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A Class Perspective on Gender Inequality: How Welfare States Shape the Gender Pay Gap

**Hadas Mandel and Michael Shalev** 

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# A Class Perspective on Gender Inequality:

# **How Welfare States Shape the Gender Pay Gap\***

#### Hadas Mandel

Department of Sociology and Anthropology
Tel Aviv University
<a href="mailto:hadasm@post.tau.ac.il">hadasm@post.tau.ac.il</a>

#### Michael Shalev

Department of Sociology and Anthropology
Department of Political Science
The Hebrew University of Jerusalem
shalev@vms.huji.ac.il

#### **Abstract**

The gender division of paid labor is embedded within systems of class stratification. The gap between the average earnings of men and women derives from the tendency for women to occupy inferior class positions and thereby to disproportionately pay the price of class inequality. From a class perspective, welfare states have multiple impacts on the gender pay gap. They influence women's class locations and also shape inequality between and within classes. We theorize and test the effects of three dimensions of welfare regimes on three components of the gender gap. Using both income and occupation-based measures of class and microdata for 17 post-industrial societies, we reveal systematic regime-level variation. The results resolve previous puzzles by showing that multiple aspects of welfare regimes have different and often contradictory effects on the class/gender components of the wage gap. Women face distinct tradeoffs across welfare regimes, depending on their class positions.

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Comparative research on the impact of welfare states on gender inequality has proliferated over the last 15 years (O'Connor 1996; Orloff 2002; Sainsbury 1994; 1996). These studies focus mainly on how state interventions influence women's economic autonomy, either directly by providing them with transfer payments or indirectly by assisting them to combine motherhood with paid work. A substantial literature now recognizes the role of subsidized childcare, paid maternity leave and other public policies in facilitating women's labor force participation (e.g. Daly 2000; Gornick and Meyers 2003). Today however across the rich democracies a majority of women are employed, and in some countries the gender gap in labor force participation has virtually disappeared. Consequently there is a need to complement comparative studies of the conditions for women's entry into the labor market with research on how the role of the state influences the attainments of employed women.

Sociologists have made important contributions to the understanding of cross-national similarities and differences in significant aspects of women's labor market achievements, including patterns of occupational segregation and how these are affected by public policies (Chang 2000; Charles and Grusky 2004). But with few exceptions (Gornick 1999; Mandel and Semyonov 2005; Misra, Budig and Moller 2005; Rosenfeld and Kalleberg 1990), sociological research has failed to address the determinants of the substantial variation across countries in the gender wage gap. Meanwhile, an outpouring of studies by economists has done much to document variation in the size of wage gaps across countries and its economic sources, but without the benefit of sociological insights into the causes of inequality and the role of the state (e.g. Arulampalam, Booth and Bryan 2004; Blau and Kahn 2003; Boeri, Del Boca and Pissarides 2005; OECD 2002).

In this paper we assess the contribution of state intervention to cross-national differences in the gender wage gap, in the framework of a sociological approach that has been surprisingly neglected (but see Clement and Myles 1994). We offer a class perspective on gender stratification, with a view to demonstrating the value of this approach for understanding both the nature of gender inequality and how it is affected by the welfare state. Reinterpreting gender inequality in terms of class stratification has become increasingly relevant now that most women have class affiliations that are separate from those of their husbands and fathers, and they have become more dispersed throughout the class structure (Burchell and Rubery 1994; Morris and Western 1999).

Our class perspective views gender stratification as being nested within the system of class stratification. From this standpoint, national gender wage gaps are shaped by the location of women in the overall class hierarchy and by patterns of class inequality. More specifically, the severity of the class divide, in conjunction with the extent to which women have penetrated the upper reaches of the class structure and the advantages they find there, are the main factors accounting for cross-country variation in gender inequality. In contrast to the common practice of focusing on aggregated wage gaps between men and women, this approach highlights the effects of inequality between classes and gender-unequal representation across classes.

Breaking down the gender wage gap into its gender and class components is especially relevant for comprehending the effects of the welfare state, which has the potential to reduce both class and gender inequalities. These twin axes of inequality have been the subject of two separate literatures that deal with the impact of welfare states. Mainstream research documents the impact of "social policy" on class inequality through decommodification and redistribution, while feminist research enlarges our understanding of how "family policy" either perpetuates or ameliorates women's subordination. Esping-Andersen (1999) has integrated these two approaches by showing that both class and gender policies differ systematically between welfare state regimes. At the same time, he retains the traditional focus on how each type of policy affects a specific "face" of inequality (Korpi 2000) – either class or gender. However, we will argue that class inequality plays an active role in determining gender inequality, and that consequently, state interventions that reduce class inequality are relevant to gender stratification.

To prepare the ground for our task, the next section offers a more extended explanation of how our approach links to the existing literature. We will identify the problems to be addressed and show how some important prior studies fit our integrated class and gender perspective. Then we will develop the claim that the gender wage gap can be disaggregated in a way that clearly identifies its class components. In turn, this decomposition will be the basis for our claim that welfare states have a double impact on the gender earnings gap: by influencing men's and women's representation in the class hierarchy and by affecting the extent of inequality between and within classes. In the final theoretical section we will distinguish three types of welfare state intervention and consider their

influence on each component of the gender earnings gap. These detailed expectations will be resolved into broader hypotheses concerning how the components of the gender wage gap can be expected to vary across welfare state regimes. Empirical support for these hypotheses will be drawn from a comparative analysis of 17 post-industrial societies in Europe, North America and the Antipodes using original indicators computed from micro-datasets, the products of large-scale official surveys carried out around the year 2000.

## Insights and Oversights from the Literature

As noted, feminist scholars have drawn attention to the importance of welfare state interventions for women's economic autonomy (Hobson 1990; Orloff 1993; O'Connor 1993). They argue that states play a potentially critical role by taking over women's caring responsibilities and by providing subsidies and making rules that ameliorate conflicts between the traditional roles of wives and mothers and the demands of paid employment. It follows that the welfare state—a social and political institution that plays an active role in the stratification process—powerfully affects the life-chances of women relative to men, in addition to its well studied effect on class stratification.

These insights have substantially extended the study of gender inequality and welfare states. However, most comparative research has adopted a limited perspective on both the dependent and independent variables. Gender inequality in the labor market has usually been equated with women's ability to integrate into paid work rather than their occupational and wage attainments (e.g. Daly 2000; Korpi 2000; Orloff 2002). Furthermore, with gender rather then class at the center of attention, the main explanatory focus has been on policies affecting mothers' employment, neglecting the impact of the welfare state on the workforce as a whole. Yet insofar as women are more prevalent among disadvantaged workers and men among the advantaged, "worker friendly" as well as "women friendly" policies are bound to affect the size of the gender wage gap. Consequently, an integrated view of these two dimensions of the welfare state ought to provide greater leverage than an explanation of cross-country variations in gender wage inequality based solely on gender-related policies.

We are not the first to advocate viewing the effects of social and family policies in tandem. In Esping-Andersen's (1999) elegant formulation of the dual functions of the welfare state, decommodification buffers workers from market forces, while defamilialization buffers

women from unpaid care responsibilities (cf. Lister 1995). However, what interested Esping-Andersen was not gender inequality but the consequences of welfare regimes for women's labor force participation and fertility. In contrast, a landmark comparative study by Walter Korpi (2000) sought to explain cross-national variation in both gender and class inequality. However, Korpi's study treated class and gender as two different "faces of inequality", each of which is affected by a different component of the welfare state. In effect he conducted two parallel studies, one on the impact of social insurance systems on poverty rates and the other on the effect of family policy on female labor force participation.

We propose going beyond this dichotomized understanding by viewing the two faces of inequality as interlocking. Since the gender division of paid labor is embedded within the system of class stratification, we believe that it is impossible to fully understand its sources in isolation from class. Correspondingly, the impact of the welfare state on gender earnings inequality is multi-dimensional. It can be expected to influence both women's position in the class structure and the extent of inequality between and within classes.

# Unpacking the Gender Wage Gap

The unequal distribution of men and women between classes, and its impact on gender pay gaps, appear indirectly in the sociological literature under the rubrics of sex segregation and the glass ceiling. According to this literature, gender occupational segregation and the exclusion of women from well-paid jobs are the core determinants of the gender wage gap (e.g. England 1992; Tomaskovic-Devey 1993). Our view that class inequality matters for gender inequality receives indirect support from a range of studies that are generally unconnected to sociological discourse and welfare state research. These contributions have showcased the effects of political-economy variables – particularly wage bargaining systems – on the gender gap, 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; Rosenfeld and Kalleberg 1990; Rubery et al. 1997; Whitehouse 1992).

The relationship between overall wage compression and gender gaps has been central to a series of high-profile comparative studies by economists Blau and Kahn (1992; 1996; 2003). Their key insight is that since women everywhere are over-represented in low-paying

and men in high-paying jobs, nationwide gender wage gaps depend to an important extent on the distance between the top and bottom of the wage structure. Blau and Kahn note, for example, that even though women in the US have been unusually successful in breaking into highly-paid occupations, America's overall gender gap continues to be comparatively large due to its large wage differentials between high and low-paid workers. Their analyses suggest that if Swedish men and women were relocated into the American wage structure, Sweden's national gender wage gap would actually be at least as large as America's (Blau and Kahn 1996).

Some sociological research has built on this insight to highlight the importance of overall wage inequality when comparing gender wage gaps across welfare states. Gornick (1999) pointed out that selected liberal and conservative countries exhibit larger gender wage gaps than the Scandinavian social democracies and Australia. Following Blau and Kahn, she showed that whereas the main source of women's disadvantage in Canada and the US is the long "length of the earnings 'ladder'" (p.231), in Germany and the Netherlands the more acute problem is women's low placement on that ladder relative to men. Recently, Mandel and Semyonov (2005) have marshaled evidence for 20 countries showing the importance of overall earnings inequality for explaining how the gender wage gap varies across countries and discerning how it is affected by welfare state interventions.

What is missing from these studies is theoretical linkage to class stratification. In sociological terms the "length of the earnings ladder" can be reinterpreted as *class inequality*, while the differential location of men and women on that ladder is understood as unequal *class representation*. This is the basis for our claim that the size of gender wage gaps depends jointly on how differently men and women are distributed in the class structure, and the extent of inequality between classes. Indeed, when the class structure is treated as a continuous wage hierarchy (as in the work of Blau and Kahn and others), the gender gap is fully explained by the gender composition of classes and the extent of class inequality. However if classes are understood as discrete categories, rather than a continuous hierarchy, then the average gender wage gap also depends on differences in earnings between men and women located in the same class – in our terms, the severity of *intraclass gender inequality*. This third component is well illustrated by the idea of a glass ceiling in management, which refers not only to women's under-representation in the managerial class in general (gender-

unequal distribution across classes), but more pointedly to their exclusion from the most lucrative and powerful positions *within* this class (Cotter et al. 2001; Federal Glass Ceiling Commission 1995).

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). Intraclass inequality may also be caused by outright discrimination against women workers, typically under the cover of different job titles (Bielby and Baron 1986). The importance of intraclass inequality has been highlighted by studies showing that women's entry into male occupations (desegregation) has not necessarily reduced gender wage inequality (Reskin and Roos 1990). Consequently, varying patterns of intraclass inequality may account for an important part of the cross-country variance in gender gaps.

The reinterpretation of "wage structure" as "class structure" is not merely a change in terminology, but also a proposal for a different perspective on the structure of economic inequality. Both Marxist and non-Marxist approaches conceptualize classes as discrete groups of jobs that share fundamental and socially significant similarities in their conditions of employment, which directly or indirectly give rise to broadly shared outcomes (not only economic resources but also cultural consumption, social interaction and political preferences) (Wright 2005). Class analysis is valuable for researching inequality precisely because it does not reduce it to a continuum of income or status, but rather highlights breaks in the distribution of life chances. This opens the way to utilization of classes as powerful categorical *predictors* of job rewards, including gender wage inequality (e.g. McNamee and Vanneman 1987; McCall 2001; Warren 2003).

Conceiving the stratification order in categorical rather than continuous terms exposes gender differences that are not merely wage-based, offering two additional advantages. First, defining classes as occupational categories reveals patterns of horizontal as well as vertical sex segregation. Research by Charles and Grusky (2004) shows, in effect, that the class distinctions between blue-collar and clerical or service work are heavily gendered without necessarily being hierarchical. The consequences of these class differences for gender pay differentials may well vary across countries. A second important distinction offered by breaking the stratification order into classes is the difference between inter- and intra-class

inequality which has already been mentioned. Countries are likely to vary in the extent to which gender gaps are driven by women's under-representation in classes, compared with the rewards they receive relative to men in the same class. Consistent with this expectation, a 6-country study by Wright, Baxter and Birkelund (1995) revealed cross-national differences in both the probability of women entering management (unequal representation) and the degree of authority attained by women managers (intraclass inequality).

To summarize, our theoretical preference is to conceptualize gender inequality in relation to the class structure. From this perspective, the gender wage gap is jointly generated by the *unequal representation* of men and women in the class hierarchy and the extent of *inequality between and within classes*. To revisit Blau and Kahn's illustration in the terms proposed here, the class representation of women in the USA may be more favorable than in Sweden, but this is hidden from view by America's much higher inequality both between classes and within them. The average American woman occupies a superior class position than her Swedish counterpart, but her earnings are pulled down by a much wider wage gap between higher and lower classes. Intraclass differentials further aggravate the problem, because America's heterogeneous economy and weakly regulated labor market generate much greater variability of wages between and within firms than in Sweden.

The lesson is clear. Because three different and potentially independent components are involved, the same aggregate pay gap can be a product of diverse combinations of the three underlying components we have identified. It follows that focusing on the aggregate gender gap is a potentially misleading way of comparing countries. We shall now attempt to show that for the specific purpose of tracing welfare state effects on gender inequality, decomposition of the gender gap adds both substance and precision to the effort of tracing the ways in which welfare state variations affect the relative pay of men and women.

# Welfare State Regimes

Contemporary welfare state theory fits comfortably with our insistence that the role of the state should be analyzed simultaneously in relation to both class and gender stratification. 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

universal public care services and cash benefits to families, which facilitate reconciliation of paid and unpaid work. In addition, when welfare states decommodify health and education services, or defamilialize child and elder care, they create jobs. These jobs "become a vehicle for the absorption of new, especially female, labor-force entrants" (Esping Andersen 1990:148). The welfare state as employer thus joins decommodification and defamilialization to form a triad that helps 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 welfare states 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 penchant for familial responsibility. The preservation of traditional family structures is often an explicit or implicit goal, especially in Southern Europe where "pro-familial" policies (e.g. tax and employer benefits that favor male breadwinners) are 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.

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<sup>&</sup>lt;sup>1</sup> 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).

Table 1: Core Differences between Welfare State Regimes

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

# How Welfare States Affect Gender Pay Gaps

To complete the picture, this section proposes 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). Very concisely, we argue that decommodification reduces the total gender earnings gap by reducing overall class and intraclass inequality. At the same time, defamilialization increases the gender gap by aggravating unequal gender representation between and within classes, and the welfare state as employer has mixed effects. This explains why welfare state 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. 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 low-wage 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 intraclass 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 powerfully affects the gender wage gap, since workers in the overlapping categories of low-wage, service and part-time employment are disproportionately female.

<u>Defamilialization</u>. When the state accepts responsibility for the care of infants, small children and dependent elders, it takes over tasks that would otherwise fall primarily on wives and mothers. Service provision of this kind is typically complemented by other entitlements to working mothers such as paid maternity leave with the right to resume employment, shorter working hours for mothers, and the right to time off in order to care for sick children (Gauthier 1996; Gornick and Meyers 2003). Thus the state may doubly support women's labor force participation, allowing them to work outside of the home by reducing the burden of family obligations, and facilitating their integration into the labor market by adjusting the demands of employment to their domestic duties.<sup>2</sup>

This, however, has paradoxical effects on gender equality (for summaries of relevant literature and new cross-national evidence, see Mandel and Semyonov 2005; 2006). On the one hand, when family policy facilitates paid employment, women gain enhanced economic autonomy and more equal power relations with their partners (Sorensen and McLanahan 1987). On the other hand, policies that facilitate women's employment by adjusting working time to household demands reduce their motivation to compete with men for lucrative but demanding jobs. Furthermore, as the Scandinavian experience demonstrates, when almost all women participate in the paid economy – including those with low skills and weak attachment to paid work who would otherwise have stayed at home – the average woman will be less well paid than in settings where women's entry to employment is more selective. The problem is aggravated by statistical discrimination by employers, who make generalizations about all women workers on the basis of the low productivity expected of some of them and the eligibility of all of them for social rights that are seldom used by men. In sum, the effect of defamilialization on women's earnings relative to men is doubly

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<sup>&</sup>lt;sup>2</sup> It follows that the state interventions which we refer to generically as "defamilialization" might more specifically be called "reconciliation policies". We adopt Esping-Andersen's terminology but recognize that, taken literally, defamilialization implies transformation of women's traditional roles in the private sphere, whereas reconciliation policies undertake merely to reduce the strain between their public and private obligations (Misra and Moller 2005).

negative: women are channeled into less favorable class positions and are also paid less than men who occupy similar positions.

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 1985; 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 the public 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 and the emphasis is on "food and fun services" (Esping-Andersen 1993).<sup>3</sup> It is also true that because governments are large, law-abiding, 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 (for evidence, see Gornick and Jacobs 1998:Table 3). Where the public sector is very large, as in Sweden, it tends to employ most of the women who work in high-level (managerial and professional) occupations. Whether due to the absence of other opportunities or their own preferences, women are attracted to the shorter

which are open to women (Esping-Andersen 1993: especially Tables 2.4 and 2.6).

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<sup>&</sup>lt;sup>3</sup> This indication of the superior skill mix offered by developed welfare states is however counterbalanced by the fact that they also generate a great deal of employment in routine care jobs. Moreover, the comparative study of class structure just cited suggests that in countries with a liberal welfare regime, the "Fordist" sector of the economy creates relatively more high-level jobs, many of

and more flexible hours found in the public sector, as well as its more reliable implementation of mothers' employment rights. Unaffected by similar considerations, men flock to the better-paying heights of the private sector, where it is possible to extract handsome "rents" (Hansen 1997; see also Rice 1999:25). As a result, although the public sector's relatively high wage floor may narrow the gender pay gap at the low end of the class structure, its relatively low wage ceiling widens it at the high end.

Moreover, 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 work that are not highly paid, but are female-typed and better adjusted to women's domestic obligations (Hansen 1995; Mandel and Semyonov 2006). The downside of reduced working hours and other "convenient" employment conditions is that they lower the selectivity of working women and decrease their motivation to compete with men for highly paid positions.

To summarize, the relative egalitarianism of the public sector leads us to expect that more extensive public social services will be associated with a lower level of class inequality. The effects of the welfare state as employer on the other two components of the gender gap are more difficult to predict. The class representation of women may be enhanced by the skilled jobs furnished at the high end of the social welfare labor market, but the prevalence of routine care work in developed social services and the negative effects of women-friendliness on the female workforce both have unfavorable effects on women's location in the class structure. The tendency for wage differentials to be more compressed in the public sector and this sector's greater wage uniformity should lessen gender earnings inequality within the lower classes. However in the higher classes, the dominance of men in the private sector and women in the public sector can be expected to aggravate intraclass inequality.

To complete this synopsis of what has been proposed so far, we offer a table that cross-tabulates the three roles of welfare states with the three components of the gender pay gap. The left-hand panel of Table 2 indicates how the former are expected to influence the latter. On the basis of these expected effects, the right-hand panel assesses the magnitude of each component of gender inequality in earnings in the three welfare state regimes. 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; while the welfare state as employer has similar effects to decommodification, but a mixed effect on the class representation of men and women and intraclass inequality.

Table 2: Welfare State Effects on Gender Earnings Inequality

	Roles of the Welfare State			Welfare State Regimes		
Components of the Gender Earnings Gap	Decomm- odification	Defamilial- ization	Welfare State as Employer	Social- Democratic	Liberal	Conserv- ative
Inequality between classes	Reduces <sup>1</sup>		Reduces <sup>5a</sup>	Least	Most	Least / Medium
Unequal class representation of men and women		Increases <sup>3, 4a</sup>	? 3, 6	Most	Medium	Least
Intraclass gender inequality	Reduces <sup>2</sup>	Increases <sup>4b</sup>	? <sup>5b, 7</sup>	?	?	?

- 1. Public provision of income and services raises the reservation wage and discourages creation of low-wage service jobs.
- 2. Extension of social rights to "secondary" workers makes for greater wage uniformity.
- 3. Women workers are less "selective" and less motivated to compete for lucrative positions.
- 4. "Statistical discrimination" as a result of mothers' entitlements excludes women from powerful positions (4a) or lowers their earnings (4b).
- 5. Public sector unionization and centralized wage-fixing compress the gap between the top and bottom of the class structure (5a) but widen sectoral inequality in higher classes (5b).
- 6. Mixed effects of a large social welfare sector on the skill level of jobs.
- 7. Bureaucratization & political sensitivity in public sector encourage wage uniformity.

Turning to the regime analysis on the right, 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. Our hypotheses for intraclass gender inequality predict inconsistent effects; which of them dominates will be a matter for empirical testing. 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. With moderate levels of defamilializing policies and a comparatively small social service sector, women in conservative welfare states (as in liberal ones) will not suffer negative effects on their class representation. Indeed, the conservative combination of pro-familial policies and moderate decommodification discourages many women from entering the labor force at all. Following the argument that selective women's employment results in a higher quality female labor force, those women in the conservative countries who do work may be the most successful in gaining access to highly paid "men's jobs" (Boeri, Del Boca and Pissarides 2005:75-77). Lastly, and in common with the other regimes, because different welfare state roles push intraclass inequality in different directions, no clear prediction can be made in that respect.

#### Methods and Data

<u>Methodological Approach</u>: To test hypotheses predicting different outcomes across welfare regimes, we will perform a regime-level analysis based on Esping-Andersen's ideal types. The first stage of this analysis will demonstrate that the multiple aspects of welfare states which we expect to affect gender inequality indeed "hang together" in distinct families of nations. Subsequently we will test how far cross-country variation in outcomes actually clusters in these families.

We favor a regime-level analysis over attempting to assess the relative importance of discrete explanatory variables, because welfare regimes blend multiple attributes that cannot be disentangled (Shalev 2006). Since regimes are ideal types, observable cases should be understood as better or worse empirical approximations of conceptual categories. While some countries may perfectly represent the ideal type, others straddle more than one regime or exhibit inconsistent combinations of policy. We will try to benefit from such hybrid or deviant cases in order to explain the fit between welfare regimes and their presumed outcomes.

<u>Data Sources</u>: The only source of datasets for the OECD area that are sufficiently large to decompose national gender wage gaps along the lines we have recommended is the

Luxembourg Income Study (LIS).<sup>4</sup> LIS is a repository of original microdata from government-sponsored surveys of household income and employment that have been harmonized to facilitate cross-national comparison. The number of individuals polled in these surveys ranges from about 5000 in Belgium and Austria to 100,000 in the USA. For the sake of substantive comparability, as well as compatibility with Esping-Andersen's welfare regimes, our study is limited to 17 of the total of 30 countries included in LIS. Most of the surveys utilized are from the most recent wave in the LIS database and were carried out around the year 2000.

While LIS is an invaluable resource for cross-national research, it does have limitations which we did our best to correct. We obtained data for 4 countries (Australia, Germany, Sweden and Switzerland) from national household panels that are superior in quality or offer more detailed information than parallel LIS datasets. Further, two Scandinavian countries, Denmark and Norway, supplied us with datasets that include a critical variable (hours of work) not available through LIS. Appendix 1 provides details of countries, years and datasets. Focusing on wage-earners aged 25-55 and other restrictions led to effective sample sizes ranging from 1,500-3,500 in the smaller European countries to tens of thousands in North America.<sup>5</sup>

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 the division of household responsibilities is predetermined by social norms, comparisons between men's and women's hourly earnings effectively define

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<sup>4</sup> http://www.lisproject.org

<sup>&</sup>lt;sup>5</sup> 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 due to education or retirement. We decided to exclude both employers and proprietors without employees, since both the coverage of the self-employed and the accuracy of their self-reporting on earnings are less satisfactory than for wage-earners. We also applied three other filters, excluding agriculture, employees of the military, and workers reporting either trivial or seemingly exaggerated hours of work (less than 8 or more than 90 hours per week).

<sup>&</sup>lt;sup>6</sup> 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 rather than self-reported earnings. It has been shown that self-reporting tends to understate earnings at the top of the income distribution, while register data suffers from understatement at the bottom (Nordberg, Penttila and Sandstrom 2001).

away a major component of gender income inequality. Moreover, since welfare states influence women's hours of work through benefits to 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<sup>7</sup>. Under these circumstances, despite the disadvantages we concluded that it is preferable to investigate hourly wages. Like labor force participation, the study of gender differences in working hours should be separated from research on rates of compensation for paid work.

Measuring Class: The most common approaches to operationally defining classes are based on occupational groups. These aggregations are consistent with the theoretical construct of classes as socially bounded categories that encapsulate horizontal as well as vertical differentiation, but they pose 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). Since occupational coding schemes are nationally idiosyncratic, we were able to identify only limited groups of occupations that are comparable across countries. Thus, the bulk of our analysis will rely on "income classes" – quintiles of hourly earnings – which furnish a scale that is perfectly comparable across countries.<sup>8</sup>

The use of income categories to define classes does not permit measurement of intraclass inequality, since the very definition of wage quintiles guarantees that there will be few if any gender differences within each quintile. To estimate cross-country differences in intraclass gender inequality, we analyze two occupational classes for which it was possible to construct harmonized categories and which capture diversity in both class position and extent

<sup>&</sup>lt;sup>7</sup> Across the 17 countries in our study, the average rate of part-time employment among women varies widely around a mean of 30% (cf .8% for men). In Finland, Spain and the USA the rate is below 20%, whereas in Australia, Britain, Netherlands and Switzerland it exceeds 40%. http://unstats.un.org/unsd/demographic/products/indwm/table5b.htm

<sup>&</sup>lt;sup>8</sup> Before constructing income quintiles we eliminated the top and bottom percentiles of the hourly wage distribution. However, in order to avoid unintentionally censoring the high and low classes our analyses of occupational classes instead follow the LIS recommendation for top and bottom coding (10 times the median and 1% of the mean, respectively).

of feminization. Managers represent the high end of the class structure, where women are still a minority. In contrast the "menial services class" consists of unskilled or semiskilled occupations in care work, cleanup, sales, restaurants and the like, which are staffed predominantly by women.

# **Findings**

## Authenticating Welfare Regimes

The first test of a regime-based study is to validate the existence of distinct worlds of welfare. Our theoretical analysis rests on Esping-Andersen's identification of three central attributes of welfare regimes that we expect to influence class and gender inequality. Chart 1 simultaneously plots these three regime attributes for our 17 countries. An independent and updated measure of decommodification (Scruggs and Allan 2006) is shown on the X-axis, an index of work/family reconciliation on the Y-axis, and the scope of the welfare state as an employer is represented by bubbles of varying size.<sup>10</sup>

#### **INSERT CHART 1 ABOUT HERE**

Countries indeed cluster as expected into three distinct groups. The liberal and social-democratic regimes, located towards the bottom-left and top-right corners of the chart respectively, are polar opposites on all three of our measures (The single exception is the size of the public welfare sector in the UK, amplified by its National Health Service.) Our indicator of work/family reconciliation 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".

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<sup>&</sup>lt;sup>9</sup> Occupational class categories could not be constructed for Denmark.

<sup>&</sup>lt;sup>10</sup> The Scruggs and Allen measure (for the year 2000) was retrieved from the project website (http://sp.uconn.edu/~scruggs/wp.htm). The other measures are adopted from Mandel and Semyonov (2005). Reconciliation was scored by factor analysis of two variables: number of fully paid weeks of maternity leave and the proportion of infants (0-3) in publicly funded day-care. Welfare state employment is the percent of the workforce employed in the public welfare sector (public health, education, and welfare).

There are two exceptions to the close similarity of our results to Esping-Andersen's classification – Switzerland, which is clearly liberal on our indicators, and Ireland, which is positioned just outside the liberal cluster. 11 This is one of several indications that these are best understood as mixed cases. Standard measures of defamilialization (including our own) fail to capture the classically conservative features of the role of the state in relation to gender and the family (on Ireland see Adshead and Millar 2004; Lewis 1992; on Switzerland see Bonoli and Combes 2002; Charles chapter 2004). One more qualification may also affect the closeness of the fit between class/gender inequality and Esping-Andersen's regime clusters. The English-speaking countries all share income maintenance systems based on a distinctly liberal preference for private means of economic security, but they vary in the extent to which they decommodify labor by "other means" (Castles 1989; Mishra 1994). As documented by O'Connor, Orloff and Shaver (1999), the family policy domain also varies significantly among the liberal states. Australia is likely to be especially distinctive in relation to both class and gender equality, because its system of wage-fixing by judicial tribunals has generated an unusually high wage floor and a truncated gender gap (Gregory et al. 1989; Kidd and Shannon 1996).

## Empirical Decomposition of the Gender Gap

Our first findings regarding wage inequality between the sexes, presented in Chart 2, document 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 between countries, from a gap of less than 5% in Italy to almost 25% in the US and UK. This variation is only modestly consistent with the regimes identified by Esping-Andersen. Although Sweden and Denmark are located in the middle of the distribution, with most of the conservative countries below them (exhibiting the smallest wage gaps) and the liberal cases above, Finland has a surprisingly larger gender gap than the other Scandinavian countries. Moreover, Germany and Austria are located in the "Scandinavian middle" of the chart, with a gap some 5 points higher than the nearest conservative countries. As argued in the theoretical section, the wage differential between the

<sup>&</sup>lt;sup>11</sup> 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 & 4B).

average man and woman could easily mask substantial differences in the causes of gender earnings inequality across welfare regimes. Thus we expect to find a more consistent picture when decomposing overall gender gaps to their sources. In the following analyses, when classes are operationalized as income quintiles, the gender gap is fully disaggregated into two components: unequal gender representation across classes and class inequality.

#### **INSERT CHARTS 2 & 3 ABOUT HERE**

Chart 3 describes the class representation of women in our 17 countries. It compares the proportion of working women who are in the top and bottom quintiles of their country's earning distribution, represented by black and gray lines respectively. A value of 20% would imply equal gender representation in a quintile. Not surprisingly, in every country women are over-represented at the bottom and under-represented at the top. But the patterning of these two imbalances is quite different. Women's under-representation in the highest "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 enjoying a proportional 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% of women belong to the highest earnings quintile, compared to about 30% of men. The poor performance of the social democracies in this respect is consistent with other research (e.g. Datta Gupta, Smith and Verner 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 expectation that in conservative countries, especially the familistic Southern European countries, women would be more equally represented due to a relatively selective female labor force under strong pressure to adopt the male model of commitment to work.

male distributions are the mirror image of female distributions. Note however that the results with and without the correction are very similar.

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<sup>&</sup>lt;sup>12</sup> Cross national differences in female labor force participation can slightly affect the probability of women vs. men to be found in *any* wage quintile. To correct for this, female respondents in each country have been weighted so that men and women are equally represented. After the correction

The intermediate position of the liberal countries in Chart 3 is also consistent with our regime-level hypotheses. However, the result for the USA understates women's success in entering high-level occupational positions, notably management (Wright, Baxter and Birkelund 1995; Mandel and Semyonov 2006). The reason is that our quintile-based measure of classes yields no information regarding the extent of intraclass gender inequality. The moderate representation of American women in the higher income classes, despite their impressive penetration of management, reflects the severity of the gender gap among managers. <sup>13</sup>

A final observation on the liberal group concerns Ireland. The favorability of women's representation in the top quintile suggests that in relation to gender inequality in the labor market, Ireland indeed belongs to the conservative regime.

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 workers (both men and women) in the top and bottom quintiles. In more familiar terms, this is the "90/10 ratio" between earnings at the 90<sup>th</sup> and 10<sup>th</sup> percentiles. Inequality of representation appears on the vertical axis of Chart 4, using a composite measure of the relative risk of women 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 in Chart 2. The higher the resulting figure, the stronger the tendency for women to be concentrated at the bottom of the wage structure and absent from the top.

# INSERT CHART 4 ABOUT HERE

For ease of interpretation, Chart 4 is divided into four quadrants according to 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

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<sup>&</sup>lt;sup>13</sup> The gender gap among managers in the USA is 29%, second highest of 16 countries. As later findings will show, this is primarily due to the size of wage differentials among American managers.

overall wage gap between the top and bottom quintiles is modest in these countries (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. Spain is one of only two exceptions to this pattern (Austria is the other). Located on the opposite corner of the chart, Spain exhibits the reverse of the Scandinavian combination: exceptionally equal gender representation coupled with high class inequality. 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 underscore the internal diversity of the liberal regime. The UK is located alone in the upper right-hand quadrant 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 however exhibits the opposite features to the UK, and Canada is similar to the USA 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. In terms of gender representation, as Chart 2 revealed, 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 a puzzle. Others may however be explained by taking into account their ambiguous location in relation to Esping-Andersen's ideal-types (as documented in Chart 1). The very unequal representation levels in the UK may be due, at least in part, to its comparatively large public service sector compared to other liberal countries. In the same vein, the more moderate level of class inequality in both Britain and Canada, in comparison with the US, is consistent with their more decommodified labor markets. The even lower class differential computed for Australia, as well as its egalitarian gender representation, are not unexpected in view of its unique system of wage determination. Finally, Ireland illustrates how we can learn from cases that are mixed in terms of regime membership. 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, the basically liberal character of social protection pulls Ireland in the direction of greater class inequality.

To recap, in general the empirical data we have presented 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 reconciliation and extensive public employment with unequal gender representation, and high levels of decommodification with relative equality between classes. Furthermore, our expectations are also borne out (with the exception of Austria) by the comparatively equal representation found in the 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 however be explicable by individual countries' departures from the ideal-typical liberal regime.

## Estimating Counterfactual Effects

The association between welfare regimes and distinctive configurations of gender representation and class inequality leaves unanswered the question of how much each of these components contributes to a country's overall level of gender wage inequality. This section addresses that question, in the process underlining 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.

Tables 3 and 4 reveal the role played by inequality of representation and class inequality respectively. In each table simulations compare the actual gender wage gap with the counterfactual gap for 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). In Table 3 the counterfactual effect of unequal representation is illustrated by replacing the actual distribution of men and women across quintiles with the distribution of two extreme cases – first egalitarian Italy (column 2) and then 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, then on average their gender wage gaps would decline by more than 60%. 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%. In societies with similarly unequal representation (like the other Scandinavian countries and the UK) 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.

## **INSERT TABLES 3 AND 4 ABOUT HERE**

Table 4 provides parallel illustrations of the role of class inequality in shaping gender wage gaps, by estimating counterfactual values under American and Swedish patterns of class inequality. The table vividly demonstrates the opposite contributions of Sweden's relative class equality and American's high class inequality to their gender wage gaps. Under US class differentials the gap would rise by an average of 47%, 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 equal 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 variation in 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 profound effects. Moreover the relative importance of each component varies across countries, highlighting the different tradeoffs for women exemplified by America and Sweden. The USA offers higher mobility for advantaged women that pays off handsomely due to its long wage ladder. However, this attribute severely punishes women (and men) located in less fortunate class positions. Sweden on the other hand crowds women into the lower and middle rungs of the wage ladder, but the effect is mitigated by the relatively small distance between rungs. These are but extreme illustrations of our overall argument that the two sources of gender wage inequality measured here must be juxtaposed in order to properly capture the impact of welfare regimes.

The results strongly confirm an even more fundamental justification for decomposing aggregate gender pay gaps. To repeat, the overall gap at the mean may be generated by two very different forces: gender segregation by class, and inequality between classes. The most striking examples are Ireland and Sweden, two countries with quite similar gender gaps. 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 top income levels compared with their high concentration at the bottom. Similar diversity is evident when comparing the UK and the USA, two liberal countries that share the distinction of having by far the highest aggregate pay gaps in our study. While in the UK this results mainly from women monopolizing the bottom of the class structure and men the top, in the USA it derives primarily from an exceptionally high level of class inequality. In short, disaggregating gender wage gaps improves both our ability to describe national patterns of gender wage inequality and the accuracy of predictions based on welfare state characteristics.

## Evaluating Intraclass Inequality using Occupational Classes

The third component of the gender gap refers to inequality between men and women located in the same class. To measure intraclass gender inequality independently of income we utilize occupational class categories. As explained in the Methods section, 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 class and the "menial services class".

As in the preceding decomposition of national gender gaps, we break down gender inequality within a class into two components. *Representational inequality* will refer to the extent to which women are concentrated in lower-paid positions and excluded from the top. The unit of analysis is now hourly wage tertiles rather than quintiles because of the limited sample sizes available for many countries at this level of disaggregation (see Appendix 3 for details). The term *intraclass wage differential* will denote the gap between the highest and lowest wages earned in a given class. Empirical identification of the two sources of intraclass gender gaps enhances our ability to test the theoretical predictions presented in Table 2. Decommodification should mitigate intraclass differentials, while defamilialization should heighten gender inequality in intraclass representation.

The effects of state intervention on intraclass inequality are liable to vary at different levels of the class structure (managers vs. menials). The social-democratic context suggests several examples. The relative equality of wages in this context may be limited to the working and intermediate classes, since 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 tendency for intraclass wage differentials to be small. 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 costs are lower.

### The Managerial Class

Chart 5 presents empirical measures of the two components of intraclass inequality among managers<sup>14</sup>. Representational inequality (the vertical axis) is operationalized by a

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<sup>&</sup>lt;sup>14</sup> Managers are identified in accordance with the International Standard Classification of Occupations (ISCO88), specifically Major Group 1 which comprises legislators, senior officials and managers. We have compensated for the looseness of some countries' definitions by imposing the requirement that they pass a modest income threshold. This threshold requires managers to be above the lowest tertile of annual earnings in each country. The proportion excluded by this criterion ranged from no more than 6% in Austria, Belgium, Finland and France to 13-16% in Australia, North America, Germany,

ratio 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 intraclass 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. Intraclass wage differentials in Finland and Sweden are actually very similar to 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.

#### **INSERT CHART 5 ABOUT HERE**

When the two dimensions of intraclass inequality are considered in tandem, the three worlds of welfare capitalism become clearly visible (the exceptions are Norway's proximity to the conservative cluster and Spain's pronounced absence from it.) The conservative nations exhibit relatively low levels of both representational 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 anticipated, the distinction between the private and public sectors is crucial in this regard (see Appendix 3). Women managers in Scandinavia are exceptionally dependent on the welfare state as an employer, and this dependence exacts a price. 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.<sup>15</sup>

Three countries are located well outside the clusters identified in Chart 5. In Switzerland only one tenth of women managers reach the top earnings tertile, whereas in

Netherlands and Norway. Further information on our operational definitions of classes and detailed results not reported here are available on request.

<sup>&</sup>lt;sup>15</sup> This penalty is only paid by women. Findings 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.

Ireland they are almost equally represented. Spain is doubly exceptional, particularly in having by far the highest intraclass differential of any country. From a regime perspective there is no obvious explanation for these deviations, and it is possible that they are due in part to issues of data comparability or quality.

#### 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 1993). The size of this class varies from 6% of the workforce in Belgium to 16% in Sweden. The menial services class is largest in Scandinavia, where the public sector plays a major role, and it is everywhere highly feminized (at least 80% in all countries except Australia, Belgium and the United States).

### **INSERT CHART 6 ABOUT HERE**

Chart 6 plots the two dimensions of intraclass 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% greater than their share of the top tertile, whereas due to the glass ceiling effect it is more than 130% greater among managers. Turning to the intraclass 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 quite a high degree of cross-country convergence 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-

<sup>&</sup>lt;sup>16</sup> The ISCO88 codes identifying menial service workers are 4211, 512, 513, 514, 522 and 91, but these potentially include skilled and supervisory workers. We compensated for overly broad occupational distinctions by using more specific information on levels of skill and/or authority, or by adding an educational threshold (excluding respondents with more than a basic high-school education). We also imposed an income constraint in all countries, excluding respondents in the top tertile of the national distribution of annual earnings. The proportion excluded by this ceiling varied from only 3%-6% in half of the countries to 14% in the UK. Available occupational data for Austria, Canada, Italy and the Netherlands were not close enough to the ISCO schema to be usable.

<sup>17</sup> The USA 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 USA constitute 16% of all menials, but their relative likelihood of being found in this class is 3 times greater than for white men (although still only half that of nonwhite women).

country variation in gender inequality is mainly the result of differences in the wage structure. This implies that, as expected, 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 indicates that lower-class women benefit from the social-democratic welfare regime, because decommodification and a large public services sector raise the wage floor and promote wage uniformity. 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 (see 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 intraclass 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 intraclass inequality. It therefore inverts Swedish conditions by being doubly inegalitarian for lower class women. These contrasting outcomes for liberal USA and social-democratic Sweden support our theoretical arguments regarding the impact of welfare states on intraclass inequality in the lower classes.

## Conclusions

We have argued that a class perspective is indispensable for understanding both gender inequality and the way it is affected by welfare states. This led us to decompose the gender wage gap into components that reflect the intersection of gender and class inequalities, and to evaluate the effect of the welfare state on each component. Following Esping-Andersen, our approach to understanding welfare state variations encompasses interventions with relevance to class inequality (decommodification) as well as gender inequality (defamilialization), and it also considers the distinct role of welfare states as employers. Disaggregation of both the dependent and independent variables generated a set of hypotheses regarding the effects of specific features of the welfare state on specific components of the gender wage gap. These hypotheses have been subjected to empirical testing at the regime level.

The results are consistent with our expectations, and they sharpen our understanding of the contradictory effects of different welfare state interventions. In particular, social democracy – where decommodification, defamilialization and public employment are all highly developed – supports women's relative pay by narrowing overall earnings differentials between classes through decommodification. However, defamilialization and the role of the welfare state as an employer appear to hamper the upward mobility of advantaged women, while amplifying the economic strength of disadvantaged women. The opposite conditions prevail in the liberal regime, where gender earnings differentials are predominantly caused by inequality between classes, the result of a highly commodified labor force. Finally, the combination of familialism and moderate decommodification that typifies the conservative welfare regime produces the smallest gender wage gaps. Policies designed to preserve traditional family structures discourage many women from entering employment at all. As a result of the selective character of those who do join the labor force, compared to the other regimes fewer working women enter low-income positions and more of them reach the top.

Our decomposition of the gender gap was motivated by the larger ambition of enriching the study of gender inequality by connecting it more closely to class analysis. Leading stratification theorists have emphasized that class and gender inequality should be studied interactively (Crompton 2001; Wright 2001). Nevertheless, most research focuses on how gender inequality "is important in structuring class relations" (Walby 1997:15), rather

than the opposite. Conceptualizing inequality between men and women in terms of their position in the class structure has enabled us to trace the gap between their average earnings to the tendency for women to occupy inferior class positions and thereby to disproportionately pay the price of class inequality. By paying attention to the impact of class inequality on gender inequality, we also move beyond the tendency in most comparative scholarship on the welfare state to treat class and gender stratification as distinct and unrelated. Relatedly, rather than seeing the welfare state as shaping class and gender inequalities independently through social policy and family policy, we have emphasized the significance of decommodification for gender inequality. Since in all countries women tend to occupy less favorable class positions than men, they benefit most from social policies that reduce class inequality.

Paradoxically, therefore, the size of the gender-equalizing effect of class-egalitarian policies grows with the extent to which women occupy less favorable class positions than men. However, it appears that different welfare state mechanisms may balance each other. In Scandinavia, where women's entry into the higher classes is hampered by defamilialization and public employment, they are compensated by a lower wage differential between classes. Under the conditions prevailing in the liberal regime, inequality between classes drives national gender wage gaps upwards but at the same time women's dispersion across classes is more egalitarian.

Similar insights emerge from our analysis of patterns of intraclass inequality in selected high and low occupational classes. The welfare state affects gender inequality within higher classes (in this case managers) mainly by defamilialization, whereas it influences lower classes (menials) primarily by decommodification. The social-democratic regime lowers the glass ceiling on the occupational attainments of upwardly mobile women, but it compensates the many women located at the bottom of the class structure with better access to well-paid jobs and a smaller wage differential. In the United States, on the other hand, the relative equality of representation characteristic of the liberal model holds mainly for upper class women. Lower class women in America are disadvantaged in all possible respects. In addition to the misfortune of belonging to a poorly paid class, their plight is aggravated by exceptionally high wage differentials, both between classes and within their own class.

These contrasts raise two related topics for future research seeking to profit from a class perspective on gender inequality. One is the need for "classing" gender inequality, in the sense of recognizing that gender inequalities (such as wage gaps) vary between classes. Our investigation of intraclass inequality has illustrated the potential significance of this variation, but future work needs to compare a broader range of classes. Given the existence of class differences in gender inequality, a second critical issue is how much, and by what means, welfare states contribute to these differences. Very little prior scholarship exists in either of these areas. McCall's (2001) research on "complex inequality" pioneered an interactive approach to the role of class and gender (and race) in the determination of wage inequality, but in the framework of comparing geographical subdivisions within one country rather than cross-national comparison (see also Cotter, Hermsen and Vanneman 1999; Huffman 2004). 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 different classes of women. The tasks ahead are to further theorize this conditionality and to systematically study it across a broad range of societies.

### References

Arulampalam, Wiji, Alison L. Booth, and Mark L. Bryan. 2004. "Is There a Glass Ceiling over Europe? Exploring the Gender Pay Gap across the Wages Distribution." Discussion Paper No. 1373, Institute for the Study of Labor (IZA), Bonn, October, ftp://ftp.iza.org/dps/dp1373.pdf

Bielby, William T. and James N. Baron. 1986. "Men and Women at Work: Sex Segregation and Statistical Discrimination." *American Journal of Sociology* 91:759-799

Blau, Francine D. and Lawrence M. Kahn. 1992. "The Gender Earnings Gap - Learning from International Comparisons." *American Economic Review* 82:533-538

Blau, Francine D. and Lawrence M. Kahn. 1996. "Wage Structure and Gender Earnings Differentials - an International Comparison." *Economica* 63:S29-S62

Blau, Francine D. and Lawrence M. Kahn. 2003. "Understanding International Differences in the Gender Pay Gap." *Journal of Labor Economics* 21:106-144

Boeri, Tito, Daniela Del Boca, and Christopher A. Pissarides. 2005. *Women at Work: An Economic Perspective*. Oxford: Oxford University Press

Burchell, Brendan J. and Jill Rubery. 1994. "Divided Women: Labour Market Segmentation and Gender Segregation." Pp. 80-120 in *Gender Segregation and Social Change: Men and Women in Changing Labour Markets*, edited by A. M. Scott. Oxford; New York: Oxford University Press.

Castles, Francis G. 1989. "Social Protection by Other Means: Australia's Strategy of Coping with External Vulnerability." Pp. 16-55 in *The Comparative History of Public Policy*, edited by F. G. Castles. Cambridge: Polity Press

Chang, Mariko-Lin. 2000. "The Evolution of Sex Segregation Regimes." *American Journal of Sociology* 105:1658-1701

Charles, Maria and David B. Grusky. 2004. *Occupational Ghettos: The Worldwide Segregation of Women and Men*. Stanford CA: Stanford University Press

Clement, Wallace and John Myles. 1994. *Relations of Ruling: Class and Gender in Postindustrial Societies*. Montreal: McGill-Queen's University Press

Cotter, David A., Joan M. Hermsen, Seth Ovadia, and Reeve Vanneman. 2001. "The Glass Ceiling Effect." *Social Forces* 80:655-681

Cotter, David A., Joan M. Hermsen, and Reeve Vanneman. 1999. "Systems of Gender, Race, and Class Inequality: Multilevel Analyses." *Social Forces* 78:433-460

Crompton, Rosemary. 2001. "Social Class and Gender." Pp. 14233-14238 in *International Encyclopedia of the Social & Behavioral Sciences*, edited by N. J. Smelser and P. B. Baltes. Amsterdam: Elsevier

Daly, Mary. 2000. "A Fine Balance: Women's Labor Market Participation in International Comparison." Pp. 467-510 in *Welfare and Work in the Open Economy, Volume II: Diverse Responses to Common Challenges*, edited by F. W. Scharpf and V. A. Schmidt. Oxford: Oxford University Press

Datta Gupta, Nabanita, Nina Smith, and Mette Verner. 2006. "Child Care and Parental Leave in the Nordic Countries: A Model to Aspire To?" Discussion Paper No. 2014, Institute for the Study of Labor (IZA), Bonn, ftp://ftp.iza.org/dps/dp2014.pdf

England, Paula. 1992. Comparable Worth: Theories and Evidence. New York: Aldine de Gruyter

Esping-Andersen, Gosta. 1990. The Three Worlds of Welfare Capitalism. Cambridge: Polity Press

Esping-Andersen, Gosta, ed. 1993. Changing Classes: Stratification and Mobility in Post-Industrial Societies. London: Sage

Esping-Andersen, Gosta. 1999. *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press

Federal Glass Ceiling Commission. 1995. A Solid Investment: Making Full Use of the Nation's Human Capital (Final Report of the Commission). Washington DC: Government Printing Office

Gauthier, Anne Helene. 1996. The State and the Family: A Comparative Analysis of Family Policies in Industrialized Countries. Oxford: Clarendon Press

Goldthorpe, John H. and Robert Erikson. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press

Gornick, Janet C. 1999. "Gender Equality in the Labor Market." Pp. 210-242 in *Gender and Welfare State Regimes*, edited by D. Sainsbury. Oxford: Oxford University Press

Gornick, Janet C. and Jerry A. Jacobs. 1998. "Gender, the Welfare State, and Public Employment: A Comparative Study of Seven Industrialized Countries." *American Sociological Review* 63:688-710

Gornick, Janet C. and Marcia Meyers. 2003. Families That Work: Policies for Reconciling Parenthood and Employment. New York: Russell Sage Foundation

Gregory, R.G., R. Anstie, A. Daly, and V. Ho. 1989. "Women's Pay in Australia, Great Britain, and the United States: The Role of Laws, Regulations and Human Capital." Pp. 222-246 in *Pay Equity: Empirical Inquiries*, edited by R. T. Michael, H. I. Hartmann, and B. O'Farrell. Washington DC: National Academy Press

Hansen, Marianne-Nordli. 1995. "Sex Segregation in the Norwegian Labor Market. The Impact of Sector Differences in the Effect of Family Responsibilities on Salary." *Tidsskrift for Samfunnsforskning* 36:147-177

Hansen, Marianne-Nordli. 1997. "The Scandinavian Welfare State Model: The Impact of the Public Sector on Segregation and Gender Equality." Work, Employment and Society 11:83-99

Hernes, Helga Maria. 1987. Welfare State and Woman Power: Essays in State Feminism. Oslo: Norwegian University Press

Hobson, Barbara. 1990. "No Exit, No Voice: Women's Economic Dependency and the Welfare State." *Acta Sociologica* 33:235-250

Huffman, M. L. 2004. "Gender Inequality across Local Wage Hierarchies." Work and Occupations 31:323-344

Iversen, Torben. 2005. Capitalism, Democracy, and Welfare: The Changing Nature of Production, Elections, and Social Protection in Modern Capitalism. Cambridge, UK; New York: Cambridge University Press

Kearney, Richard C. and David G. Carnevale. 2001. *Labor Relations in the Public Sector*. New York: Marcel Dekker

Kidd, Michael P. and Michael Shannon. 1996. "The Gender Wage Gap: A Comparison of Australia and Canada." *Industrial and Labor Relations Review* 49:729-746

Kolberg, Jon Eivend, ed. 1991. The Welfare State as Employer. Armonk NY: M.E. Sharpe

Kolberg, Jon Eivend and Gosta Esping-Andersen. 1993. "Welfare States and Employment Regimes." Pp. 3-35 in *Between Work and Social Citizenship*, edited by J. E. Kolberg. Armonk NY: M.E. Sharpe

Korpi, Walter. 2000. "Faces of Inequality: Gender, Class, and Patterns of Inequalities in Different Types of Welfare States." *Social Politics* 7:127-191

Lister, Ruth. 1995. "Dilemmas in Engendering Citizenship." Economy and Society 24:1-40

Mandel, Hadas and Moshe Semyonov. 2005. "Family Policies, Wage Structures, and Gender Gaps: Sources of Earnings Inequality in 20 Countries." *American Sociological Review* 70:949-967

Mandel, Hadas and Moshe Semyonov. 2006. "A Welfare State Paradox: State Intervention and Women's Employment Opportunities in 22 Countries." *American Journal of Sociology*, forthcoming

McCall, Leslie. 2001. *Complex Inequality: Gender, Class, and Race in the New Economy*. New York: Routledge

McNamee, Stephen J. and Reeve Vanneman. 1987. "The Class Structure of Job Rewards: A Canonical Analysis." *Work and Occupations* 14:190-215

Meyer, Traute. 1994. "The German and British Welfare States as Employers: Patriarchal or Emancipatory?" Pp. 62-81 in *Gendering Welfare States*, edited by D. Sainsbury. London: Sage Publications

Mishra, Ramesh. 1994. "Typologies of the Welfare State and Comparative Analysis: The "Liberal" Welfare State." *Journal of International & Comparative Social Welfare* 10:90-106

Misra, Joya, Michelle J. Budig, and Stephanie Moller. 2005. "Employment, Wages, and Poverty: Reconciliation Policies and Gender Equity." Paper presented at the Annual Conference of the Research Committee on Poverty, Social Welfare and Social Policy, Northwestern University, September 8-10

Misra, Joya and Stephanie Moller. 2005. "Familialism and Welfare Regimes: Poverty, Employment, and Family Policies." Working Paper No. 399, Luxembourg Income Study, Luxembourg, January

Morris, Martina and Bruce Western. 1999. "Inequality in Earnings at the Close of the Twentieth Century." *Annual Review of Sociology* 25:623-657

Nordberg, Leif, Irmeli Penttila, and Susanna Sandstrom. 2001. "A Study on the Effects of Using Interview Versus Register Data in Income Distribution Analysis with an Application to the Finnish ECHP-Survey in 1996." CHINTEX Working Paper No. 11/2001, 2 November, http://www.destatis.de/chintex/download/wp8\_01.pdf

O'Connor, Julia S. 1993. "Gender, Class and Citizenship in the Comparative Analysis of Welfare State Regimes: Theoretical and Methodological Issues." *The British Journal of Sociology* 44:501-518

O'Connor, Julia S. 1996. "From Women in the Welfare State to Gendering Welfare State Regimes." Current Sociology 44:1-124 O'Connor, Julia S., Ann Shola Orloff, and Sheila Shaver. 1999. *States, Markets, Families: Gender, Liberalism, and Social Policy in Australia, Canada, Great Britain, and the United States*. Cambridge, UK; New York: Cambridge University Press

OECD. 2002. "Women at Work: Who Are They and How Are They Faring?" Pp. 61-125 in *OECD Employment Outlook*. Paris: OECD

Orloff, Ann Shola. 1993. "Gender and the Social Rights of Citizenship - the Comparative Analysis of Gender Relations and Welfare States." *American Sociological Review* 58:303-328

Orloff, Ann Shola. 2002. *Women's Employment and Welfare Regimes: Globalization, Export Orientation and Social Policy in Europe and North America*. Geneva: United Nations Research Institute for Social Development (UNRISD), Social Policy and Development, paper No. 12

Pedersen, Susan. 1993. Family, Dependence, and the Origins of the Welfare State - Britain and France, 1914-1945. New York: Cambridge University Press

Petersen, Trond and Laurie A. Morgan. 1995. "Separate and Unequal: Occupation-Establishment Sex Segregation and the Gender Wage Gap." *American Journal of Sociology* 101:329-365

Pontusson, Jonas, F. David Rueda, and Christopher Way. 1999. "The Role of Political Institutional Variables in the Making of Gendered Patterns of Wage Inequality: A Comparative Analysis of OECD Countries." Institute for European Studies, San Giacomo Working Paper 99.4, Cornell University, Ithaca NY

Rein, Martin. 1985. "Women's Employment and Social Welfare." Pp. 37-57 in *The Future of Welfare*, edited by R. Klein and M. O'Higgins. Oxford: Blackwell

Reskin, Barbara F. and Patricia A. Roos. 1990. *Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations*. Philadelphia: Temple University Press

Rice, Patricia. 1999. "Gender Earnings Differentials: The European Experience." World Bank Policy Research Report on Gender and Development, Working Paper No. 8, Nov., http://www.worldbank.org/gender/prr/wp8.pdf

Robson, P., S. Dex, F. Wilkinson, and O. S. Cortes. 1999. "Low Pay, Labour Market Institutions, Gender and Part-Time Work: Cross-National Comparisons." *European Journal of Industrial Relations* 5:187-207

Rosenfeld, Rachel A. and Arne L. Kalleberg. 1990. "A Cross-National Comparison of the Gender Gap in Income." *American Journal of Sociology* 96:69-106

Rubery, Jill, Francesca Bettio, Colette Fagan, Friederike Maier, Sigrid Quack, and Paola Villa. 1997. "Payment Structures and Gender Pay Differentials: Some Societal Effects." *The International Journal of Human Resource Management* 8:131-149

Sainsbury, Diane (ed.). 1994. Gendering Welfare States. London: Sage Publications

Sainsbury, Diane (ed.). 1996. *Gender, Equality, and Welfare States*. Cambridge: Cambridge University Press

Scharpf, Fritz W. 2001. "Employment and the Welfare State. A Continental Dilemma." Pp. 270-283 in *Comparing Welfare Capitalism: Social Policy and Political Economy in Europe, Japan and the USA*, edited by B. Ebbinghaus and P. Manow. London: Routledge

Scruggs, Lyle and James Allan. 2006. "Welfare-State Decommodification in 18 OECD Countries: A Replication and Revision." *Journal of European Social Policy* 16:55-72

Shalev, Michael. 2006. "Limits and Alternatives to Multiple Regression in Comparative Research." *Comparative Social Research*, forthcoming

Sorensen, Annemette and Sara McLanahan. 1987. "Married Women's Economic Dependency, 1940-1980." *American Journal of Sociology* 93:659-687

Tomaskovic-Devey, Donald. 1993. "The Gender and Race Composition of Jobs and the Male/Female, White/Black Pay Gaps." *Social Forces* 72:45-76

Walby, Sylvia. 1997. Gender Transformations. London: Routledge

Warren, Tracey. 2003. "A Privileged Pole? Diversity in Women's Pay, Pensions and Wealth in Britain." *Gender, Work and Organization* 10:605-628

Whitehouse, Gillian. 1992. "Legislation and Labour Market Gender Inequality: An Analysis of OECD Countries." Work, Employment and Society 6:65-86

Wright, Erik Olin. 1997. *Class Counts: Comparative Studies in Class Analysis*. Cambridge: Cambridge University Press

Wright, Erik Olin. 2001. "A Conceptual Menu for Studying the Interconnections of Class and Gender." Pp. 28-38 in *Reconfigurations of Class and Gender*, edited by J. Baxter and M. Western. Stanford, CA: Stanford U Press

Wright, Erik Olin (ed.). 2005. *Approaches to Class Analysis*. Cambridge, UK; New York: Cambridge University Press

Wright, Erik-Olin, Janeen Baxter, and Gunn-Elisabeth Birkelund. 1995. "The Gender Gap in Workplace Authority: A Cross-National Study." *American Sociological Review* 60:407-435

Table 3: The Contribution of Unequal Class Representation to the Gender Wage Gap<sup>1</sup>

	(1)	(2)	(3)	(4)	(5)
Countries	Omi aim al	Hypothetical gender wage gap		% change	
	Original - gender wage gap	using Italy's class representation	using Sweden's class representation	using Italy	using Sweden
Sweden	13.6	2.9	13.6	-79	0
Finland	19.0	4.4	18.6	-77	-3
Denmark	15.4	3.6	14.4	-77	-7
Norway	16.2	4.0	16.6	-75	2
UK	21.9	5.5	22.6	-75	4
Austria	15.4	4.7	18.2	-70	18
Canada	17.0	5.2	20.2	-69	19
USA	21.4	6.7	27.2	-69	27
Germany	15.5	5.0	19.8	-68	28
Switzerland	16.8	5.8	24.1	-65	44
Netherlands	12.8	4.7	18.2	-63	43
Australia	11.2	4.4	18.8	-61	68
Ireland	11.7	5.2	21.1	-56	81
France	11.9	5.3	21.4	-55	80
Belgium	8.5	4.0	15.6	-53	84
Spain	9.6	5.8	24.1	-39	152
Italy	4.1	4.1	17.0	0	313
Mean	14.2	4.8	19.5	-62	55
SD	4.6	0.9	3.7	19	79

T Sorted in ascending order by column 4.

Table 4: The Contribution of Class Inequality to the Gender Wage Gap<sup>1</sup>

	(1)	(2)	(3)	(4)	(5)
Countries	Original	Hypothetical gender wage gap		% change	
	Original - gender wage gap	using USA class inequality	using Sweden's class inequality	using USA	using Sweden
USA	21.4	21.4	10.7	0	-50
Spain	9.6	10.7	4.8	12	-50
UK	21.9	26.3	13.1	20	-40
France	11.9	15.0	7.1	27	-40
Ireland	11.7	15.2	7.2	30	-38
Canada	17.0	22.7	11.2	34	-34
Germany	15.5	21.7	0.7	41	-31
Austria	15.4	22.3	10.8	45	-30
Switzerland	16.8	24.4	11.9	46	-29
Netherlands	12.8	18.8	9.1	47	-29
Finland	19.0	28.0	14.2	47	-25
Australia	11.2	16.5	8.2	48	-27
Italy	4.1	6.7	2.9	62	-30
Norway	16.2	27.7	14.2	70	-13
Belgium	8.5	15.1	7.3	77	-15
Denmark	15.4	29.1	14.7	89	-5
Sweden	13.6	27.2	13.6	100	0
Mean	14.4	20.6	10.1	47	-29
SD	4.7	6.6	3.5	27	14

Sorted in ascending order by column 4.

Chart 1
Three Welfare State Dimensions
(Bubbles show welfare state employment)

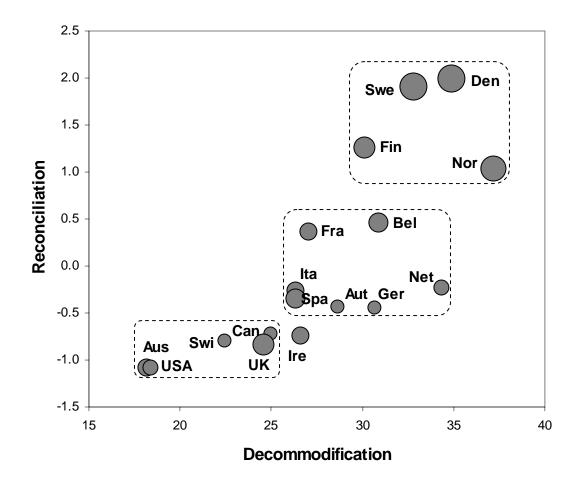
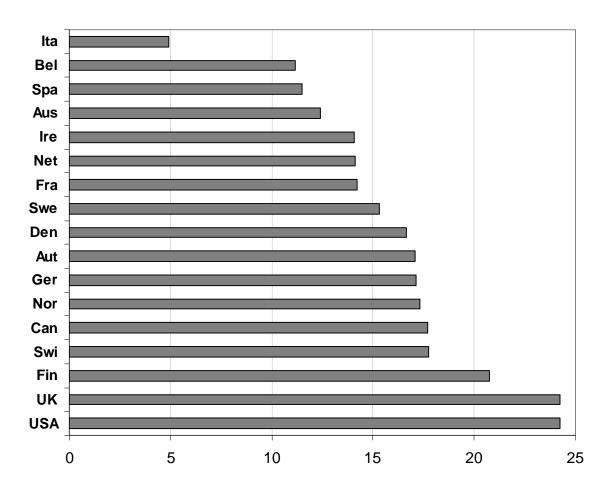
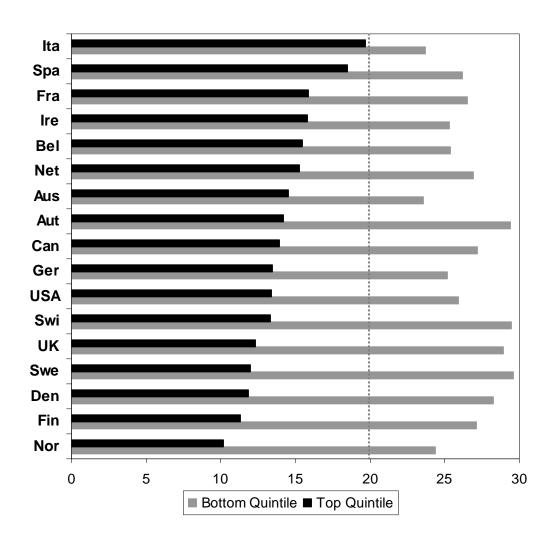


Chart 2 National Gender Wage Gaps



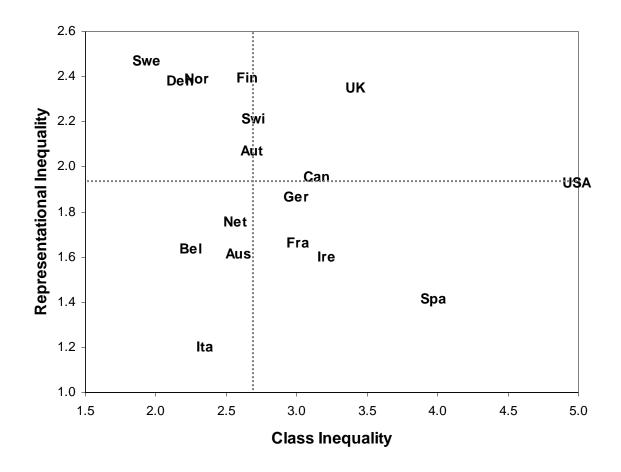
41

Chart 3
Women's Representation by Quintile



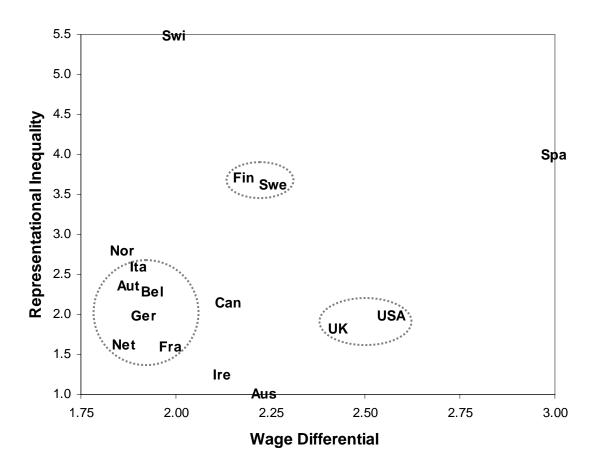
42

Chart 4
Decomposition of the Gender Wage Gap



43

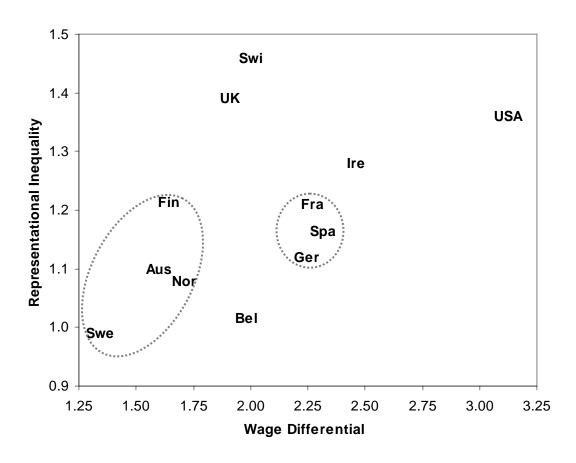
Chart 5
Two Components of the Gender Gap among Managers



Y AXIS: Ratio of % women in the bottom and top hourly wage tertiles of managers.

X AXIS: Ratio of the median hourly wage in the top and bottom tertiles of managers.

Chart 6
Two Components of the Gender Gap among Menials



 $\ensuremath{\mathsf{Y}}$  AXIS: Ratio of % women in the bottom and top hourly wage tertiles of menials.

X AXIS: Ratio of the median hourly wage in the top and bottom tertiles of menials.

Appendix 1
Information on Micro Datasets\*

	Dataset and Year	Effective Sample Size
Australia	HILDA - Household Income & Labour Dynamics, 2000	4,695
Austria	ECHP national panel (LIS), 1994	1,757
Belgium	ECHP national panel (LIS), 2000	2,047
Canada	SLID - Survey of Labor & Income Dynamics (LIS), 2000	22,660
Denmark	Danish Leisure Study, 1993	729
Finland	Income Distribution Survey (LIS), 1991	8,911
France	Household Budget Survey (LIS), 1994	8,279
Germany	German Socioeconomic Panel, 2000 (GSOEP)	8,122
Ireland	ECHP national panel (LIS), 2000	1,768
Italy	IBFI - Bank of Italy Income & Wealth Survey (LIS), 2000	4,920
Netherlands	SEP - Socioeconomic Panel (LIS), 1999	3,483
Norway	Norwegian Level of Living Survey, 1995	1,538
Spain	ECHP national panel (LIS), 2000	3,147
Sweden	LNU - Level of Living Survey, 2000	2,308
Switzerland	SHP - Swiss Household Panel, 1999-2003	2,600
UK	FRS - Family Resources Survey (LIS), 1999	16,424
USA	CPS - Current Population Survey (LIS), 2000	42,650

 $<sup>^{\</sup>star}$  "LIS" denotes that the dataset was harmonized and supplied by the Luxembourg Income Study (<a href="http://www.lisproject.org">http://www.lisproject.org</a>) .

## Appendix 2

## Calculation of Counterfactual Effects

The Gender Ratio in country i (GRi) is the female to male wage ratio:

$$GR_{i} = \frac{F_{i}}{M_{i}} \tag{1}$$

where Mi and Fi denote the mean wage of males and females respectively in country i.

Suppose that we divide the population into j classes. In the present case, where classes are defined according to wage quintiles, the gender-specific mean wages in each class will be very similar and almost equal to the class grand mean. Let  $\overline{X}_{ij}$  denote the grand mean wage of class j in country i. Let  $p_{ij}$  be the proportion of males in country i in class j (out of all working males in country i), and  $q_{ij}$  the respective proportion of females. We can re-express the gender ratio in terms of the class means and proportions:

$$GR_{i} = \frac{\sum_{j=1}^{J} q_{ij} \overline{X}_{ij}}{\sum_{j=1}^{J} p_{ij} \overline{X}_{ij}}$$
(2)

The gender ratio between two countries can be attributed to differences in the distribution of the two genders between different classes or to the distribution of wages among classes. To distinguish between the two, we present counterfactual gender ratios that calculate the measure GR using different distributions of gender or wage. For example, the expected gender ratio in country i if the gender distribution was as in country 1 is calculated by replacing in Equation 2 the variable proportions  $p_{ij}$  and  $q_{ij}$  with the constant proportions that hold for country 1:

$$GR_{i}(proportions_{1}) = \frac{\sum_{j=1}^{J} q_{1j} \overline{X}_{ij}}{\sum_{j=1}^{J} p_{1j} \overline{X}_{ij}}$$
(3)

Similarly, the counterfactual gender ratio in country i if the wage distribution is fixed at that of country 1 is:

$$GR_{i}(wage_{i}) = \frac{\sum_{j=1}^{J} q_{ij} \overline{X}_{1j}}{\sum_{j=1}^{J} p_{ij} \overline{X}_{1j}}$$

$$(4)$$

Appendix 3
Intraclass Inequality: Sectoral Effects and Sample Sizes

	Managerial Class			Menial Services Class		
Country	% of	Female	No. of	% of	Female	No. of
	women	public-private	cases	women in	public-	cases
	in public sector*	wage differential		public sector*	private wage differential	
	Sector	(percentiles)*		Sector	(percentiles)*	
Australia	29	12.1	445	19	6.9	597
Canada	23	12.5	1,487			
UK			2,539			1,368
USA	17	0.3	4,182	13	6.0	4,733
Finland			600			1,245
Norway	67	-3.6	134	51	11.9	201
Sweden	46	-9.6	119	71	7.1	362
Austria			85			
Belgium			132			95
France	33	6.6	769			722
Germany			266	20	6.0	746
Italy	49	2.9	481			
Netherlands	28	3.2	373			
Spain			80			
Ireland			135	23	6.4	118
Switzerland	28	9.7	225	33	11.8	157

<sup>\*</sup> UK & Finland missing information on sector. Data not shown for some other countries because there are fewer than 10 cases in one or more sector.