of the countries included in our analysis. Illustrated by Figure 2, a partisan version of the Meltzer-Richard model readily suggests itself. In this model, the preferences for redistribution of the Left-party and Right-party constituencies are determined by the distance between their income and the mean income. The further the income of the median Left-party voter is from the mean, the more she stands to gain from redistribution. On the other hand, the further the income of the median Right-party voter is from the mean, the more she stands to lose from redistribution. This logic leads us to expect that greater inequality, illustrated by the shift from country A to country B in Figure 2, will generate partisan polarization over redistributive policy.

[Figure 2]

The proposition that the median Right-party wants less redistribution as inequality rises may seem odd, for in the Meltzer-Richard framework someone with an income above the mean always wants zero redistribution. Still, it should be evident that the amount of income loss that a given redistributive scheme entails for such a person increases as the distance to the mean increases. Within the Meltzer-Richard framework, we might say that the *intensity* of the preference for zero redistribution increases with inequality. The willingness of someone in, say, the 70^{th} percentile of the income distribution to devote more money or effort to defeating redistributive proposals should increase with inequality. Put differently, the importance that such

a person assigns to zero redistribution, relative to other policy preferences, should increase with inequality.

We do not mean to suggest that parties are oblivious to the preferences of the median voter in the electorate as a whole. Following Strom (1990), among others, we assume that parties are motivated by winning elections and, at the same time, by serving the interests of their core constituencies. In government, parties can be expected to pursue partisan distributive objectives so long as these policies do not threaten their prospects of re-election.

It is easy to criticize the Meltzer-Richard model as being based on an overly simplistic understanding of politics. By introducing core constituencies, our partisan version of the Meltzer-Richard model adds a new layer of complexity and, arguably, better approximates the "real world" of politics. Also, let us again emphasize that the model sketched above is intended to explain the positions that parties take on redistribution. For this purpose, we do not need to assume that elections are only about redistributive issues, nor do we need to assume that the policies actually carried out by parties in government are determined entirely or even primarily by the redistributive preferences of their core constituencies. Like the Meltzer-Richard model, however, our model does assume that voters derive well-defined preferences over redistribution from their position in the distribution of income.

Different forms of inequality

In addition to introducing core constituencies, we seek to go beyond the Meltzer-Richard and the literature that it has inspired to date by exploring the effects of different forms of inequality. Empirically, we estimate models that include measures of both (a) wage inequality among full-time employees and (b) disposable household income inequality.

In the Meltzer-Richard framework, voters actually do not need to know anything about the distribution of income or where they fall in the income distribution: they simply need know

how the benefits they derive compare to the taxes they pay at any given level of taxation. Crudely put, envy does not motivate voters. However, the Meltzer-Richard model does assume that voters have a clear and fairly accurate understanding of the disincentive effects of taxation. In our view, it seems reasonable to assume that voters do care about relative incomes.[3] Their understanding of what the distribution of income looks like is undoubtedly imperfect, but so is their understanding of the disincentive effects of taxation. Moreover, it should be noted that the Meltzer-Richard model is premised on a very simple redistributive scheme (flat-rate benefits financed by a linear tax). Under more realistic conditions, the cost-benefit calculus facing voters is bound to be far more complicated and it may well that relative income, however imperfectly understood, provides voters with a shortcut as they form preferences for or against redistribution.

Following Rueda (2005, 2006, 2007), we believe that is useful to conceive of the (potential) electorate as consisting of three broad socio-economic categories: "labor-market insiders," "labor-market outsiders" and "upscale groups." The last category encompasses the self-employed and professional-managerial strata as well as capitalists. For labor-market insiders and outsiders alike, dependent employment is the primary source of income in the market economy. The lion's share of full-time employees can be characterized as labor-market insiders, enjoying relatively stable employment conditions. With jobs that are often protected by unions or government regulation, their skills tend to be higher and more marketable than those labor-market outsiders. The "outsider" category encompasses people with precarious positions in the labor market: the unemployed and the increasingly important part of the labor market dedicated to involuntary part-time or fixed-term employment. Women, young people, immigrants and minorities tend to be overrepresented among labor-market outsiders.

Labor-market outsiders have fewer political resources and are less likely to vote or otherwise exercise political voice than labor-market insiders, let alone upscale groups. Arguably, their interests are also quite heterogeneous. For these reasons, labor-market outsiders do not figure prominently, if at all, among the core constituencies of either Left or Right parties. The

core constituency of Left parties consists essentially of labor-market insiders in the lower half and the middle of the wage hierarchy. Right parties draw much of their support from upscale groups, but their core constituency also includes well-educated and well-paid labor-market insiders.

We argue that the core constituencies of Left parties care primarily about the distribution of wages. While these voters do not necessarily want to raise the position of low-pay jobs relative to median of the wage distribution, they have a strong interest in narrowing the gap between the median and the upper end of the wage distribution. The core constituencies of Left also want to redistribute income from capital to labor, by subjecting income from real estate and financial assets to progressive taxation, but in this regard their redistributive interests may be constrained by growth and employment considerations (cf. Cusack and Beramendi 2006). As a practical matter, the LIS data on which our measures of household income inequality are "top-coded" and, as a result, our measures of household income inequality are not very sensitive to income differentials associated with the distribution of wealth. Controlling for wage inequality, cross-national and over-time differences in household income inequality, as measured here, largely reflect income differentials associated with how many household members are employed on a regular basis (see Kenworthy and Pontusson 2005).[4] Thus we conceive household inequality essentially as a measure of *inequality between insiders and outsiders* and wage inequality as a measure of *inequality among insiders.* Again, the core constituencies of Left parties are likely to be most concerned with the latter form of inequality.

We might expect the core constituencies of Right parties to be more or less oblivious to the distinction between wage inequality and household inequality. As either form of inequality rises, the losses that redistribution entails for these groups increase. However, there may be strategic reasons why Right parties might respond differently to wage inequality and household inequality. The assumption behind this expectation is that the median voter in the electorate as a whole is a labor-market insider whose support for redistribution increases with wage inequality, but not with household income inequality (holding the other form of inequality constant). The

need to secure the support of this voter should constrain the extent to which Right parties following the preferences of the core constituencies as wage inequality rises.

Political mobilization of low-income groups

Our model adds yet another layer of complexity by positing that partisan responses to wage inequality and household income inequality are conditioned by the income differentials in political participation. As Meltzer and Richard (1980) clearly recognize, their prediction that inequality will be associated with more redistribution rests on the unrealistic assumption that all income earners vote. Under any other circumstance, testing Meltzer-Richard model requires us to distinguish between the income of the median voter and the median income (Nelson 1999, Barnes 2006). The discrepancy between the two is particularly pronounced in the US not only because of low voter turnout, but also because many low-income earners are not citizens (McCarty, Poole and Rosenthal 2006:ch.4). With reference to Figure 1, the point here is the following: everything else being equal, the Meltzer-Richard model predicts that a shift from the income distribution of country A to that of country B will generate more redistribution, but it could well be the case that such an increase in income inequality is associated with an increase in the inequality of voting. If citizens with low income disproportionately drop out of the political process, increased income inequality will not necessarily translate into an increase in the distance between the median voter and the mean income.

Income skew in voting is bound to diminish as aggregate voter turnout approaches 100% and, as Mahler (2006) demonstrates, income skew of voting and aggregate voter turnout are indeed closely correlated on a cross-national basis. Like much of the existing literature, we conceive aggregate voter turnout as a proxy measure of income skew in voting. However, we do not believe that aggregate voter turnout alone suffices to capture (or explain) variation in the

extent to which parties pay attention to the preferences of low-income groups or, in other words, potential low-income voters.

In the comparative political economy literature, organized labor is commonly conceived as a political force promoting redistribution by mobilizing workers who stand to benefit from redistribution. The extent to which unions organize and represent low-pay workers varies across countries and over time. As more encompassing union movements reach into the upper half of the wage distribution, their political effects of their increased mobilizational capacity may well be offset by the increased heterogeneity of the interests they represent. Still, it seems reasonable to suppose that the income of the median union member falls below the income of the median voter in the electorate as a whole and that unionization makes low-income voters more aware of their relative income and more politically "assertive." As Pontusson and Kwon's (2006) analysis of individual-level survey data demonstrates, moreover, union membership is consistently associated (across nine OECD countries) with preferences for social spending and redistribution when we control for income, employment status, age, gender and even ideological self-placement (cf. Kumlin and Svallfors 2007). The latter finding suggests that parties of the Left and the Right alike should be more leftist (or less rightist) in their responses to inequality in countries where the median voter is a union member.

In principle, it might be desirable to estimate separately how voter turnout and unionization condition partisan responses to inequality, but our dataset is quite limited and these variables are correlated with each other. It also seems likely that turnout and unionization interact with each other. Thus we might expect the effects of turnout to be different when unionization is high. To simplify matters, and to avoid multi-collinearity problems, we combine turnout and unionization into a single variable, which we will refer to as "low-income mobilization" (see below).

To sum up the discussion so far, we have argued that core constituencies and strategic considerations make parties of the Left and the Right responsive to different forms of inequality.

We have also argued that low-income mobilization conditions partisan responses to inequality. Combining these arguments makes for a good deal of complexity, but two unambiguous propositions stand out. First, we expect wage inequality to be associated with more leftist (more pro-redistribution) Left parties at higher levels of low-income mobilization. Secondly, we expect household income inequality to be associated with more rightist (more anti-redistribution) Right parties at lower levels of low-income mobilization.

The center of political gravity

By all accounts, what we might call the center of gravity in party politics varies across countries and over time. For instance, the position of most right-wing of the five main parties contesting the Dutch general election of 1998 was, according to the Comparative Manifesto Project, more leftist than the position of Bill Clinton in the presidential election campaign of 1996. While the Netherlands is clearly a more egalitarian country that the U.S., we do not believe that contemporary differences in the distribution of income explain why the center of gravity in Dutch politics is further to the Left than the center of gravity in American politics. If there is a causal relationship between income distribution and the center of political gravity, it is at least as likely to run in the opposite direction. More leftist government policies must surely play a role in any account of why the distribution of wages and disposable household income is more compressed in the Netherlands than in the US.[5]

There is also a great deal of evidence suggesting that the center of political gravity moved to the Right in many OECD countries during the 1980s and 1990s. This trend appears to have been quite pervasive and, for this very reason, cannot be explained simply in terms of trends in the distribution of income. As we shall document below, rising inequality is by no means a universal trend among the countries included in our analysis. A number of other plausible explanations for the apparent shift to the Right should be noted. One line of argument holds that

this shift reflects the "growth to limits" of redistributive welfare states. Tax fatigue certainly became a prevalent feature of electoral dynamics in the 1980s and 1990s, and many voters as well as politicians seem to have become convinced that redistributive policies have reached a point of diminishing returns. In a different vein, the rightward shift of party politics might be attributed to the erosion of the sociological foundations of traditional Left politics: the decline of the industrial working class, the decline of unions, and the decline of class voting. Finally, it also seems quite plausible to attribute this rightward to pressures associated with "globalization," i.e., the international integration of financial markets and the intensification of international competition in product markets.

We believe that all of these arguments are relevant to the evolution of party politics since the mid-1970s and that the forces that they identify cannot be straightforwardly captured by a few quantitative variables. Our dataset is too small to evaluate the relative merits of the aforementioned arguments in any systematic fashion. Yet our theoretical model makes predictions about the effects of inequality on relative party positions—not about its effects on the center of political gravity. In order to estimate these effects of inequality, we control for the center of political gravity by including a measure of the position of the median voter developed by Kim and Fording (1998, 2003) on the right-hand side of our regression equations. As we explain below, Kim and Fording's measure estimates the position of the median voter based on Left-Right scores of party election manifestos and the distribution of votes among parties. In our view, it is more appropriate conceive this variable as a measure of the center of political gravity than a measure of the position of the median voter, and we shall refer to it as "the median position."

The Kim-Fording measure confirms that the center of political gravity did indeed shift to the Right in most OECD countries in the 1980s and 1990s (see Figure 4 below). As we shall see, their measure turns out to be a strong predictor of the positions adopted by both Left and Right parties. In itself, this is a somewhat trivial finding, since party positions are used to estimate the

median position. More interesting, the results we report below indicate that the rightward shift of party politics in the 1980s and 1990s was skewed in the sense that main Left parties generally shifted their positions in a rightward to greater extent than main Right parties. Again, our goal here is not to explain either the rightward shift or the convergence tendencies associated with this shift. Rather, we seek to explore the effects of inequality on party positions while holding these trends constant.

2. Data and measurements

This section describes the dataset that we have constructed to explore the effects of wage inequality and household income inequality on party politics and discusses our measurements of dependent and independent variables.[6] The units of observation in our dataset are "country-election-years." For each election from the late 1940s onwards, the Comparative Manifesto Project provides measures of party positions on the Left-Right dimension, which we use to construct the dependent variables specified below. Recently published CMP data (Klingemann *et al* 2006) enables us to include elections through 2003, but the availability of relevant measures of inequality restricts the number of countries and election-years included in our dataset.

Inequality measures

We draw on two sources for our measures of inequality: the OECD dataset on relative wages and the Luxembourg Income Study. Commonly used in the existing literature, these are the best available datasets providing wage/income measures that are comparable across countries. Pertaining to gross (pre-tax) earnings from dependent employment and restricted to full-time employees, the OECD dataset enables us to calculate various decile ratios.[7] Our measure of wage

inequality is the 90-10 ratio, i.e., the ratio of earnings of someone in the 90th percentile (the bottom of the top 10% of the wage distribution) to the earnings of someone in the 10th percentile (the top of the bottom 10%).

The inequality measure that we derive from the LIS database is the Gini coefficient for disposable household income. The Gini coefficient is commonly interpreted as the percentage of total income that would have to be redistributed in order to achieve perfect equality. Like the 90-10 wage ratio, this is a broad summary measure of inequality. There is certainly a lot more that we might want to know about the shape of the income distribution, but for our purposes these inequality measures would seem to be quite sufficient.

We measure household income inequality in terms of "disposable income" (post-tax and post-transfer income) rather than "market income" (pre-tax and pre-transfer income) because our theoretical framework posits that voters form policy and party preferences based on their position in the income distribution.[8] Put differently, we assume that voters have some knowledge, however imperfect, about their relative income. This assumption seems less reasonable for market income of households than for disposable income of households or gross wages of individuals. In particular, it should be noted that cross-national comparisons of market income inequality are highly misleading unless we exclude elderly households (cf. Kenworthy and Pontusson 2005). In countries with generous public pension systems, many households headed by retired people have no "market income" at all, but this does not mean that they are poor. Given that the elderly constitute a large segment of the electorate, we do wish to exclude them from our analysis.

Needless to say perhaps, our measure of household income inequality is a more encompassing inequality measure than our measure of wage inequality. It encompasses sources of income other than wages (most notably government transfers) and takes into account the (re)distributive effects of taxation and income pooling within households. Crucially for our purposes, our measure of household inequality is also more encompassing in the sense that it

encompasses the entire population, not just that segment of the population that is engaged in full-time employment.[9]

As indicated above, we conceive our measure of wage inequality essentially as a measure of inequality among labor-market insiders. Our measure of household inequality encompasses inequality among insiders, but also captures inequality between insiders (full-time employees), outsiders (the unemployed, people who are employed on a part-time or fixed-term basis) and others (the retired or those who are not in the labor force at all). As we control for the effects of wage inequality on party politics in the empirical models reported below, the effects of household inequality can, to a large extent, be interpreted as the effects of inequality between insiders and outsiders.[10]

For eight countries, the most recent version of the OECD dataset on relative wages (OECD 2004) contains more or less complete time series of annual observations from the mid-1970s (or late 1970s) to the early 2000s (or late 1990s). However, a number of countries do not enter the OECD dataset until the 1980s, the early 1990s or even the late 1990s, and for some countries the time series ends at some point in the 1990s. The LIS dataset is organized on the basis of five-year "waves," with observations in each wave pertaining to different years for different countries. For the early waves (mid-1970s and early 1980s), the LIS dataset covers only a small number of countries.

In constructing our own dataset, we have proceeded as follows. We include as a case any country-election-year for which we have at least one observation of both wage inequality and household disposable income inequality for that the year in question or any of preceding four years. When we have multiple observations of inequality over the five years, which is typically the case for wage inequality, we average these observations. To maximize the number of countries included in our analysis, we use wage inequality data from an earlier version of the OECD dataset (OECD 1999) for Belgium and Norway.[11] On the other hand, we decided to drop five observations for Austria, Canada and Switzerland. For Switzerland, we could only generate

a single election-year observation, and the post-1997 time series for Canada in OECD (2004) is strikingly more erratic than the time series for other countries. Austria was eliminated because it was the only remaining country with only two election-year observations.

As shown in Table 1, the upshot of these procedures is a dataset that includes twelve countries, for a total of 68 country-election-year observations. For Denmark and Norway, the dataset includes three observations. At other end of the spectrum, the dataset includes nine observations for Sweden, and eight observations for Australia and the UK. On average, we have 5.7 observations per country. While 58 of the observations of household inequality are single-year observations and 5 of these are contemporaneous with our observation of party positions, only 5 of our observations of wage inequality are single-observations (none contemporaneous) and fully 55 of these observations are based on averaging across four or five years.

[Table 1 here]

Before we proceed, it should be noted that our inequality data, as summarized in Table 1, do not exactly bear out the common notion of an OECD-wide trend for inequality to increase since the early 1980s. Britain, Sweden and the US stand as the OECD countries in which wage inequality and household income inequality have both increased quite dramatically. However, wage inequality declined in Denmark, France and the Netherlands and increased only modestly in Australia, Finland and Italy over the (variable) time periods for which data are available. The tendency for household income inequality is more pronounced, but Denmark, France and the Netherlands bucked this trend, while we observe quite modest increases in Germany and Norway.

Party positions

The dependent variables of the empirical models reported below are based on data from the Comparative Manifesto Project (CMP) and refer to party positions on the Left-Right dimensions, as measured by Laver and Budge (1992) and subsequent CMP publications (Budge

et al 2001, Klingemann *et al* 2006). Briefly, the CMP identifies 54 policy areas (or categories) and reports the percentage of "quasi sentences" of election manifestos that fall into each of these areas. Laver and Budge (1992) use factor analysis to identify two groups of thirteen categories that load at the opposite ends of an underlying dimension, and calculate Left-Right scores for individual parties by summing across the percentages of manifesto statements that fall into each of the opposing groups and subtracting the percentage of Left statements from the percentage of Right statement. This yields a Left-Right index that ranges from -100 (extreme Left) to 100 (extreme Right).[12]

It is commonplace to argue that the CMP data tells us more about the salience of particular issues than about party positions on these issues. As Benoit and Laver (2006) point out, however, virtually all of the CMP coding categories are in fact explicitly or implicitly positional (cf. also McDonald and Mendes 2001). For Benoit and Laver, the more important limitations of CMP-derived Left-Right scores have to do with the absence of any estimates of measurement error and the fact that they fail to capture variation in the meaning of the Left-Right divide across countries and over time. With regard to the latter issue, Benoit and Laver emphasize that the Left-Right dimension was inductively derived from an analysis of party manifestos between 1945 and 1985 and therefore does not include party positions on environmental issues.

Our analysis depends on being able to track changes in party positions over time. The expert surveys that Benoit and Laver favor as an alternative to the CMP approach to measuring party positions provide, at best, two observations of party positions per country. The absence of any estimates of measurement error in the CMP data is simply the price that we have to pay to obtain a more time-sensitive set of Left-Right scores. As for the observation that the meaning of the Left-Right divide in politics has changed over time, this is arguably not such a serious problem for us, since our theoretical framework pertains to the representation of voter preferences for (or against) redistribution. For us, the problem with the CMP Left-Right dimension is that it

contains too many policy items rather than too few items. A Left-Right index that focuses more strictly on policies with a redistributive impact would be desirable, but the so-called "welfare dimension" in the CMP dataset does not fit this bill. As Esping-Andersen (1990) and others have long argued, there are many political forces in Europe, most notably Christian Democrats, who favor social protection without necessarily favoring redistribution.

Several of studies (e.g., Powell 2000) have shown that the standard CMP Left-Right scores provide a reasonably good summary of what parties stand for in elections and that the Left-Right dimension is a meaningful factor for voters. There is also some evidence in the existing literature suggesting that the CMP's Left-Right scores can be used to predict what parties actually do when they come to power (e.g., Budge and Hofferbert 1990). Furthermore, these Left-Right scores correlate reasonably well with various party classification schemes based on expert surveys (see Gabel and Huber 2000, McDonald and Kim n.d.). For main parties of the Left and Right combined, the correlation between the most recent Left-Right scores in our dataset and the expert scores on the general Left-Right dimension reported by Benoit and Laver (2006) is .71. Even more noteworthy, the correlation between our most recent Left-Right scores (for main parties) and Benoit and Laver's expert scores on their "taxes-versus-spending" dimension is .77.

Arguably, the fact that the Left-Right dimension, as measured here, encompasses issues that do not pertain directly to redistribution militates against finding effects of inequality on party positions. There is certainly no reason to believe that measuring party positions in this manner biases the exercise in favor of our theoretical expectations. It should also be noted that there is a great deal of election-to-election volatility in Left-Right scores (for the same party) in the CMP data. This volatility reflects not only measurement errors, but also, we believe, strategic signaling by parties. For instance, a Left party that has decided to move to the center may exaggerate the extent of its move to offset its reputation. Smoothing party scores over several elections might yield more accurate measures of party positions (McDonald and Mendes 2001), but it would also introduce an obvious endogeneity problem for our analysis. To avoid invoking

inequality in year t as an explanation of party positions in some prior year, we stick with single-year (current) observations of party positions. Again, this approach generates noise that militates against finding statistically significant effects of inequality.

The dependent variable of the empirical models that we report below is the Left-Right score of either the main party of the Left or the main party of the Right (with higher score representing more rightist position in both cases). We code as "main party of the Left" the party that won the largest of the Left vote in the most elections included in our dataset and, similarly, we code as "main party of the Right" the party that won the largest share of the non-Left vote in the most elections (see Table 2). While party positions change, our analysis thus holds main Left parties and main Right parties constant.[13]

[Table 2]

Figure 3 graphs annual average Left-Right scores for main parties of the Left and the Right as well as the difference between them over the period 1975-98 in the twelve countries included in the dataset. (For between-election years, the data used to generate this figure are based on linear interpolation, so that all twelve countries are included in each annual average). In marked contrast to the US case (McCarty, Poole and Rosenthal 2006), we do not observe any secular OECD-wide trend towards polarization of party politics over this period. If wage inequality and household inequality had uniformly increased across the OECD countries over the same period, this would be a most damning picture for the partisan Meltzer-Richard model elaborated above. As noted already, however, inequality only increased significantly in some of the countries included in our dataset (see Table 1). Also, we hasten to stress that our framework posits that trends in wage inequality and household income inequality have different political effects and that we other variables must be taken into account. By focusing on trends over time and pooling data across twelve countries, Figure 3 hides much of the interesting variation in our dataset. In short, it is necessary to engage in multivariate analysis to estimate the effects of different forms of inequality on party politics.

[Figure 3]

Other variables

Our theoretical framework posits that the degree of inequality in political participation conditions partisan responses to wage inequality and household income inequality. Specifically, we hypothesize that political participation by low-income groups renders Left party responses to inequality more leftist and Right party responses less rightist. As indicated earlier, we believe that aggregate voter turnout and union density are both associated with political participation by low-income groups and can jointly serve as a proxy measure for this variable. We generate a single measure of "low-income mobilization" by summing standardized scores for voter turnout and union density. We lag the impact of this variable by averaging observations over five years, including the election year in question.[14]

With a total N of only 68, we want to keep the number of control variables to a minimum. However, it is clearly necessary to somehow control for the center of political gravity in order to estimate the effects of inequality on the Left-Right positions of parties of the Left and the Right. Again, we do this by including Kim and Fording's (1998, 2003) measure of the position of the median voter as a right-hand variable.

Working with CMP data, Kim and Fording identify the mid-points between parties that have been ranked on the Left-Right dimension and assume that the policy preferences or ideological positions of those who voted for a particular party fall in the interval between the two midpoints that separate this party from the parties to its immediate Right and immediate Left. Knowing the overall distribution of votes, they estimate the median position based on this schema and engage in linear interpellation to generate values for the median position on the Left-Right dimension for non-election years. Based on policy preferences expressed by parties rather than voters, the Kim-Fording measure is clearly not a measure of the position of the median voter in

any strict sense. Conceiving it as measure of the center of political gravity, we refer to this variable as "the median position."

Kim and Fording's measure of the median position is scaled from 0 to 100, where higher numbers representing more leftist positions. We have rescaled their measure so that it conforms to the standard CMP measure of party positions, ranging from -100 to +100, with higher numbers representing more rightist positions. In our regression models, we include the average value for the election year in question and the preceding four years as our control variable. Following Kim and Fording, these five-year averages are based on linearly interpolated values for non-election. This setup captures the idea that shifts in the center of gravity are not simply an unanticipated outcome of elections. We assume that parties observe shifts in voter opinions and the policy positions of their competitors between elections and take such shifts into account when they prepare their election manifestos.

Tracking the evolution of the average median position on the Left-Right dimension is our twelve countries (again using interpolated values for non-election years), Figure 4 strongly confirms that the time period covered by our analysis is characterized by a rightward trend in electoral politics. To reiterate, our goal in this paper is not to explain either the rightward shift illustrated by Figure 4, but rather to explore the effects of inequality on party while controlling for this shift. Needless to say perhaps, we expect the median position to be associated with more rightist positions held by both main parties of the Left and the Right alike.

[Figure 4]

Our regression models include one other control variable: the effective number of parties, as measured by Laakso and Taagapeera (1979). This variable is also measured as a five-year average. The motivation for including it is simply to control for the effects party-system dynamics. The most obvious hypothesis along these lines is that multi-party competition is a source of political polarization, pushing main Left parties to the Left and main Right parties to the Right (cf. Cox 1990).

2. Empirical results

The results reported in Table 3 (below) were obtained by estimating a series of models with the following specification:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \ldots + \beta_n X_{nit} + \varepsilon_{it}$$

Where Y_{it} represents the positions of either Left or Right parties, β_0 represents a general intercept, X_1 to X_n are the explanatory variables (Wage Inequality, Household Income Inequality, Low-income Mobilization, Median Position and Effective Number of Parties), β_1 to β_n are the slopes of the explanatory variables, and ε_{it} denotes the errors.

We recognize that there may be a number of country-specific effects that we cannot estimate directly (specific historical circumstances, institutional complexities, etc.) and that the existence of country-specific omitted variables could affect the accuracy of our estimations of the effects of the variables included in our model. To mitigate this potential problem, we produce a set of estimates with random effects.[15] We also estimate standard errors that are robust to correlation within countries. In short, Table 3 presents estimates from random-effects GLS regressions with country-adjusted standard errors.

All of the models reported in Table 3 estimate the effects of both wage inequality and household income inequality. The first two models estimate only the direct effects of these and the other variables identified above. The four interaction models explore the effects of low-income mobilization on the relationship between inequality and party positions. Because of the potential problem posed by multicollinearity, we estimate the effects of interacting mobilization with wage inequality and household inequality separately.

[Table 3]

Setting the effects of inequality aside for the time being, we observe that the median position, as measured by Kim and Fording, is associated with more rightist positions held by Left and Right parties alike. In all three models with Left party positions as the dependent variable, this variable is significant with better than 99% confidence. Once we control for interaction effects, the median also becomes a statistically significant predictor of Right party positions. Given that party positions are used to estimate the position of the median voter, it is hardly surprising that parties of the Left and the Right move in the same direction as the median position. A far more interesting is that the size of the coefficient for this variable is much larger (invariably more than three times as large) in the models with Left party positions as the dependent variable. Quite intuitively, it appears that Left parties are more vulnerable to the median voter's move to the right. This makes sense, for the Right the median voter has moved in the same direction as the Right's core constituency. For the Left this has not been the case and Left parties have had to make larger strategic adjustments than Right parties in order to remain competitive as the center of gravity has shifted in a rightward direction. In other words, the rightward shift has been accompanied by a Right-skewed convergence between the positions of Left and Right parties. It is important to keep in mind that we control for this asymmetric rightward shift in estimating the effects of inequality.

Our results do not support the proposition that the dynamics of multi-party competition is a source of polarization. According to our results, the effective number of parties has no effect on the position of Left parties, but it has a strong negative effect on the position of Right parties. Consistent with Iversen and Soskice's (2006) thesis that proportional representation favors the Left, this finding suggests that Right parties move to the Left (towards the median position) when they are faced with competition from centrist parties or, alternatively, that more centrist parties tend to dominate more rightist parties when the Right (non-Left) is fragmented.

Without controlling for interaction effects, wage inequality is weakly associated with more leftist Left parties and appears to have no effect whatsoever on the position of Right parties.

By contrast, household income inequality is strongly associated with more rightist Right parties, but we do not observe any association between household inequality and the position of Left parties.[16] The coefficient of our mobilization variable is negative but not statistically significant for Left parties, while positive and significant for Right parties. Rather surprisingly, high voter turnout and high union density appear to be associated with more right-leaning Right parties. When we interact mobilization with either measure of inequality, the direct effect of mobilization is positive for both Left parties and Right parties. For our purposes, the key point is that all interaction terms all have negative coefficients and are significant at the 99% level. As mobilization increases, Left and Right parties alike move to Left in response to either form of inequality.

Based on the interaction models in Table 3, Figure 5 reports the conditional coefficients of wage inequality on Left and Right party positions at different levels mobilization and Figure 6 in turn reports the conditional coefficients of household income inequality at different levels of mobilization. (The dotted lines indicate 95% confidence intervals for the point estimates). These graphs essentially confirm the expectations of our theoretical framework. For Left parties, the coefficient of wage inequality is always negative and the size of the coefficient increases with mobilization. The association between wage inequality and leftist Left parties is only significant at medium and high levels of mobilization. For Right parties, wage inequality has a positive (but insignificant) coefficient at low levels of mobilization and the coefficient turns positive as mobilization increases. At very high levels of mobilization, we observe a statistically significant association between wage inequality and more leftist (or less rightist) Right parties.

[Figures 5 and 6]

In Figure 6, we observe a strong and very significant association between household income inequality and rightist Right parties at low levels of mobilization. As mobilization increases, this association disappears. The point estimates for impact of household inequality on

Left parties follow a very similar trajectory, but these estimates never satisfy conventional criteria of statistical significance.

Figure 5 makes clear that increasing wage inequality pushes Left parties to the left when mobilization is high (at the level of the mean or higher), but it is difficult to assess the substantive significance of these results from Figure 5. To understand what these estimates mean, we can compare two countries. The US is a country with a very low level of mobilization. In 1980, for example, the value for our 5-year average of union density was 21.5 and the value for our 5-year average of voter turnout was 45.44. After we standardize these two measures and add them up, we obtain a measure of mobilization equal to -3.33. This is not the lowest of the mobilization observations in our sample but, as indicated in Figure 1, it is within the range of very low values. In 1980, the 5-year average for the 90-10 ratio in the US was already a pretty high 3.76. By the year 2000, however, the 5-year average for the 90-10 ratio in the US had reached a whopping 4.59. Our results suggest that because of the low level of mobilization (a level that in fact decreases further from 1980 to 2000), an increase in wage inequality in the US would have no significance effect on the position of the Democratic Party.

Sweden, on the other hand, has the highest level of mobilization in our sample. In 1988, the value for our 5-year average of union density was 82.76 and the value for our 5-year average of voter turnout was 89.42. After we standardize these two measures and add them up, we obtain a measure of mobilization equal to 2.4. What would be the effect of the increase in inequality we have described in the previous paragraph if the US had the mobilization level of Sweden? Our interaction results show that an increase in the 90-10 ratio from 3.76 to 4.59 is associated with a move equal to around 19 points to left by the Democratic Party. To put this in context, the Democratic Party had a score of -21.2 in the left-right dimension in 1980. Our results suggest that if mobilization had been as high in the US as in Sweden, the increase in wage inequality would have pushed the Democratic Party's position to the left by 19 points (to -40.2), *ceteris paribus*. Instead, the position of the Democratic Party in 2000 (-3.6) was much more centrist.

Similarly, Figure 6 makes clear that increasing household income inequality pushes Right parties to the left (i.e., it makes them less conservative) as mobilization grows. As for Figure 5, we can assess the substantive significance of these results by comparing two countries. We will again use the case of the US. In 1992, the value for our 5-year average of union density in the US was 15.58.5 and the value for our 5-year average of voter turnout was 43.78. After we standardize these two measures and add them up, we obtain a measure of mobilization equal to -3.7. This is, in fact, the lowest value for mobilization in our sample. In 1992, the corresponding household income Gini value for the US was .338.[17] By the year 2000, however, the value of the household income Gini had increased to .370.[18] Figure 6 shows that, because of the low level of mobilization, an increase in household income inequality in the US would have a big effect on the position of the Republican Party. An increase from .338 to .370 in the Gini is associated with a move to the right by the Republican Party equal to 13 points on the Left-Right dimension.

Britain in 1979, on the other hand, has a level of mobilization quite close to the mean in our sample. In 1979, the value for our 5-year average of union density was 51.9 and the value for our 5-year average of voter turnout was 73.58. After we standardize these two measures and add them up, we obtain a measure of mobilization equal to -0.03 (close to the mean, which is 0). What would be the effect of the increase in household income inequality we have described in the previous paragraph if the US had the mobilization level of Britain? Our interaction results show that an increase in the Gini from .338 to .370 when mobilization is at the mean[19] is associated with a move equal to around 4 points to the right by the Republican Party. To put these in context, the Republican Party had a score of 30.42 in the Left-Right dimension in 1992. Our results suggest that with the US level of mobilization, the increase in household inequality experience in the US from 1992 to 2000 would have pushed the score to 43.42. However, if mobilization had been as high in the US as in Britain in 1979, the increase in household income inequality would have only moved the Republican Party's position to a score of 34.42.

As indicated by the R^2 statistics at the bottom of Table 2, our models do a much better explaining variation across countries than explaining over-time variation within countries, and this is particularly true for the model that uses positions of Right parties as the dependent variable. As we might expect given the volatility of Left-Right scores from one election to the next, between-country differences drive our results to a very large extent.

4. Conclusion

The main message of this paper is that different forms of inequality have different consequences for partisan politics. Wage inequality tends to be associated with Left-skewed polarization and household income inequality tends to be associated with Right-skewed polarization. The former association holds at medium and high levels of mobilization of low-income groups while the latter associations holds at low and medium levels of mobilization.

Our explanation of the differential effects of wage inequality and household inequality rests on two basic claims. First, the core constituencies of Left parties consist of labor-market insiders who care primarily about wage inequality and do not necessary become more supportive of redistribution as household income inequality rises. Secondly, the fact that most labor-market insiders vote makes Right parties less likely to respond to wage inequality in accordance with the preferences of their core constituencies, who become more opposed to redistribution as inequality rises.

Our theoretical model implies that causality runs from (changes in) the distribution of income to (changes in) party positions via the policy preferences of core constituencies as well as the policy preferences of the median voter in the electorate as whole. We readily admit that causality might also run in the opposite direction—from party politics to the distribution of income. For the US, Bartels (2006:ch.2) argues persuasively that the policies pursued have

Republican administrations have been a major source of the growth of inequality in disposable household income since the 1970s. However, we do not believe that "reverse causality" can adequately account for the results presented above.

To begin with, it should be noted that our analysis is based on measures of inequality that are temporally prior to our measures of party positions and that there is a lot of inter-temporal volatility in our measures of party positions. Also, it should again be noted that while we do observe a secular and quite pervasive rightward across the countries included in our analysis (Figures 2 and 3) rising inequality is not a secular and pervasive trend in our dataset (see Table 1). Most importantly, the reverse-causality objection pertains primarily to the effects of household income inequality, since our measure of household income inequality refers to disposable income and thus takes into account the effects of taxation and government transfers. Government partisanship may affect the distribution of wages through minimum-wage legislation and indirect, second-order effects of taxation and social benefits, but these are not the primary determinants of wage inequality. "Reverse causality" does not provide a plausible account of why we observe a strong association between wage inequality and more leftist (redistributive) positions held by Left parties. Finally, the conditioning effects of low-income mobilization make more sense if we think of causality as running from the income distribution to party politics.

In concluding, let us again stress that between-country differences drive our empirical results to a very large extent. In future research, we plan to explore responses to changes in equality—or, in other, inequality as a determinant of change over time, within countries—in a more focused and systematic manner. Empirically, this requires longer time series and may involve the estimation of fixed-effects models. For a subset of our countries, this type of analysis should be possible using wage inequality data only. Theoretically, such an analysis would seem to call for several modifications of the model that we have proposed. In particular, we believe that it becomes essential to take into account cross-national differences in perceptions of legitimate income differentials as we focus on dynamics of change within countries (Svallfors

2006). There are good reasons to believe that a given increase in the amount of inequality will have different effects in more a more egalitarian country, like Sweden, than in the US.

As noted earlier, the Meltzer-Richard model and the literature that it has inspired conceive the politics of redistribution in terms of individual voters calculating the costs and benefits of redistribution. From this perspective, we would not expect to find that different forms of inequality have different political effects. The fact that we do find differential effects of wage inequality and household inequality suggests that voters and other political actors (party activists, trade unionists, etc.) care about relative income. At the same time, it seems clear that voters operate with only limited, sometimes very distorted information about what the distribution of income looks like and where they themselves fall in the distribution of income. This represents another topic for research, based on survey data. From a comparative perspective, the obvious question is whether the salience of different forms of inequality varies across countries or, in other words, across different macro-institutional configurations. For instance, it seem plausible to suppose that wage inequality matters more in countries with encompassing unions and more institutionalized, economy-wide wage bargaining. This points to an important limitation of the preceding analysis. In the real world, wage inequality and household income inequality typically go together. While our results indicate that wage inequality tends to be associated with Left-skewed polarization while household income inequality tends to be associated with Right-skewed polarization, they do not tell us much about the relative importance of these two effects.

FIGURE 1

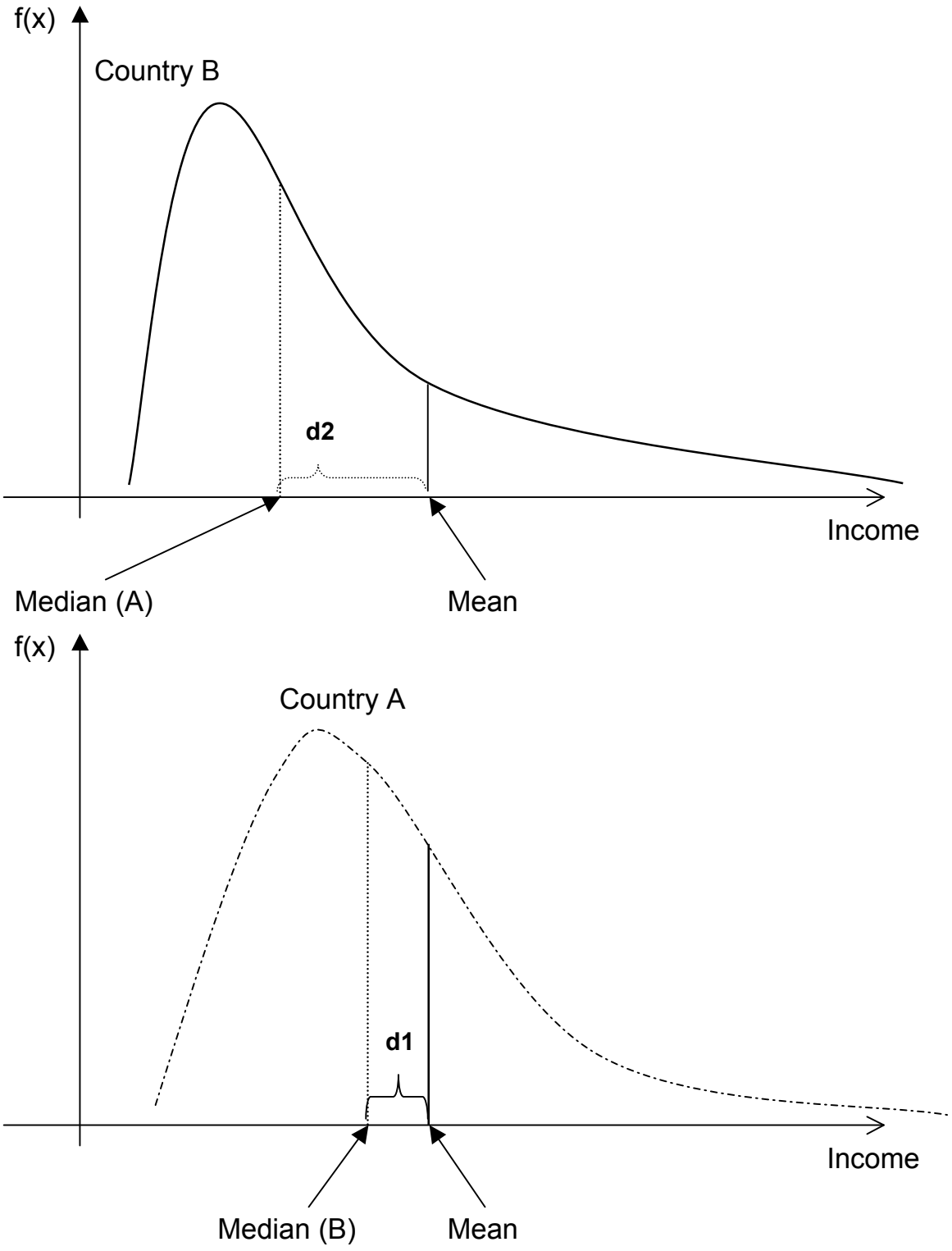
f(x)
Country B
d2
Income
Median (A)
Mean
f(x)
Country A
d1
Income
Median (B)
Mean

FIGURE 2

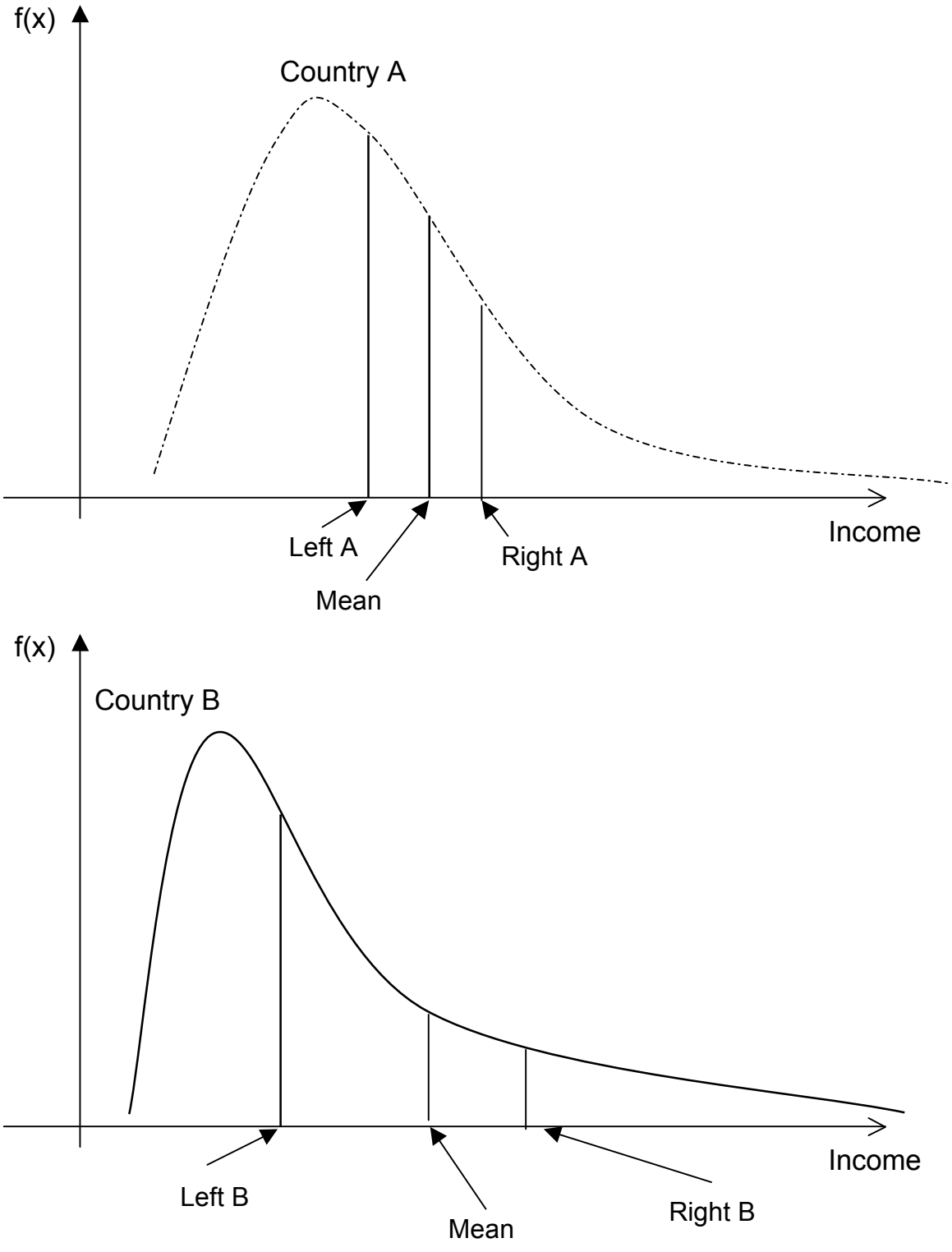
f(x)
Country A
Income
Left A
Mean
Right A
f(x)
Country B
Income
Left B
Mean
Right B

FIGURE 3. Positions of main Left and main Right parties on the Left-Right dimension: yearly means for thirteen countries, 1975-98.

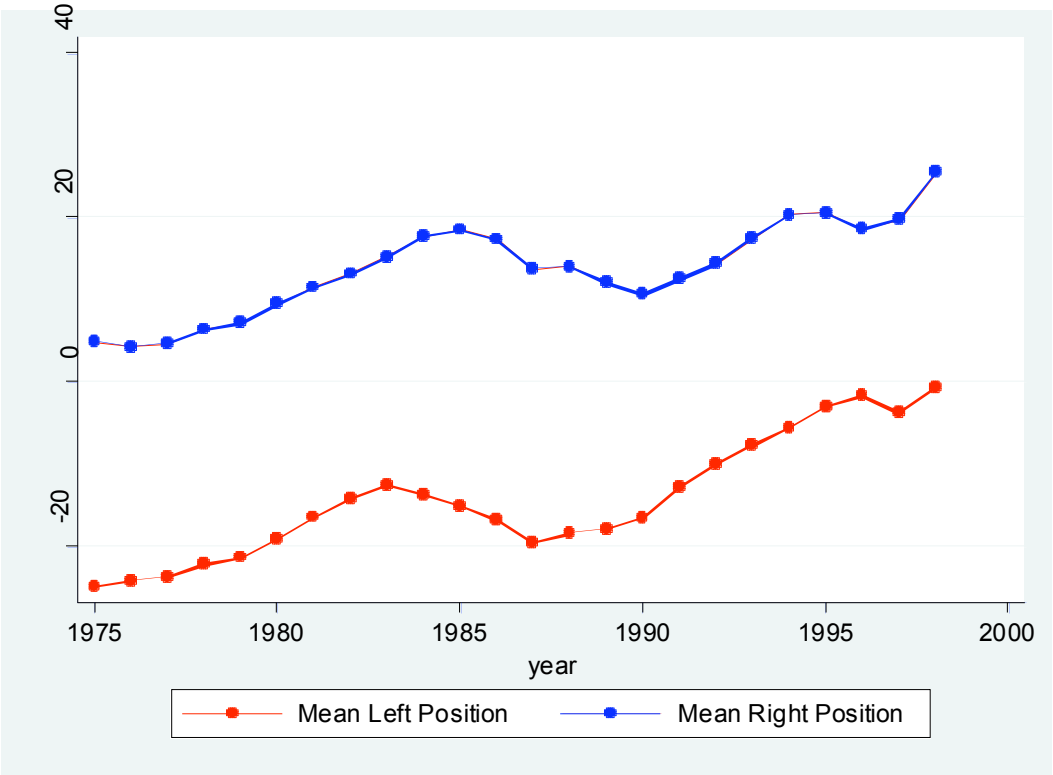

FIGURE 4. The median position (Kim-Fording measure): yearly means for twelve countries, 1975-98.

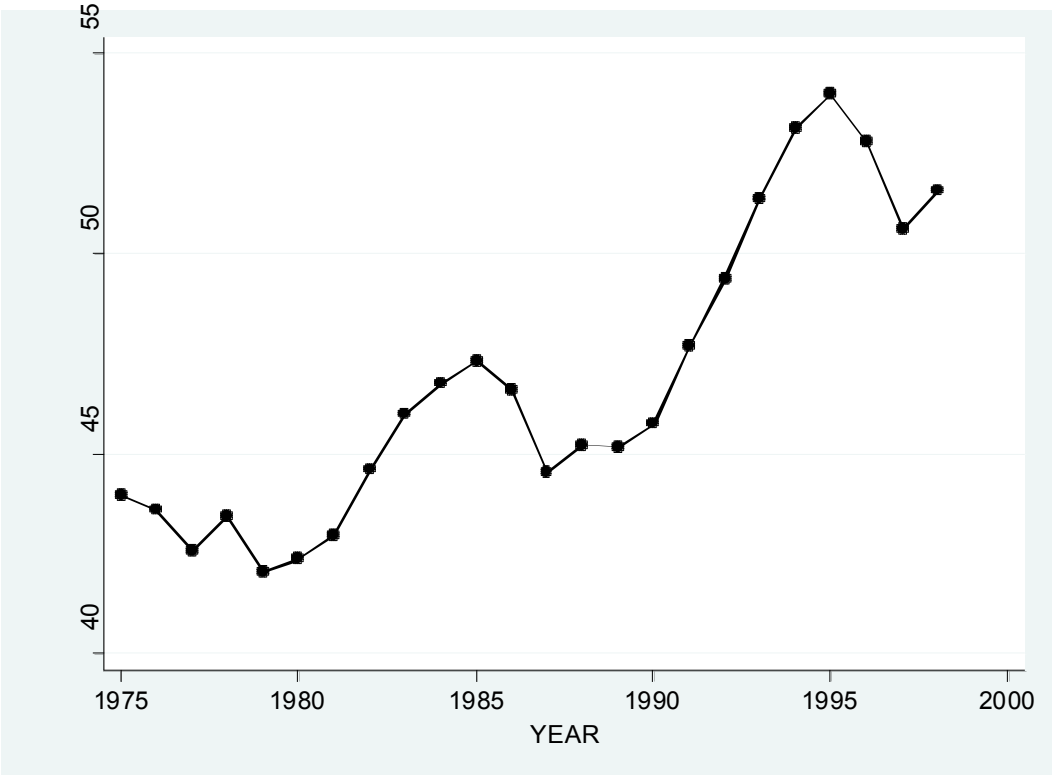

Figure 5: Effects of Wage Inequality on Left (Red) and Right (Blue) Party Positions Conditional on Levels of Mobilization

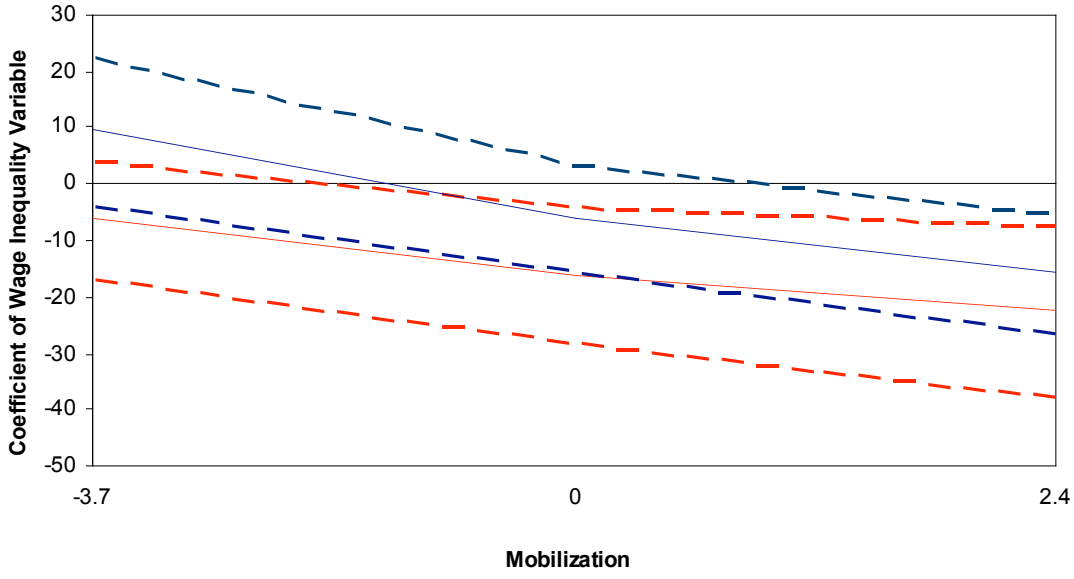

Figure 6: Effects of Household Income Inequality on Left (Red) and Right (Blue) Party Positions Conditional on Levels of Mobilization

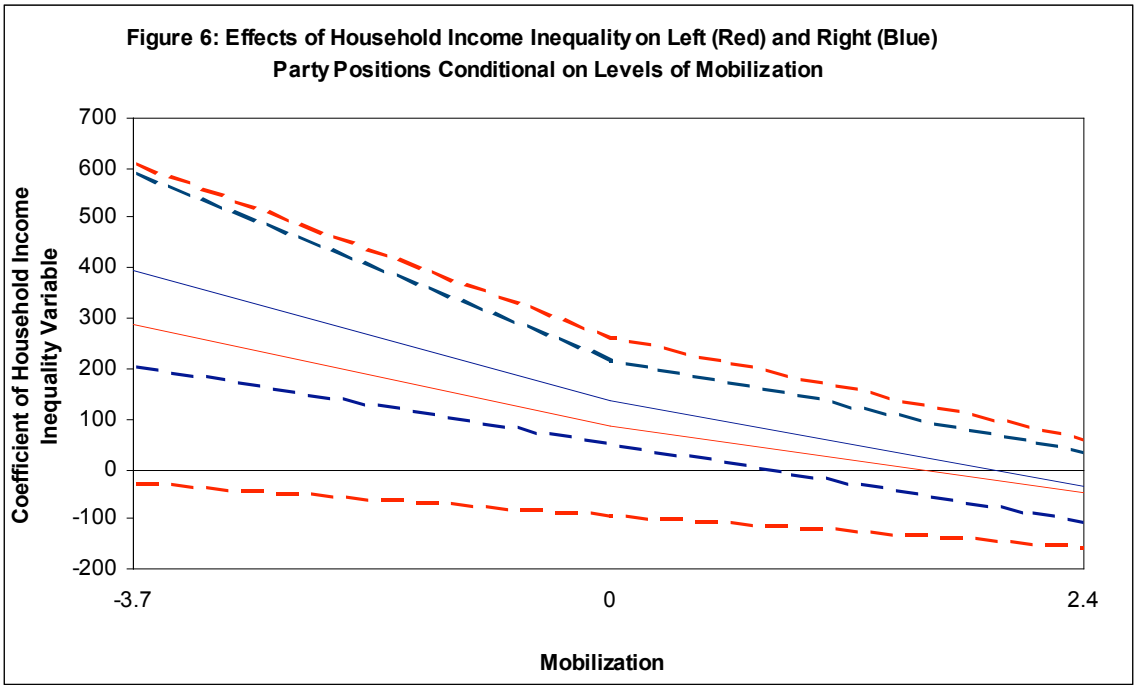

Table 1: Country-election-years covered and descriptive inequality data.

	election years	wage inequality		household inequality	
		most recent	change*	most recent	change*
Australia	83, 84, 87, 90, 93, 96, 98, 01	2.998	+6.0%	.317	+12.8%
Belgium	87, 91, 95, 99	1.96	(series br)	.258	+13.7%
Britain	74 (Feb), 74 (Oct), 79, 83, 87, 92, 97, 01	3.45	+17.3%	.343	+28.0%
Denmark	88, 90, 94	2.155	-1.7%	.236	-7.1%
Finland	87, 91, 95, 99, 03	2.417	+2.5%	.247	+18.2%
France	81, 86, 88, 93, 97, 02	3.106	-5.1%	.278	-5.8%
Germany	87, 90, 94, 98, 02	3.036	+9.4%	.275	+7.0
Italy	87, 92, 94, 96	2.372	+5.0%	.339	+14.1%
Netherlands	86, 89, 94, 98, 02, 03	2.92	+18.5%	.248	-4.6%
Norway	93, 97, 01	1.99	-1.5%	.251	+8.7%
Sweden	76, 79, 82, 85, 88, 91, 94, 98, 02	2.28	+12.6%	.252	+27.9
USA	76, 80, 84, 88, 92, 96, 00	4.592	+24.3	.370	+22.9%

*). Change is measured as the change from the minimum to the most recent observation unless the most recent observation is also the minimum observation; in the latter cases, change is measured as the change from the maximum observation to the most recent observation.

Table 2

Main parties of the Left and Right

	LEFT	RIGHT
Australia	Labour	Liberals
Belgium	Socialists (SP+PS)	Christian Democrats (CVP+PSC)
Denmark	Social Democrats (SD)	Conservatives (KF)
Finland	Social Democrats (SSDP)	Center Party (SK)
France	Socialists (PS)	Gaullists (RPR, UMP)
Germany	Social Democrats (SPD)	Christian Democrats (CDU/CSU)
Italy	PCI/PDS	Christian Democrats (DC)
Netherlands	Labor (PvdA)	Christian Democrats (CDA)
Norway	Labor (DNA)	Conservatives (H)
Sweden	Social Democrats (SAP)	Moderates
UK	Labour	Conservatives
USA	Democrats	Republicans

TABLE 3:
DETERMINANTS OF PARTY POSITIONS ON THE LEFT-RIGHT DIMENSION

	main effects		WI*MOB		HI*MOB	
	Left	Right	Left	Right	Left	Right
Constant	9.419 (21.208) *.657*	2.819 23.040 *.903*	14.768 (21.411) *.490*	17.795 (20.612) *.388*	16.219 (17.315) *.349*	18.138 (21.756) *.404*
Wage inequality	-11.425 (7.117) *.108*	1.239 (7.006) *.860*	-16.093 (6.148) *.009*	-5.912 (4.840) *.222*	-17.997 (6.339) *.005*	-7.025 (5.554) *.206*
Household inequality	53.295 (76.687) *.487*	111.193 (43.506) *.011*	72.658 (92.074) *.431*	124.163 (39.130) *.002*	86.709 (90.073) *.336*	136.948 (42.926) *.001*
LI Mobilization	-1.116 (1.488) *.454*	5.236 (.2.405) *.029*	6.296 (3.805) *.098*	16.847 (4.627) *.000*	13.122 (6.056) *.030*	23.462 (5.666) *.000*
WI*Mobilization			-2.658 (1.031) *.010*	-4.137 (1.135) *.000*		
HI*Mobilization					-55.216 (20.980) *.008*	-70.375 (17.217) *.000*
Median position	.535 (.054) *.000*	.134 (.086) *.119*	.549 (.076) *.000*	.145 (.074) *.049*	.571 (.071) *.000*	.169 (.074) *.023*
Number of parties	-.461 (.935) *.622*	-4.314 (1.240) *.001*	-.430 (.982) *.661*	-4.779 (1.023) *.000*	-.453 (.923) *.624*	-4.817 (.995) *.000*
R^2 within groups R^2 between groups R^2 overall	.267 .835 .432	.031 .779 .401	.303 .831 .472	.047 .893 .485	.330 .835 .489	.045 .912 .482
N	68	68	68	68	68	68

Note: Results from random-effects GLS regression with robust standard errors. *P*-values are two-sided.

Appendix 1

Data sources and specifications

Party positions: data from Klingemann (2006), see text for explanation.

Wage Inequality: 90-10 wage ratios from OECD (2004), supplemented by data from OECD (1999) for Belgium and Norway.

Household income inequality: Gini coefficients for disposable household income, http://www.lisproject.org/keyfigures/ineqtable.htm (accessed 4/15/07).

Low-income mobilization: sum of standardized scores for voter turnout and net union density (union members a percent of employed labor force). Turnout data from Armingeon, Beyeler and Menegale (2004), supplemented by internet sources for 2003. Union density data from Ebbinghaus and Visser (2000) except for Australia, Japan, the UK and the US: pre-1990 figures for these countries from Visser (1996) and post-1990 figures provided by Ebbinghaus. The following observations were extrapolated: all countries 2001, Switzerland 2002-2003, Sweden 2002, Finland 2002-2003, Netherlands 2002-2003, France 2002, and Germany 2002.

Median position: transformed Kim-Fording measure (see text for explanation), based on data downloaded from http://garnet.acns.fsu.edu/%7Ehkim/ (accessed 4/15/07).

Effective number of parties: based on measure developed by Laakso and Taagapera (1979), data from Armingeon, Beyeler and Menegale (2004). Updated for 2003, based on CMP data in Klingemann (2006).

Appendix 2

Summary Statistics

VARIABLE	MEAN	STANDARD DEVIATION	MINIMUM	MAXIMUM
Main Left position	-11.507	15.698	-48.5	29.26
Main Right position	17.593	17.065	-10.55	59.8
Wage Inequality (90-10 ratio)	2.796	.635	1.96	4.592
Household inequality (Gini coefficient)	.271	.042	.197	.370
LI mobilization	0	1.689	-3.697	2.413
Median position	-2.6836	20.51432	-47.04074	41.77728
Effective number of parties	4.333	1.760	2.020	9.776

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ENDNOTES

[1] As we explain below, data availability determines the countries included in our analysis. The twelve countries included are Australia, Belgium, Britain, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden and the US. Altogether, our analysis encompasses 68 election-years over the period 1974-2003.

[2] In this respect, our only claim to novelty is that we apply partisan theory to the question of how income distribution affects politics. Most existing alternatives to the Meltzer-Richard model (e.g., Moene and Wallerstein 2000, Iversen and Soskice 2001) share or, at least, do not challenge the assumption that the median voter determines government policy. Lee and Roemer (2005) represent a notable exception, which informs our own discussion.

[3] There is a good deal of evidence to suggest that perceptions of "legitimate income differentials" vary across countries (see Svallfors 2006:ch. 4). We plan to explore the relevance of this question in future work.

[4] For a subset of eleven countries (ten of which are included in our analysis), Kenworthy and Pontusson (2005:463) report that "gross earnings" account for 86-99% of total "market income" of working-age households as measured by LIS. Pooling over-time observations for the eleven countries (N=61), the correlation between Gini coefficients for gross earnings and for marker income is 0.98.

[5] We shall return to the question of "reverse causality" below. See Bartels (2006:ch. 2) on government policy as a source of growing inequality in the US since the 1970s.

[6] See Appendix 1 for a list of our data sources and Appendix 2 (also Table 1) for summary statistics.

[7] It should be noted that problems of cross-national comparability exist in the OECD dataset. In particular, definitions of "full-time employees" are not entirely consistent, some countries report earnings net of social security contributions and others not, and whether or not bonuses are counted as earning also varies by country.

[8] Another reason for measuring household inequality in terms of disposable income is that it enables us to include Belgium, France and Italy in our analysis. The LIS database does not allow for the calculation of household market income for these countries. Note also that the measure household inequality used here adjust for household size based on the conventional LIS formula.

[9] On average, full-time employees account for roughly 55% of the working-age population in the OECD countries (Pontusson 2005:49).

[10] Again, it should be noted that the LIS data are top-coded and not very sensitive to income differentials associated with the distribution of wealth (see fn. 4).

[11] In the new OECD dataset, Belgium and Norway stand out as the two countries with the most compressed distribution of wages in the late 1990s and early 2000s (90-10 ratios of 1.96 and 2.00 respectively in 2000). In earlier OECD dataset, Norway had the lowest 90-10 ratio (1.99) and Belgium the third lowest (2.24), with Sweden in second place, in 1993. In our view, the two datasets are sufficiently in agreement to justify using the old measures for these two countries. The same does not hold for Canada.

[12] See Armstrong and Bakker (2006) for a review of alternative methods for extracting a Left-Right dimension from CMP data. As Armstrong and Bakker point out, the measures generated by these techniques are highly correlated with the conventional CMP Left-Right index.

[13] For Left parties, the coding scheme presented in Table 2 is unproblematic, because the same party won the largest share of Left vote in every election included in our dataset. For most countries, the coding of main Right parties is also straightforward, but the Italian case is problematic, since Forza Italia displaced the Christian Democrats as the main party of the Right in the election of 1994. Recoding "main Right" for Italy in 1994 and 1996 does not significantly alter the findings reported below. Note also that for Left-Right scores for Belgian socialists and Christian Democrats used here are the average for Flemish and French-speaking parties.

[14] For non-election years, our source on voter turnout (Armingeon, Beyeler and Menegale 2004) records the turnout figure for the previous election.

[15] An alternative would be to estimate models with fixed effects, but our need to include (almost) time-invariant explanatory variables, like the effective number of parties, in our analysis makes this impossible. For details on estimating random effects with panel data, see Hsiao (1986).

[16] Needless to say perhaps, the size of the coefficients for wage inequality and household inequality should not be compared with each, since the metrics of this variable are very different (see Appendix 2).

[17] This is in fact from a LIS survey conducted in 1991.

[18] This is the average from LIS surveys conducted in 1997 and 2000.

[19] We are rounding the value of Britain in 1979 to 0.