

Varieties of welfare capitalism

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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 homogeneous benefits, active labour 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 programmes and specialized income security programmes 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. Pooled cross-section time-series regressions covering 18 countries over the 1980s and 1990s suggest that progressive liberalism is associated with income redistribution and greater gender equality in the labour market. The principal consequence of traditional conservatism appears to be weakened employment performance.

Keywords: Welfare state, capitalism, political economy, political sociology, conservative politics

JEL classification: D3 distribution, I3 welfare and poverty, J1 demographic economics

1. Introduction

Despite the scale and dynamism of the Chinese economy, the contrast between capitalism and socialism has lost vigour 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 (Hicks and Kenworthy, 1998; Iversen *et al.*, 2000; Hall and Soskice, 2001; 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 Gösta Esping-Andersen's (1990, 1999) work, which has stimulated a visible and voluminous body of research (e.g. Castles and Mitchell, 1993; Ragin, 1994; Birchfield and Crepaz, 1998; Goodin *et al.*, 1999; Gornick, 1999; Scharpf, 2000; Scharpf and Schmidt, 2000; Huber and Stephens, 2001; Pierson, 2001; Swank, 2001*a, b*). Yet this research has been almost entirely confined to Esping-Andersen's categorization of welfare states into three regime-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; Ragin, 1994; Scharpf, 2000; Huber and Stephens, 2001). 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, 2001*a, b*). They specify regime-type-specific explanatory theories of varied outputs and outcomes, and evolutions of welfare states (Scharpf and Schmidt, 2000; Pierson, 2001). They also sometimes employ Esping-Andersen's (1990) decommodification scores in discussions of theory or descriptions of their cases. However, for all its activities

Table 1 Esping-Andersen's 'worlds' of welfare capitalism

Countries	
1990 worlds	
Socialist	Norway, Sweden, Denmark, Finland, Netherlands
Liberal	USA, Canada, Switzerland, Australia, Japan
Conservative	Italy, France, Austria, Germany, Belgium
Not classified	Ireland, New Zealand, UK
1999 worlds	
Universalist	Denmark, Norway, Sweden, Finland, Netherlands (and, to a degree, the UK)
Residual	Australia, Canada, New Zealand, United States (and, to a degree, the UK)
Social Insurance	Austria, Belgium, France, Germany, Italy, Japan
Not classified	Ireland, Switzerland

Sources: Esping-Andersen (1990, Table 3.3, p. 74; 1999, pp. 85–6).

and vibrancy this research has largely neglected investigation of Esping-Andersen's *dimensions* of welfare state policy and politics.

Each of Esping-Andersen's three worlds is rooted in a specific dimension of welfare state programmes. 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 comprises the five nations whose social insurance programmes 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 the highest scores on a dimension tapping the degree to which social insurance programmes 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.¹ Table 2 displays Esping-Andersen's 1990 country scores for these policy characteristics and for his three welfare state dimensions.

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, Chapter 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 (2000) differentiate the cases of their explanatory schemes by regime-type. Huber and Stephens (2001) and Swank (2001*a, b*) differentiate some statistical analyses by regime-type, attributing inter-regime differences in descriptive and explanatory patterns to regime-types.

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.

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			
Country	Benefit universalism	Benefit equality	Socialism dimension	Country	Means-tested poor relief	Private pensions	Private health spending	Liberalism dimension	Country	Corporatism	Etatism	Conservatism dimension
Norway	95	0.69	8	USA	18.2	21	57	12	Italy	12	2.2	8
Sweden	90	0.82	8	Canada	15.6	38	26	12	France	10	3.1	8
Denmark	87	0.99	8	Switzerland	8.8	20	35	12	Austria	7	3.8	8
Finland	88	0.72	6	Australia	3.3	30	36	10	Germany	6	2.2	8
Netherlands	87	0.57	6	Japan	7.0	23	28	10	Belgium	5	3.0	8
Switzerland	96	0.48	4	France	11.2	8	28	8	Finland	4	2.5	6
Canada	93	0.48	4	Netherlands	6.9	13	22	8	Ireland	1	2.2	4
UK	76	0.64	4	Denmark	1.0	17	15	6	Japan	7	0.9	4
Germany	72	0.56	4	Germany	4.9	11	20	6	Netherlands	3	1.8	4
Belgium	67	0.79	4	Italy	9.3	2	12	6	Norway	4	0.9	4
Australia	33	1.00	4	UK*		12	10	6	Denmark	2	1.1	2
New Zealand	33	1.00	4	Belgium	4.5	8	13	4	Canada	2	0.2	2
Austria	72	0.52	2	Austria	2.8	3	36	4	New Zealand	1	0.9	2
France	70	0.55	2	Finland	1.9	3	21	4	UK	2	2.0	0
Japan	63	0.32	2	Ireland	5.9	10	6	2	USA	2	1.5	0
Ireland	60	0.77	2	New Zealand	2.3	4	18	2	Sweden	2	1.0	0
Italy	59	0.52	0	Norway	2.1	8	1	0	Switzerland	2	1.0	0
USA	54	0.22	0	Sweden	1.1	6	7	0	Australia	1	0.7	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).

*Data for UK means-tested poor relief are not available.

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, for example, Lange and Garrett, 1985; Alvarez *et al.*, 1991). 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 UK, which is neither clearly liberal nor social democratic (Esping-Andersen, 1999, pp. 85–6); it may also more effectively sensitize us to change, such as the UK'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-centred dimensions to include his more recent (1999) emphasis on labour 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 assisted interpretation of them by briefly examining some of their historical predictors and correlates. Finally, we turned 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 regime ‘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.

2. Dimensions of welfare state regimes

2.1 *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 programmes. 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 degree to which public social insurance programmes are differentiated by occupational and public–private status group distinctions. Esping-Andersen assigned each country a score for each of these items circa 1980, and then summed the scores. These summed scores were 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 -0.44 between ‘social democracy’ and ‘liberalism’. Conservatism correlates negatively but less strongly with these two dimensions: -0.27 with social democracy and -0.26 with liberalism.

What emerges from factor analyses of Esping-Andersen’s three dimensions? An orthogonal principal components analysis yields two factors.² These are shown

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, Chapters 4 and 7; Long, 1983, pp. 34–55). For example, the identification of a two-dimensional 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

Table 3 Principal components analysis of Esping-Andersen's welfare state dimensions

	Country	'Socialist-liberal'	Country	Traditional conservatism
Factor loadings				
	Social democracy	0.84		-0.40
	Liberalism	-0.85		-0.38
	Conservatism	-0.01		0.96
Country scores				
	Norway	1.89	Italy	1.58
	Sweden	1.88	Austria	1.48
	Denmark	0.98	Belgium	1.22
	Finland	0.81	France	1.16
	New Zealand	0.63	Germany	1.06
	Belgium	0.35	Ireland	0.65
	Netherlands	0.20	Finland	0.46
	Ireland	0.17	Norway	0.03
	Germany	0.04	Japan	0.01
	UK	0.03	New Zealand	-0.10
	Austria	-0.13	Netherlands	-0.35
	Australia	-0.58	USA	-0.87
	France	-0.73	Canada	-0.90
	Canada	-0.88	UK	-0.91
	Switzerland	-0.88	Denmark	-0.94
	Italy	-0.90	Sweden	-0.95
	Japan	-1.04	Australia	-1.23
	USA	-1.83	Switzerland	-1.39

Note: Principal components analysis with varimax rotation.

Source: The scores used in the principal components analysis are from Esping-Andersen (1990, Table 3.3, p. 74).

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 0.84 and -0.85, respectively, on this factor. His conservative dimension, by contrast, loads negligibly at -0.01. The four nations with the highest scores on this factor are four of the five in

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.

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 0.96. 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.

2.2 *A more thorough exploration*

Focusing on Esping-Andersen's three welfare state dimensions may be insufficiently comprehensive. We therefore conducted additional principal components analyses of a broader set of welfare state and related measures. We chose 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 analysed in concert with those of labour 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 programmes 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-centred focus—and its social democratic, liberal and conservative scales—to encompass his embrace of labour market regulation and family policies as integral to the analysis of welfare states. Further, we 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 labour markets and families. (Some aspects are most accurately considered hybrids that bridge social insurance and labour market policies.) In addition, it distinguishes between measures drawn directly from Esping-Andersen and ones that move beyond his work. Part 1 of the Appendix lists operational definitions and data sources for the variables.

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 programmes and also to the most utilized of all measures of social policy, welfare effort (see Hicks, 1999). We measure

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
Labour 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 labour force participation policy

the latter as expenditures for income security programmes as a share of GDP. For parsimony, we created an index using the factor scores from a principal components analysis of these two measures (loadings equalling 0.91 for each item). We dubbed 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 included a wide range of labour market institutions in his recent (1999) treatment of post-industrial economies, including union density and wage bargaining centralization. We omit these non-state institutions from our analysis and concentrate instead on state labour market policies (but see Hicks and Kenworthy, 1998; Kenworthy 2001a, 2002). However, we draw on Esping-Andersen’s labour market considerations in several ways. One is by means of his index of ‘labour 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-centred 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) labour market variable specification in a few respects. One is by including active labour 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 components 'factor' score) indexes of some of these labour 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 labour market rigidity, state union contract extension, social insurance tax burden and unemployment benefit duration (see 'long' version of 'state labourism' 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 labourism' 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 labour force participation scale from Wilensky that sums scores on (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.

Here too we reduce the number of indicators via principal components analysis of these four family policy measures. This yielded 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 labour force participation policies', loads strongly on the public child care coverage and Wilensky family labour 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 labour-market-related policies (active labour market policy, government employment and the four-item state labourism 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 labour force participation policies).

For the trimmed analysis we use seven measures. This include 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 labour market measures: active labour market policy, government employment and a modified (short) index of state labourism that excludes Esping-Andersen’s labour 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 labour 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.

2.3 *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 (0.88), government employment (0.85), family labour force participation policies (0.78), social democracy (0.77), liberalism (−0.65), active labour market policy (0.62) and family allowance

Table 5 Principal components analysis of welfare state items

Factor loadings	'Full' analysis				'Trimmed' analysis			
	Country	Progressive liberalism	Country	Traditional conservatism	Country	Progressive liberalism	Country	Traditional conservatism
Social democracy		0.77		-0.31		0.81		-0.27
Liberalism		-0.65		-0.18		-0.74		-0.28
Conservatism		-0.05		0.97		-0.06		0.93
Decom-effort index		0.88		0.18				
Active labour market policy		0.62		-0.03		0.75		0.17
Government employment		0.85		-0.46		0.88		-0.29
State labourism index (long)		0.02		0.72				
State labourism index (short)						0.03		0.87
Family allowance policies index		0.51		0.41				
Family labour force participation policies index		0.78		0.12				
Family labour force participation policy (Wilensky)						0.68		-0.54

Table 5 Continued

Factor loadings	'Full' analysis				'Trimmed' analysis			
	Country	Progressive liberalism	Country	Traditional conservatism	Country	Progressive liberalism	Country	Traditional conservatism
	Sweden	2.27	Austria	1.44	Sweden	2.57	France	1.77
	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	0.52	Italy	1.10	Finland	0.55	Austria	1.26
	Austria	0.35	France	1.10	Belgium	0.42	Italy	1.21
	Belgium	0.30	Finland	0.53	UK	0.26	Netherlands	0.57
	France	0.21	Netherlands	0.37	Germany	-0.04	Finland	0.28
	Germany	0.10	Ireland	0.09	New Zealand	-0.06	Ireland	-0.07
	Netherlands	0.06	Norway	0.00	Ireland	-0.06	Norway	-0.10
	Canada	-0.35	Japan	-0.01	France	-0.06	New Zealand	-0.56
	UK	-0.40	Canada	-0.23	Netherlands	-0.11	Sweden	-0.58
	Ireland	-0.45	New Zealand	-0.40	Austria	-0.31	Japan	-0.62
	New Zealand	-0.46	Denmark	-0.82	Canada	-0.58	UK	-0.85
	Italy	-0.52	Switzerland	-0.97	Australia	-0.79	USA	-0.85
	Switzerland	-0.62	UK	-1.09	Italy	-0.91	Switzerland	-0.94
	USA	-1.24	Australia	-1.15	Switzerland	-0.98	Denmark	-1.02
	Australia	-1.27	Sweden	-1.29	USA	-1.23	Australia	-1.08
	Japan	-1.41	USA	-1.43	Japan	-1.37	Canada	-1.11

Note: Principal components analysis with varimax rotation.

policies (0.51). This first orthogonal component explains 47% of total item variance. The second component is defined chiefly by conservatism (0.97), state labourism (0.72), government employment (−0.46) and family allowance policies (0.41). This orthogonal component explains 25% of the total item variance.³

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 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 (0.81), active labour market policy (0.75), liberalism (−0.74), family labour force participation policy (0.68) and government employment (0.68). The highest-loading items for the second component are conservatism (0.93), state labourism (0.87) and government employment (0.49).

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 labourite 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 labour 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 Justice Matters*. Historically, the farmer labour alliances behind Robert

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 a share of GDP (from Hicks, 1999), foreign aid spending as a share of GDP (from Lijphart, 1999), and good environmental 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 = 0.95) and a fourth ‘militarism’ component (loading = 0.93). 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 χ^2 tests (see Long, 1983).

LaFollette and Franklin Delano Roosevelt in the USA 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 post-war 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 fuelled 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 programmes (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 *et al.*, 2001) and the wage earner family embalmed by family allowances (Esping-Andersen, 1990).

A fuller sense of the extent of the progressive liberalism dimension 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 (0.91), with Huber and Stephens’s cumulative measure of 1946–1980 social democratic party rule (0.85), with Hicks’s measure of tripartite neocorporatism (0.73) and with the share of parliamentary representatives who are women (a useful measure of civil rights progress) (0.80). It correlates negatively (–0.56) 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 (0.91), moderately with Huber and Stephens’s cumulative measure of 1946–1980 Christian democratic party rule (0.55) and with Hicks’s measure of fascist legacies (0.45), and, like progressive liberalism, negatively with property rights freedom (–0.52).

The ‘full’ and ‘trimmed’ dimensions of progressive liberalism correlate 0.95 with one another, while the full and trimmed dimensions of traditional conservatism correlate 0.92.

Table 6 Some correlates of progressive liberalism and traditional conservatism

	Progressive liberalism*	Traditional conservatism*
Esping-Andersen 'socialist-liberal' factors scores [†]	0.91	0.02
Esping-Andersen 'traditional conservative' factors scores [†]	-0.08	0.91
Cumulative social democratic party cabinet share [‡]	0.85	-0.04
Cumulative Christian democratic party cabinet share [‡]	-0.22	0.55
Fascism [§]	-0.36	0.45
Neocorporatism [¶]	0.73	0.19
Female parliamentary representation	0.80	-0.01
Property rights freedom**	-0.56	-0.52

*'Trimmed' version (see Table 5).

[†]From Table 3 above.

[‡]From Huber and Stephens (2001, Table 3.1, p. 53).

[§]From Hicks (1999, Table 5.2, p. 143).

[¶]From Lijphart (1999).

**From Gwartney *et al.* (1996).

3. 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.

3.1 Measures and method

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

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

Table 7 Outcome measures for regression analyses

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

taxes and transfers—i.e. the difference between pre-tax–pre-transfer and post-tax–post-transfer income inequality divided by pre-tax–pre-transfer inequality. Inequality is measured using the Gini coefficient for size-adjusted household income.⁴ 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 labour market status. We look at two indicators: women’s share of total labour market earnings and women’s share of the labour force. These are preferable to two more commonly used counterparts: the female-to-male pay ratio and the female labour 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

⁴ The size adjustment follows convention in dividing household income by the square root of 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 *et al.* (1995).

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 labour force participation rate will be lower in societies in which there is an overall low rate of labour force participation, but that does not necessarily indicate a disadvantageous position for women relative to men. Consider two hypothetical countries. In one the male labour force participation rate is 90% and the female labour force participation rate is 75%. In the other both the male and female labour force participation rates are 65%. If the aim is to capture gender equality in the labour 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 labour 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 UK and the USA. Due to lack of data in the LIS data set, 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 is a necessary simplification, given the limited longitudinal data on welfare state policy orientations used in our analysis of regime dimensions.⁵ The data for the outcome variables and the controls are period averages. The regressions are estimated using ordinary least squares (OLS), with 'HC3' heteroscedasticity-consistent standard errors (Long and Ervin, 2000).⁶ A dummy variable for the 1990s is included in order to parcel out period-specific effects and to help avert longitudinal autocorrelation.

⁵ We would not argue that the effective assumption of regime invariance is accurate enough to preclude any distortions 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 percentage of the labour force and the state collective bargaining coverage extension (state labourism). The correlation between 1980 and 1990 measures of the government employment item (which loads highest, at 0.88, on the 'trimmed' measure of progressive liberalism) is 0.98. The correlation between 1980 and 1990 measures of state extension of collective bargaining (which correlates 0.74 with the 'trimmed' measure of traditional conservatism) is 0.96.

⁶ The option in Stata 7.0 is 'hc3'. Similar results were obtained using White heteroscedasticity-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).

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 were selected based primarily on their empirical relevance in prior research (e.g. see Schmidt, 1993; Hicks and Kenworthy, 1998; Gornick, 1999; Gustafsson and Johansson, 1999; Hicks, 1999; Kenworthy, 1999, 2001*a*, 2002; Nickell and Layard, 1999; Iversen and Cusack, 2000; Huber and Stephens, 2001; Alderson and Nielsen, 2002). Two measures of partisan government, left party cabinet share and Christian democratic party cabinet share, are included in all of the regressions. Pre-tax–pre-transfer inequality or poverty, trade and de-industrialization 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 labour 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 go along with what the major players decide. As noted earlier, this key institution is not included in the principal components analyses because it is based principally on labour–management relationships rather than on state policy. Finally, women’s education is included in the two regressions assessing gender labour market equality.⁷

It is important to note that measures of welfare state regime dimensions are highly proximate prospective causes of the policy outcomes analysed 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 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 channelled (or mediated) by, and thus controlled away by, regime dimensions.

⁷ An additional variable that might well be relevant in explaining cross-country differences in income redistribution is corporatism (Hicks and Swank, 1992; Hicks and Kenworthy, 1998; Hicks, 1999). Corporatism is not included in the regressions here, however, because it is highly collinear with the progressive liberalism welfare state dimension—better than 0.70 for the most commonly used corporatism measures, and better than 0.80 for some.

3.2 Regression results

Tables 8 and 9 show the regression results. Table 8 presents relationships of our ‘trimmed’ measures⁸ of progressive liberalism and traditional conservatism to outcome measures, with a stress on comparisons with relationships of two other sets of regime measures to those outcomes: (a) Esping-Andersen’s (1990) three dimensions and (b) 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 relationships 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.

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 (0.01 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: 0.83 for inequality reduction and 0.79 for poverty reduction. Though the estimate for traditional conservatism is positive in both equations, it only attains significance (at the 0.05 level) for poverty reduction. And the effect is much weaker than that of progressive liberalism ($\beta = 0.27$).

Income redistribution models using Esping-Andersen’s original measures of welfare regimes—whether his three dimensions or his tripartite categorization

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 Table 9 are the following. Several effects of traditional conservatism fall in statistical significance: that on change in employment from the 0.05 level to the 0.10 level, and that on employment from the 0.01 level to the 0.05 level. More notably, the positive estimate for traditional conservatism on female share of earnings shifts from statistical insignificance to significance at the 0.05 level (while the negative effect of Christian democratic government persists at the 0.01 level). Also, the positive estimate for traditional conservatism on women’s share of earnings shifts from statistical insignificance to significance at the 0.01 level to 0.10-level significance for a favourably construed one-tailed hypothesis and test (while, again, the negative effect of Christian democratic government persists at the 0.01 level).

Table 8 Regression results: comparison between welfare state dimensions and 'worlds'

	Income redistribution						Employment performance						Gender equality in the labour market					
	Inequality reduction			Poverty reduction			Employment rate			Change in employment			Women's share of earnings			Women's share of the labour force		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<i>Hicks–Kenworthy two dimensions</i>																		
Progressive	8.05***			11.72***			2.00**			−1.04			2.09***			2.06***		
liberalism	0.83			0.79			0.26			−0.29			0.46			0.50		
Traditional	0.63			4.04**			−4.88***			−0.90**			−1.35**			−0.86**		
conservatism	0.07			0.27			−0.63			−0.25			−0.30			−0.21		
<i>Esping-Andersen three dimensions</i>																		
Social democratic		1.94***			4.47***			1.44**		0.08				0.37			0.87**	
		0.49			0.74			0.46		0.06				0.21			0.52	
Liberal		−0.90*			−0.50			0.38		0.29*				−0.24			0.11	
		−0.35			−0.12			0.19		0.32				−0.19			0.11	
Conservative		0.10			1.60**			−1.04***		−0.74				−0.28			−0.05	
		0.03			0.35			−0.43		−0.17				−0.19			−0.04	
<i>Esping-Andersen 2 of 3 'world' categories†</i>																		
Social democratic			16.75***			26.87***		3.01		−0.96			3.18*			4.00**		
			0.80			0.84		0.18		−0.12			0.33			0.45		
Conservative			5.13*			13.01**		−8.04***		−2.24**			−1.63			−0.07		
			0.23			0.38		−0.48		−0.29			−0.16			−0.01		
Adjusted R ²	0.68	0.51	0.49	0.64	0.66	0.50	0.42	0.44	0.27	0.10	0.06	0.01	0.33	0.11	0.17	0.37	0.30	0.27
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' heteroscedasticity-consistent standard errors. Progressive liberalism and traditional conservatism variables are 'trimmed' versions (see Table 5). For variable definitions and data sources see the Appendix.

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$ (one-tailed tests).

†The liberal world is the omitted category.

Table 9 Regression results with control variables

Equality in	Income redistribution		Employment performance		Gender equality in the labour market	
	Inequality reduction	Poverty reduction	Employment	Change in employment	Women's share of earnings	Women's share of the labour force
Progressive liberalism	8.56***	8.34*	1.54*	-0.77	2.14***	2.23***
Standardized coefficients	0.88	0.56	0.20	-0.22	0.47	0.54
Traditional conservatism	1.65	3.47	-4.90***	-1.64**	1.97	1.88***
Standardized coefficients	0.17	0.23	-0.63	-0.45	0.43	0.46
CD government omitted		(4.10*)				(0.58)
Pre-tax-pre-transfer inequality	41.94					
Pre-tax-pre-transfer poverty		1.12				
Left government	3.00	-3.68	3.15	2.20	3.00	-0.19
Christian democratic govt	-0.13	5.50	-4.61	5.83*	-13.12***	-8.42***
Real per capita GDP	0.02	0.00			0.05	0.07***
Trade	-6.71	14.73				
De-industrialization	4.68	74.22				
Real long-term interest rates			-1.65**	-0.57		
Growth of real GDP			-2.16	0.60		
Wage-setting coordination			1.11*	-0.02		
Women's education					0.76	0.86**
1990s dummy	0.70	-6.71	1.71	1.45	0.15	0.10
Adjusted R ²	0.72	0.57	0.56	0.12	0.66	0.67
<i>n</i>	28	28	36	36	26	36

Note: Unstandardized regression coefficients. OLS estimates with 'HC3' heteroscedasticity-consistent standard errors. Numbers in the second row for the progressive liberalism and traditional conservatism variables are standardized coefficients. Numbers in parentheses 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 5). Coefficients for left government, Christian democratic government, real per capita GDP, trade and de-industrialization are multiplied by 100. For variable definitions and data sources see the Appendix.

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$ (one-tailed tests).

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 stands 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: 0.68 versus 0.51. 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 = 0.81 and significant at the 0.01 test level) stands in for the progressive liberalism scale; but the adjusted R^2 is 0.49 in comparison with our dimensions' 0.68. For poverty reduction, Esping-Andersen's three dimensions performs favourably compared with our two. A highly significant (positive) social democratic effect (beta = 0.74, significant at the 0.01 test level) stands in for the progressive liberalism effect. A positive conservatism estimate emerges that exceeds that of our traditional conservatism dimension: 0.35 to 0.27 (albeit at the same 0.05 level of significance). Moreover, the adjusted R^2 for Esping-Andersen's dimensions marginally exceeds that for ours: 0.66 versus 0.64. 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 attain 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 labour market (Table 8, columns 13–18), progressive liberalism has consistently robust egalitarian effects (beta = 0.46 and 0.50) on women's share of earnings and of the labour 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 appeared rather large (adjusted R^2 = 0.33 versus 0.11 and 0.17). But there is a twist: Esping-Andersen's categorical variables outperform his dimensions. For women's share of the labour force, our new pair of dimensions nominally outperform Esping-Andersen's trio of dimensions while each set of continuous dimensions more markedly outperform regime-type dummies.

Overall, dimensions (whether Esping-Andersen's or ours) outperform categories for 11 of 12 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, whereas 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 (0.01 level) egalitarian effects on inequality reduction and more modestly significant effects on poverty reduction (0.10 level). The standardized coefficients are 0.88 and 0.56, 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 0.60 with traditional conservatism).⁹

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 0.05 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 programmes appears to have no impact on employment performance, except for a small ($\beta = 0.12$) and barely statistically significant positive effect on employment levels.¹⁰

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 0.05 test level.

¹⁰ Real long-term interest rates have significant negative effects on rates of employment, though they do not appear to affect period-to-period increases. Wage coordination seems to help boost unemployment, though it also appears not to have affected increases, 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.

As regards gender equality in the labour 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 labour force (standardized coefficients of 0.45 and 0.54, respectively). Secondly, Christian democratic rule, not traditional conservatism as in Table 8, has the model's second pair of consistent effects, both negative. Indeed, women's labour 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 labour 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 channelled by regime) in its own right.

4. 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 programmes.

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 labour market and family policies. We find progressive liberalism to be characterized not only by extensive, universal and homogeneous benefits, but also by active labour market policies, government employment and family subsidies for general child support and female labour 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 programmes and specialized income security programmes 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 programmes. 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.¹¹

¹¹ A paper has just come to our attention that overlaps on at least one analysis with this one: de Beer *et al.* (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 at one pole to Canada, Australia and USA at the other, resembles our progressive liberalism dimension, though with a 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), not a table, it is impossible to discern precisely 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 -0.69 , whereas the Spearman's rho ordinal correlation between rankings of nations on the two scales is 0.67 . The Pearsonian correlation between the de Beer *et al.* conservatism scale and our traditional conservatism scale is -0.70 , whereas the Spearman's rho ordinal correlation between rankings of nations on the two scales is 0.53 . 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

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 labour market, whether measured as women's share of earnings or of the labour 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 centred 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 labourism', less union strength or neocorporatist integration of union confederations into state policy making than relatively passive (insurance-centred) employment policy, government labour market regulation and labour unionism by state proxy.¹² 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 labour 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 welfare regimes, 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

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, for example, Huber and Stephens, 2001, Chapters 5 and 7).

optimal specification of ‘worlds’ of welfare capitalism.¹³ 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), Iversen (1999), Hicks and Kenworthy (1998), 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 democratic capitalist world around the millennium, the relevance of our small empirical domain may have considerable generality.¹⁴

¹³ If an SPSSX 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 UK and the USA, 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 UK 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 UK 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 1980–1998-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 limit the paper to exploratory principal components analysis and its limited conventions of factor vetting by means of eigenvalues—as opposed to confirmatory factor analyses with its powerful repertoire of (generally χ^2) 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.

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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 years 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 programmes). *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).

Labour market policy measures

Active labour market policy. Expenditures on active labour 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 years. *Source:* OECD (various years).

State labourism (long). Factor scores for sole first factor from a principal components analysis of employment rigidity (0.53), state union contract extension (0.99), social insurance tax (0.68) and unemployment benefit duration (0.55).

State labourism (short). Factor scores for sole first factor from a principal components analysis of state union contract extension (0.90) and social insurance tax burden (0.90).

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 *et al.* (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 (0.91), child benefits (0.75), public child care coverage (−0.11) and family labour force participation policy (0.33). Two-factor solution (oblimin rotation); pattern matrix loadings for first factor are shown in parentheses.

Family labour force participation policies. Factor scores for second factor from a principal factor analysis of family benefits (−0.09), child benefits (0.12), public child care coverage (0.90) and family labour force participation policy (0.74). 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 labour force participation policy measures as regressors.

Public child care coverage. Share of children under the age of 3 years in public child care, 1980s. *Source:* Esping-Andersen (1999, Table 4A, p. 71). Values for Japan (0.10), New Zealand (0.10) and Switzerland (0.10) generated with a prediction equation using the family benefits and family labour force participation policy as regressors.

Family labour 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 pre-tax–pre-transfer Gini and post-tax–post-transfer Gini divided by pre-tax–pre-transfer Gini. Measured in the mid-1980s and mid-1990s. *Source:* Authors' calculations from data in Luxembourg Income Study (see LIS, n.d.).

Poverty reduction. Difference between pre-tax–pre-transfer relative poverty rate and post-tax–post-transfer relative poverty rate divided by pre-tax–pre-transfer relative poverty rate. Measured in the mid-1980s and mid-1990s. 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 years. 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 labour market earnings, among those aged 20–59 years. Measured in the late-1980s and mid-1990s. *Source:* Gornick (1999, unpublished data), using Luxembourg Income Study data.

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

Control variable measures

Pre-tax–pre-transfer income inequality. Measured in the mid-1980s and mid-1990s. *Source:* Authors' calculations from data in Luxembourg Income Study (see LIS, n.d.).

Pre-tax–pre-transfer relative poverty. Measured in the mid-1980s and mid-1990s. *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).

De-industrialization. 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*b*).

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.).