

Hicks, Alexander; Kenworthy, Lane

**Working Paper**

## Varieties of Welfare Capitalism

LIS Working Paper Series, No. 316

**Provided in Cooperation with:**

Luxembourg Income Study (LIS)

*Suggested Citation:* Hicks, Alexander; Kenworthy, Lane (2002) : Varieties of Welfare Capitalism, LIS Working Paper Series, No. 316, Luxembourg Income Study (LIS), Luxembourg

This Version is available at:

<https://hdl.handle.net/10419/160988>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# **Luxembourg Income Study Working Paper Series**

**Working Paper No. 316**

**Varieties of Welfare Capitalism**

**Alexander Hicks and Lane Kenworthy**

**August 2002**



---

**Luxembourg Income Study (LIS), asbl**

---

## Varieties of Welfare Capitalism

Alexander Hicks and Lane Kenworthy

Department of Sociology  
Emory University  
Atlanta, GA 30322  
E-mail: ahicks@emory.edu, lkenwor@emory.edu

Forthcoming in *Socio-Economic Review*, vol. 1, no. 1, 2003

Earlier versions were presented at the American Political Science Association annual meeting, September 2000, and the Emory University Sociology department seminar, October 2001. We thank participants, particularly Torben Iversen, along with two *Socio-Economic Review* referees, for helpful comments. We are also grateful to Janet Gornick for allowing us to use her data on women's share of total earnings.

# Varieties of Welfare Capitalism

## Abstract

Despite the considerable influence of Esping-Andersen's categorization of three "worlds" of welfare capitalism, researchers have largely neglected investigation of his *dimensions* of welfare state policy and politics. Building on and extending the foundations provided by Esping-Andersen, we explore the identities and consequences of welfare state regime dimensions. Our principal components analyses identify two such dimensions. The first, which we label "progressive liberalism," rearranges Esping-Andersen's separate "social democratic" and "liberal" dimensions into two poles of a single dimension. Its positive pole is characterized by extensive, universal, and homogenous benefits, active labor market policy, government employment, and gender-egalitarian family policies. The second, which we label "traditional conservatism," is similar to but broader than Esping-Andersen's conservative dimension. It features not only occupational and status-based differentiations of social insurance programs and specialized income security programs for civil servants, but also generous and long-lasting unemployment benefits, reliance on employer-heavy social insurance tax burdens, and extension of union collective bargaining coverage. Pooled cross-section time-series regressions covering 18 countries over the 1980s and 1990s suggest that progressive liberalism is associated with income redistribution and gender equality in the labor market. The principal consequence of traditional conservatism appears to be weakened employment performance.

## Varieties of Welfare Capitalism

Despite the scale and dynamism of the Chinese economy, the contrast between capitalism and socialism has lost vigor since the collapse of the Soviet Union and its satellites. Attention among comparative political economists has shifted to "varieties of capitalism." However, efforts to define and articulate these have focused on economies, or more broadly on political economies (Hall and Soskice 2001; Hicks and Kenworthy 1998; Iversen, Pontusson, and Soskice 2000; Pontusson 2003). How are we to characterize and differentiate *states* in affluent capitalist societies? Our interest here is in what has recently been the most commonly addressed aspect of the democratic facets of affluent capitalist nations: welfare states.

Recent efforts to characterize and differentiate welfare states have been dominated by Gøsta Esping-Andersen's (1990, 1999) work, which has stimulated a visible and voluminous body of research (e.g., Castles and Mitchell 1993; Crepaz 1998; Goodin et al. 1999; Gornick 1999; Huber and Stephens 2001; Pierson 2001; Ragin 1994; Scharpf 2000; Scharpf and Schmidt 2000; Swank 2001a, 2001b). Yet this research has been almost entirely confined to Esping-Andersen's categorization of welfare states into three regimes-types, or "worlds," of welfare capitalism: the social democratic (or "socialist" as originally termed), liberal ("residual"), and conservative ("corporatist") worlds shown in Table 1. Authors debate the number of worlds of welfare capitalism and the country memberships of those worlds (Castles and Mitchell 1993; Huber and Stephens 2001; Ragin 1994; Scharpf 2000). They map trajectories of welfare policies *per* regime-type subpopulation (Huber and Stephens 2001). They group nations by regime-type for statistical analyses of such policies (Goodin et al. 1999; Gornick 1999; Swank 2001a, 2001b). They specify regime-type-specific explanatory theories of varied outputs and outcomes, and evolutions of welfare states (Pierson 2001; Scharpf and Schmidt 2000). They also sometimes employ Esping-Andersen's (1990) decommodification scores in discussions of theory or descriptions of their cases. However, for all its activities and vibrancy this research has largely neglected investigation of Esping-Andersen's *dimensions* of welfare state policy and politics.

– Table 1 about here –

Each of Esping-Andersen's three worlds is rooted in a specific dimension of welfare state programs. Indeed each was, in its original categorization, plucked from atop a dimension of signature policy characteristics (Esping-Andersen 1990, pp. 69-77). The social democratic world is comprised of the five nations whose social insurance programs are most universalistic in coverage and homogeneous in benefit level. The liberal world includes the five countries most marked by means testing and by private (as opposed to public) health and retirement insurance. The conservative

world is constituted by the five nations with highest scores on a dimension tapping the degree to which social insurance programs are differentiated by occupational and public-private status group distinctions. These dimensions remain the basis for regime classification in Esping-Andersen's (1999) recent refinement.<sup>1</sup> Table 2 displays Esping-Andersen's 1990 country scores for these policy characteristics and for his three welfare state dimensions.

– Table 2 about here –

As outcomes, these dimensions underlying welfare regimes are seldom studied, though particular dependent variables that are known to tap them, such as decommodification and the "social wage," have been examined (e.g., Birchfield and Crepaz 1998; Pontusson 2003). Yet neither decommodification nor the social wage is a constituent, differentiating dimension of Esping-Andersen's regimes, though decommodification is sometimes mistakenly invoked as one. Hicks (1999, chap. 4) did explore the political origins of the regimes, finding them more discontinuous and heterogeneous than Esping-Andersen had posited. However, that investigation examined worlds or clusters, not dimensions (though see Hicks 1999, Appendix 8A). As causes, welfare state dimensions are studied almost exclusively as mediating contexts and operationalized as regime categories. For example, Pierson (2001) and Scharpf and Schmidt (2000b) differentiate the cases of their explanatory schemes by regime-type. Huber and Stephens (2001) and Swank (2001a, 2001b) differentiate some statistical analyses by regime-type, attributing inter-regime differences in descriptive and explanatory patterns to regime-types.

Analytically, a focus on underlying welfare state dimensions may allow for more elegant and fine-grained analyses of cross-regime differences in parameters explaining welfare state phenomena. For instance, interactions between continuous variables can be examined and parameters differentiated for every case's value along a welfare state *dimension* as opposed to across *categories* of welfare state regimes (see, e.g., Alvarez, Garrett, and Lange 1991; Lange and Garrett 1985). Similarly, a focus on dimensions may allow for more elegant findings, as where a continuous regressor substitutes for a multi-regressor categorical variable. Conceptually, dimensions knit cases together as well as differentiate them, alerting us to continuity as well as contrast. Borderline cases can be highlighted by their intermediacy instead of obscured by their forced allocation to one or another category. Such nuance may not only better characterize a country such as the United Kingdom, which is neither clearly liberal nor social democratic (Esping-Andersen 1999, pp. 85-86). It may also more effectively sensitize us to change, such as the U.K.'s regression from welfare leader circa 1950 to welfare laggard only decades later (Hicks 1999, p. 123).

Here, building on and extending the foundations provided by Esping-Andersen (1990, 1999), we explore the identities and consequences of welfare state regime dimensions. We move beyond Esping-Andersen's three initial (1990) social insurance-centered dimensions to include his more recent (1999) emphasis on labor market regulation and family policies. After articulating possible constituent elements of

welfare state regimes, we use principal components analysis in an attempt to map ideologically and politically interpretable and theoretically and analytically cogent summary dimensions of such regimes. After mapping dimensions, we assist interpretation of them by briefly examining some of their historical predictors and correlates. Finally, we turn to an analysis of the consequences of these dimensions for equality, jobs, and incomes.

To preview, we find two principal dimensions. One, extending between the twin "worlds" of social democracy and liberalism as if they might be poles of a single sphere, dominates our analysis, capturing most of the variance in the various aspects of welfare states that we consider. A second dimension, extending outward from what look like residues of precisely Esping-Andersen's (1990, 1999) conservative "world," appears to complement the strong force of the first "progressive liberal" dimension (as we come to call it) as a weaker, residual power out of the pre-capitalist past. These two dimensions do not merely shift attention from "worlds" to dimensions and reduce Esping-Andersen's focus from three dimensions to two. They expand comprehension of state axes from social insurance states to welfare states that are broadly construed to encompass not only "social security" but also "work" and "family" policies. They not only appear consequential for a range of welfare state functions; they indicate that many of the "dysfunctions" of welfare states are endemic not to some illiberal "welfarism," but rather to a particular "conservative," continental European variant of it. We attempt to clarify the continuing value and usefulness of welfare regimes "worlds" (as categorically identified regimes) in the face of what we hope will be a new attention to welfare regime dimensions. As the effort is preliminary, suggestions for future work are highlighted.

## **Dimensions of Welfare State Regimes**

### ***Three Dimensions of Welfare Capitalism?***

We begin our attempt to articulate the elements and dimensions of welfare state regimes with the foundational dimensions of Esping-Andersen's "welfare states as systems of stratification" (1990, pp. 69-77). To recapitulate, there are three such dimensions. One is a social democratic dimension gauging the universalism and benefit uniformity of public social insurance programs. The second is a liberal dimension tapping the degree of means testing and the relative weight of private, as opposed to public, health and retirement insurance. The third is a conservative dimension tapping the degrees to which public social insurance programs are differentiated by occupational and public-private status group distinctions. Esping-Andersen assigns each country a score for each of these items circa 1980, and then sums the scores. These summed scores are then used to classify countries into particular regime-types, or worlds, as shown in Tables 1 and 2 above.

However, the distinctiveness of these three dimensions is unclear (see Hicks 1999, Appendix 8A). Most notably, countries that provide universal benefits are,

almost by definition, the least likely to make extensive use of means testing. Furthermore, nations with a universalistic, egalitarian orientation toward benefits tend to be strongly oriented toward government, as opposed to private, provision of pensions and health insurance. This suggests that Esping-Andersen's social democratic and liberal worlds may actually represent opposing poles of a single dimension. Indeed, there is a moderate inverse correlation of  $-.44$  between "social democracy" and "liberalism." Conservatism correlates negatively but less strongly with these two dimensions:  $-.27$  with social democracy and  $-.26$  with liberalism.

What emerges from factor analyses of Esping-Andersen's three dimensions? An orthogonal principal components analysis yields two factors.<sup>2</sup> These are shown in Table 3. One, which accounts for 48% of total item variance, arrays nations along a single "socialist-liberal" dimension, to use Esping-Andersen's (1990) terms. Esping-Andersen's socialist and liberal dimensions load at  $.84$  and  $-.85$ , respectively, on this factor. His conservative dimension, by contrast, loads negligibly at  $-.01$ . The four nations with the highest scores on this factor are four of the five in Esping-Andersen's 1990 social democratic world: Norway, Sweden, Denmark, and Finland. The other factor, which explains 40% of the variance among the items, arrays nations along a dimension headed by all five members of Esping-Andersen's 1990 conservative world: Italy, Austria, Belgium, France, and Germany. His conservative dimension loads very strongly on this factor at  $.96$ . These analyses suggest two underlying dimensions of welfare state regimes. We label the first a "socialist-liberal" dimension, as its poles, expressed in Esping-Anderson's (1990) vocabulary, are dramatically clear. We label the second "traditional conservatism" because the dimension gains a clear identity from the patent conservatism of Italy and Austria, the nations that cap one of its poles.

– Table 3 about here –

### ***A More Thorough Exploration***

Focusing on Esping-Andersen's three welfare state dimensions may be insufficiently comprehensive. We therefore conduct additional principal components analyses of a broader set of welfare state and related measures. We choose these measures with one eye to including a full range of relevant welfare policy indicators and with the other to averting possible operational tautology in analyses of the consequences of welfare regime dimensions.

In *Social Foundations of Postindustrial Economies*, Esping-Andersen (1999) argues that welfare state operations and effects must be analyzed in concert with those of labor market and family policies. Analyses of welfare state effects raise a multitude of questions that are difficult if not impossible to answer in the absence of broader exploration of the consequences of policies and programs in these three interconnected domains. (For example, does redistribution reduce poverty but at the cost of raising unemployment?) As noted earlier, our examination of welfare state dimensions moves beyond Esping-Andersen's (1990) initial social insurance-



centered focus — and its social democratic, liberal, and conservative scales — to encompass his embrace of labor market regulation and family policies as integral to the analysis of welfare states. We further go beyond Esping-Andersen's specification of relevant aspects of all three types of policy. Table 4 categorizes the aspects of welfare states treated here in terms of the classical focus on social insurance and the new turn to labor markets and families. (Some aspects are most accurately considered hybrids that bridge social insurance and labor market policies.) In addition, it distinguishes between measures drawn directly from Esping-Andersen and ones that move beyond his work. Part I of the Appendix lists operational definitions and data sources for the variables.

– Table 4 about here –

As regards social insurance, we direct some attention both to Esping-Andersen's (1990, table 2.2, pp. 33-54) decommodification scale of the "safety net" income-maintenance capabilities of social insurance programs and also to the most utilized of all measures of social policy, welfare effort (see Hicks 1999). We measure the latter as expenditures for income security programs as a share of GDP. For parsimony, we create an index using the factor scores from a principal components analysis of these two measures (loadings equaling .91 for each item). We dub the resulting scale "decom-effort." Decommodification and welfare effort each directly tap benefit levels, the former in per-household form of income replacement rates and the latter in the more aggregate form of expenditure totals. Hence, they encompass core welfare state outputs that one might wish a measure of welfare states to help explain. We therefore include the "decom-effort" measure in analyses of "full" dimensions of welfare regimes but exclude it from "trimmed" ones that will have wider explanatory applications.

Esping-Andersen includes a wide range of labor market institutions in his recent (1999) treatment of postindustrial economies, including union density and wage bargaining centralization. We omit these non-state institutions from our analysis and concentrate instead on state labor market policies (but see Hicks and Kenworthy 1998; Kenworthy 2002, 2003). However, we draw on Esping-Andersen's labor market considerations in several ways. One is by means of his index of "labor market rigidity," which indexes the generosity of the unemployment compensation benefits as a percentage of the average production worker's wage and the minimum wage as a percentage of the average wage. A second is via union contract coverage, an amalgam of unionization rates coupled with laws and/or collective bargaining agreements that extend the range of union contract coverage beyond union members. We render such "coverage" more state-centered by transforming it into state contract *extension* — that is, the union contract coverage rate *minus* union density.

We go fully beyond Esping-Andersen's (1999) labor market variable specification in a few respects. One is by including active labor market policy (job training, placement, etc.). A second is by including government employment. In addition, we specify a measure of state reliance on social insurance contributions that fall on the

employer, whether directly as employer contributions to social security or indirectly (if only partially) via the payroll tax, and that may discourage employment by raising its price. We term this the "social insurance tax burden" and measure it as social security contributions plus payroll taxes as share of GDP. We also include another indicator of social policy as possible employment disincentive: the duration of the unemployment compensation benefit.

We employ factor analytical (principal component "factor" score) indexes of some of these labor market measures in order to contain the number of indicators used in analyses of the dimensions of welfare regimes. One factor score indexes the measures of labor market rigidity, state union contract extension, social insurance tax burden, and unemployment benefit duration (see "long" version of "state laborism" in the Appendix). A second indexes only the measures of state union contract extension and the social insurance tax burden (see "short" version of "state laborism" in the Appendix). As we explain in greater detail below, we use this more circumscribed measure in order to help avert operational tautology between regime dimensions and the policy outputs and outcomes such dimensions might help to explain.

For family policy, we complement Esping-Andersen's contributions with elements of the work of Irene Wennemo (1992) and Harold Wilensky (1990). Specifically, we consider four family policy measures. One is a measure of family benefits, tax credits, and tax allowances from Wennemo. The second is a kindred measure from Esping-Andersen that he calls "child benefits." The third is a measure of family service spending as a share of GDP from Esping-Andersen. The fourth is a family labor force participation scale from Wilensky that sums scores on (a) the generosity family and maternity leave policy, (b) the generosity of public day care subsidization and provision, and (c) the flexibility of retirement policy.

Here too we reduce the number of indicators via principal components analysis of these four family policy measures. This yields two indexes, as described in the Appendix. The first, which we refer to as "family allowance policies," loads strongly on the family benefits and child benefits measures. The second, which we term "family labor force participation policies," loads strongly on the public child care coverage and Wilensky family labor force participation measures.

Our analyses of welfare state dimensions have two substantive aims. On the one hand we aim at a thorough coverage of relevant aspects of welfare policies, uncompromised by concern that measures might be so comprehensive as to incorporate some things that we would like them to predict. On the other hand we seek, by means of more circumscribed specifications of items, to obtain measures of welfare state regime dimensions able to help in the explanation of some welfare state outcomes (and even outputs) without danger of tautology. Thus, for instance, if we aim to assess the impact of welfare state dimensions on income redistribution, it makes sense not to include government social spending as an element in the operational definition of such dimensions, since spending and redistribution are almost certain to be directly intertwined.

We include nine measures in our "full" principal components analysis of welfare state dimensions: four measures of social insurance policies (Esping-Andersen's social democratic, liberal, and conservative scales and our "decom-effort" index), three of labor market-related policies (active labor market policy, government employment, and the four-item state laborism index [long] tapping employment rigidity, state union contract extension, the social insurance tax burden, and unemployment benefit duration), and two of family policies (the indexes of family allowance policies and family labor force participation policies).

For the trimmed analysis we use seven measures. This includes three rather than four measures of social insurance policies: Esping-Andersen's three regime dimensions. It excludes the "decom-effort" index because this directly taps integral aspects of measures of inequality or poverty reduction, i.e., dollar amounts of income transfers and benefit levels and their duration. The trimmed analysis includes three labor market measures: active labor market policy, government employment, and a modified (short) index of state laborism that excludes the Esping-Andersen's labor market rigidity index and the measure of unemployment benefit duration. The former is omitted because it directly taps the generosity of the unemployment compensation benefit and the minimum wage, two constituent parts of any measure of income redistribution or poverty reduction. The latter is left out because it directly taps a flow of income transfers integral to any measure of final income used to assess income inequality or poverty. The only family policy indicator in the trimmed analysis is Wilensky's family labor market participation measure. The other three family policy measures are excluded because each includes information on transfer payments to families in the form of family allowances or (for some nations) day care subsidies. Such quantities are implicit in income data for distributive measures.

### ***Principal Components Results***

The results of the principal components analyses are displayed in Table 5. The "full" analysis yields two "factors": a "progressive" one and a "conservative" one, as with analyses of the Esping-Andersen items in Table 3. The first is defined by the following sequence of items, listed in descending order as determined by the absolute magnitudes of component loadings: decom-effort (.88), government employment (.85), family labor force participation policies (.78), social democracy (.77), liberalism (–.65), active labor market policy (.62), and family allowance policies (.51). This first orthogonal component explains 47% of total item variance. The second component is defined chiefly by conservatism (.97), state laborism (.72), government employment (–.46), and family allowance policies (.41). This orthogonal component explains 25% of the total item variance.<sup>3</sup>

– Table 5 about here –

The "trimmed" component analysis also results in two components, once again what we term a "progressive" one and a "conservative" one. The first is defined by the following prominent items (again listed in order of descending order based on the

absolute magnitudes of loadings from the pattern matrix, which partials each component's loadings on the other component): social democracy (.81), active labor market policy (.75), liberalism (-.74), family labor force participation policy (.68), and government employment (.68). The highest-loading items for the second component are conservatism (.93), state laborism (.87), and government employment (.49).

We label the first dimension a "progressive liberal" dimension of welfare regimes. We do this because we think the actually existing policies (and states), albeit of strongly social democratic and laborite lineage, are hardly socialist or illiberal. They are neither socialist nor illiberal in the sense that the defining regime characteristics — universalistic public social insurance, large public sectors, and both male and female empowerment for labor market success in the "trimmed" case (plus generous safety nets in the "full" case) — do not require one to go beyond capitalism and liberal democracy for rationales and precedents. Even if socialist ideology that reached out beyond the liberal tradition was key to the construction and implementation of the political forces that set the welfare state's foundations, the foundation is set. And the structure that rises upon it is not beyond the orthodox, if unfashionable, progressive neoclassicism of Nicholas Barr's (1993) *Economics of the Welfare State* or the progressive liberalism of Bo Rothstein's (2000) Rawlsian *Just Institutions Matter*. Historically, the farmer labor-alliances behind Robert LaFollette and Franklin Delano Roosevelt in the United States might have allowed the progressive architects of modern welfare states to have doubled for social democratic ones had such alliances been more extensive and durable (Hicks 1999). In some respects, the term "socialist political legacies" might do as well as "progressive liberalism," for often (as with Britain's postwar National Health Service) socialist governments enacted collective goods that progressive liberals merely contemplated. However, both pragmatically and analytically, differences in our actual situation and its possible futures are engaged more clearly if we focus on the varieties of liberal capitalism rather than on remote alternatives. A fuller phrasing of the "progressive liberal" moniker would be "progressive liberalism/neoliberalism." It pinpoints where the actual intellectual and political engagements in affluent capitalist democracies are to be found.

We continue to call the second dimension "traditional conservatism" because if the progressive development of liberalism was fueled by social democracy and its solidaristic legacies, this dimension is a forthright Paretian "residue" of the old traditional solidarities and powers: the civil servant and guild distinction alive today in the fracturing of social insurance programs (e.g., Esping-Andersen 1990), a venerable traditional conservative indifference to market mechanisms alive in dysfunctional excesses of unemployment benefits and their funding (Haveman 1999; Nickell and Layard 1999), the collective bargaining aspirations of the union movement enacted by state fiat (Traxler, Blaschke, and Kittel 2001), and the wage earner family embalmed by family allowances (Esping-Andersen 1990).

A fuller sense of the extent of the progressive liberalism can be gleaned from

considering correlations between its trimmed version, which we stress in the analysis of welfare state consequences below, and the variables in Table 6. Progressive liberalism correlates positively and strongly with our "socialist-liberal" modification of two of Esping-Andersen's original dimensions of welfare state stratification from Table 3 above (.91), with Huber and Stephens's cumulative measure of 1946-1980 social democratic party rule (.85), with Hicks's measure of tripartite neocorporatism (.73), and with the share of parliamentary representatives who are women (a useful measure of civil rights progress) (.80). It correlates negatively (-.56) with the Freedom House's measure of economic freedom as the extent and security of property rights. Traditional conservatism correlates strongly with our "traditional conservative" modification of Esping-Andersen's original conservative dimension of welfare state stratification from Table 3 (.91), moderately with Huber and Stephens's cumulative measure of 1946-1980 Christian democratic party rule (.55) and with Hicks's measure of fascist legacies (.45), and, like progressive liberalism, negatively with property rights freedom (-.52).

– Table 6 about here –

The "full" and "trimmed" dimensions of progressive liberalism correlate .95 with one another, while the full and trimmed dimensions of traditional conservatism correlate .92.

## **Consequences of Welfare State Dimensions**

Can the two dimensions we have highlighted assist in understanding the effects of welfare states on economic outcomes? We explore the relationship between the progressive liberalism and traditional conservatism dimensions (trimmed versions) and three areas of policy effectiveness and economic performance: income redistribution, jobs, and gender equality.

### ***Measures and Method***

The outcome variables we use are shown in Table 7, and variable definitions and data sources are detailed in the Appendix.

– Table 7 about here –

A principal aim of welfare states is to reduce income inequality and poverty, chiefly by redistributing income. We examine two relevant measures of redistribution, using data from the Luxembourg Income Study (see LIS n.d.). The LIS data are the best available for purposes of cross-national comparison of income redistribution (Atkinson and Brandolini 2001). One of the measures of redistribution, "inequality reduction," is the percentage reduction in income inequality achieved by taxes and transfers — i.e., the difference between pretax-pretransfer and posttax-posttransfer income inequality divided by pretax-pretransfer inequality. Inequality is measured using the Gini coefficient for size-adjusted household income.<sup>4</sup> The second, "poverty reduction," is a counterpart measure for (relative) poverty, with poverty defined as

the share of the population living in size-adjusted households with incomes below 50% of the median within each country.

A number of European countries have experienced sustained mass unemployment and stagnant employment growth over the past two decades, and some scholars and policy makers have concluded that the welfare state is a principal contributing factor (e.g., Lindbeck 1986; Siebert 1997). Equality, in this view, comes at a price. High tax rates, particularly those levied on payroll, increase the costs of hiring new employees. Generous unemployment benefits, pension structures that encourage early retirement, and other types of government payments reduce the incentive to remain in work or return to the workforce. We examine two measures of employment performance: employment (as a share of the working-age population) and period-to-period change in employment.

To the extent that family policies are an integral component of the broad dimensions of social welfare policies on which we focus, they may be expected to have an impact on women's labor market status. We look at two indicators: women's share of total labor market earnings and women's share of the labor force. These are preferable to two more commonly used counterparts: the female-to-male pay ratio and the female labor force participation rate. The much-studied female-to-male pay ratio is problematic for purposes of cross-country analysis because it is confined to full-time year-round employees. A country may have a relatively high degree of equality on this ratio but a relatively small share of working-age women in full-time jobs. A better measure, in terms of gauging women's overall earnings status relative to men's, is therefore women's share of market earnings. These figures have been calculated by Janet Gornick from the Luxembourg Income Study data set and kindly made available to us. The female labor force participation rate will be lower in societies in which there is an overall low rate of labor force participation, but that does not necessarily indicate a disadvantageous position for women relative to men. Consider two hypothetical countries. In one the male labor force participation rate is 90% and the female labor force participation rate is 75%. In the other both the male and female labor force participation rates are 65%. If the aim is to capture gender equality in the labor market, rather than employment rates (which we examine using the measures described in the previous paragraph), we may well get a misleading impression using the female labor force participation rate.

Eighteen affluent OECD countries are included: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States. Due to lack of data in the LIS dataset, four countries (Austria, Ireland, Japan, and New Zealand) are missing from the income redistribution regressions and five (the same four plus Switzerland) from the regression for women's share of earnings. The regressions are pooled cross-section time-series analyses over two decades: the 1980s and the 1990s. Since the two welfare state dimensions are time-invariant, they are constant across the two time periods. This a necessary simplification, given the

limited longitudinal data on welfare state policy orientations used in our analysis of regime dimensions.<sup>5</sup> The data for the outcome variables and the controls are period averages. The regressions are estimated using ordinary least squares (OLS), with "HC3" heteroskedasticity-consistent standard errors (Long and Ervin 2000).<sup>6</sup> A dummy variable for the 1990s is included in order to parcel out period-specific effects and to help avert longitudinal autocorrelation.

These analyses are intended to be largely suggestive rather than definitive. Our goal is not to search for the "best" possible model for any of the outcome variables. Instead, we aim to provide a preliminary assessment of the impact of the two welfare state dimensions highlighted by our principal components analyses. For this reason, and because the small number of observations limits degrees of freedom, we include a modest array of control variables in the regressions. They are selected based primarily on their empirical relevance in prior research (see, e.g., Alderson and Nielsen 2002; Gustafsson and Johansson 1999; Gornick 1999; Hicks 1999; Hicks and Kenworthy 1998; Huber and Stephens 2001; Iversen and Cusack 2000; Kenworthy 1999, 2002, 2003; Nickell and Layard 1999; Schmidt 1993). Two measures of partisan government — left party cabinet share and Christian democratic party cabinet share — are included in all of the regressions. Pretax-pretransfer inequality or poverty, trade, and deindustrialization are included in the income redistribution analyses. The level of real GDP per capita at the beginning of each decade is entered into the income redistribution and gender labor market equality equations. Real interest rates, the growth rate of real GDP, and wage-setting coordination are included in the two employment performance regressions. Wage-setting coordination refers to the degree of intentional harmony in the wage-setting process — or, put another way, the degree to which minor players deliberately follow along with what the major players decide. As noted earlier, this key institution was not included in the principal components analyses because it is based principally in labor-management relationships rather than in state policy. Finally, women's education is included in the two regressions assessing gender labor market equality.<sup>7</sup>

It is important to note that measures of welfare state regime dimensions are highly proximate prospective causes of the policy outcomes analyzed here. Most control variables are relatively exogenous variables and distal prospective causes relative to the regime measures. Thus, although controlling for such variables is exactly what is called for to safeguard against the basic analytical problem of spuriousness due to neglected antecedent causes, causal ordering negatively handicaps the control variables, making it unlikely that they will commonly have large effects on the outcome variables. Effects on the outcome variables are likely to be largely channeled (or mediated by) by, and thus controlled away by, regime dimensions.

### ***Regression Results***

Tables 8 and 9 show the regression results. Table 8 presents relations of our "trimmed" measures<sup>8</sup> of progressive liberalism and traditional conservatism to out-

come measures, with a stress on comparisons to relations of two other sets of regime measures to those outcomes: (1) Esping-Andersen's (1990) three dimensions and (2) Esping-Anderson's (1990) categorization of regime-types, operationalized using dummy variables representing the social democratic and conservative worlds (with the liberal world as the omitted category). The regressions in Table 8 are simply three- and four-variable equations of outcomes on regime measures plus a period (1990s) control. Table 9 stresses relations to the outcome variable of this paper's two dimensions, assessed in the context of more fully specified models than those of Table 8. For the most part the findings for our two dimensions are similar across the two tables, but inclusion of the controls does substantially alter a few estimated effects, particularly for traditional conservatism. Both tables include not only metric slope estimates but also standardized regression coefficients ("betas") for the welfare state variables. Standardized coefficients vary around 0, typically (if not strictly) within the range of  $-1$  to  $+1$ . They help us to assess the absolute and relative magnitudes of effects.

– Tables 8 and 9 about here –

The egalitarian effects anticipated for our progressive liberal and traditional conservative welfare state dimensions are generally borne out for the former dimension but are merely suggested for the latter (Table 8, columns 1 and 4). Progressive liberalism has substantively strong and highly significant (.01 level) positive effects on inequality reduction and poverty reduction. As gauged by the standardized regression coefficients — which are easily assessed and nicely comparable because of their variation of plus or minus a point about zero — these effects are substantial: .83 for inequality reduction and .79 for poverty reduction. Though the estimate for traditional conservatism is positive in both equations, it only attains significance (at the .05 level) for poverty reduction. And the effect is much weaker than that of progressive liberalism (beta = .27).

Income redistribution models using Esping-Andersen's original measures of welfare regimes — whether his three dimensions or his tripartite categorization of regime-types — perform similarly or, more commonly, less well (Table 8, columns 2-3 and 5-6). For inequality reduction and Esping-Andersen's three dimensions, a highly significant (positive) social democratic effect and a marginally significant (negative) liberalism effect stand in for the progressive liberalism effect. However, the adjusted  $R^2$  for the model that uses our two dimensions exceeds that for the model employing Esping-Andersen's three: .68 versus .51. For inequality reduction and dummies for Esping-Andersen's social democratic and conservative regime-types, an apparently substantial and highly significant social democratic effect (beta = .81 and significant at the .01 level) stands in for the progressive liberalism scale; but the adjusted  $R^2$  is .49 in comparison with our dimensions' .68. For poverty reduction, Esping-Andersen's three dimensions perform favorably compared with our two. A highly significant (positive) social democratic effect (beta = .74, significant at the .01 test level) stands in for the progressive liberalism effect. A positive conservatism



estimate emerges that exceeds that of our traditional conservatism dimension: .35 to .27 (albeit at the same .05 level of significance). Moreover, the adjusted  $R^2$  for Esping-Andersen's dimensions marginally exceeds that for ours: .66 versus .64. However, the categorical findings, though they qualitatively parallel the findings for the two sets of dimensions, have (as invariably is the case) notably less "explanatory" power as gauged by the adjusted coefficients of determination.

For employment performance, it is the traditional conservatism dimension of welfare states that matters most (Table 8, columns 7-12). For levels of employment, significant effects of progressive liberalism (positive) and traditional conservatism (negative) emerge, but the conservative effect is much larger in absolute value (column 7). For change in employment, only the negative impact of traditional conservatism attains significance (column 10). Once again, the three Esping-Andersen dimensions perform slightly better than our two for one of the outcomes, the employment rate, and worse for the other, employment growth (see adjusted  $R^2$ 's). Here too the dimensional measures of regimes clearly outperform categorical measures.

As regards gender equality in the labor market (Table 8, columns 13-18), progressive liberalism has consistently robust egalitarian effects (beta = .46 and .50) on women's share of earnings and of the labor force, while traditional conservatism has consistently negative, if less marked, effects. Here, the explanatory power of our two dimensions always at least nominally exceeds that of Esping-Andersen's regime measures. In the case of earnings, the advantage offered by the new measure appears rather large (adjusted  $R^2 = .33$  versus .11 and .17). But there is a twist: Esping-Andersen's categorical variables outperform his dimensions. For women's share of the labor force, our new pair of dimensions nominally outperforms Esping-Andersen's trio of dimensions while each set of continuous dimensions more markedly outperforms regime-type dummies.

Overall, dimensions (whether Esping-Andersen's or ours) outperform categories for eleven of twelve relevant comparisons in Table 8. And our two dimensions tend to do markedly better or, at worst, similarly in comparison with the three Esping-Andersen dimensions. In our view this warrants a shift in attention from the explanatory use of regime categories to that of regime dimensions. As we discuss in our conclusions, however, we do not think a new stress on regime dimensions implies any rejection, or even degrading, of worlds, which remain fruitful for a whole range of categorical modes of theoretical and empirical analysis. Relative to our progressive liberalism dimension, Esping-Andersen's separate social democratic and liberal dimensions do not appear to add much in nuanced information to compensate for what they lack in statistical power. Esping-Andersen's social democratic dimension appears to function as a statistically less potent variant of progressive liberalism while Esping-Andersen's liberalism dimension tends to function at its most consequential (as for inequality reduction and employment growth) as a weak inverse indicator of progressive liberalism and otherwise as little at all.

In the more fully specified equations of Table 9, egalitarian effects anticipated

for our progressive liberal and traditional conservative welfare state dimensions once again are generally borne out for the former. Progressive liberalism has substantively strong and highly significant (.01 level) egalitarian effects on inequality reduction and more modestly significant effects on poverty reduction (.10 level). The standardized coefficients are .88 and .56, respectively. Traditional conservatism, though it again yields egalitarian signs, is only significant in an auxiliary model for poverty reduction in which we omit the Christian democratic government variable (which correlates .60 with traditional conservatism).<sup>9</sup>

For employment performance in Table 9, it is the traditional conservatism dimension of welfare states that matters most. Conservative policy legacies have significant effects (at the .05 level or better) in both of the employment performance regressions. The estimates suggest adverse effects on both the level of and growth in employment. The progressive liberal dimension of welfare state programs appears to have no impact on employment performance, except for a small (beta = .12) and barely statistically significant positive effect on employment levels.<sup>10</sup>

As regards gender equality in the labor market in Table 9, two forces have consistent effects. First, progressive liberalism has a positive and moderately strong impact on women's share of earnings and of the labor force (standardized coefficients of .45 and .54, respectively). Second, Christian democratic rule, not traditional conservatism as in Table 8, has the model's second pair of consistent effects — both negative. Indeed, women's labor force share appears bolstered by conservative legacies. This suggests that it is not traditional conservatism *per se* — prominent in politically secular France and Finland — but rather Christian Democratic government that tends to discourage women's entry into the labor market. It also suggests an instance of a control variable breaking through the handicap imposed by competition with such proximate potential causes of policy outcomes as regime traits and both transforming lower order findings and demonstrating a direct causal relevance (not channeled by regime) in its own right.

## Conclusion

How are we to characterize and differentiate welfare states in affluent capitalist societies? Our intention here has been to extend Esping-Andersen's deservedly influential conceptualization of affluent welfare states in ways that address this question. Our short answer to the question is that we can characterize and differentiate welfare states in terms of the "progressive liberalism" and "traditional conservatism" of their policies and programs.

The first of these two dimensions is fairly novel. It rearranges Esping-Andersen's separate social democratic and liberal dimensions into two poles of a single dimension. This dimension appears relatively robust to the particular elements of welfare and related policies included in the principal components analyses. It is revealed clearly and forcefully not only in our "minimalist" principal components analysis of

Esping-Andersen's (1990) three original welfare state dimensions but also in our extended (both "full" and "trimmed") analyses that, following Esping-Andersen's recent work (1999), incorporate aspects of labor market and family policies. We find progressive liberalism to be characterized not only by extensive, universal, and homogenous benefits but also by active labor market policies, government employment, and family subsidies for general child support and female labor market entry. As this axis does not exceed the span of liberal political economic philosophy, it can be regarded as an axis of liberalism. Hence our use of the label "progressive liberalism."

The second dimension, traditional conservatism, is less novel relative to our starting point in Esping-Andersen (1990, 1999). Nation by nation, it correlates tightly with his "conservative" (or "corporatist" or "social insurance") dimension. However, in our analysis it taps aspects of state policy not encompassed by Esping-Andersen's (1990) conception of "conservatism." In particular, it stresses not only occupational and status-based differentiations of social insurance programs and specialized income security programs for civil servants, but also generous and long-lasting unemployment benefits, reliance on employer-heavy social insurance tax burdens, and extensions of union collective bargaining coverage.

Our analysis does not merely expand comprehension of welfare state axes from social insurance states to "social-welfare" states broadly construed, nor simply reduce Esping-Andersen's focus from three "variables" to two. Most fundamentally, it shifts attention from worlds of welfare capitalism to welfare state dimensions. We suggest that welfare states are most accurately described and differentiated in terms of the two dimensions we have highlighted. Universal benefits and means-testing are central components of Esping-Andersen's social democratic and liberal welfare state dimensions, respectively. They seem clearly to represent, not qualitatively different orientations, but rather opposite ends of a single pole. The other component of Esping-Andersen's social democratic dimension is provided by "flat rate" benefits, which are unlikely to be utilized in means tested programs. A second component of the liberal dimension is private provision of pensions and health insurance. A universalistic benefit orientation seems unlikely to be coupled with heavy reliance on the private sector for such provision. In addition to conceptual and empirical veracity, describing welfare states in terms of continuous dimensions has the advantage of allowing ambiguous cases to be scored as intermediate rather than forced into one or another category or left out altogether (see Table 1 above). And it facilitates differentiation within dimensions instead of simply between them.<sup>11</sup>

The dimensions we identify appear quite consequential for important political economic outcomes. Viewed in comparison with Esping-Andersen's earlier dimensional (or categorical) measures of regimes, our two dimensions are often markedly more, and never notably less, strongly related to key political economic outcomes. Progressive liberalism seems to progressively redistribute income and reduce poverty. It is also associated with greater gender equality in the labor market, whether

measured as women's share of earnings or of the labor force. And it has no adverse impact on employment performance. The principal consequence of traditional conservatism appears to be weakened employment performance. Much of the recent critique of the welfare state has centered on its purported job-reducing effects (e.g., Lindbeck 1986; Siebert 1997). Our findings suggest that this type of critique may be accurate to the extent that it focuses on what we have termed "state laborism" — less union strength or neocorporatist integration of union confederations into state policy making than relatively passive (insurance-centered) employment policy, government labor market regulation, and labor unionism by state proxy.<sup>12</sup> In other words, it may not be activism in a social democratic vein but in a conservative vein that saps employment and job creation. Those seeking impediments to labor market efficiency should turn to statist policies in more patriarchal (e.g., "Bismarckian"), *dirigiste*, and Catholic welfare states rather than social democratic ones. With regard to female economic empowerment, our analyses suggest that it is not traditional conservative legacies but modal Christian democratic governance that tends to limit women's earnings and employment.

A new focus on welfare regime dimensions hardly precludes attention to categorically conceived regime-types, or "worlds," of welfare capitalism. Not only is categorical thought a fruitful and powerful bridge between quantitative and qualitative analysis (Ragin 1987); it may be heuristically useful for particular problems, for sample analyses where categorical breaks are hypothesized, or for audiences more enlightened by interactions between continuous and categorical variables than by uniformly continuous ones. Furthermore, cluster analysis of the present principal components yields "worlds" that resemble those identified by Esping-Andersen (1990, 1999), though it also raises possibilities for further work on the optimal specification of "worlds" of welfare capitalism.<sup>13</sup> Of course, further work on the robustness, generalizability, and consequences of these dimensions of welfare regimes will be wanted to the extent that this study stimulates new ideas and further ambitions with regard to how to characterize and differentiate states in affluent capitalist societies and beyond.

Our progressive liberal and traditional conservative dimensions of welfare states are merely two possible dimensions of the relatively "domestic" policy side of states in affluent democracies. They should invite rather than preclude investigations into additional or more encompassing dimensions of states, domestic or international. Still, as measures of general policy legacies, these dimensions may enlighten the study of many policies not considered here, complementing and clarifying the roles of other societal dimensions — whether of more general political institutions as in the work of Lijphart (1999) or of more general political economic institutions as in the work of Hall and Soskice (2001), Hicks and Kenworthy (1998), Iversen (1999), Lange and Garrett (1985), and Lehmbruch (1984). How well our dimensions extend outward into the world from our sample of long-standing capitalist democracies is a bigger question than can be illuminated here. However, amidst the increasingly de-

mocratic capitalist world around the millennium, the relevance of our small empirical domain may have considerable generality.<sup>14</sup>

## Appendix: Variable Descriptions and Data Sources

### Part I. Variables for Principal Components Analyses

#### Social Insurance Measures

*Esping-Andersen's social democratic (socialist, universalist) welfare state dimension.* Sum of scores for Esping-Andersen's measures of corporatism (the number of major occupationally distinct pension schemes in operation) and etatism (expenditure on government-employee pensions as a share of GDP). Source: Esping-Andersen (1990, table 3.3, p. 74).

*Esping-Andersen's conservative (corporatist) welfare state dimension.* Sum of scores for Esping-Andersen's measures of means-tested poor relief (as a share of total public social expenditure), private pensions (as a share of total pensions), and private health spending (as a share of total health spending). Source: Esping-Andersen (1990, table 3.3, p. 74).

*Esping-Andersen's liberal (residual) welfare state dimension.* Sum of scores for Esping-Andersen's measures of universalism (average share of the population age 16-64 eligible for sickness, unemployment, and pension benefits) and benefit equality (ratio of basic level of benefits to the legal maximum benefits, average for sickness, unemployment, and pension programs). Source: Esping-Andersen (1990, table 3.3, p. 74).

*Decom-effort.* Factor scores from a principal components analysis of:

*Decommodification.* Source: Esping-Andersen 1990, table 2.2, p. 52; and

*Welfare effort.* Government social spending as a percentage of GDP. Source: OECD (various years).

#### Labor Market Policy Measures

*Active labor market policy.* Expenditures on active labor market policy as a share of GDP. Source: Hicks and Kenworthy (1998, p. 1650).

*Government employment.* Government employment as a percentage of the population age 15 to 64. Source: OECD (various years).

*State laborism (long).* Factor scores for sole first factor from a principal components analysis of employment rigidity (.53), state union contract extension (.99), social insurance tax (.68), and unemployment benefit duration (.55).

*State laborism (short).* Factor scores for sole first factor from a principal components analysis of state union contract extension (.90) and social insurance tax burden (.90).

*Employment rigidity.* Ranking of rigidification of re-employment of the unemployed, based on unemployment compensation benefit as percentage of average production worker's wage and minimum wage as percentage of average wage. Source: Esping-Andersen (1999, table 2.2, p. 22).

*State union contract extension.* Collective bargaining coverage minus union density. Source: Coverage data are from Esping-Andersen (1999, table 2.1, p. 20) complemented by Traxler et al. (2001, table III.15, p. 196). Union density data are from Ebbinghaus and Visser (2000) and Golden, Lange, and Wallerstein (1997).

*Social insurance tax burden.* Social security contributions and payroll taxes as a share of GDP. Source: Scharpf and Schmidt (2000, table A.26, p. 363).

*Unemployment benefit duration.* Length of eligibility for unemployment benefits, in years; 4 indicates infinite duration. Source: Centre for Economic Performance (n.d.); see Nickell (1997) for discussion.

#### Family Policy Measures

*Family allowance policies.* Factor scores for first factor from a principal factor analysis of family benefits (.91), child benefits (.75), public child care coverage (-.11), and family labor force participation policy (.33). Two factor solution (oblimin rotation); pattern matrix loadings for first factor are shown in parentheses.

*Family labor force participation policies.* Factor scores for second factor from a principal factor analysis of family benefits (-.09), child benefits (.12), public child care coverage (.90), and family labor force participation policy (.74). Two-factor solution (oblimin rotation); pattern matrix loadings for second factor are shown in parentheses.

*Family benefits.* Value of family benefits, tax credits, and tax allowances as a share of average industrial wage, circa 1985. Source: Wennemo (1992).

*Child benefits.* Estimated family benefits plus tax relief as a share of a "typical" couple's income (with one earning an average production worker income and the other earning two-thirds of an average production worker income), circa 1990. Source: Esping-Andersen (1999, table 4B, p. 72). Values for New Zealand (5.90) and Switzerland (4.77) generated with a prediction equation using the family benefits and family labor force participation policy measures as regressors.

*Public child care coverage.* Share of children under age 3 in public child care, 1980s. Source: Esping-Andersen (1999, table 4A, p. 71). Values for Japan (.10), New Zealand (.10), and Switzerland (.10) generated with a prediction equation using the family benefits and family labor force participation policy as regressors.

*Family labor force participation policy.* Sum of scores for measures of (a) the generosity of family and maternity leave policy, (b) the generosity of public day care subsidization and provision, and (c) the flexibility of retirement policy. Source: Wilensky (1990, p. 2).

## Part II. Variables for Regression Analyses

### Outcome Measures

*Inequality reduction.* Difference between pretax-pretransfer Gini and posttax-posttransfer Gini divided by pretax-pretransfer Gini. Measured in the mid-80s and mid-90s. Source: Authors' calculations from data in Luxembourg Income Study (see LIS n.d.).

*Poverty reduction.* Difference between pretax-pretransfer relative poverty rate and posttax-posttransfer relative poverty rate divided by pretax-pretransfer relative poverty rate. Measured in the mid-80s and mid-90s. Poverty rate is measured as below. Source: Authors' calculations from data in Luxembourg Income Study (see LIS n.d.).

*Employment.* Total employment as a percentage of the population age 15 to 64. Measured as averages over 1980-89 and 1990-99. Source: Authors' calculations from data in OECD (2001).

*Change in employment.* Average for current period minus average for previous period.

*Women's share of earnings.* Women's share of labor market earnings, among those age 20-59. Measured in the late 1980s and mid 1990s. Source: Gornick (1999, n.d.), using Luxembourg Income Study data.

*Women's share of the labor force.* Measured as averages over 1980-89 and 1990-97. Source: OECD (various years).

### Control Variable Measures

*Pretax-pretransfer income inequality.* Measured in the mid-80s and mid-90s. Source: Authors' calculations from data in Luxembourg Income Study (see LIS n.d.).

*Pretax-pretransfer relative poverty.* Measured in the mid-80s and mid-90s. Source: Authors' calculations from data in Luxembourg Income Study (see LIS n.d.).

*Left government.* Left party cabinet portfolios as a percentage of all cabinet portfolios. Measured as averages over 1980-89 and 1990-95. Source: Swank (n.d., variable: LEFTC).

*Christian democratic government.* Christian democratic cabinet portfolios as a percentage of all cabinet portfolios. Measured as averages over 1980-89 and 1990-95. Source: Swank (n.d., variable: MCDEMC).

*Real GDP per capita.* Level of real GDP per capita, with purchasing power parities used to adjust currencies. Measured in 1980 and 1990. Source: OECD (2001).

*Trade.* Exports plus imports as a percentage of GDP. Measured as averages over 1980-89 and 1990-99. Source: Authors' calculations from data in OECD (2001).



*Deindustrialization.* Employment in manufacturing and agriculture as a share of total employment. Measured as 1960 level minus 1980-89 average level and 1960 level minus 1990-95 average level. Source: Authors' calculations from data in OECD (various years).

*Real long-term interest rates.* Measured as averages over 1980-89 and 1990-99. Source: Authors' calculations from data in OECD (2001).

*Growth of real GDP.* Measured as averages over 1980-89 and 1990-99. Source: Authors' calculations from data in OECD (2001).

*Wage setting coordination.* Index with five categories: 1 = Fragmented wage bargaining, confined largely to individual firms or plants. 2 = Mixed industry- and firm-level bargaining, with little or no pattern-setting and relatively weak elements of government coordination such as setting of basic pay rate or wage indexation. 3 = Industry-level bargaining with somewhat irregular and uncertain pattern-setting and only moderate union concentration; government wage arbitration. 4 = Centralized bargaining by peak confederation(s) or government imposition of a wage schedule/freeze, without a peace obligation; informal centralization of industry- and firm-level bargaining by peak associations; extensive, regularized pattern-setting coupled with a high degree of union concentration. 5 = Centralized bargaining by peak confederation(s) or government imposition of a wage schedule/freeze, with a peace obligation; informal centralization of industry-level bargaining by a powerful, monopolistic union confederation; extensive, regularized pattern-setting and synchronized bargaining coupled with coordination of bargaining by influential large firms. Measured as averages over 1980-89 and 1990-99. Source: Kenworthy (2001).

*Women's education.* Average years of education completed by women age 25 and over. Measured in 1980 and 1990. Source: Barro and Lee (n.d.).

## Notes

1. Moreover, the historical origins and development of each regime *qua* set of nations are entangled in corresponding regime dimensions. Political roots of regimes are grounded in empirical demonstrations of the political causes of regime dimensions. Findings that absolutist party legacies and Catholic parties underlay the origins and developments of conservative "corporatism" recast conservative policy configurations as conservative policy traditions, if not teleologies. Findings that working class strength and weakness, respectively, have advanced degrees of policy "socialism" and obstructed policy "liberalism" have likewise imprinted social democratic and liberal regimes, respectively, with political projects. National policy histories moved along distinguishing policy dimensions in response to characteristic political conditions. Analyses using regime categorization presume underlying regime dimensions — conservative paternalism, social democratic solidarism, liberal anti-statism. However, such analyses seldom investigate regime dimensions directly and seldom utilize dimensional measures of regimes.

2. Principal components is used for this and other dimensional analyses of this paper for various reasons. One is because it routinely generates "*p* uncorrelated and standardized variates" from "*p* observed variates" (Lawley and Maxwell 1971, p. 15), free of the more stringent identification requirements of factor analysis (see Lawley and Maxwell 1971, chaps. 4, 7; Long 1983, pp. 34-55). For example, the identification of a two-dimension model of the three observed variates presented in Table 3 could not have resulted from a factor analysis, for which identification of a *single* "factor" requires at least three variates. (Generally, identification of a factor model with *S* factors requires at least as many unrepeated elements in the variate variance-covariances matrix as there are free factor-model parameters — e.g. loadings, and unconstrained inter-item correlations — to estimate from those elements.) A second, related reason is that the practice of principal components continues largely within the tradition of "exploratory factor analysis," free of the hypothesis-testing practices and resulting augmentation of sample-size requirements and degree-of-freedom restrictions of confirmatory factor analysis (see Lawley and Maxwell 1971; Long, 1983; Bollen 1989). Lijphart (1984, 1999), Hicks and Swank (1992), and Lijphart and Crepaz (1991) with their small samples and use of the "eigenvalue greater than or equal to one" rule for factor assessment provide examples of this tradition in the study of politics.

3. Note that, on the one hand, no degree-of-freedom or other constraint proscribes a three-or-more-dimension solution for either the nine-variable "full" or seven-variable "trimmed" analysis. Indeed, more than two components with eigenvalues of greater than 1.0 are easily generated with more theoretically heterogeneous items. For example, if we add measures of military spending as share of GDP (from Hicks 1999), foreign aid spending as a share of GDP (from Lijphart 1999), and good environ-

mental performance (from Lijphart 1999), we get four components that pass the threshold of eigenvalues at least as great as 1.0 (not shown here; available upon request). Specifically, we get an approximate replication of the first two components of Table 5 plus a third "environmentalism" component (loading = .95) and a fourth "militarism" component (loading = .93). On the other hand, this paper's principal components are not vetted by any strict procedure of statistical testing either as effectively able to reproduce underlying data by some general standard or relative to other factor models. For such testing in a confirmatory factor analytical mode more observations are wanted, both to provide statistical power for tests and, more specifically, to provide enough degrees of freedom to meet the distributional as well as power requirements of chi-square tests (see Long 1983).

4. The size adjustment follows convention in dividing household income by  $S^5$  (the square root of  $S$ ), where  $S$  represents the number of persons in the household. This presumes that larger households enjoy economies of scale in their use of income, so that, for instance, a household of four needs only twice as much income as a household of one, rather than four times as much. See Atkinson, Rainwater, and Smeeding (1995).

5. We would not argue that the effective assumption of regime invariance is accurate enough to preclude any distortion of findings. However, in our view longitudinal variation in regimes (if not in every component) is unlikely to be great enough to make distortion of the thrust of regression findings, or of any particular finding, very likely. Indeed, key components of the dimensions are likely to be temporally quite inert. We have two key items of the two dimensions that are measured separately in the 1980s and 1990s: government employment as a share of the labor force and state collective bargaining coverage extension (state laborism). The correlation between 1980 and 1990 measures of the government employment item (which loads highest, at .88, on the "trimmed" measure of progressive liberalism) is .98. The correlation between 1980 and 1990 measures of state extension of collective bargaining (which correlates .74 with the "trimmed" measure of traditional conservatism) is .96.

6. The option in Stata 7.0 is "hc3." Similar results were obtained using White heteroskedasticity-consistent standard errors that take into account the correlations among errors due to non-independence of observations from the same country ("robust cluster" option in Stata).

7. An additional variable that might well be relevant in explaining cross-country differences in income redistribution is corporatism (Hicks 1999; Hicks and Kenworthy 1998; Hicks and Swank 1992). Corporatism is not included in the regressions here, however, because it is highly collinear with the progressive liberalism welfare state dimension — better than .70 for the most commonly used corporatism measures, and better than .80 for some.

8. When "full" measures of the dimensions are used, results are quasi-identical. The only notable differences in findings for models otherwise identical to those of Tables 9 are the following. Several effects of traditional conservatism fall in statistical significance: that on change in employment from the .05 level to the .10 level, and that on employment from the .01 level to the .05 level. More notably, the positive estimate for traditional conservatism on female share of earnings shifts from statistical insignificance to significance at the .05 level (while the negative effect of Christian democratic government persist at the .01 level). Also, the positive estimate for traditional conservatism on women's share of earnings shifts from statistical insignificance to significance at the .01 level to .10-level significance for a favorably construed one-tailed hypothesis and test (while, again, the negative effects of Christian democratic government persists at the .01 level).

9. A row of Table 9 is devoted to findings for the traditional conservatism variable where the highly collinear measure of Christian democratic government has been deleted and estimates for traditional conservatism have, as a result, changed to the extent of shifting into or out of statistical significance at the .05 test level.

10. Real long-term interest rates have significant positive and negative effects, respectively, on rates of unemployment and employment, though they do not appear to affect period-to-period increases in either. Wage coordination seems to help contain unemployment, though it also appears not to have affected increases in rates of jobs or joblessness. Moreover, Christian democratic governments appear to have stimulated job growth, even while policy legacies of traditional-conservative politics, often "Christian," appear to have dampened job growth.

11. A paper has just come to our attention that overlaps on at least one analysis with this one: de Beer, Vrooman, and Schut (2001). In it de Beer et al. subject scores on 58 characteristics of welfare institutions in 11 countries (our 18 minus Austria, Finland, Ireland, Italy, Japan, New Zealand, and Switzerland) to a principal components analysis. Two dimensions emerge. One, which varies in descending order from France, Belgium, and Germany near one pole to Norway, Sweden, and Denmark at the other, looks very much like our traditional conservatism factor. The other, which varies in descending order from Sweden, the Netherlands, and Germany on one pole to Canada, Australia, and the U.S.A. at the other, resembles our progressive liberalism dimension, though with a bit less ordered mix of (in Esping-Andersen's terms) social democratic and conservative nations. As the de Beer et al. dimensions and the corresponding nations are presented in a graph (Figure 1, p. 12), rather than a table, it is impossible to precisely discern the scores for each country. It is, however, possible to identify rankings; and these can be correlated with scores and rankings (for the relevant 11 nations) for our scales. The Pearsonian correlation between the de Beer et al. "social liberalism" scale and our progressive liberalism scale is .69, while the Spearman's rho ordinal correlation between rankings of nations on the two scales is .67. The Pearsonian correlation between the de Beer et al. conservatism scale and our

traditional conservatism scale is .70, while the Spearman's rho ordinal correlation between rankings of nations on the two scales is .53. Thus, the de Beer et al. analysis appears consistent with our identification of two, not three, dimensions of welfare capitalism. Moreover, it also seems consistent with our identification of the dimensions, though there certainly is slippage; and the de Beer et al. paper's interest is in the delineation of "worlds" (and their relation to income security and distributional outcomes rather than in the relation of dimensions to policy outcomes). On "worlds," we are in no disagreement: cluster analyses of our dimensions and Esping-Andersen's also yield three worlds resembling both those uncovered by de Beer et al. and those famously defined by Esping-Andersen (1990, 1999). Clearly, the conceptualizations and data employed by de Beer et al. offer interesting possibilities for following up the present research, whether as replication, critique, or spin-off.

12. Social insurance fragmentation may connote a lack of overall economic rationalization of social insurance rooted in the relatively low traditional conservative regard for economic rationalization prominent in social democratic as well as liberal policy orientations (see, e.g., Huber and Stephens 2001, chaps. 5, 7).

13. If an SPSS K-means cluster analysis with a three-world target is applied to our two dimensions, the three worlds that emerge are a seemingly "social democratic" one composed of Denmark, Norway and Sweden, a seemingly "liberal" one composed of Australia, Canada, Ireland, Japan, New Zealand, Switzerland, the U.K., and the U.S., and a seemingly "conservative" one composed of Austria, Belgium, France, Germany, Italy, and the Netherlands. This is essentially Esping-Andersen's (1990) classification with Finland and the Netherlands shifted to the conservative set of regimes and Ireland, New Zealand, and the U.K. shifted from a "residual" category to the liberal set. It is essentially Esping-Andersen's (1999) classification with Finland and the Netherlands shifted from the universalist set to the "social insurance" set, with Japan shifted from the "social insurance" set to the "residual" one, and with the ambiguous U.K. allocated to this set rather than to the universalist set. Here, as in de Beer et al. (2001), there clearly is both substantial convergence and substantial room for controversy.

14. Of course, the generalizability of this paper is limited not only by the mere 18-nation scope of its dimensional analyses, but also by its temporal confinement to analysis of data from a single, coarsely aggregated 1980-1996-ish panel of data. This problem is not merely a matter of national and temporal scope; it is also one of limited observations. These in turn limit the precision of parameter estimates and restrain the paper to exploratory principal components analysis and its limited conventions of factor vetting by means of eigenvalues — as opposed to confirmatory factor analysis with its powerful repertoire of (generally chi-square) statistical procedures for testing the statistical significance of particular factors in relation to other factors and of particular sets of factors in relation to smaller or larger sets of factors (see Lawley and Maxwell 1971; Long 1983; Bollen 1989). We hope that this paper will

motivate others to go further by mobilizing the large resources and larger effort of research and analysis that goes beyond our contribution.

## References

- Alderson, Arthur S. and François Nielsen. 2002. "Globalization and the Great U-Turn: Income Inequality Trends in 16 OECD Countries." *American Journal of Sociology*, forthcoming.
- Alvarez, R. Michael, Geoffrey Garrett, and Peter Lange. 1991. "Government Partisanship, Labor Organization, and Macroeconomic Performance." *American Political Science Review* 85:539-556.
- Atkinson, Anthony B. and Andrea Brandolini. 2001. "Promise and Pitfalls in the Use of 'Secondary' Data-Sets: Income Inequality in OECD Countries as a Case Study." *Journal of Economic Literature* 39:771-799.
- Atkinson, Anthony B., Lee Rainwater, and Timothy M. Smeeding. 1995. *Income Distribution in OECD Countries*. Paris: OECD.
- Barr, N. A. 1993. *The Economics of the Welfare State*. New York : Oxford University Press.
- Barro, Robert J. and Jong-Wha Lee. N.d. "Barro-Lee Data Set: International Measures of Schooling Years and Schooling Quality." Data set. Available at: [www.worldbank.org/research/growth/ddbarle2.htm](http://www.worldbank.org/research/growth/ddbarle2.htm).
- Birchfield, V. and M.M.L. Crepaz. 1998. "The Impact of Constitutional Structures and Collective and Competitive Veto Points on Income Inequality in Industrialized Democracies." *European Journal of Political Research* 34:175-200.
- Bollen, Kenneth A. 1989. *Structural Equations with Latent Variables*. New York : Wiley.
- Castles, Francis G. and Deborah Mitchell. 1993. "Worlds of Welfare and Families of Nations." Pp. 93-128 in *Families of Nations*, edited by Francis G. Castles. Aldershot: Dartmouth.
- de Beer, Paul, Cok Vrooman, and Jean Marie Wildeboer Schut. 2001. "Measuring Welfare State Performance: Three or Two Worlds of Welfare Capitalism?" Working Paper No. 276. Luxembourg Income Study. Available at: [www.lisproject.org/publications.htm](http://www.lisproject.org/publications.htm).
- Ebbinghaus, Bernhard and Jelle Visser. 2000. *Trade Unions in Western Europe since 1945*. London: Macmillan.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.
- . 1999. *Social Foundations of Postindustrial Economies*. New York: Oxford University Press.
- Esping-Andersen, Gøsta and Marino Regini, eds. 2000. *Why Deregulate Labour Markets?* New York: Oxford University Press.
- Golden, Miriam, Peter Lange, and Michael Wallerstein. 1997. "Union Centralization among Advanced Industrial Societies: An Empirical Study." Version dated November 2, 1998. Data set. Available at: [www.shelley.polisci.ucla.edu/data](http://www.shelley.polisci.ucla.edu/data).

- Goodin, Robert E., Bruce Headey, Ruud Muffels, and Henk-Jan Dirven. 1999. *The Real Worlds of Welfare Capitalism*. New York: Cambridge University Press.
- Gornick, Janet C. 1999. "Gender Equality in the Labour Market." Pp. 210-242 in *Gender and Welfare State Regimes*, edited by Diane Sainsbury. New York: Oxford University Press.
- . N.d. "Women's Share of Labor Market Earnings, Mid-1990s." Unpublished data set. Department of Political Science, City University of New York.
- Gustafsson, Bjorn and Mats Johansson. 1999. "In Search of Smoking Guns: What Makes Income Inequality Vary over Time in Different Countries?" *American Sociological Review* 64:585-605.
- Gwartney, James, Robert Lawson, and Walter Block. 1996. *Economic Freedom of the World: 1975-1995*. Vancouver: Fraser Institute.
- Hall, Peter and David Soskice, eds. 2001. *Varieties of Capitalism*. New York: Oxford University Press.
- Haveman R. 1999. "From Sharing to Earning: Considerations for Social Security in the 21st Century." *The Economist* 147(3):364-366.
- Hicks, Alexander. 1999. *Social Democracy and Welfare Capitalism*. Ithaca, NY: Cornell University Press.
- Hicks, Alexander and Lane Kenworthy. 1998. "Cooperation and Political Economic Performance in Affluent Democratic Capitalism." *American Journal of Sociology* 103:1631-1672.
- Hicks, Alexander and Duane Swank. 1992. "Politics, Institutions, and Welfare Spending in Industrialized Democracies, 1960-1982." *American Political Science Review* 86:658-674.
- Huber, Evelyne and John D. Stephens. 2001. *Development and Crisis of the Welfare State*. Chicago: University of Chicago Press.
- Iversen, Torben and Thomas R. Cusack. 2000. "The Causes of Welfare State Expansion: Deindustrialization or Globalization?" *World Politics* 52:313-349.
- Iversen, Torben, Jonas Pontusson, and David Soskice, eds. 2000. *Unions, Employers, and Central Banks*. New York: Cambridge University Press.
- Kenworthy, Lane. 1999. "Do Social-Welfare Policies Reduce Poverty? A Cross-National Assessment." *Social Forces* 77:1119-1139.
- . 2001. "Wage Setting Coordination Scores." Version dated June 17, 2001. Data set. Available at: [www.emory.edu/SOC/lkenworthy](http://www.emory.edu/SOC/lkenworthy).
- . 2002. "Corporatism and Unemployment in the 1980s and 1990s." *American Sociological Review* 67:367-388.
- . 2003. "Do Affluent Countries Face an Incomes-Jobs Tradeoff?" *Comparative Political Studies*, forthcoming. Available at: [www.emory.edu/SOC/lkenworthy](http://www.emory.edu/SOC/lkenworthy).
- Kim, Jae-On and Charles W. Mueller. 1979. *Factor Analysis: Statistical Methods and Practical Issues*. Beverly Hills, CA: Sage.



- Lange, Peter, and Geoffrey Garrett. 1985. "The Politics of Growth." *Journal of Politics* 47:794-809.
- Lawley, D. N. and A. E. Maxwell. 1971. *Factor Analysis as a Statistical Method*. New York: American Elsevier.
- Lehmbruch, Gerhard. 1984. "Concertation and the Structure of Corporatist Networks." Pp. 60-80 in *Order and Conflict in Contemporary Capitalism*, edited by John H. Goldthorpe. Oxford: Clarendon Press.
- Lijphart, Arend. 1984. *Democracy*. New Haven CT: Yale University Press.
- \_\_\_\_\_. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven CT: Yale University Press.
- Lijphart, Arend and M.M.L. Crepaz. 1991. "Corporatism and Consensus Democracy in 18 Countries." *British Journal of Political Science* 21:235-246
- Lindbeck, Assar. 1986. "Limits to the Welfare State." *Challenge*, January-February, pp. 31-36.
- LIS (Luxembourg Income Study). N.d. "Luxembourg Income Study Webpage." See [www.lisproject.org](http://www.lisproject.org).
- Long, J. Scott. 1983. *Confirmatory Factor Analysis*. Beverly Hills, CA: Sage.
- Long, J. Scott and Laurie H. Ervin. 2000. "Using Heteroscedasticity Consistent Standard Errors in the Linear Regression Model." *American Statistician* 54:217-224.
- Nickell, Stephen and Richard Layard. 1999. "Labor Market Institutions and Economic Performance." Pp. 3029-3084 in *Handbook of Labor Economics*, volume 3C, edited by Orley Ashenfelter and David Card. Amsterdam: Elsevier.
- OECD. 2001. *OECD Statistical Compendium*. Edition 01#2001. Paris: OECD.
- \_\_\_\_\_. Various years. *OECD Historical Statistics*. Paris: OECD.
- Pierson, Paul. 2001. "Coping with Permanent Austerity: Welfare State Restructuring in Affluent Democracies." Pp. 410-456 in *The New Politics of the Welfare State*, edited by Paul Pierson. New York: Oxford University Press.
- Pontusson, Jonas. 2003. *Social Europe versus Liberal America*. New York: Century Foundation.
- Ragin, Charles. 1994. "A Quantitative Comparative Analysis of Pension Systems." In *The Comparative Political Economy of the Welfare State*, edited by Thomas Janoski and Alexander Hicks. New York: Cambridge University Press.
- Rothstein, Bo. 2000. *Just Institutions Matter: the Moral and Political Logic of the Universal Welfare State*. New York: Cambridge University Press.
- Scharpf, Fritz W. 2000. "Economic Changes, Vulnerabilities, and Institutional Capabilities." Pp. 21-124 in *Welfare and Work in the Open Economy. Volume 1: From Vulnerability to Competitiveness*, edited by Fritz W. Scharpf and Vivien A. Schmidt. New York: Oxford University Press.
- Scharpf, Fritz W. and Vivien A. Schmidt. 2000. "Conclusions." Pp. 310-336 in *Welfare and Work in the Open Economy. Volume 1: From Vulnerability to Competi-*

- tiveness*, edited by Fritz W. Scharpf and Vivien A. Schmidt. New York: Oxford University Press.
- Schmidt, Manfred G. 1993. "Gendered Labour Force Participation." Pp. 179-237 in *Families of Nations*, edited by Francis G. Castles. Aldershot: Dartmouth.
- Siebert, Horst. 1997. "Labor Market Rigidities: At the Root of Unemployment in Europe." *Journal of Economic Perspectives* 11(3):37-54.
- Swank, Duane. 2001a. *Diminished Democracy?* New York: Cambridge University Press.
- . 2001b. "Political Institutions and Welfare State Restructuring." Pp. 197-237 in *The New Politics of the Welfare State*, edited by Paul Pierson. New York: Oxford University Press
- . N.d. "18-Nation Pooled Time-Series Data Set: Strength of Political Parties by Ideological Group in Advanced Capitalist Countries." Data set. Available at: [www.marquette.edu/polisci/Swank.htm](http://www.marquette.edu/polisci/Swank.htm).
- Traxler, Franz, Sabine Blaschke, and Bernhard Kittel. 2001. *National Labour Relations in Internationalized Markets*. New York: Oxford University Press.
- Wennemo, Irene. 1992. "The Development of Family Policy." *Acta Sociologica* 35:201-217.
- Wilensky, Harold. 1990. "Common Problems, Divergent Policies: An 18-Nation Study of Family Policy." *Foreign Affairs Report* 31:1-3.

Table 1. Esping-Andersen's "Worlds" of Welfare Capitalism

---

*1990 Worlds*

Socialist: Norway, Sweden, Denmark, Finland, Netherlands  
Liberal: United States, Canada, Switzerland, Australia, Japan  
Conservative: Italy, France, Austria, Germany, Belgium  
Not classified: Ireland, New Zealand, United Kingdom

*1999 Worlds*

Universalist: Denmark, Norway, Sweden, Finland, Netherlands (and, to a degree, the United Kingdom)  
Residual: Australia, Canada, New Zealand, United States (and, to a degree, the United Kingdom)  
Social Insurance: Austria, Belgium, France, Germany, Italy, Japan  
Not classified: Ireland, Switzerland

---

Sources: Esping-Andersen (1990, table 3.3, p. 74; 1999, pp. 85-86).

Table 2. Esping-Andersen's 1990 Welfare Policy Characteristics and Welfare State Dimensions

"Socialist" World and Dimension				"Liberal" World and Dimension					"Conservative" World and Dimension			
Benefit Universalism	Equality	<i>Socialism</i> <i>Dimension</i>		Means-Tested Poor Relief	Private Pensions	Private Health Spending	<i>Liberalism</i> <i>Dimension</i>		Corporatism	Etatism	<i>Conservatism</i> <i>Dimension</i>	
Norway	95	.69	8	United States	18.2	21	57	12	Italy	12	2.2	8
Sweden	90	.82	8	Canada	15.6	38	26	12	France	10	3.1	8
Denmark	87	.99	8	Switzerland	8.8	20	35	12	Austria	7	3.8	8
Finland	88	.72	6	Australia	3.3	30	36	10	Germany	6	2.2	8
Netherlands	87	.57	6	Japan	7.0	23	28	10	Belgium	5	3.0	8
Switzerland	96	.48	4	France	11.2	8	28	8	Finland	4	2.5	6
Canada	93	.48	4	Netherlands	6.9	13	22	8	Ireland	1	2.2	4
United Kingdom	76	.64	4	Denmark	1.0	17	15	6	Japan	7	.9	4
Germany	72	.56	4	Germany	4.9	11	20	6	Netherlands	3	1.8	4
Belgium	67	.79	4	Italy	9.3	2	12	6	Norway	4	.9	4
Australia	33	1.00	4	United Kingdom <sup>a</sup>		12	10	6	Denmark	2	1.1	2
New Zealand	33	1.00	4	Belgium	4.5	8	13	4	Canada	2	.2	2
Austria	72	.52	2	Austria	2.8	3	36	4	New Zealand	1	.9	2
France	70	.55	2	Finland	1.9	3	21	4	United Kingdom	2	2.0	0
Japan	63	.32	2	Ireland	5.9	10	6	2	United States	2	1.5	0
Ireland	60	.77	2	New Zealand	2.3	4	18	2	Sweden	2	1.0	0
Italy	59	.52	0	Norway	2.1	8	1	0	Switzerland	2	1.0	0
United States	54	.22	0	Sweden	1.1	6	7	0	Australia	1	.7	0

Note: The top five countries in each section of the table are classified by Esping-Andersen as comprising that world (see Table 1). Source: Esping-Andersen (1990, tables 3.1 and 3.3, pp. 70, 74).

<sup>a</sup> Data for U.K. means-tested poor relief are not available.

Table 3. Principal Components Analysis of Esping-Andersen's Welfare State Dimensions

<i>Factor Loadings</i>			
	"Socialist-Liberal"	Traditional Conservatism	
Social Democracy	.84	-.40	
Liberalism	-.85	-.38	
Conservatism	-.01	.96	
<i>Country Scores</i>			
	"Socialist-Liberal"	Traditional Conservatism	
Norway	1.89	Italy	1.58
Sweden	1.88	Austria	1.48
Denmark	.98	Belgium	1.22
Finland	.81	France	1.16
New Zealand	.63	Germany	1.06
Belgium	.35	Ireland	.65
Netherlands	.20	Finland	.46
Ireland	.17	Norway	.03
Germany	.04	Japan	.01
United Kingdom	.03	New Zealand	-.10
Austria	-.13	Netherlands	-.35
Australia	-.58	United States	-.87
France	-.73	Canada	-.90
Canada	-.88	United Kingdom	-.91
Switzerland	-.88	Denmark	-.94
Italy	-.90	Sweden	-.95
Japan	-1.04	Australia	-1.23
United States	-1.83	Switzerland	-1.39

*Note:* Principal components analysis with varimax rotation. The scores used in the principal components analysis are from Esping-Andersen (1990, table 3.3, p. 74).

Table 4. Aspects and Measures of Welfare Regimes for Principal Components Analyses

Policy Arena	Data Source	
	Esping-Andersen	Other Authors
Social insurance	Social democratic dimension Liberal dimension Conservative dimension	Decommodification Welfare effort
Labor market	Employment rigidity	Government employment State union contract extension Social insurance tax burden Unemployment benefit duration
Family	Child benefits Public child care coverage	Family benefits Family labor force participation policy

Table 5. Principal Components Analysis of Welfare State Items

<i>Factor Loadings</i>	"Full" Analysis		"Trimmed" Analysis	
	Progressive Liberalism	Traditional Conservatism	Progressive Liberalism	Traditional Conservatism
	Social Democracy	.77	-.31	.81
Liberalism	-.65	-.18	-.74	-.28
Conservatism	-.05	.97	-.06	.93
Decom-effort index	.88	.18		
Active labor market policy	.62	-.03	.75	.17
Government employment	.85	-.46	.88	-.29
State laborism index (long)	.02	.72		
State laborism index (short)			.03	.87
Family allowance policies index	.51	.41		
Family labor force participation policies index	.78	.12		
Family labor force participation policy (Wilensky)			.68	-.54

  

<i>Country Scores</i>	"Full" Analysis		"Trimmed" Analysis	
	Progressive Liberalism	Traditional Conservatism	Progressive Liberalism	Traditional Conservatism
	Sweden	2.27	Austria 1.44	Sweden 2.57
Denmark	1.46	Germany 1.42	Denmark 1.44	Germany 1.39
Norway	1.43	Belgium 1.34	Norway 1.24	Belgium 1.29
Finland	.52	Italy 1.10	Finland .55	Austria 1.26
Austria	.35	France 1.10	Belgium .42	Italy 1.21
Belgium	.30	Finland .53	United Kingdom .26	Netherlands .57
France	.21	Netherlands .37	Germany -.04	Finland .28
Germany	.10	Ireland .09	New Zealand -.06	Ireland -.07
Netherlands	.06	Norway .00	Ireland -.06	Norway -.10
Canada	-.35	Japan -.01	France -.06	New Zealand -.56
United Kingdom	-.40	Canada -.23	Netherlands -.11	Sweden -.58
Ireland	-.45	New Zealand -.40	Austria -.31	Japan -.62
New Zealand	-.46	Denmark -.82	Canada -.58	United Kingdom -.85
Italy	-.52	Switzerland -.97	Australia -.79	United States -.85
Switzerland	-.62	United Kingdom -1.09	Italy -.91	Switzerland -.94
United States	-1.24	Australia -1.15	Switzerland -.98	Denmark -1.02
Australia	-1.27	Sweden -1.29	United States -1.23	Australia -1.08
Japan	-1.41	United States -1.43	Japan -1.37	Canada -1.11

Note: Principal components analysis with varimax rotation.

Table 6. Some Correlates of Progressive Liberalism and Traditional Conservatism

	Progressive Liberalism <sup>a</sup>	Traditional Conservatism <sup>a</sup>
Esping-Andersen "socialist-liberal" factors scores <sup>b</sup>	.91	.02
Esping-Andersen "traditional conservative" factor scores <sup>b</sup>	-.08	.91
Cumulative social democratic party cabinet share <sup>c</sup>	.85	-.04
Cumulative Christian democratic party cabinet share <sup>c</sup>	-.22	.55
Fascism <sup>d</sup>	-.36	.45
Neocorporatism <sup>d</sup>	.73	.19
Female parliamentary representation <sup>e</sup>	.80	-.01
Property rights freedom <sup>f</sup>	-.56	-.52

<sup>a</sup> "Trimmed" version (see Table 6).

<sup>b</sup> From Table 3 above.

<sup>c</sup> From Huber and Stephens (2001, table 3.1, p. 53).

<sup>d</sup> From Hicks (1999, table 5.2, p. 143).

<sup>e</sup> From Lijphart (1999).

<sup>f</sup> From Gwartney, Lawson, and Block (1996).



Table 7. Outcome Measures for Regression Analyses

	Incomes	Jobs
Redistribution and distribution	Inequality reduction Poverty reduction	Employment Change in employment
Gender equality	Female share of earnings	Female share of the labor force

Table 8. Regression Results: Comparison between Welfare State Dimensions and "Worlds"

	Income Redistribution						Employment Performance						Gender Equality in the Labor Market					
	Inequality Reduction			Poverty Reduction			Employment Rate			Change in Employment			Women's Share of Earnings			Women's Share of the Labor Force		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Hicks-Kenworthy 2 Dimensions																		
Progressive liberalism	8.05***			11.72***			2.00**			-1.04			2.09***			2.06***		
	.83			.79			.26			-.29			.46			.50		
Traditional conservatism	.63			4.04**			-4.88***			-.90**			-1.35**			-.86**		
	.07			.27			-.63			-.25			-.30			-.21		
Esping-Andersen 3 Dimensions																		
Social democratic dimension		1.94***			4.47***			1.44**		.08			.37			.87**		
		.49			.74			.46		.06			.21			.52		
Liberal dimension		-.90*			-.50			.38		.29*			-.24			.11		
		-.35			-.12			.19		.32			-.19			.11		
Conservative dimension		.10			1.60**			-1.04***		-.74			-.28			-.05		
		.03			.35			-.43		-.17			-.19			-.04		
Esping-Andersen 2 of 3 "World" Categories <sup>a</sup>																		
Social democratic world			16.75***			26.87***		3.01				-.96			3.18*			4.00**
			.80			.84		.18				-.12			.33			.45
Conservative world			5.13*			13.01**		-8.04***				-2.24**			-1.63			-.07
			.23			.38		-.48				-.29			-.16			-.01
Adjusted R <sup>2</sup>	.68	.51	.49	.64	.66	.50	.42	.44	.27	.10	.06	.01	.33	.11	.17	.37	.30	.27
N	28	28	28	28	28	28	36	36	36	36	36	36	26	26	26	36	36	36

Note: Unstandardized and standardized regression coefficients. OLS estimates with "HC3" heteroskedasticity-consistent standard errors. Progressive liberalism and traditional conservatism variables are "trimmed" versions (see Table 5). For variable definitions and data sources see the Appendix.

<sup>a</sup> The liberal world is the omitted category.

\*  $p < .10$ ; \*\*  $p < .05$ ; \*\*\*  $p < .01$  (one-tailed tests)

Table 9. Regression Results with Control Variables

	Income Redistribution		Employment Performance		Gender Equality in the Labor Market	
	Inequality Reduction	Poverty Reduction	Employment	Change in Employment	Women's Share of Earnings	Women's Share of the Labor Force
Progressive liberalism	8.56***	8.34*	1.54*	-.77	2.14***	2.23***
standardized coefficients	.88	.56	.20	-.22	.47	.54
Traditional conservatism	1.65	3.47	-4.90***	-1.64**	1.97	1.88***
standardized coefficients	.17	.23	-.63	-.45	.43	.46
CD government omitted		[4.10*]				[.58]
Pretax-pretransfer inequality	41.94					
Pretax-pretransfer poverty		1.12				
Left government	3.00	-3.68	3.15	2.20	3.00	-.19
Christian democratic govt.	-.13	5.50	-4.61	5.83*	-13.12***	-8.42***
Real per capita GDP	.02	.00			.05	.07***
Trade	-6.71	14.73				
Deindustrialization	4.68	74.22				
Real long-term interest rates			-1.65**	-.57		
Growth of real GDP			-2.16	.60		
Wage setting coordination			1.11*	-.02		
Women's education					.76	.86**
1990s dummy	.70	-6.71	1.71	1.45	.15	.10
Adjusted R <sup>2</sup>	.72	.57	.56	.12	.66	.67
N	28	28	36	36	26	36

Note: Unstandardized regression coefficients. OLS estimates with "HC3" heteroskedasticity-consistent standard errors. Numbers in the second row for the progressive liberalism and traditional conservatism variables are standardized coefficients. Numbers in brackets are unstandardized coefficients for the traditional conservatism variable in regressions with Christian democratic government omitted, due to multicollinearity; these are shown only when such omission alters the finding for traditional conservatism. Progressive liberalism and traditional conservatism variables are "trimmed" versions (see Table 6). Coefficients for left government, Christian democratic government, real per capita GDP, trade, and deindustrialization are multiplied by 100. For variable definitions and data sources see the Appendix.

\*  $p < .10$ ; \*\*  $p < .05$ ; \*\*\*  $p < .01$  (one-tailed tests)

