Inegalitarian Market Trends and the Politics of Compensatory Redistribution in OECD Countries

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Abstract

We use data from the Luxembourg Income Study to examine the effect of changes in market inequality on changes in government redistribution in 14 OECD countries from the mid-1980s to the mid-1990s. Unlike most prior studies, we focus on earnings inequality across households (rather than full-time employed individuals) and on the actual redistributive effects of taxes and government transfers (rather than levels of social spending or transfers). Household earnings inequality increased sharply in many countries, and the increase was most pronounced in more egalitarian countries. These increases were driven largely by employment losses. Despite the extensive discussion of welfare-state retrenchment, however, most welfare states became more redistributive over this period, compensating for inegalitarian market trends. Trends in household earnings inequality and in redistribution are positively and quite closely correlated on a cross-national basis. This pattern is consistent with the expectations of the Meltzer-Richard median voter model, but the increases in redistribution that we observe are not the result of new redistributive policy initiatives. We argue that they should instead be seen as a built-in response of existing welfare-state programs to employment losses among low-income households.
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Using data from the Luxembourg Income Study (LIS), this paper explores the relationship between the distribution of earnings among working-age households and the redistributive effects of taxation and government transfers in fourteen OECD countries in the 1980s and 1990s. In an oft-cited article, Meltzer and Richard (1981, following Romer 1975) develop an economic model in support of the common-sensical notion that market inequality triggers compensatory redistributive policies in democratic societies. The logic of the Meltzer-Richard model is compelling, but from a comparative perspective there is an obvious empirical problem: across countries, more unequal distributions of earnings seem to be associated with smaller rather than larger welfare states. Controlling for other determinants of social spending, Moene and Wallerstein (2001, 2002) find that wage inequality among full-time employees is negatively associated with social expenditures in pooled cross-section time-series regressions.

We do not set out to test the Meltzer-Richard model or the alternative model proposed by Moene and Wallerstein. More modestly, our goal is to present and examine new empirical data that shed some light on the general issue these models address. Our empirical approach differs from that of Moene and Wallerstein in three ways. First, we focus on the distribution of household earnings rather than individual earnings. This enables us to take account of the distributive impact of unemployment (or nonemployment) and part-time employment. Moreover, the distribution of household earnings may be more salient to the politics of inequality than the distribution of individual earnings. For instance, someone who has experienced relative wage losses may be less likely to support compensatory redistribution if she pools her earnings with someone who has experienced relative wage gains. At a minimum, it seems reasonable to suppose that households are an important reference point if and when voters think about their relative position in the income distribution.

Second, we look at the actual redistributive effect of taxes and government trans-
fers rather than at levels of social spending or transfers, the typical measure in welfare-state research (e.g., Hicks 1999; Kenworthy 1999). We measure redistribution as the difference between the Gini coefficient for posttax-posttransfer household income and the Gini for gross (pretax-pretransfer) household earnings.

Third, in analyzing the effect of inequality on redistribution we focus on changes over time, though we also examine static cross-sectional patterns. The time period covered by our data varies somewhat from country to country. Roughly, we track changes in the distribution of household gross earnings and in the redistributive effects of taxation and transfers from the mid-1980s to the mid-1990s. Over this rather brief period, we observe large increases in household earnings inequality in almost all countries. In marked contrast to the picture conveyed by data on wage inequality among full-time year-round employees, the rise of household inequality was particularly pronounced in more egalitarian countries. Indeed, the LIS data point to a substantial cross-national convergence in the market distribution of household earnings in this period.

If household inequality is measured in terms of disposable (posttax-posttransfer) income rather than earnings, however, there is no evidence of cross-national convergence in the LIS data. That is because, despite the extensive discussion of welfare-state retrenchment, most welfare states became more redistributive over the time period covered by our analysis, compensating for inegalitarian market trends. Trends in household earnings inequality and in redistribution turn out to be positively and quite closely correlated on a cross-national basis. This finding is consistent with the expectations of the Meltzer-Richard model, but the increases in redistribution that we observe are not the result of new redistributive policy initiatives. We argue that they should instead be seen as a built-in response of existing welfare-state programs to employment losses among low-income households.

We should note at the outset that we use the terms "market inequality" and "redistribution" largely for expositional convenience. As research on the determinants of wage inequality has found, collective actors such as unions and politically-constructed institutions such as centralized wage bargaining and public employment play an important role in the process that determines the distribution of earnings (Rueda and Pontusson 2000; Wallerstein 1999). And as the literature on welfare-state
"disincentives" reminds us, social-welfare programs may have significant effects on the earnings distribution by altering the economic behavior of individuals (Alvarez 2001). We do not mean to imply, in other words, that the distribution of gross earnings is simply an outcome of "market forces" or that the effects of redistributive policies come into play only after the earnings distribution has been established.

Effects of Inequality on Redistribution: Theoretical Approaches

To motivate the analysis that follows, let us begin with a brief, nontechnical review of the theoretical model developed by Meltzer and Richard (1981) and the alternative model proposed by Moene and Wallerstein (2001, 2002). Both models hinge on the preferences of the median-income voter. In the Meltzer-Richard model, the fraction of income paid in taxes rises with gross income and tax revenues finance a certain amount of consumption for all individuals. The median voter effectively chooses the overall tax rate or, in other words, the size of government. Like all other individuals, the median voter prefers the tax rate that maximizes the combined value of the earned income she retains after taxes and the units of consumption provided by the government. Under certain additional assumptions, this tax rate turns out to be a function of the distance between the pretax earnings of the median voter and the average pretax earnings of all voters. As Moene and Wallerstein summarize the argument, "the greater the gap between the pretax earnings of the median income voter and average (mean) income, the greater is the level of spending preferred by the median income voter and the higher is the equilibrium level of welfare spending" (2001, p. 859).

While their model pertains specifically to the median-income voter's preferences for redistribution, Meltzer and Richard present the model as an explanation of the growth of government. In effect, Meltzer and Richard treat all government spending — at least all government transfers to individuals or households — as (equally) redistributive. (They explicitly recognize that their model does not apply to the provision of public goods.) By contrast, Moene and Wallerstein (2001, 2002) propose an insurance model of the welfare state. The core assumption of this model is that the
demand for insurance increases with income, holding risk (e.g., the threat of unemployment or disability) constant. Everything else being equal, people with higher incomes will choose to buy more insurance against income loss than people with lower incomes. From this follows the opposite prediction concerning the relationship between inequality and social spending than that proposed by Meltzer and Richard. Assuming that the average income remains constant, as inequality rises the income of the median-income voter declines. Consequently the median-income voter's support for social insurance-type spending — unemployment, sickness, disability, and death benefits along with active labor market programs — also declines.

Moene and Wallerstein do not reject the Meltzer-Richard model, but rather incorporate it into a broader analytical framework. For social programs that redistribute income among employed people (rather than redistribute income from employed to nonemployed), their model produces the same expected relationship between inequality and spending as the Meltzer-Richard model. As noted earlier, however, Moene and Wallerstein's (2001, 2002) empirical results show that market inequality is associated with lower levels of aggregate social spending. On Moene and Wallerstein's terms, these results imply that insurance motives dominate the politics of the welfare state.²

The "power resources" approach favored by many students of comparative welfare-state development provides a somewhat different interpretation of the results reported by Moene and Wallerstein. Instead of positing a direct relationship between the distribution of gross earnings and the size of the welfare state, this approach treats both variables as influenced by the balance of power between labor and capital (Bradley et al. 2002; Stephens 1979). Through collective bargaining, strong labor movements promote compression of wage differentials. At the same time, strong labor movements and labor-affiliated parties push for the expansion of social insurance and other redistributive measures.

To some extent, Moene and Wallerstein avoid the objection that the association between inequality and lower levels of social spending might be spurious by controlling for government partisanship, but the question of the analytical significance of median-voter preferences relative to the power resources of collective actors remains open. We shall not attempt to settle this question here. For the most part, our discus-
sion remains on the terrain staked out by the Meltzer-Richard and Moene-Wallerstein models. Conceptually, the innovation we introduce is to sidestep the question of the size of the welfare state and instead consider the redistributive effects of the welfare state.

The Distribution of Gross Earnings

*Individuals or Households?*

Wage distribution has recently emerged as an important object of analysis for students of comparative political economy. To date, virtually all work on this topic has been based on the OECD's dataset on decile wage ratios (e.g., Kenworthy 2001; Moene and Wallerstein 2001, 2002; Mosher 2001; Pontusson, Rueda, and Way 2002; Rueda and Pontusson 1999; Wallerstein 1999). This dataset pertains to the earnings of individuals. As indicated at the outset, we believe useful insights about the politics of inequality might be gained by instead looking at household earnings. To the extent that individuals (voters) ask themselves how they are faring relative to others, they are likely to be thinking about this question at least partly, and perhaps primarily, in terms of household income (and expenses). Moreover, measuring inequality in terms of household earnings enables us to take account of the distributive impact of unemployment and labor-force exit. Needless to say, measures of wage inequality only capture inequality among employed workers. In addition, such measures are quite misleading to the extent that employers hang on to skilled (well-paid) workers while shedding unskilled (low-paid) workers during an economic downturn. Under these conditions, increasing unemployment automatically reduces inequality as measured by wage ratios.

Another problem with the OECD dataset on relative earnings is that it pertains exclusively to workers in (year-round) full-time employment. Including part-time employees in our measures of wage inequality might not matter much to a comparative assessment of wage inequality at any point in time. Part-time workers earn considerably less, on an hourly basis, than full-time workers in all of the rich OECD countries, but they tend to do better relative to full-time workers in countries with more compressed wages among full-time workers (Pontusson 2003). Since the
growth of part-time employment varies substantially across countries, however, the issue of part-time employment may matter a great deal to a comparative assessment of over-time changes in earnings inequality. By way of illustration, consider the following two-country comparison. In 1995, the hourly wage premium enjoyed by full-time workers was nearly the same in Sweden and Australia; on average, the hourly wages of part-time workers were 87-89% of those of full-time workers. From 1983 to 1998, the incidence of part-time employment grew by 48% in Australia, but declined by 13% in Sweden. Over the same period, wage inequality among full-time workers, measured by 90/10 ratios, remained essentially unchanged in Australia (+.3%) but increased by 14% in Sweden (Pontusson 2003).

Using data on household earnings from the Luxembourg Income Study to measure inequality enables us to take into account the distributive effects of part-time employment as well as unemployment and labor force nonparticipation. Shifting from individual earnings to household earnings also takes account of the extent to which the earnings of spouses/cohabitants are correlated with each other ("marital homogamy").

The inequality measure we use is the Gini coefficient, which ranges from 0 to 1, with larger numbers indicating greater inequality. Multiplied by 100, the Gini coefficient can be interpreted as the percentage of total income that would have to be redistributed to achieve perfect equality. Since our goal is to explore the nexus between labor-market dynamics and welfare-state dynamics, we restrict our measure of inequality to households with working-age heads, i.e., households headed by someone age 25 to 59 (see also Bradley et al. 2002; Gornick 1999). For the same reason, our measure of household inequality is based on earnings rather than "market income." In addition to earnings, the latter LIS category includes income from financial assets and real estate. As a practical matter, earnings and market income yield nearly identical measures of household inequality. Across the 14 countries included in our analysis, $r = .99$ for mid-1980s Gini coefficients and .98 for mid-1990s Gini coefficients. For change over time (mid-1990s Ginis minus mid-1980s Ginis), $r = .99$. In almost all countries, the difference between the Gini coefficient for household earnings and the Gini for household market income is less than .005. Following convention, we adjust household earnings using the square root of the number of persons in
the household as the equivalence scale (Atkinson, Rainwater, and Smeeding 1995).

The national surveys included in the LIS database have been collected in "waves." Within each wave, the year of observation for individual countries differs somewhat. To maximize the number of countries covered and to ensure comparison across similar points in the business cycle, we focus on the mid-1980s and the mid-1990s. Even for this limited time frame, the LIS database only contains sufficient information to include 14 of the 18 OECD countries usually included in analyses of this sort: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States.\(^5\) Table 1 lists the specific survey years for each country (and the country abbreviations used in the figures that follow).

For heuristic purposes, we group the countries into three categories: Nordic social market economies, continental social market economies, and liberal market economies. This categorization corresponds to the three types of advanced capitalist political economies highlighted by Schumpf (2000) and Pontusson (2003), among others. It should be noted that this paper makes no claims about causal dynamics being different in different clusters of countries. Quite the contrary, our evidence suggests that it is quite possible to generalize about the politics of inequality across these clusters (see Pontusson 2002).

To clarify the implications of shifting from a measure of inequality based on the wages of full-time employed individuals to a measure based on household earnings, Figure 1a reports 90/10 wage ratios from the OECD dataset for the closest we can get to "LIS-equivalent" years in the mid-1980s and mid-1990s (see Table 1). The figure tells a familiar story. The Nordic social market economies clearly stand out as a group, characterized by very compressed wage structures. On the other hand, the liberal market economies — at least Canada, the U.K., and the U.S. — stand out as highly inegalitarian. The continental social market economies occupy an intermediate position on this spectrum. In terms of change over time, we observe significant increases of wage inequality in Italy, the Netherlands, the U.K., and the U.S. More modest increases of wage inequality also occurred in Sweden and Australia. In the majority of social market economies, however, wage inequality remained unchanged.
or even declined slightly over this period. Certainly there is no evidence of cross-
national convergence of wage structures in Figure 1a. At opposite ends of the spec-
trum, Sweden and the U.S. both experienced increased wage inequality and the gap
between these countries remained roughly the same.6

– Figures 1a and 1b about here –

Figure 1b reports Gini coefficients for gross household earnings from the LIS
database for the mid-1980s and mid-1990s. Comparing Figure 1b to Figure 1a, we
find that there is significantly less cross-country variation in earnings inequality
among households than in wage inequality among full-time employees. Looking at
the household Gini coefficients for the mid-1980s, the Netherlands and France fall in
the same range as the liberal market economies while the rest of the continental so-
cial market economies resemble the Nordic countries quite closely.7 However, the
truly striking contrast between Figures 1a and 1b concerns change over time. In Fig-
ure 1b, we observe large increases of household earnings inequality in all but three
countries: Switzerland (small increase), France (no change), and the Netherlands
(substantial decline). Moreover, the growth of household inequality appears to have
been particularly pronounced in more egalitarian countries, producing a substantial
degree of cross-national convergence in the distribution of household earnings. This
is shown in Figure 2.8

– Figure 2 about here –

Explaining the Rise in Household Earnings Inequality

How should we understand the discrepancy between Figures 1a and 1b with respect
to change over time? Why has household earnings inequality grown so consistently
while wage inequality among employed individuals has not? More specifically, why
has household inequality grown in countries that have experienced little or no in-
crease in wage inequality? A fully satisfactory answer to these questions would re-
quire an individual-level analysis of the effects of changes in unemployment, part-
time employment, household composition (notably the growth of households with a
single adult), and interspousal earnings correlations.9 Such an analysis lies beyond
the scope of this paper. For our present purposes, the big picture conveyed by Figure
3a must suffice: across countries, changes in household earnings inequality correlate
remarkably well ($r = -.82$) with changes in employment rates, i.e., absolute changes in the percentage of people aged 15-64 who are employed (full-time or part-time).\textsuperscript{10}

-- Figures 3a and 3b about here --

It appears that employment contraction disproportionately hurt the employment opportunities and earnings of low-earning households and, conversely, employment growth disproportionately benefited low-earning households. Hence, in countries with declining employment — most notably Finland and Sweden, but also Norway, Denmark, and Italy — we see relatively large increases in household earnings inequality.\textsuperscript{11} By contrast, in nations with rising employment — particularly the Netherlands — we observe a decrease or more modest increase in household inequality. If the key development is the way in which employment changes have affected low-earning households, the pattern should be even stronger if we focus on the bottom half of the earnings distribution. Figure 3b shows that this is indeed the case. The correlation between change in employment and change in earnings inequality among households with earnings below the median is nearly perfect ($r = -.94$).\textsuperscript{12}

The evidence in Figures 3a and 3b might be combined with the data on wage inequality (Figure 1a above) to tell a story about cross-national variation in relative employment opportunities for unskilled workers and the distribution of employment by household earnings. In the U.S., the U.K., and also the Netherlands, low-income households appear to have compensated for falling relative wages by increasing their employment relative to high-income households, in terms of the number of working household members (and also hours worked). By contrast, low-earning households presumably lost employment relative to high-earning households in countries with no increase in wage inequality but a significant increase in household earnings inequality — e.g., Denmark, Norway, Finland, Canada — or, as in the Swedish case, a much larger increase in household earnings inequality than in wage inequality. The existing literature suggests two reasons why the mechanism of "compensatory employment" might operate in some countries and not others. On the demand side, a combination of wage compression through centralized wage bargaining and high payroll taxes may weaken relative demand for low-wage workers in the more egalitarian social market economies of Northern Europe.\textsuperscript{13} On the supply side, continued real wage
growth for low-wage workers and the public provision of relatively generous income support for unemployed workers may have reduced the need for low-income households in these countries to engage in compensatory employment (see Alvarez 2001). Further analysis, beyond the purview of this paper, is required to parse such effects and to determine their relative significance.

Inequality and Redistribution

Our Measure of Redistribution
As noted at the outset, the LIS data enable us to calculate the actual redistribution achieved via taxes and government transfers and thereby avoid using the level of social spending or transfers as a proxy for redistribution. The measure of redistribution we use here is simply the difference between the Gini coefficient for posttax-posttransfer ("disposable") household income and the Gini coefficient for gross household earnings. Again our analysis is restricted to working-age households; hence our measure of redistribution ignores the effects of pensions and other cash benefits targeted to the elderly. Also, it is worth emphasizing that our measure of redistribution does not take into account the redistributive impact of the public provision of services, such as education, health care, and child care. As Huber and Stephens (2001) and others have emphasized, services are a critical component of the welfare states of many OECD countries. To the extent they are provided at low or no cost and are universally available, services are equivalent to a flat-rate benefit given to each household, which reduces the degree of consumption inequality. However, they do not alter the distribution of earnings or income per se.

Cross-Sectional Patterns
Figures 4a and 4b highlight the significance of the way we choose to measure market inequality for our understanding of the relationship between inequality and redistribution. For the mid-1980s, Figure 4a plots our measure of redistribution against individual wage inequality (OECD data) while Figure 4b plots the same measure of redistribution against household earnings inequality (LIS data). The regression line in Figure 4a is essentially flat, but if we disregard Norway and especially Italy we find a
reasonably consistent inverse association, suggesting that countries with compressed wage structures tend to have more redistributive welfare states than countries characterized by more wage inequality. Though the fit is again far from perfect, Figure 4b suggests, by contrast, that less egalitarian countries tend to have more redistributive welfare states. With some good will, Figure 4a might be interpreted as supportive of the power resources model. Figure 4b, on the other hand, is more consistent with the Meltzer-Richard model.

– Figures 4a and 4b about here –

**Change Over Time**

It would surely be foolish to draw any definitive conclusions about the merits of alternative interpretations of the relationship between inequality and redistribution from Figures 4a and 4b, as the fit is not particularly good in either figure. The evidence presented in Figure 5 is more intriguing and also more persuasive. This figure tracks how countries moved in the space defined by inequality of household earnings and welfare-state redistribution from the mid-1980s to the mid-1990s. With respect to movements on the horizontal axis, Figure 5 simply restates what was shown in Figure 1b, namely that household earnings inequality increased significantly in all countries except the Netherlands, France, and Switzerland. The new information in Figure 5 concerns movement on the vertical axis. Here we observe a general tendency for welfare-state redistribution to increase. The most notable exception is the Dutch case, the only country in which redistribution was significantly reduced. In France and Switzerland, the other two countries without any significant increase in household inequality, redistribution was essentially unchanged over this period. Among the many countries that experienced growth in household inequality, the U.K. is the only case in which we observe a (slight) decline in redistribution.  

– Figure 5 about here –

Welfare states did not entirely offset the growth of earnings inequality in the 1980s and 1990s. In every country for which we observe growth in earnings inequality, we also observe an increase in disposable-income inequality (see the Appendix). Still, welfare states did compensate for inequality growth to a considerable extent. Most importantly for our present purposes, increases in redistribution were largely
proportionate to increases in earnings inequality, as indicated in Figure 6. The association is quite strong: $r = .83$.

Explaining the Over-Time Pattern

The pattern in Figure 6 is precisely what the Meltzer-Richard model would lead us to expect: increases in inequality are associated with increases in redistribution. On the other hand, this pattern runs counter to the expectations of the power resources approach. (As the Moene-Wallerstein model focuses on insurance-motivated social spending rather than redistribution, Figure 6 does not speak directly to this model.) Should this be seen as a vindication of the Meltzer-Richard model? The answer to this question depends on how we interpret the causal mechanisms invoked by the model. One thing seems very clear: the increases of redistribution that we observe in the LIS data were generally not the result of new policy initiatives introduced in response to a shift in median-voter preferences toward increased redistribution. As is commonly recognized, the partisan composition of government shifted markedly to the right across OECD countries in the 1975-85 period (for aggregate evidence see Garrett 1998, p. 60). In most of the countries covered by our analysis, center-right parties retained control of the government well into the 1990s. The time frame of our analysis incorporates the "return of the left" phenomenon of the mid-to-late 1990s to a limited extent, but it does not seem plausible to suppose that this explains the increases in welfare-state redistribution we observe. The timing is not right for such an explanation to work. More importantly, a good deal of impressionistic evidence indicates that the policy platforms of social democratic parties became less redistributive in the 1980s and especially the 1990s (see, e.g., Kitschelt 1994). Above all, we clearly do not observe, in any of these countries, the shift toward greater redistributive effort across the entire party spectrum that the Meltzer-Richard model might lead us to expect.

Among scholars analyzing trends in social spending and in benefit levels provided by social insurance and social assistance, there is some disagreement as to the extent of cutbacks and the degree to which welfare states have been restructured. Some scholars (e.g., Pierson 1996) emphasize the resilience of the welfare state and
the persistence of cross-national diversity, while others (e.g., Clayton and Pontusson 1998) emphasize common trends for universalistic benefits and services to be cut back. However, no one working on this topic suggests that the period of the mid-1980s to the mid-1990s can be characterized as one of welfare-state expansion. In the most recent literature (Hicks 1999; Huber and Stephens 2001; Pierson 2001; Swank 2002), there seems to be broad consensus around the following propositions: (1) Many countries have seen significant retrenchment of public welfare programs, particularly income support for the unemployed. (2) With one or two possible exceptions (New Zealand and the U.K.), there has been no radical dismantling of the welfare state. (3) There is little evidence of cross-national convergence in spending levels or welfare-state structure.

A few stylized facts about developments in individual countries might be instructive at this point. In percentage terms, Sweden experienced the largest increase in household earnings inequality from the mid-1980s to mid-1990s of all the countries included in our analysis. To the extent that the Meltzer-Richard model supposes that this would lead to policy changes intended to increase redistribution, the Swedish experience is clearly not consistent with the model. As Huber and Stephens (2001, pp. 241-57) and Swank (2002, pp. 133-42) describe in detail, policy changes in Sweden during the 1980s and 1990s were mainly intended to reduce redistribution. In 1990, a Social Democratic government reduced the replacement rate for sick pay from 90% to 65% for the first three days and to 80% from day four through 90. The "bourgeois" government elected in 1991 subsequently introduced a number of additional changes, most with Social Democratic support. The sick pay replacement rate was reduced to 80% after 90 days, qualifying conditions for sick pay and occupational injury insurance were tightened, and employers were required to pay for the first two weeks of sick pay. A five-day waiting period for unemployment benefits was introduced and the replacement rate was reduced to 80%. Employee contributions to social insurance were introduced in some programs and increased in others.

There were some policy changes that might be said to have boosted the redistributive character of the Swedish welfare state. Paid leave to care for ill children, public daycare, and preschool facilities were all expanded in the 1980s. And spending on active labor market policies was substantially increased in the 1990s. How-
ever, these changes did not involve cash benefits and so would not have affected the degree of redistribution as measured with the LIS data.

A similar story holds for Finland. As in Sweden, the rise in household earnings inequality in Finland began in the 1980s but accelerated as the economy tanked in the early 1990s. Again, ensuing policy developments entailed fiscal tightening and substantial cutbacks of welfare benefits (Huber and Stephens 2001, pp. 259-62). Stricter eligibility criteria were introduced for unemployment compensation and sick pay, and replacement rates were reduced for the latter. In addition, employee contributions to these and other programs were increased, and a sickness allowance payable to students, homemakers, and others without income was abolished.

In Germany, the CDU-FDP coalition that held government power for the entire period covered by our analysis "tightened eligibility conditions for unemployment benefits, increased copayments for medical services and prescriptions, reduced social assistance, and weakened entitlements to social assistance in favor of significant cuts in benefits" (Huber and Stephens 2001, p. 266).

Finally, we observe some compensatory increase in redistribution even in the United States, the quintessential welfare-state laggard. This is partly a product of the increase in the Earned Income Tax Credit beginning in 1993. However, the time period covered by LIS data for the U.S. also featured a tightening of eligibility requirements for unemployment compensation and a decline in its generosity. A number states also introduced time limits on receipt of AFDC in the early 1990s (prior to the 1996 federal welfare legislation). On balance, it is far from clear that policy changes made the American welfare state more redistributive during these years.

In addition, virtually all OECD countries reduced the progressivity of income taxes in the 1980s and 1990s. For all but one of the 12 countries for which Garrett (1998, p. 137) presents data on this score, we observe a reduction in the gap between the highest and lowest rates of income taxation. Indeed, the increases in redistribution shown in Figure 6 appear to be entirely a result of transfer payments. Plotting changes in redistribution via transfers against changes in household earnings inequality produces a picture that is more or less identical to Figure 6 (not shown here; available on request). By contrast, plotting changes in redistribution via taxes against changes in earnings inequality produces a completely flat regression line: lots of
change and cross-national variation in earnings inequality, but no change at all in redistribution via taxes (not shown here).\textsuperscript{17}

In sum, the increases in redistribution that we observe can hardly be interpreted as the product of policy reforms that increased the redistributive character of the welfare state. Far more plausibly, these changes in redistribution were a result income support provisions in existing programs. Specifically, our evidence suggests that earnings losses due to employment losses among low-income households rendered transfer programs more redistributive in effect — because more individuals and households qualified for them — despite marginal cutbacks in the replacement levels provided by these programs.

Returning to the Meltzer-Richard model, it is tempting to argue that the compensatory redistribution that occurred in the 1980s and 1990s was "chosen" by median voters in the 1960s and 1970s. However, though we have no data on this, it seems safe to assume that the median voter of 1970 had not experienced a recent fall in relative income, at least not to the same extent as the median voter of 1990. The notion that support for redistributive social programs might be modeled as a response to rising inequality thus seems less credible.

In defense of the Meltzer-Richard model, one might argue as follows. While it is true that the policy decisions that produced the increase in redistribution we observe predate the mid-1980s, this does not mean that the preferences of median voters in the mid-1980s-to-mid-1990s period were irrelevant. The median voter of 1990 could have cast her support in favor of dismantling existing redistributive programs but apparently chose not to do so. Moreover, the critique of the Meltzer-Richard model suggested above assumes that the model posits that the preferences of the median voter alone determine policy outcomes. This certainly is not a necessary feature of the model. Instead, the redistributive preferences of the median voter should be seen as one of many relevant factors. Along these lines, the retrenchment of redistributive policy that we observe might be attributed to other developments, such as the (real or perceived) fiscal constraints imposed by globalization and the decline of solidaristic labor movements due to deindustrialization. This "soft" version of the median-voter theorem simply asserts that the impact of these forces was tempered by the redistributive preferences of median voters, i.e., that the retrenchment of redistributive
policy would have been considerably more pronounced had it not been for the growth of market inequality. Our evidence is certainly consistent with this claim.

For a few countries, the LIS data enable us to calculate Gini coefficients for gross household earnings and disposable household income going back to the mid-1970s. This makes it possible to trace the relationship between market inequality and redistribution over a more extended period of time than that covered by Figure 6. Figure 7 shows the results of this exercise for Sweden, Germany, the U.K., and the U.S. For every one of these cases, we again observe a positive over-time association between inequality and redistribution. This again suggests that the Meltzer-Richard model may shed some light on the politics of inequality and redistribution in affluent capitalist societies, and it seems to run counter to the expectations of the power resources model. At the same time, however, the differing slopes of the regression lines indicate that "tastes for equality" vary across countries. The Swedish welfare state has consistently compensated for rising market inequality to a greater extent than the German welfare state, which in turn has compensated more than the British welfare state. The American welfare state stands out as uniquely unresponsive to increases in inequality. The distance between the earnings of the median voter and average earnings is not positively correlated with the slope of the relationship between inequality and redistribution. As suggested by the comparative political economy tradition, the differences in these slopes must be explained through some combination of power resources, institutions, and perhaps cultural norms.

– Figure 7 about here –

Put differently, Figure 7 raises two distinct questions: (1) Why does rising inequality tend to be associated with rising redistribution? (2) Why does the slope of the association vary across countries? The Meltzer-Richard model speaks to the first question, but not to the second question. Conversely, the power resources model is not very helpful in answering the first question, but provides a great deal of insight into the second question.

**Reverse Causality?**

Could it be that rising household earnings inequality is a product of increases in welfare-state redistribution rather than the other way around? A standard argument holds
that high marginal income taxes not only redistribute income, but also discourage high-income households from working more. In addition, generous unemployment compensation and other welfare benefits may discourage the unemployed or nonemployed from seeking jobs. By changing individual incentives to work, redistributive policies affect the distribution of gross earnings (in the language of public economics, the "primary" distribution of income) as well as the distribution of disposable income. Alvarez (2001) argues that these "second-order effects" of redistribution explain why measures of distribution based on household earnings differ so markedly from measures of distribution based on the wages of employed individuals.

The significance of such second-order effects of redistribution for the preceding discussion is a conceptually and empirically complicated question, which we plan to pursue in a subsequent paper. A few general observations must suffice for now. To begin with, it should be noted that the work disincentive effects of progressive income taxes and of benefits for the nonemployed have opposite implications for the distribution of gross earnings. If progressive taxation discourages additional work by high-earning households, it should be associated with a more egalitarian distribution of gross earnings; by contrast, social programs that provide income support for nonworking members of low-earning households should be associated with a less egalitarian distribution. It is quite conceivable, then, that the second-order effects of redistribution cancel each other out.

Our cross-national comparison of changes in household earnings inequality does seem to indicate that countries which provide more generous support for the nonemployed, most notably the Nordic countries, experienced particularly rapid growth of household earnings inequality in the 1980s and 1990s. Yet, as indicated above, programs providing income support to the nonemployed have become less rather than more generous in these countries since 1980. If anything, therefore, incentives for the nonemployed to seek jobs should have increased during this period, leading to less earnings inequality across households. By contrast, some of the growth of household earnings inequality might plausibly be attributed to tax policy changes, reducing marginal taxation of high incomes and thus creating incentives for high-income households to work more. However, this reversal of the causal arrows implies a negative association between inequality and redistribution, which is the opposite of
what the data indicate. Moreover, the pattern of welfare-state compensation for inequality that we observe is a function of the redistributive effects of government transfers, rather than of taxes. On the whole, then, we do not see any obvious endogeneity problem here.

**Conclusion**

We have used Luxembourg Income Study data to examine the effects of changes in market inequality on changes in redistribution in affluent OECD countries between the mid-1980s and the mid-1990s. Unlike wage inequality among the full-time employed, for household earnings inequality we observe sizeable increases over time in most countries. This development was driven largely by changes in employment. In countries with better employment performance, low-earning households benefited relative to high-earning ones; in nations with poor employment performance, low-earning households fared worse. In contrast to widespread rhetoric about the decline of the welfare state, social-welfare policies tended to compensate for the rise in household earnings inequality. And they did so in proportion to the degree of increase in inequality, producing a very strong positive association between changes in inequality and changes in redistribution.

Whereas Moene and Wallerstein's (2001, 2002) empirical analysis of the relationship between wage inequality and levels of social spending contradicts the expectations of the Meltzer-Richard model, our findings regarding the relationship between household earnings inequality and actual redistribution are broadly consistent the Meltzer-Richard model. However, it is quite clear that the compensatory trend in welfare-state redistribution from the mid-1980s to the mid-1990s was not a product of new policy initiatives. On the contrary, most countries underwent some degree of social-policy retrenchment (and tax-policy liberalization) during this period. The observed increase in redistribution was first and foremost a function of a growing number of individuals and households becoming eligible for benefits under existing policies. For the Meltzer-Richard model to be relevant to the "real world" of redistributive politics in this period, one would have to argue that (increasing) redistributive preferences of median voters constrained retrenchment pressures. Clearly, there
is much more to the politics of redistribution than the preferences of median voters.

On the other hand, neither the insurance model proposed by Moene and Wallerstein nor the power resources approach advocated by Stephens (1979) and others provides any ready explanation of the positive over-time association between inequality and redistribution that we observe in the LIS data. Also, the limited time period covered by our empirical analysis deserves to be underscored. The core insight of the Meltzer-Richard model — that the competitive logic of democratic politics balances inegalitarian forces generated by markets — may well provide the basis for understanding new redistributive policy initiatives in other time periods. For instance, electoral gains for left parties across much of Western Europe in the second half of the 1990s can be interpreted at least partly as a conscious effort by voters in the middle of the political spectrum to correct inegalitarian market as well as policy trends over the preceding 10 to 15 years.

In closing, we want to return to the disjuncture between trends in individual and household earnings inequality. For most of the social market economies of northern Europe, the sharp rise in household earnings inequality from the mid-1980s to the mid-1990s contrasts starkly with the rather minimal rise in earnings inequality among full-time employees, suggesting two very different inegalitarian trajectories. In the liberal market economies, particularly the U.S., it is not very meaningful to think of changes in wage inequality as a "choice" made by unions, but union choices presumably do matter to wage-distributive outcomes in the social market economies (given the high rates of unionization and even higher rates of collective bargaining coverage). For the sake of argument, suppose that there is a tradeoff between wage solidarity and employment prospects for unskilled and semiskilled workers, that unions are rational actors, and that they realize they face such a tradeoff. Under these assumptions, the following question arises: Why have unions in these countries generally opted to resist dispersion of wage differentials? One answer might be that unions only care about the income and employment of their own members and disregard the interests of "outsiders" (see Rueda 2002). But this line of reasoning assumes that the employment-inhibiting effects of union wage demands only affect job seekers, not currently employed union workers.

The data presented here suggest that between the mid-1980s and mid-1990s most
welfare states were quite responsive to rising inequality generated by employment losses among low-income households. This would seem to provide the basis for an alternative explanation of union willingness to sacrifice employment in favor of wage solidarity, even when this entails reduced job prospects for their own members. In the recent political climate, unions have had very little reason to believe that rising wage inequality would be met with redistributive tax policy changes. At the same time, they presumably understand that public social-welfare systems will compensate for earnings losses that stem from employment losses. Though ultimately concerned with the distribution of disposable income, rational unions might thus choose to prioritize wage compression over household earnings compression in their approach to wage bargaining. This strikes us as an idea worthy of further exploration.
Notes

1 Meltzer and Richard's (1981) article is strictly theoretical. They offer no empirical test of their model.

2 See Moene and Wallerstein (2002) for a more disaggregated analysis, exploring the effects of inequality on different kinds of social spending.

3 The most recent version of the OECD dataset has yet to be published (OECD n.d.). For earlier versions, see OECD (1993, 1996).

4 According to Burtless' (1998, pp. 70-71) calculations, the increased correlation of spousal earnings accounts for 40% of the rise in household income inequality in the United States between 1979 and the mid-1990s.

5 For a handful of countries, it is possible to track the evolution of Gini coefficients back to the mid-1970s (see below). Also, it should be noted here that our Gini coefficients for mid-1980s Belgium, France, and Italy and for mid-1990s France and Italy are based on earnings before transfers but after taxes ("net" earnings). All other Gini coefficients reported below are based on pretax-pretransfer ("gross") earnings.

6 The short time period covered by Figure 1a should be underscored. As Pontusson (2003) demonstrates, what distinguishes the American case — and to a lesser extent also the British case — in this respect is the fact that the growth of wage inequality began already in the 1970s and has been sustained for a very long period of time. Also, a common (OECD-wide) tendency for wage inequality to increase emerges if we look at 90/10 ratios for men and women separately. In general, continued compression of between-gender wage differentials has offset dispersion of within-gender differentials.

7 For the mid-1980s, the correlation coefficient between 90/10 wage ratios and household earnings Ginis is .51.

8 Measuring change in percentage terms produces an even more impressive association with initial levels. From the mid-1980s to the mid-1990s, Gini coefficients for household earnings grew by 25% in Sweden and Finland and 19% in Norway and Belgium, as compared to 9-11% in the liberal market economies. The question of whether change should be measured absolutely or relatively is a thorny one. We opt for absolute measures because we are ultimately more interested in what inequality means for real people than in the question of cross-national convergence.

9 Some of the contrast between wage inequality and household inequality that we observe may have to do with properties of the particular inequality measures used. Unfortunately, the OECD database does not allow us to calculate Gini coefficients for individual earnings. We can calculate 90/10 ratios for LIS household earnings; but in some countries a sizeable share of households have no employed adult, and as
a result the gross earnings of households in the 10th percentile are very low. This dramatically inflates the 90/10 (or 50/10) ratio, leading to figures that are not very illuminating. 90/10 ratios normally range from 0 to 15 or so (the U.S. figure for 1997 is 12), but the ratio was 61 for Australia in 1994, 181 for Belgium in 1997, and 184 for the Netherlands in 1983.

10 Again, the data used to generate the employment rate changes reported in Figures 3a and 3b are for "LIS-equivalent" years. In regressions not shown here, we examined the effect on changes in household earnings inequality of various combinations of changes in earnings inequality among full-time year-round employed individuals, changes in employment, changes in single-earner households, and changes in marital homogamy. All were measured as mid-1990s value minus mid-1980s value. (We did not include change in part-time employment because data for several countries are not available for the mid-1980s and because, across the countries for which data are available, this variable is highly correlated with change in employment.) The change in employment variable dominated these regressions. It was always statistically significant at the .10 level or better (usually at the .01 level) and yielded standardized coefficients of -.52 or better. Change in single-earner households and change in marital homogamy each consistently had the expected positive sign, though neither was always statistically significant. Earnings inequality among individuals had inconsistent signs and seldom reached significance.

11 Between 1995 and 2000, the employment rate increased from 61% to 67% in Finland and from 72% to 74% in Sweden. These trends suggest that household earnings inequality has probably decreased somewhat in these two countries in recent years.

12 Switzerland is omitted from Figure 3b. The small number of observations in the 1992 Swiss dataset yielded an unreliable Gini coefficient for earnings inequality among households in the bottom half of the distribution.

13 Note that the argument suggested here is about relative demand for different kinds of labor rather than overall demand. Kenworthy (2001) reports some employment effects of wage compression, but finds that other labor market institutions and policies matter more to cross-country variation in employment performance. See also Blau and Kahn (2002); Iversen and Wren (1998); Nickell and Layard 1999; Scharpf (2000).

14 The Appendix shows Gini coefficients for disposable household income in the mid-1980s and mid-1990s. Other authors (e.g., Bradley et al. 2002; Hicks and Kenworthy 2003; Mahler, Jesuit, and Roscoe 1999) measure redistribution as the percentage reduction in inequality brought about by taxes and transfers (disposable income Ginis minus earnings Ginis divided by earnings Ginis). We opt for an absolute measure of redistribution because it is neutral with respect to levels of pretax-
pretransfer inequality. Imagine two countries, A and B, which have pretax-pretransfer Ginis of .30 and .40, respectively. If government taxes and transfers reduce the Gini by .10 in each country, we feel redistribution should be scored equally in the two nations. In our measure that is the case: each country is scored .10. A percentage reduction measure, however, would yield a score of .33 (.10 divided by .30) for country A and .25 (.10 divided by .40) for country B. As it turns out, the patterns on which we focus here are not significantly affected by the choice of whether to measure redistribution as absolute change or percentage change. For the mid-1990s data, the correlation between the two measures is .94.

15 As Huber and Stephens (2001, p. 375) note, analyses that include the retired population (e.g., Mitchell 1991) tend to exaggerate the redistributive effects of welfare states that have generous pension systems. In such countries, people have little incentive to save for their retirement and consequently retired people have little or no pretransfer income.

16 Belgium is not included in Figure 5 (or Figure 6 below). The LIS data show an increase in earnings inequality as well as redistribution in Belgium between the mid-1980s and the mid-1990s, but that is largely (if not entirely) due to the fact that the 1988 data for Belgium are based on net (i.e., after-tax) earnings while the 1997 data are based on gross earnings.

17 It is also noteworthy that levels of redistribution via transfers vary much more across countries than levels of redistribution via taxes.
References


toral Analysis of the Developed Countries." *Comparative Political Studies* 32:363-395.

Table 1. Luxembourg Income Study Countries and Years Included in Our Analysis

<table>
<thead>
<tr>
<th>LIS Survey Year</th>
<th>Mid-1980s</th>
<th>Mid-1990s</th>
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<tr>
<td>Sweden (Swe)</td>
<td>1987</td>
<td>1995</td>
</tr>
<tr>
<td>Continental SMEs</td>
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<tr>
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Note: SME = "social market economy"; LME = "liberal market economy"
Figure 1a. Earnings Inequality among Full-Time Employed Individuals (OECD), Mid-1980s and Mid-1990s

Figure 1b. Earnings Inequality among Households (LIS), Mid-1980s and Mid-1990s
Figure 2. Convergence in Household Earnings Inequality

Household earnings inequality, mid-1980s (Gini, LIS)

Household earnings inequality, mid-1990s minus mid-1980s (Gini, LIS)

-0.05 -0.00 0.00 0.05 0.10

Household earnings inequality, mid-1980s (Gini, LIS)

-0.05 -0.00 0.00 0.05 0.10

Household earnings inequality, mid-1990s minus mid-1980s (Gini, LIS)
Figure 3a. Change in Employment and Change in Household Earnings Inequality, Mid-1980s to Mid-1990s

Figure 3b. Change in Employment and Change in Below-Median Household Earnings Inequality, Mid-1980s to Mid-1990s
Figure 4a. Earnings Inequality among Full-Time Employed Individuals and Redistribution, Mid-1980s

Figure 4b. Household Earnings Inequality and Redistribution, Mid-1980s
Figure 5. Household Earnings Inequality and Redistribution, Mid-1980s and Mid-1990s
Figure 6. Change in Household Earnings Inequality and Change in Redistribution, Mid-1980s to Mid-1990s

Change in redistribution (earnings Gini minus posttax-posttransfer Gini, LIS)

Change in household earnings inequality (Gini, LIS)
Figure 7. Household Earnings Inequality and Redistribution since the Mid-1970s

7a. Sweden

7b. Germany

7c. United Kingdom

7d. United States
Appendix. Posttax-Posttransfer Income Inequality, Mid-1980s and Mid-1990s

The diagram illustrates the posttax-posttransfer income inequality (Gini, LIS) for various countries in the mid-1980s and mid-1990s. The x-axis represents the countries, and the y-axis shows the posttax-posttransfer income inequality (Gini, LIS). The bars for the mid-1980s are indicated by a light shade, while the bars for the mid-1990s are dark. The data shows a general increase in income inequality over the two decades.