

How Welfare States Shape the Gender Pay Gap: A Theoretical and Comparative Analysis

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We assess the impact of the welfare state on cross-national variation in the gender wage gap. Earnings inequality between men and women is conceptualized as resulting from their different locations in the class hierarchy, combined with the severity of wage differentials between and within classes. This decomposition contributes to identifying the relevant dimensions of welfare states and testing their impact on women's relative earnings. Our empirical analysis is based on income and occupation-based indicators of class and utilizes microdata for 17 post-industrial societies. We find systematic differences between welfare regimes in the components of the gender gap. The evidence supports our claim that the state molds gender inequality in labor market attainments by influencing women's class positions and regulating class inequality.

In recent decades feminist scholars have drawn attention to the importance of welfare state policies for women's economic autonomy. They have argued that the welfare state powerfully affects the life chances of women relative to men, as well as ameliorating class inequalities. This insight has substantially extended the study of gender inequality and the welfare state, particularly research informed by a comparative perspective.¹

However, previous comparative studies have adopted a limited perspective on both the dependent and independent variables. Gender inequality has usually been equated with women's ability to integrate into paid work. Relatively little research has further investigated the impact of welfare states on women's positions within the labor market (i.e., their occupational attainment and earnings).² Furthermore, with gender rather than class at the center of attention, the main focus has been on policies that mitigate conflicts between motherhood and paid employment, neglecting the decommodifying effects of the welfare state on workers – including women. However, insofar as women are more common among the disadvantaged workforce and men among the advantaged, "worker

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friendly" policies as well as "family friendly" policies are bound to affect the gender wage gap. Consequently, an integrated view of both welfare state components provides greater leverage for explaining national variations in the relative wages of men and women.

The present study offers a new theoretical framework designed to overcome this lacuna and enhance our understanding of how welfare states affect gender inequality in the labor market. Learning from the work of feminist researchers, we stress the significance of family policies for women's economic gains. However, our approach also borrows from research in labor economics that has revealed the role of egalitarian wage structures in improving women's relative economic position (Blau and Kahn 1992; Rubery et al. 1997). These two literatures help establish our claim that welfare states have a double impact on the gender earnings gap, by affecting class as well as gender inequality.

Our research disaggregates the gender wage gap into class and gender-based components. We then distinguish between three different roles of the welfare state, our independent variable, and hypothesize how each of these roles affects each component of the wage gap. To evaluate the empirical plausibility of the predicted outcomes, we compare 17 OECD countries using data from large-scale surveys carried out around the year 2000.

Unpacking the Gender Wage Gap

Cross-country variation in gender wage gaps depends on the extent to which women have penetrated the upper reaches of the class structure and the advantages they find there, together with the severity of the class divide. The first of these components appears indirectly in the sociological literature under the rubrics of sex segregation and the glass ceiling. Indeed, occupational sex segregation and the exclusion of women from the most highly-paid jobs have long been viewed by sociologists as the core determinants of the gender wage gap (England 1992; Petersen and Morgan 1995; Tomaskovic-Devey 1993). The importance of class inequality for gender inequality has been recognized in some comparative research, primarily by economists and political scientists (however, see Rosenfeld and Kalleberg 1990). These studies have showcased the effects of politicaleconomy variables - particularly wage-bargaining systems - arguing that earnings differentials of all kinds narrow when labor enjoys substantial political and institutional power and wage determination is centralized (Pontusson, Rueda and Way 1999; Rowthorn 1992; Rubery et al. 1997; Wallerstein 1999; Whitehouse 1992). A series of high-profile studies by Blau and Kahn (1992, 1996, 2003) demonstrate the equalizing effect of egalitarian wage distributions on the gender wage gap. They show that because women everywhere are over-represented in low-paying jobs and

men in high-paying jobs, national gender gaps depend significantly on the extent of class inequality – the distance between the top and bottom of the "wage structure."

Some sociological research has built on Blau and Kahn's insight. Mandel and Semyonov (2005) marshaled evidence for 20 countries showing the importance of controlling for inequality in the wage structure in order to explain the effects of family policies and social service employment on the gender wage gap. Gornick (1999:231) had previously shown that the main source of women's disadvantage in Canada and the United States is the "length of the earnings 'ladder," whereas in Germany and the Netherlands the more acute problem is women's low placement on that ladder relative to men. In our terminology the length of the earnings ladder is redefined as the extent of class inequality, while the differential location of men and women on that ladder is understood as their unequal representation across classes. One advantage of this conceptualization is that it points to a third and potentially crucial component of national gender wage gaps: differences in earnings between men and women located within the same class, which we will refer to as the severity of intra-class gender inequality.

This third component is well illustrated by the idea of a glass ceiling, which refers not to women's under-representation in management but their exclusion from the most lucrative and powerful positions within this class (Cotter et al. 2001; U.S. Federal Glass Ceiling Commission 1995). Studies of occupational sex segregation have also demonstrated the importance of intra-class inequality, for example by showing that women's entry into male occupations (desegregation) has not necessarily reduced gender wage inequality (Reskin and Roos 1990). The findings of segregation researchers suggest that most gender pay inequality within classes results from the fact that workers of the two sexes are unequally spread across industries, sectors, firms or departments within firms with different pay standards (Petersen and Morgan 1995). Intra-class inequality may also be caused by direct firm-level discrimination against women workers, typically under the cover of different job titles (Bielby and Baron 1986). Because it is reasonable to assume that these underlying determinants vary across countries, differing patterns of intra-class inequality should account for an important part of the cross-country variance in gender gaps.

From our perspective, the gender wage gap is jointly generated by men's and women's unequal representation in the class hierarchy and the extent of inequality between and within classes. It follows that the same aggregate pay gap can be a product of diverse combinations of these three underlying components. This insight follows directly from our theoretical preference to conceptualize gender inequality in relation to the class structure. By drawing on familiar concepts and insights from the study of class stratification, we believe it is possible to enrich the

study of gender stratification. Conceptualizing women and men as being differentially situated in the class structure makes it possible to break down gender wage differentials into components that are theoretically meaningful, and to avoid the puzzling empirical results that arise when contextual variables are linked to aggregate measures of the pay gap.

Welfare State Regimes

The analytical payoff of an integrated class/gender approach is particularly significant when studying the impact of states on inequality. From the dominant sociological perspective on welfare states, which we embrace, class and gender stratification are the twin targets of welfare state intervention. In Esping-Andersen's (1999) influential formulation, welfare states address the first type of inequality by decommodification and the second by defamilialization. The former is achieved by unconditional entitlements to income replacement and public services, the latter by care services that facilitate reconciliation of women's paid and unpaid work. In addition, when welfare states decommodify health and education services, or defamilialize child and elder care, they create jobs that "become a vehicle for the absorption of new, especially female, labor-force entrants." (Esping-Andersen 1990:148) The welfare state as employer influences both gender and class stratification, and thus joins decommodification and defamilialization to form a triad that will help organize our theoretical expectations. We argue that all three roles of the welfare state powerfully influence national gender wage gaps, although their effects are not necessarily consistent.

The connection between the three central roles of the welfare state identified above and Esping-Andersen's three welfare state regimes is well known. Scandinavian social democracy is associated with patterns of intervention that exemplify all three roles: the state substitutes for functions otherwise performed by markets or families and it does so with a distinct emphasis on service provision (as opposed to income maintenance), which turns it into a massive employer. The liberal regime, represented by the English-speaking countries, is the mirror image of the social-democratic regime. Stressing the primacy of the market in providing social and family services, this regime minimizes all three types of intervention.

The conservative welfare regime, found in the late-blooming democracies and Catholic-influenced societies of continental Europe, is a hybrid case with considerable internal variation. Income maintenance may be generous, yet eligibility rules are less uniform than in Scandinavia due to program fragmentation, which Esping-Andersen describes as status-preserving rather than solidaristic. Defamilialization, on the other hand, is limited in conservative welfare states by a preference for familial responsibility. The preservation of traditional family structures is often an explicit or implicit

	Roles of the Welfare State				
			Welfare State		
Welfare State Regimes	Decommodification	Defamilialization	as Employer		
Social-Democratic	High	High	Large		
Liberal	Low	Low	Small		
Conservative	Medium	Low/Medium	Small		

Table 1: Core Differences between Welfare State Regimes

goal, especially in Southern Europe where "pro-familial" policies (e.g., tax and employer benefits that favor male breadwinners) have long been the norm. Consequently public social services are deliberately undeveloped, resulting in limited public employment but without fostering the growth of the liberal model's market-based alternatives. Table 1 summarizes the combination of welfare state roles that characterizes each regime.

How Welfare States Affect Gender Pay Gaps

To complete the theoretical picture, we propose hypotheses that relate the three roles of the welfare state (decommodification, defamilialization and the welfare state as employer) to the three components of national gender pay gaps (class inequality, gender-unequal representation across classes and intraclass gender inequality). Potential inconsistencies between the effects of different dimensions explain why welfare regimes have complicated and often unexpected consequences for wage differentials between men and women.

Decommodification

The welfare state decommodifies labor insofar as it substitutes for wages, either directly by means of income transfers or indirectly by providing free or subsidized goods and services. Social insurance against sickness and unemployment, other cash benefits, food stamps, public housing, and free education and health services are all substitutes for earnings. The key effect of decommodification, on which both socialist advocates and market-minded critics agree, is that it increases workers' reservation wage, the minimum compensation that makes it worth their while to accept paid employment. Other things being equal, the implication of a higher wage floor is reduced class inequality. In addition, a high level of decommodification, in conjunction with labor market regulation by the state and through collective bargaining, tends to stifle the growth of lowwage jobs in the private service sector (Iversen 2005; Scharpf 2001). This sectoral dynamic also has the effect of lowering class inequality. Finally, a decommodifying welfare state reduces intra-class inequality, since in

the absence of uniform social rights, part-time and intermittent workers are more vulnerable to wage discrimination. Each one of these effects should powerfully influence the gender-wage gap because workers in the overlapping categories of low-wage, service and part-time employment are disproportionately female.

Defamilialization

In Esping-Andersen's original formulation, defamilialization refers to the state taking responsibility for care work that would otherwise fall primarily on wives and mothers, thereby freeing them to take paid employment. Here we expand the term to include all types of state support for working mothers, including employment-related benefits such as paid maternity leave, favorable tax treatment, reduced working hours and the right to time off to care for sick children (Gauthier 1996; Gornick and Meyers 2003). Employment-related benefits for mothers seek to reconcile the demands of work and family rather than to liberate women from responsibility for family obligations (Misra and Moller 2005). Nevertheless, recent comparative studies by Mandel and Semyonov (2005, 2006) show that, in practice, public care services and work-related benefits tend to be packaged together into an integrated bundle of policies. What is critical for our purposes is their demonstration that the more this "bundle" is developed, the lower women's occupational and earnings attainments. Mandel and Semyonov build on an earlier literature, which argued that women's eligibility for social rights that are rarely used by men lowers their commitment to careers and increases the motivation of private employers to practice statistical discrimination against women.

On the surface, the perverse effects of family-friendly reconciliation policies on women's jobs and earnings are relevant only to job-related benefits. Most evident is the case of lengthy maternity leaves, which interrupt women's employment continuity and signal risk to employers (Ruhm 1998; Misra, Moller and Budig 2007; Morgan and Zippel 2003; Pettit and Hook 2005). Public care services, in contrast, facilitate rather than undermine women's availability for work, and are therefore not expected to jeopardize their attainments (Estevez-Abe 2005). However, in addition to liberating women from domestic responsibilities, extensive public care has second-order consequences which mirror the negative effects of job-related benefits on women's labor market attainments. The Scandinavian experience teaches us that state responsibility for care increases female labor market activity not only by freeing women from household responsibilities, but also by offering them jobs in an enlarged and highly feminized service sector (see Hernes 1987 and the next section). Defamilialized public care therefore contributes to the concentration of

women in feminized service jobs, lowering their representation in betterpaid, male-dominated positions. This tendency is reinforced by the unselective entry of women into the labor force stimulated by reconciliation policies that provide public care and convenient employment conditions. The reason is that if mothers with relatively meager endowments of human capital and weak career motivation are drawn into paid work, they can be expected to achieve limited wage and occupational attainments. Thus, while it appears that individual components of the family policy package may contribute to women's attainments, they also have shared effects that cannot be detached from one another, either theoretically or empirically.

The Welfare State as Employer

Ever since Rein's pioneering work on the "social welfare labor market," the welfare state's function as an employer and its gendered implications have become part and parcel of comparative research (Rein 1985a; Kolberg and Esping-Andersen 1993). There has been some debate over just how beneficial these jobs are for women (Hernes 1987; Kolberg 1991; Meyer 1994). A seven-country study conducted by Gornick and Jacobs (1998) concluded that both the skill mix and the pay policies which typify the public sector enhance women's pay relative to men. However, the same study also found that the overrepresentation of women in the exceptionally large Swedish public sector contributed to widening the gender wage gap. Attempting to reconcile these seemingly contradictory findings opens a window onto the complexities of how the welfare state as employer affects gender wage inequality.

The two claimed advantages of state-provided social services for the relative wages of female employees are both plausible. Extensive provision of education, health and care services by the public sector probably offers women more professional and semi-professional jobs than are available where private enterprise dominates the service sector (Kolberg and Esping-Andersen 1993). It is also true that because governments are large, lawabiding and politically sensitive employers, wages are typically negotiated with unions in a centralized fashion and administered bureaucratically (Kearney and Carnevale 2001). Consequently, the public sector tends to refrain from paying very low wages or directly discriminating against women (Robson et al. 1999).

However, more compressed wage differentials also imply lower earnings ceilings for those who work in the upper reaches.⁴ Where the public sector is very large, as in Sweden, it employs most of the women who work in high-level occupational class positions (managerial and professional). Whether due to their own preferences or the absence of other opportunities, women are attracted to the shorter and more flexible hours

Table 2: Welfare State Effects on Gender Earnings Inequality

Components of	Roles	Roles of the Welfare State	е	Welfa	Welfare State Regimes	mes
the Gender			Welfare State	Social-		
Earnings Gap	Decommodification Defamilialization as Employer	Defamilialization	as Employer	Democratic		Liberal Conservative
Inequality	Reduces ¹	1	Reduces ^{5a}	Least	Most	Least /
between classes						Medium
Unequal class	I	Increases ^{3, 4a}	3 '6	Most	Medium	Least
representation of						
men and women						
Intra-class gender	Reduces ²	Increases ^{4b}	2 sb, 7	<i>د</i> .	<i>د</i> .	<i>د</i> .
inequality						

1. Public provision of income and services raises the reservation wage and discourages

creation of low-wage service jobs.

3. Women workers are less selective and less motivated to compete for lucrative positions. 2. Extension of social rights to "secondary" workers makes for greater wage uniformity,

found in the public sector, as well as its more reliable implementation of mothers' employment rights. In this manner the public sector's friendliness to mothers has the same perverse consequences as work/family reconciliation policies. It attracts women by offering them jobs in education and care

> 5. Unionization and centralized wage-fixing in the public sector compress the gap between the top and bottom of the class powerful positions (4a) or lowers their earnings (4b).

4. Statistical discrimination as a result of mothers' entitlements excludes women from

Mixed effects of a large social welfare sector on the skill level of jobs. structure (5a) but widen sectoral inequality in higher classes (5b).

7. Bureaucratization and political sensitivity in the public sector encourage wage uniformity,

work that are not highly paid, but are female-typed and better adjusted to women's domestic obligations (Hansen 1995; Rein 1985b). Unaffected by similar considerations, men flock to the better-paying heights of the private sector (Hansen 1997; see also Rice 1999). As a result, we hypothesize that in restraining class inequality, the public sector has an ambiguous effect on gender wage inequality. Its relatively high wage floor narrows gender differentials at the low end of the class structure while its restricted wage ceiling widens them at the top. The two-sided impact of the welfare state as an employer on women's representation and intra-class inequality leaves us with no specific prediction.

Table 2 offers a synopsis of our propositions by cross-tabulating the three roles of welfare states with the three components of the gender pay gap. The left-hand panel indicates how the former are expected to influence the latter. On the basis of these expected effects, the right-hand panel ranks welfare regimes on each component of gender earnings inequality. The predictions on the left will now be familiar: decommodification decreases both within and between-class inequality; defamilialization increases unequal gender representation between and within classes; and the welfare state as employer has similar effects to decommodification, but a mixed effect on the class representation of men and women and intra-class inequality.

Turning to the regime analysis on the right of Table 2, social democracy, in which all three roles of the welfare state are highly developed, is expected to simultaneously increase gender inequality in class representation while reducing class inequality. The liberal regime, with welfare state characteristics that are the obverse of social democracy, should exhibit the opposite profile: high class inequality and comparatively equal class representation. Finally, an intermediate level of class inequality is expected under the conservative regime because of its medium level of decommodification. The conservative combination of pro-familial policies and moderate decommodification discourages many women from entering the labor force at all. However, with moderate levels of defamilializing policies and a comparatively small social service sector, working women in conservative welfare states (as in liberal ones) should not suffer negative effects on their class representation. Indeed, following the argument that selective women's employment results in a higher-quality and more motivated female labor force, these women may be the most successful in gaining access to highly paid "men's jobs." Lastly, our hypotheses for intra-class gender inequality predict that different welfare state roles push intra-class inequality in different directions. Which of these roles dominates the pattern of outcomes across regimes is therefore an empirical question.

Data and Methods

Data Sources

Our empirical analyses encompass 17 advanced societies previously investigated by Esping-Andersen and other comparative welfare state researchers.⁵ The main data source is the Luxembourg Income Study, a repository of microdata from large-scale surveys of household income and employment that have been harmonized to facilitate cross-national comparison.⁶ In six countries we substituted superior national sources for LIS datasets. Appendix 1 (available upon request from the authors) provides details of countries, years and datasets. Focusing on wage-earners in the 25-55 age group and other restrictions led to effective sample sizes ranging from a low of 1,500-3,500 in the smaller European countries to a high of tens of thousands in North America.⁷

The Measurement of Earnings

Our preferred income measure is hourly earnings from paid employment, before taxes and transfers, as reported by survey respondents. There are conflicting considerations regarding the standardization of earnings by hours worked. On the one hand, to the extent that social norms mandate an unequal division of household responsibilities, controlling for working hours masks a major component of gender income inequality. Moreover, because some welfare states influence women's hours of work through special privileges for working mothers, comparing hourly wages is liable to understate the impact of state intervention. On the other hand, given the wide variation in rates of female part-time work across countries, national gender gaps in monthly or yearly earnings may be as much a product of gender differences in working hours as an indicator of pay rates. Under these circumstances, despite the disadvantages we concluded that it is preferable to investigate hourly wages.

Measuring Class

The most common approaches to operationally defining classes are based on occupational groups. These aggregations are consistent with a broadly-shared theoretical construct of classes as socially bounded categories that encapsulate systematic differences in material life-chances (cf., the diverse approaches in the collection edited by Wright 2005). However, identifying occupational classes poses demanding data requirements – either unusually detailed information on occupation and employment status, or special-purpose surveys (the classic examples are, respectively, Goldthorpe and Erikson 1992; Wright 1997). Because the occupational coding schemes utilized in LIS datasets are nationally idiosyncratic, carrying

out a comprehensive and reliable study of class effects requires utilizing "income classes" – in the present case, quintiles of hourly earnings. 10

Due to their computational properties, earnings quintiles have both strengths and limitations for our purposes. Their advantage is in furnishing a scale that is perfectly comparable across countries. However, utilizing income categories as a proxy for class differences does not permit measurement of intra-class inequality; the very definition of wage quintiles guarantees that there will be few if any gender differences within them. Fortunately, we were able to measure cross-country variation in the intra-class gender gap by constructing harmonized categories for two occupational classes. The managerial and "menial services" classes represent the top and bottom of contemporary class structures and also capture diversity in the extent of feminization.

Methodological Approach

To develop and test hypotheses predicting systematic differences in outcomes across welfare regimes, we perform a regime-level analysis based on Esping-Andersen's ideal types. The first step in our analysis will be to confirm that, as Esping-Andersen suggests, the three roles of the welfare state which we expect to affect gender inequality indeed hang together within distinct "families of nations." (Castles 1993) Subsequently we will test how far cross-country variation in outcomes actually clusters as expected in accordance with welfare state configurations.

At first sight this analytical strategy may appear limited by its inability to distinguish between the effects of the individual policies that underpin different welfare regimes, as would be mandated by the standard variable-oriented approach to comparative analysis. However, because regimes are properly understood as blending multiple attributes into distinctive policy packages, their effects are best analyzed by following the case-oriented approach (Esping-Andersen 1993b; Ragin 1987; Shalev 2007). Given that welfare regimes are ideal types, one of the advantages of analyzing named country cases is that each case can be usefully understood as a better or worse empirical approximation of conceptual categories. While some countries may closely represent the ideal type, others straddle more than one regime or exhibit inconsistent combinations of policy. Such hybrid or deviant cases contribute to testing the fit between welfare regimes and their presumed outcomes.

A potential limitation of conducting a regime-level analysis is the risk of mistakenly attributing outcomes to differences between welfare states that are actually due, in whole or in part, to some other element of the broader institutional context. For example, it is likely that the relative class equality found under the social-democratic welfare regime is due to the

effect of coordinated wage bargaining as well as decommodification (e.g., Wallerstein 1999). While decommodification is the causal variable of interest in the present study, its impact may therefore be overestimated. However, given the limited number of country cases available for analysis, and the elective affinities that link different features of political-economic regimes, cross-sectional comparative studies of all varieties cannot avoid the risk of overstating the evidence for the effects of discrete causal mechanisms. From our methodological perspective, the most promising way of overcoming this difficulty would be to complement relatively large-n investigations like this one with targeted historical and comparative case studies (cf., Rueschemeyer and Stephens 1997).

An exception to the difficulty of isolating specific causal mechanisms is the role of selective female labor force participation. Selectivity is strongly influenced by the role of the state in work/family reconciliation. Indeed, comparative research has shown that welfare state variation is the most important determinant of women's activity rates (Daly 2000), which is consistent with our hypothesis that one way in which welfare regimes shape the unequal class representation of women is through their influence on selectivity. To the extent that the female workforce is self-selected, data on wage attainments understate the full extent of the gender gap, because those women who work are likely to have superior earnings potential to those who do not (Heckman 1980). Because this bias is expected to vary across countries this could be a crucial issue for us. To estimate the degree to which unequal representation is mediated by selectivity, we simulate how women's relative representation in income classes would change if their propensity to enter the labor market was identical across countries in relation to the principal drivers of female selectivity - motherhood and level of education.

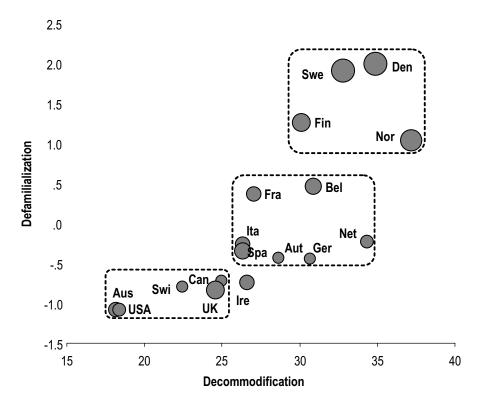
Findings

Authenticating Welfare Regimes

Our theoretical analysis rests on Esping-Andersen's suggestion that decommodification, defamilialization and the welfare state as employer are the central attributes of welfare regimes. In order to validate the existence of distinct worlds of welfare, Chart 1 simultaneously plots these three regime attributes for 17 countries. An independent and updated measure of decommodification (Scruggs and Allan 2006) is shown on the X-axis, an index of defamilialization on the Y-axis, and the scope of social service employment is represented by bubbles of varying size.¹¹

Countries indeed cluster as expected into three distinct groups. The liberal and social-democratic regimes, located in the bottom-left and top-right corners of the chart respectively, are polar opposites on all three of our

Chart 1. Three Welfare State Dimensions



Note: Bubbles show welfare state employment.

measures. (The single exception is the size of the public welfare sector in the United Kingdom, which is amplified by its National Health Service.) Our indicator of defamilialization cleanly differentiates the conservative welfare regime. The results confirm Esping-Andersen's (1999:88) observation that the difference between the conservative and social-democratic worlds of welfare "lies not so much in their decommodifying income-maintenance guarantees as in their approach to services and sponsoring women's careers." The two exceptions to the close similarity of our results to Esping-Andersen's classification are Switzerland, which is clearly liberal on our indicators, and Ireland, which is positioned just outside the liberal cluster. Expert sources indicate that in Catholic Ireland the state has played a classically conservative role in relation to gender and the family (Adshead and Millar 2004), suggesting that it is best understood as a mixed case. ¹³

If child care and maternity leave – our two indicators of defamilialization – are considered separately the quantitative picture remains unchanged,

as they are closely associated. With the partial exception of Norway, the Scandinavian countries have by far the most extensive daycare services and the most generous maternity leave, while the liberal nations are lowest on both dimensions. The distinctive feature of the Continental states (with the well-known exceptions of France and Belgium), is that they offer more generous maternity leave than childcare. Moreover, as is evident from details such as the ages for which public daycare is available and its hours of operation, the very meaning of these state interventions is different in the conservative context. This reminds us that while shorthand indicators such as the measure of defamilialization used in Chart 1 have heuristic value, in reality policies come together in configurations that "reflect particular gendered understandings of women's roles." (Misra, Moller and Budig 2007:806)

Empirical Decomposition of the Gender Gap

We start by presenting, in Chart 2, cross-country variation in the gender gap as conventionally measured – the percentage point difference between the average wages of men and women. There is substantial diversity among countries, from a gap of less than 5 percent in Italy to almost 25 percent in the United States and United Kingdom. The fact that this variation is only modestly consistent with the regime typology accords with our assumption that wage differentials between the average man and woman conceal substantial differences in the causes of gender-based earnings inequality across welfare regimes. We expect to find a more consistent picture when decomposing overall gender gaps into their three components.

Chart 3 describes the class representation of women in 17 countries. It compares the proportion of working women located at the poles of their country's earning distribution. The top and bottom quintiles are represented by black and gray lines respectively. A value of 20 percent in any quintile would imply equal gender representation. Not surprisingly, in every country women are over-represented at the bottom and underrepresented at the top. But the patterning of these two imbalances is quite different. Women's under-representation in the highest income class fits the welfare state typology almost perfectly. The liberal countries, accompanied by Germany and Austria, are sandwiched in the middle of the distribution. They lie between the conservative countries, where women come closest to occupying a proportionate share of the top fifth of wage-earners, and Scandinavia where they are least represented.

In contrast to Chart 2, the Nordic countries are now closely aligned and their standing is worse than the liberal states, not better. Our data indicate that in these countries only about 10 percent of female workers belong to the highest earnings quintile compared to about 30 percent of males. The poor performance of the social democracies in this respect is consistent

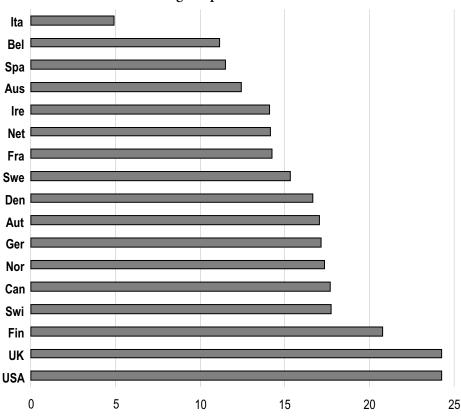
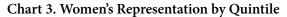
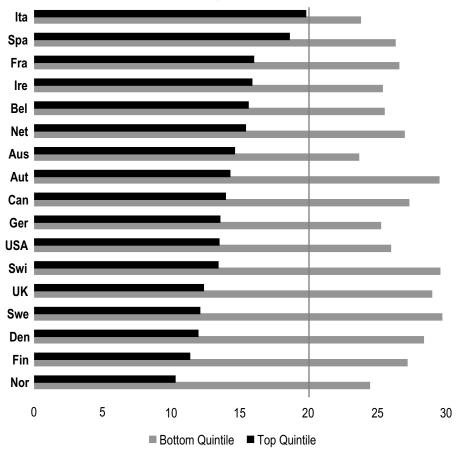


Chart 2. National Gender Wage Gaps

with other research (e.g., Datta Gupta, Oaxaca and Smith 2006), and with our expectation that the combination of defamilialization and a large public sector would depress women's penetration of the most lucrative jobs. Also confirmed is our assumption that in conservative countries, especially the familistic southern European states, women would be more equally represented due to a relatively selective female labor force that is under strong pressure to adopt the male model of commitment to work. The favorability of women's representation in the top quintile in Ireland suggests that in relation to gender inequality in the labor market, Ireland indeed belongs to the conservative regime.

The intermediate position of the liberal countries in Chart 3 is also consistent with our regime-level hypotheses. However, the result for the United States understates the success of American women in entering high-level occupational positions, notably in management (Wright, Baxter and Birkelund 1995; Mandel and Semyonov 2006). The reason is that this measure is not sensitive to the extent of intra-class gender inequality. Subsequent





Notes: The X axis shows the proportion of women with earnings in the relevant quintile. The 20% line indicates gender equality in representation.

analysis will show that the moderate representation of American women in the highest income quintile, despite their impressive penetration of management, reflects the severity of the gender gap *among managers*. ¹⁶

Chart 4 juxtaposes the representational element of gender income inequality and its second component, inequality between classes. The horizontal axis measures class inequality by the ratio of the median wage received by all workers (men and women) in the top and bottom quintiles. In more familiar terms, this is the "90/10 ratio" between earnings at the 90th and 10th percentiles. Inequality of representation appears on the vertical axis of Chart 4, using a composite measure of the relative risk of women

2.6 Swe 2.4 Fin UK Swi 2.2 Representational Inequality Aut 2.0 USA Ger 1.8 Net Fra Bel Aus 1.6 Ire Spa 1.4 lta 1.2 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 Class Inequality

Chart 4. Decomposition of the Gender Wage Gap

Note: Dotted lines are aligned with the median country on each axis.

being in the bottom rather than the top earnings quintile. In effect, for each country we calculate the ratio of the gray to the black lines shown in Chart 3. The higher the result, the stronger is the tendency for women to be concentrated at the bottom of the wage structure and absent from the top.

For ease of interpretation, Chart 4 is divided into four quadrants bordered by the median country on each dimension. The upper left quadrant encompasses countries with high gender inequality in class representation and low inequality between classes. The exclusive presence of the Scandinavian countries in this quadrant fits the expectations summarized earlier in Table 1. In the extreme case of Sweden, women are two and a half times more likely to be found at the bottom of the wage structure than the top. On the other hand, the overall wage gap between the top and bottom quintiles is modest in Sweden and the other Nordic states (a ratio of about two to one).

Most conservative countries fit the theoretical expectation of relatively low inequality of representation and low- to medium-class inequality. Austria deviates from this pattern somewhat, while Spain is an extreme outlier which exhibits the reverse of the Scandinavian profile. Befitting its hybrid stature, Ireland is positioned on the edge of the conservative cluster.

Theoretically, we predicted that the liberal welfare regime would generate a pattern of high class inequality and medium levels of gender-unequal representation. The United States is the only liberal country to clearly fit this pattern. Our findings thus underscore the internal diversity of the liberal regime noted in earlier studies (Mishra 1994; O'Connor, Orloff and Shaver 1999). The United Kingdom is located alone in the upper right-hand guadrant of Chart 4, where both measures indicate high inequality. Britain's very unequal gender representation across classes reaches the levels found in Scandinavian countries, but it conspicuously lacks their relative equality between classes. Australia exhibits the opposite features to the United Kingdom, and Canada is similar to the United States in having medium levels of inequality of representation, while registering much more moderate class inequality on our measure. Finally, Switzerland is located surprisingly near the Scandinavian cluster. As Chart 3 revealed, in terms of gender representation, the Swiss case combines a decidedly liberal level of representation at the top with exceptional crowding of women at the bottom.

Some exceptions from the expected pattern, namely Switzerland and Austria, are puzzling, but explanations may be suggested for other discordant findings. For example, the more moderate level of class inequality in both Britain and Canada, in comparison with the United States, is consistent with their more decommodified labor markets (Mishra 1994), as shown in Chart 1. In the same vein, the very unequal levels of gender representation in the United Kingdom may be due, at least in part, to its comparatively large public service sector compared to other liberal countries. Australia is predictably distinctive in relation to both class and gender equality, because its system of wage fixing by judicial tribunals historically generated an unusually high wage floor and a truncated gender gap (Gregory et al. 1989; Kidd and Shannon 1996). Finally, Ireland illustrates how we can learn from cases that are mixed in terms of regime membership. As already noted, our results confirm that it shares the conservative approach to women and the family that paradoxically improves the class representation of those women who work. Concurrently, however, the basically liberal character of social protection pulls Ireland in the direction of greater class inequality.

In general, the empirical findings are consistent with the regime typology presented in Table 1 and the hypotheses summarized in Table 2. Most conspicuous is the gathering of all four social-democratic countries as a united group, both in terms of the three dimensions of welfare regimes

(Chart 1) and the two dimensions of the gender wage gap (Chart 4). This close match supports our theoretical suggestion to link high levels of defamilialization and extensive public employment with unequal gender representation, and high levels of decommodification with less inequality between classes. Prior expectations are also borne out by the relative equality of representation found in nearly all conservative countries, along with their generally moderate levels of class inequality. Finally, while the exemplary liberal case, the United States, follows the predicted pattern of high class inequality and intermediate inequality of class representation, the other countries associated with this regime only partly fit our expectations. These deviations may be explicable by individual countries' departures from ideal-typical liberal characteristics.

The Impact of Selectivity

Policies that promote dual-earner families bring women into the labor force who would otherwise stay at home caring for their children, whereas when neither the state nor the market facilitates work/family reconciliation, highly skilled and highly motivated women are those most likely to enter the labor market. Accordingly, we have hypothesized that one way in which defamilialization affects women's earnings is by influencing the selectivity of the female labor force. To evaluate the role of selectivity empirically, we standardize our samples on two variables that universally influence women's decision to work and are available for all countries: whether they have a preschool child at home and whether they are college-educated. Specifically, observations for working women in each national dataset are weighted so that the probability of being employed, conditional on each combination of these two variables, is the same as in the average country. Our expectation is that standardizing all countries to align with the grand mean should cause women's class representation to improve in less selective countries (particularly Scandinavia) and deteriorate in the more selective conservative countries, thereby weakening but not eliminating observed differences across regimes.

In general, this expectation is strongly supported. Table 3 compares the actual levels of women's representation in the top quintile that were previously reported in Chart 3 with the simulated levels obtained by standardization. The third column shows the percentage difference between the two. The simulation has the effect of diminishing women's presence in the top income class in all conservative countries except France and Germany. However, in both the liberal and social-democratic countries their representation increases (Norway is the sole exception). A second important finding is that counterfactually eliminating selectivity does not dramatically alter the rank order of countries on the representation measure. Only Ireland and

Austria are no longer recognizable as members of their regime cluster.¹⁷

It follows that the favorability of women's class representation in conservative settings is achieved in part by the exclusion from paid work of women with limited occupational and earning potential. While many stayathome mothers would take jobs if they were offered the convenient working conditions available in Scandinavia, their absence from the labor market has the effect of inflating the attainments of those women who do work. Although the tradeoff across regimes between the level of female employ-

stars denote high Female LFPR 63 63 63 77 77 77 77 77 78 88 88 88 88 Standardization The Effect of Selectivity on Women's Representation in Change After he Top Quintile Representation Standardized rank order) Table 3: Selectivity and Women's Class Representation Representation Jnstandardized rank order) **Netherlands** Switzerland Sermany **Australia Denmark** Sanada Belgium Austria Sweden -rance reland JSA Conservative Democratic Social

Percentage changes after standardizing are calculated from exact rates of representation. Stars denote countries Notes: Within regimes, countries are sorted in ascending order by the first column. where the proportion of women working parttime is above the mean.

Source: Data in the last column, for the year 2000, are from the OECD's Population and Labour Force Statistics.

ment and the chances of a working woman occupying a lucrative job slot is substantial, its power to explain our findings regarding class representation is nevertheless quite limited. The final column of Table 3 shows that by the year 2000, in most of the conservative and all of the liberal countries the labor force participation rates of prime-age women had converged on a level of about 75 percent. Contrasting levels of female economic activity are now found only at the extremes: Italy, Spain and Ireland, Catholic conservative nations with participation rates of 65 percent or less vs. the four Nordic states with rates of approximately 85 percent. Except for Norway (a borderline case) none of the latter rely heavily on part-time jobs, which further accentuates their success in mobilizing women into paid employment.

Estimating Counterfactual Effects

The association that we have documented between welfare regimes and distinctive configurations of gender representation and class inequality leaves unanswered the question of how much each of these two components contributes to a country's overall level of gender wage inequality. This section addresses that question, by measuring cross-regime differences in the relative importance of each component. We carry out simulations that ask what would happen to international differentials in the gender gap if all countries took on the characteristics of an extreme case. A full explanation is presented in Appendix 2 (available upon request from the authors).

Tables 4 and 5 reveal the role played by inequality of representation and class inequality, respectively. Each table compares the actual gender gap with counterfactuals based on the highest and lowest values of the relevant indicator. The first column in both tables displays the original wage gap, reflecting each country's actual level of both class inequality (wage differences between quintiles) and class representation (the gender distribution across quintiles). Turning first to Table 4, the counterfactual effect of unequal representation is illustrated by replacing the actual distribution of men and women across quintiles by the distribution of two extreme cases—egalitarian Italy (column 2) and inegalitarian Sweden (column 3).

This procedure generates striking changes in the size of gender wage gaps. If all countries had the Italian profile of gender representation, their wage gaps would decline by an average of more than 60 percent. The more unbalanced the gender composition of classes, the greater the effect. Thus in the Scandinavian countries, where inequality of representation is most pronounced, the gender wage gap would decline by at least three quarters. When Sweden rather than Italy is used as the benchmark for the simulation, the trends are reversed. Sweden's gender representation would hypothetically increase the average country's gender gap by 55 percent. In societies with similarly unequal representation (like the other

Scandinavian countries and the United Kingdom) the difference would be negligible, whereas it would be dramatic in the context of relatively equal gender distributions. For example, Italy's gender wage gap would increase more than fourfold and Spain's by a factor of two and a half.

Table 5 provides parallel illustrations of the role of class inequality in shaping gender wage gaps, by estimating counterfactual values under American and Swedish levels of class inequality. The table vividly demonstrates the opposite contributions of Sweden's relative equality and America's pronounced class inequality to their gender wage gaps. Under U.S. class differentials the gap would rise by an average of 47 percent, but in Sweden it would double. In parallel, under Swedish conditions the gender wage gap would be reduced in all countries, but most strikingly (by half) in the United States.

As we would expect, the magnitude of the simulated changes in both tables is quite systematically ordered by regimes. Under Italy's egalitarian distribution of women between wage quintiles, the gender wage gap would decline most dramatically in the social-democratic countries. The effect progressively weakens when moving to the liberal countries and still more in the conservative ones. The second simulation shows that it is the liberal countries, coupled with Spain and France, that would benefit most from Sweden's relatively equal class differentials.

When the two simulations are viewed together, it can be seen that although the distribution of men and women between classes is the primary source of cross-national variation in the gender wage gap, differences in class inequality also have notable effects. Moreover the relative importance of each component varies across countries. This is evident when comparing the United Kingdom and the United States, two liberal countries that share the distinction of having by far the highest aggregate pay gaps in our study. While in the United Kingdom this results mainly from women monopolizing the bottom of the class structure and men the top, in the United States it derives primarily from an exceptionally high levelof-class inequality. An even more striking example is the contrast between Ireland and Sweden, two countries which have quite similar gender gaps despite belonging to different welfare regimes. However, whereas the Irish gap is mainly driven by high levels of class inequality, in Sweden the principal source of the gap is very low representation of women at the top of the earnings distribution compared with their high concentration at the bottom. These inconsistencies reinforce our claim that the two sources of gender wage inequality measured here must be distinguished in order to properly understand the impact of welfare regimes.

Evaluating Intra-class Inequality with Occupational Classes

The third component of the gender gap refers to inequality between men

and women within the same class. In this section we utilize occupational class categories to measure intra-class gender inequality independently of income. For this purpose we have isolated two occupational groups that are reasonably comparable across countries and illustrate two important contrasts – between the upper and working classes, and between weakly and strongly feminized classes. They are, respectively, the managerial

Using Sweden % Change Table 4: The Contribution of Unequal Class Representation to the Gender Wage Gap Using Sweden's Class Representation Hypothetical Gender Wage Gap 19.8 24.1 20.2 27.2 Using Italy's Class Representation Original Gender Wage Gap 15.5 **Netherlands** Switzerland Countries **Denmark** Sermany **Australia** Canada Austria France

Note: Sorted in ascending order by column 4.

class and the "menial services class." The latter comprises service sector occupations that require modest formal qualifications, if any. Typical examples are cleaners, waiters and child-minders.

As in the preceding decomposition of national gender gaps, we break down gender inequality within classes into two components. Intra-class representational inequality refers to the extent to which women are

% Change Using Sweden's Class Table 5: The Contribution of Class Inequality to the Gender Wage Gap Hypothetical Gender Wage Gap Using USA Class Inequality Original Gender Wage Gap Vetherlands Switzerland **Jenmark** Sanada Norway reland

Note: Sorted in ascending order by column 4.

concentrated in lower-paid positions and excluded from the top. The intraclass wage differential denotes the gap between the highest and lowest wage tertiles in a given class. 18

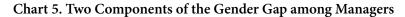
According to the theoretical predictions presented in Table 2, decommodification should mitigate intra-class wage differentials, while defamilialization should heighten gender inequality in intra-class representation. However, these effects are liable to vary at different levels of the class structure (represented here by the contrast between managers and menials). The Scandinavian social democracies suggest several examples. Wage equality in these countries may be limited to the working and intermediate classes because their earnings are most affected by the welfare state and other related factors such as unionization and the centralization of wage determination. Relatively isolated from these forces, the managerial class may be an exception to the pattern of small intra-class wage differentials. Similarly, while the high level of defamilialization characteristic of the social-democratic regime is expected to discourage employers from placing women in highly paid positions, such discrimination should be less severe in lower class positions because turnover among these workers imposes fewer costs on employers.

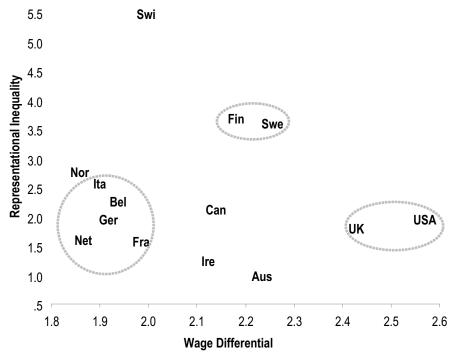
The Managerial Class

Chart 5 presents empirical measures of the two components of intra-class inequality among managers. Pepresentational inequality (the vertical axis) is operationalized by the same type of ratio used in Chart 4, expressing the degree to which women crowd into low-wage positions and are absent from high-wage positions. The results show that there is indeed a marked difference between the liberal and social-democratic countries, with women's chances of reaching the most lucrative managerial positions being substantially less favorable in the latter group.

The second component of intra-class gender inequality, the class-specific wage differential, is plotted on the horizontal axis of Chart 5 as the ratio between the median wages of managers in the top and bottom tertiles. Here the distinction between the liberal and social-democratic regimes is less clearcut, except for the polar cases of Norway and the United States. Intra-class wage differentials in Finland and Sweden are actually very similar to those in liberal Canada and Australia. Similarly, conservative countries generally display the lowest differentials despite having intermediate scores on overall wage dispersion. These findings support our suggestion that wage differentials in higher classes may be relatively autonomous from the forces that shape overall levels of class inequality.

When the two dimensions of intra-class inequality are considered in tandem, the three worlds of welfare capitalism become visible. The conservative nations exhibit relatively low levels of both representational





Notes: The Y axis shows the ratio of percent female in the bottom and top hourly wage tertiles. The X axis shows the ratio of the median hourly wage in the top and bottom tertiles. Dotted lines ring countries that cluster in accordance with welfare state regimes.

inequality and wage differentials among managers. In contrast, Finland and Sweden are located above the median on both axes of inequality, although they are most conspicuous in relation to inequality of representation. As we suggested, the distinction between the private and public sectors is crucial in this regard (details available upon request from the authors). Women managers in Scandinavia are exceptionally dependent on the welfare state as an employer, and particularly in Sweden this dependence exacts a price. The proximity of Norway to the conservative cluster on the X axis reflects the fact that while the vast majority of female managers are in the public sector, they pay a lower wage penalty. Norway's unexpectedly favorable location on the Y axis may be due to its more selective female workforce.

Three countries are located well outside the clusters identified in Chart 5. In Switzerland only a tenth of women managers reach the top earnings tertile, whereas in Ireland and Australia they are almost proportionately represented.

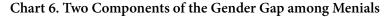
The Menial Services Class

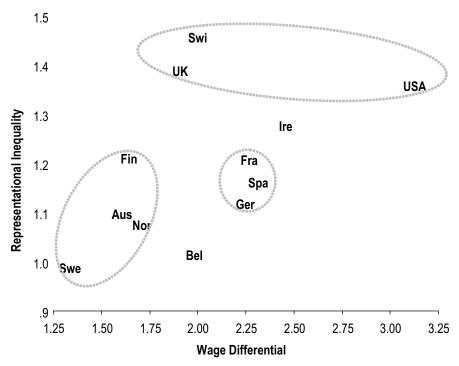
Over recent decades menial jobs have multiplied at the low end of the post-industrial economy in sales, care work, cleanup, food and entertainment (Esping-Andersen 1993a). The size of this class varies from 6 percent of the workforce in Belgium to 16 percent in Sweden.²² The menial services class is largest in Scandinavia, where the public sector plays a major role, and it is always highly feminized (at least 80 percent in all countries except Australia, Belgium and the United States).²³

Chart 6 plots the two dimensions of intra-class inequality for the menial services class. As before the Y axis measures gender inequality in access to high versus low-paying jobs, and in this respect the menial class is much less stratified than the managerial class. In the median country, the proportion of women menials crowded into the bottom tertile of wages is only about 20 percent greater than their share of the top tertile, in comparison to being more than 130 percent greater among managers. As the vast majority of menial services workers are female and management is home to the glass ceiling, this finding is not surprising. Turning to the intra-class wage differential (X axis), the median is 2.0 in both the managerial and menial classes. However, this similarity conceals an important difference. While there is guite a high degree of cross-country convergence around the median in the managerial differential, this is not the case for pay gaps in the menial services. National variation in women's disadvantage in management is thus primarily due to differences in their access to high-paying positions, whereas in menial services cross-country variation in gender inequality is mainly the result of differences in the wage structure. This implies that the welfare state affects gender inequality within the managerial class primarily through defamilialization, whereas its main impact on the menial class is via decommodification.

One of the prominent features of Chart 6 is the clustering of the Nordic countries and Australia in the egalitarian bottom-left corner of the chart. This finding is expected for Australia in view of its system of wage determination, while in the social democracies it is strongly affected by decommodification and a large public services sector, which raise the wage floor and soften wage differentials. In Norway and Sweden the mass of menial services workers are simultaneously female and employed in the public sector, adding significance to the tendency found in most countries for women menials who are public employees to enjoy a sectoral bonus (Appendix 3). This advantage contrasts with our earlier finding that female managers in Scandinavia pay a penalty for their dependence on public sector jobs.

Germany, France and Spain form a second cluster which is made up of conservative countries that are less egalitarian, especially in relation to the intra-class wage differential (Belgium is an exception). We interpret the fact that the wage differential in conservative countries lies between





Scandinavia/Australia and the United States as reflecting the intermediate level of decommodification in conservative welfare states.

One other noteworthy result of our analysis of the menial services class is that the four countries fully or partially identified with the liberal regime share the distinction of having by far the highest levels of representational inequality. The United States is of particular interest because of its exceptionally high scores on both dimensions of intra-class inequality. It therefore inverts Swedish conditions by being doubly inegalitarian for lower-class women; the relatively equal representation of women in liberal countries mainly benefits the more advantaged. Lower-class women, on the other hand, suffer from both unfavorable representation and large overall wage differentials.

Conclusions

Decomposition of the gender gap into its class-based components is essential for tracing the ways in which welfare states affect the relative pay of men and women. The severity of the class divide, in conjunction with the extent to which women penetrate the upper reaches of the class structure and the advantages they find there, are critical sources of cross-

country variation in gender wage inequality. In turn, these components of the wage gap are systematically shaped by the welfare state. Most strikingly, work-family reconciliation and public-sector expansion in the social democracies bring mothers into the labor market while inadvertently obstructing their chances of attaining higher-class positions. But these same states also favor policies that support class equality by protecting workers' economic security and raising the wage floor, which particularly benefit women. The opposite is the case under the liberal welfare regime, which refrains from adopting policies that would undermine the opportunities of high-flying women, while at the same time obliging less-fortunate women to pay the price of class inequality. In the conservative regime both types of inequality are minimized, but this is partly achieved by lower levels of female labor force participation.

These findings have profound implications for both policy and theory. For those concerned with gender discrimination and women's economic wellbeing, our research exposes two ways in which class differences play a role that is critical but rarely acknowledged. First, because class inequality inflates the gender wage gap, feminists should be concerned with ameliorating class differences as well as with combating discrimination against women (Cobble 2007; Ruggie 1984). So long as women occupy inferior class positions to men, it follows that the higher the wage premium that is enjoyed by the lower classes, the less women as a whole suffer in terms of inferior earnings and economic dependency on male partners.

However, more class equality is clearly not in the interests of those women with the potential to break through the glass ceiling, since it would undermine the value of the prizes which they seek to share with privileged men. Hence a second implication of our findings is that there is no unambiguously woman-friendly pattern of state intervention. In fact, the consequences of any given role of the welfare state vary quite dramatically for women in different class positions. This point is clearly illustrated by our analysis of intra-class inequality, which shows that the welfare state affects gender inequality within higher classes (managers) mainly through the potential for defamilialization to block women's attainments. In relation to the lower classes (menial service workers), because decommodification compresses wage differentials the state has a potentially equalizing influence on the intra-class pay gap.

In contemporary post-industrial societies, imbalances of class representation in the form of exclusion of women from higher classes are a less acute policy issue than intra-class inequalities of representation (Crompton 1999). Despite continuing cross-national variation, with the decline or disappearance of gender gaps in education and other social and economic transformations, women everywhere have enjoyed considerable success in penetrating the managerial and professional classes.²⁴ Our

findings indicate that the more pressing problem now is the glass ceiling – women's exclusion from the most desirable positions available in the classes in which they are located. However, this is only one side of intraclass inequality. We have also demonstrated the important role played by the severity of wage inequality within classes, which determines the size of the penalty attached to women's inferior positions.

The analysis presented in this article has significant theoretical implications for the study of contemporary welfare states and gender stratification. It challenges the convention of treating "family policy" (gender) and "social policy" (class) as two separate domains of welfare state research. Esping-Andersen (1999) performed a service to comparative sociologists by characterizing welfare state variation in terms of defamilialization as well as decommodification, and by showing how welfare regimes vary in relation to both. However, what interested Esping-Andersen was not gender inequality but the consequences of the welfare state for women's labor force participation and fertility. Walter Korpi (2000) was the first comparative researcher to analyze the role of welfare states in structuring both class and gender stratification. However, his landmark study treated class and gender as two different "faces of inequality," each of which is affected by a different component of the welfare state – social and family policy, respectively. Our study has taken Korpi's project an important step further by showing that gender gaps are partly determined by class inequality, and accordingly that social policy makes a potentially decisive contribution to easing gender inequality.

Our work points to two related topics for future research seeking to profit from a class perspective on gender inequality. The intriguing but sometimes uneven results yielded by analyzing intra-class inequality in two classes suggest that it would be fruitful to further investigate variations in gender economic inequality between classes. As well as incorporating additional occupational classes, future research would benefit from larger samples and more robustly comparable occupational categories. A second critical issue, given the existence of class differences in patterns of gender inequality, is how much, and by what means, welfare states contribute to these variations. Little prior scholarship exists in either of these two areas. Although feminist studies of stratification have paid considerable attention to intersections between race and gender (Browne and Misra 2003), few have investigated how gender stratification is contingent upon class position (cf. Clement and Myles 1994). McCall's (2001) work on complex inequality is a rare example of an interactive approach to the role of class and gender (as well as race) in determining economic inequality. However, McCall's research compared geographical subdivisions within one country rather than whole societies. Turning to welfare state effects, the landmark study of gender, liberalism and social policy in four English-speaking countries by O'Connor, Orloff and

Shaver (1999) is one of the few to have pointed out that the consequences of state interventions for gender inequality vary between women in different classes. The tasks ahead are to further theorize this conditionality and to systematically study it across a broad range of classes and societies.

Notes

- 1. On the significance of state intervention for women's autonomy, see Hobson 1990; Orloff 1993; and O'Connor 1996. Seminal contributions to comparative research on gender inequality and the welfare state have been made by Daly 2000; Gornick and Meyers 2003; Orloff 2002; and Sainsbury 1994.
- 2. This bias in the existing literature is validated by the comprehensive review by Gornick (2004) of studies based on Luxembourg Income Study data.
- 3. France and Belgium are unusual cases that in many respects conform to the conservative model, but where, for demographic and other local reasons, activist family policies were adopted (on France, see Pedersen 1993).
- 4. Findings presented by Gornick and Jacobs (1998:Table 3) for the early 1990s indicate that in Sweden the top quintile of women workers earned less in the public than the private sector, whereas in the United States they earned substantially more.
- 5. We are indebted to the many people who helped us to find and use data: Shaun Wilson (Australia), Markus Jantti and Jani Erola (Finland), Walter Mueller (Germany), Jon Ivar Elstad and Axel West Pedersen (Norway), Erik Bihagen, Anders Bjorklund, Robert Erikson, Jon Fahlander and Walter Korpi (Sweden), Boris Wernli (Switzerland), and Janet Gornick and the expert staff at the Luxembourg Income Study. We gratefully acknowledge permission to use panel datasets for Australia (HILDA), Germany (SOEP) and Switzerland (SHP).
- 6. http://www.lisproject.org.
- 7. The age limits we set are designed to prevent distortions caused by a substantial proportion of younger or older people being out of the labor force. Employers and proprietors without employees were excluded because most of the causal effects evaluated in this research pertain to wage-earners. The accuracy of self-reported earnings is also less satisfactory among the self-employed. We also excluded agriculture, employees of the military, apprentices, and respondents who reported either trivial or seemingly exaggerated hours of work (less than 8 or more than 90 hours per week).
- 8. Not all countries conform to this standard. For Austria, Belgium, France, Ireland, Italy and Spain the LIS database provides after-tax earnings only. This may be a source of bias since, given progressive taxation, net earnings can be expected to be more equally distributed. In addition, Norway, Finland and Canada rely mainly or wholly on register data, which tend to understate income at the bottom of the distribution (Nordberg, Penttila and Sandstrom 2001).

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- 9. Across the 17 countries in our study, in the year 2000 the average rate of part-time employment among women varied widely. In Finland, Sweden, Spain and the United States it was less than 20 percent, whereas in Switzerland, Australia, the Netherlands and the United Kingdom it exceeded 40 percent. Source: OECD Population and Labour Force Statistics.
- 10. Standardized occupational classifications are available in some alternative sources of cross-national data, such as the European and International Social Surveys, but their sample sizes are too small for a disaggregated analysis. Note that before constructing income quintiles we eliminated the top and bottom percentiles of the hourly wage distribution. In our analyses of occupational classes we followed the LIS recommendation for top and bottom coding (10 times the median and 1% of the mean, respectively).
- 11. The Scruggs and Allen measure (for the year 2000) was retrieved from the project website http://sp.uconn.edu/~scruggs/wp.htm. Welfare state employment is the percent of the workforce employed in the public welfare sector (health, education, and welfare), as reported by Mandel and Semyonov (2005). Reconciliation was scored by factor analysis of two indicators: number of fully paid weeks of maternity leave and the proportion of infants (0-2) in publicly funded day-care (for sources and definitions, see Mandel and Semyonov 2005: Appendix Table 1).
- 12. Esping-Andersen characterized Ireland as liberal and Switzerland as conservative, but his own indicators (1990:tables 2.2 and 3.3) offered somewhat contradictory evidence and neither country was included in his empirical analysis of family policy (1999:tables 4A and 4B).
- 13. Bonoli and Gay-des-Combes (2002) suggest that the Swiss state has also followed conservative gender policies but this is not apparent in outcomes such as female participation rates which, unlike in Ireland, have consistently been relatively high.
- 14. In our factor analysis the daycare and maternal leave indicators had loadings of .89 (78% of variance explained).
- 15. Cross-national differences in female labor force participation could slightly affect the probability of women vs. men being found in any wage quintile. To correct for this, female respondents in each country were weighted so that men and women are equally represented. After the correction, male distributions are the mirror image of female distributions. In practice, results with and without the correction are very similar.
- 16. Based on our analysis of occupational classes, the gender gap among managers in the United States is 29 percent, the highest of 15 countries. Findings reported later in the paper indicate that this is primarily due to the size of wage differentials among American managers.
- 17. We also implemented the conventional Heckman approach, using two-step multivariate regressions to compare the effect of gender on wages before and after controlling for selectivity. The findings, available upon request,

- strongly accord with the claim that cross-country differences in the effect of selectivity parallel welfare regimes.
- 18. Tertiles are used in preference to quintiles because of small sample sizes in some countries at this level of disaggregation (Appendix 3).
- 19. Chart 5 is limited to 14 countries because occupational categories were not available for Denmark, while the LIS datasets for Austria and Spain yielded substantially fewer than 100 managers. Detailed definitions and results for both occupational class categories are available on request. We have identified managers in accordance with the International Standard Classification of Occupations 88, specifically Major Group 1 which comprises "legislators, senior officials and managers." The looseness of some countries' definitions was offset by imposing the requirement that they pass a modest income threshold: the lowest tertile of annual earnings in each country. Sample sizes, together with indicators of the public sector effect on managerial wages, are presented in Appendix 3.
- 20. Appendix 3 indicates that in Sweden the hourly earnings of women in the managerial class are 10 percentiles lower in the public than the private sector, compared to a 12 percentile advantage in both Canada and Australia. Findings for men not reported here show that male managers in Sweden suffer hardly any public sector disadvantage (2 percentiles). In Australia and Canada they benefit from similar public sector bonuses to women.
- 21. The relatively strong selectivity of the female work force in Norway, previously documented in Table 3, probably results from its distinctive combination of a comparatively limited supply of childcare for infants along with very generous maternity leave (Gornick, Meyers and Ross 1997; Gornick, Meyers and Ross 1998; Gauthier 1999). Norway is the only country in which our indicators of child care and maternity leave policies are asymmetrical.
- 22. The menial services class is identified by ISCO88 codes 4211, 512, 513, 514, 522 and 91, together with educational and income ceilings. We excluded respondents in the top tertile of their national distribution of annual earnings, and in some countries also eliminated those with more than a basic high-school education. The proportion excluded by these restrictions varied from only 3-6 percent in most countries to a high of 14 percent in the United Kingdom. Occupational data were not available for Denmark and the categories used in Austria, Canada, Italy and the Netherlands were not close enough to the ISCO schema to be usable.
- 23. The United States has the lowest proportion of women in the menial services class (71%), which may be due to racial inequality in the labor market. Nonwhite men in the United States constitute 16 percent of all menials, and their relative likelihood of being found in this class is three times greater than for white men (although still only half that of nonwhite women).
- 24. Today, gender imbalance in class composition is most evident in women's underrepresentation in the blue-collar working class, as compared to the pink-collar working class in which they are over-represented (Esping-Andersen 1993a). However, this is more of a horizontal difference than a hierarchical one (Charles 2003).

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