A Welfare State Paradox: State Interventions and Women's Employment Opportunities in 22 Countries[1]

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This study explores the role played by the welfare state in affecting women's labor force participation and occupational achievement. Using data from 22 industrialized countries, the authors examine the consequences of state interventions for both women's employment patterns and gender inequality in occupational attainment. The findings reveal a twofold effect: developed welfare states facilitate women's access into the labor force but not into powerful and desirable positions. Specifically, nations characterized by progressive and developed welfare policies and by a large public service sector tend to have high levels of female labor force participation, along with a high concentration of women in female-typed occupations and low female representation in managerial occupations. The findings provide insights into the social mechanisms underlying the relations between welfare states' benefits to working mothers and women's participation and achievements in the labor market.

In recent decades, an increasing number of researchers have begun studying the role played by the state in affecting women's economic activities and labor market positions. The growing research on this topic points to the role of the state as legislator and implementer of social and family services, as well as to the role of the welfare state as an employer. These two bodies of literature operate under the premise that the welfare state, whether as a legislator or as an employer, strongly affects women's participation rates and economic opportunities. More specifically, researchers

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have suggested that progressive social policies and a large public service sector are likely to provide women with better opportunities to join the economically active labor force, and, indeed, to increase women's economic activities (see Rein 1985; Esping-Andersen 1990; Alestalo, Bislev, and Furaker 1991; Kolberg 1991; Kolberg and Andersen 1991; Daly 2000; Korpi 2000; Orloff 2002; Gornick and Meyers 2003).

Whereas the impact of the welfare state on women's labor force participation is widely studied, little research has further investigated the ways that state interventions affect women's occupational opportunities.[2] To address this lacuna, we seek in this article to examine systematically the impact of the welfare state on women's integration into the labor market, their working time, and their opportunities to attain powerful and elite occupational positions. We argue that the state, in its roles as a legislator and implementer of family policies, and in its role as an employer, creates sheltered labor markets for women—labor markets in which women's rights are protected and secured. By so doing the welfare state contributes to increased women's labor force participation, enhances the economic independence of women and mothers, and strengthens their power within the household and in society at large (i.e., Sorensen and McLanahan 1987; Hobson 1990; Bianchi et al. 1999). However, these state actions do not enhance women's occupational and economic achievements, since none of them seriously challenge the traditional distribution of market-family responsibilities between men and women. On the contrary, adjusting the demands of employment to women's home duties or allowing working mothers reduced working hours and long leaves from work are likely to preserve women's dominant roles as mothers and wives. As such, these interventions impede women's abilities to compete successfully with men for powerful and lucrative occupational positions.[3]

In what follows we first develop the theoretical rationale in which our arguments are embodied. Next, we test our theoretical expectations with data for 22 industrialized countries, and, finally, we discuss the findings in light of sociological theories on welfare-state policies and gender inequality. By doing so, we will be in a position to better understand the ways through which the welfare state affects the economic participation and occupational attainment of women.

[2] For a notable exception see the recent study by Chang (2004) of the impact of state policies on gender occupational segregation in less developed countries.

[3] See Mandel and Semyonov (2005) for the consequences of these impediments for gender earnings gaps.

THEORETICAL CONSIDERATIONS

The Welfare State and Women's Labor Force Participation

The massive entrance of women into the labor markets of Western societies in recent decades has been affected not only by market forces but also by state interventions. The impact of the state on women's employment opportunities is multidimensional and can be attributed to a series of factors, especially to the roles of the state as a legislator, as a provider of social services, and as an employer. The extensive literature on the topic is generally divided into two separate bodies of research, one that focuses on the role of the state as an implementer of family services (Gauthier 2000; OECD 2001; Kamerman 2000; Orloff 2002; Wilensky 2002; Gornick and Meyers 2003; Kenworthy, forthcoming), and one that focuses on the role of the welfare state as an employer (e.g., Rein 1985; Rose 1985; OECD 1987; Cusack, Notermans, and Rein 1989; Esping-Andersen 1990; Alestalo et al. 1991; Kolberg 1991; Kolberg and Esping-Andersen 1991).

In this study we combine the two bodies of research in order to better capture the effects of state interventions on women's employment opportunities. Specifically, we focus on the role of the state as a legislator and as an activator of programs aimed to decrease the conflict between family responsibilities and work, in addition to its role as an employer. For the sake of simplicity we will use the term "welfare state" to refer to all three roles.

In its role as a legislator and family service provider, the state implements and activates a variety of support systems and provides services and benefits targeted mostly at families with children. These programs and benefits, often referred to in the literature as "family policies," reflect both the state's responsibility for the care of young children and its effort to facilitate employment for mothers, by providing women with the necessary conditions to combine work with family responsibilities (Kamerman 1991, 2000; Gauthier 2000; OECD 2001; Orloff 2002; Wilensky 2002; Gornick and Meyers 2003; Kenworthy, forthcoming).

Comparative studies that focus on the relations between family policies and women's labor force participation find a positive correlation between the two (Esping-Andersen 1999; Daly 2000; Korpi 2000; Orloff 2002; Gornick and Meyers 2003; Kenworthy, forthcoming). For example, in the Scandinavian countries, which represent the social democratic welfare regime, women's high levels of employment are supported by generous family policies in the form of universal benefits to working mothers. These characteristics stand in contrast to the other welfare regimes (i.e., liberal or market economies and the conservative welfare regime), in which family policies are less developed and women's labor force participation rates

are usually lower. The reduced role of the state as a family service provider in the latter regimes leaves a greater role either to the family itself or to the private market (Esping-Andersen 1990, 1999).

Variation in the scope of family policies is evident across countries, as well as across welfare regimes. While ranking countries on continuous scales of family policies, Gornick and her associates (e.g., Gornick, Meyers, and Ross 1997; Gornick and Meyers 2003) found a positive and strong association between family policy indices and mothers' rates of labor force participation, reaffirming the argument that such state interventions are likely to facilitate women's, especially mothers', economic activity.

A different body of research links women's economic activities to the role of the welfare state as an employer. Specifically, the rise of the welfare state has led to a substantial expansion of public employment, especially in health, education, and social services. As a provider of public services—a sector overwhelmingly dominated by women—the state has become a major employer of women. By offering a large supply of care and service jobs (which are traditionally designed for women and which partly replace their care duties at home) along with convenient working conditions, the public service sector facilitates women's entry into the labor force by reducing their domestic responsibilities on the one hand, and by supplying them with new job opportunities on the other hand (e.g., Rein 1985; Rose 1985; OECD 1987; Cusack, Notermans, and Rein 1989; Esping-Andersen 1990; Alestalo et al. 1991; Kolberg 1991; Kolberg and Andersen 1991).

The Welfare State and Gender Occupational Inequality

Whereas researchers agree that both the development of family policies and the extension of public services enhance women's opportunities to become economically active, we know very little about the implications of the welfare state for women's occupational opportunities. In what follows we argue that state activities, while facilitating women's entrance into the labor market, do not facilitate their entry into high-authority and elite positions. Rather, the very same characteristics—generous family policies and a large public service sector—seem to reproduce the gendered division of labor and, in effect, decrease women's chances of joining desirable occupational positions. Put differently, state efforts to facilitate and protect women's work may result in lowering and hardening what is usually referred to in the sociological literature as "the glass ceiling."

State-provided benefits can affect women's occupational opportunities and influence their working patterns in a variety of ways. Paid maternity leaves, for example, although often viewed as paving the way for mothers back to the labor market, and thus strengthening women's ties to the labor market (OECD 2001), actually remove mothers from paid employ-

ment for several months. In countries where family policies are particularly generous (e.g., Finland and Sweden) paid maternity leave can last for an entire year, and in many other places (e.g., Austria, Belgium, France, Germany, Hungary, Italy, Denmark, and Norway) paid maternity leave can be extended with reduced compensation for up to two years and even longer (Kamerman 2000, table 2; Ferrarini 2003, table 2.3). Although paid maternity leave serves as a device through which women's employment rights are protected and secured, a long absence from paid employment may discourage employers from hiring women to positions of authority and power and thus handicap their ability to compete successfully with men for elite positions.

Likewise, institutional work arrangements, such as regulations mandating reduced working hours, can further depreciate women's economic outcomes (e.g., Jacobs and Gerson 2004, chap. 5). Part-time employment, for example, is a common arrangement that enables women to combine paid employment with unpaid work. Consequently, part-time work has become one of the major forms of employment for women in most industrial societies, where about one-third of all employed women work on a part-time basis (e.g., Blossfeld and Hakim 1997; Daly 2000; Orloff 2002).

Although part-time employment is not a direct product of states' policies, it is reinforced by regulation and protected by the welfare state. This is, indeed, the case in many Scandinavian states. In these countries (with Finland as a notable exception), part-time employment has become a common practice for many mothers. Yet, unlike other countries where part-time employment serves as an institutional mechanism through which mothers are incorporated into paid work (e.g., the Netherlands, the United Kingdom, Germany, Belgium, and Australia), in Scandinavia part-time employees are entitled to full social benefits, paid vacation, and job security (Borchorst 1994; Sundstrom 1997; Anxo and Flood 1998). The allocation of full benefits to part-time workers reflects the state's efforts to encourage and support women's economic activities, whether on a full-time or a part-time basis.

Part-time employment is not the only mechanism through which women's working hours are curtailed. In several European countries (e.g., Sweden, Denmark, France) working hours have been reduced through regulations that set the standard below the conventional 40 weekly hours (Sundstrom 1997; Gornick and Meyers 2003). Although reduced working hours can contribute to decreasing the conflict between work and family responsibilities for both parents, women are more likely than men to utilize this option.

Occupational discrimination.—The tendency of women to adopt reduced working hour arrangements and their tendency to take parental leave are likely to restrict their opportunities for occupational mobility,

as they foster employers' reluctance to hire women and to promote them to positions that require costly investment in firm-specific knowledge, as required in most powerful and elite positions. Tomaskovic-Devey and Skaggs (2002), following Tam's (1997) findings, highlight the importance of "on-the-job training" for occupational mobility, and its consequences for gender occupational and wage inequality. They suggest that the limited access of women to firm-specific training is one of the most significant causes of their low occupational achievements compared to men.

One major explanation for the limited access of women to positions that require costly qualification and training periods can be cast within the framework of the "statistical discrimination model" (see also Tomaskovic-Devey and Skaggs 1999).[4] According to this theoretical model employers have limited access to information on their candidates' characteristics and future productivity. Therefore when searching for workers to fill jobs that require high training costs, employers are likely to discriminate against employees belonging to groups with statistically lower average levels of expected productivity (Phelps 1972; Aigner and Cain 1977).

In this article we contend that in well-developed welfare states where women's eligibility for social rights supports their absence from work, the exclusion of women from jobs which require costly firm-specific investment will be more acute. In labor markets where women as a group are more protected by regulations and legislation, and where they enjoy social rights that interfere with their work continuity, employers are expected to prefer male workers for positions that require investment in firm-specific human capital. In Hansen's (1997, p. 85) words: "If women have social rights that do not apply to men, or are seldom used by men, and the practice of these rights is unprofitable for employers, employers may choose to discriminate against female job applicants," as indeed has been demonstrated in many studies of gender inequalities in the Scandinavian labor markets (see, e.g., Hansen 1997; Asplund 1998; Hemstrom 1998; Longva and Strom 1998; Naur and Smith 1998).

The restricted ability of qualified women to enter high-paying jobs, and their limited promotion opportunities in positions of power and authority, can be viewed as part of the glass ceiling phenomenon—"the unseen, yet unbeatable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or

[4] Other explanations of occupational inequality between men and women focus mostly on the supply side, viewing women's occupational attainments as resulting from their own aspirations and preferences (Hakim 1997; Shu and Marini 1998), and as a rational choice (Polachek 1979) in an attempt to reconcile conflicts between family and work responsibilities.

achievements" (Federal Glass Ceiling Commission 1995, p. 4). Following other studies that have dealt with the glass ceiling (i.e., Dulepp and Sanders 1992; Wright, Baxter, and Birkelund 1995; Athey, Avery, and Zemksy 2000; Cotter et al. 2001) in this study we empirically define "powerful" or "high-level" positions as management positions. We argue that the invisible barriers of the "glass ceiling"—the barriers that prevent women from moving into positions of high authority and high earnings in organizations—are expected to be greater in well-developed welfare states where women are more protected by legislation that supports their absenteeism from the labor force and allows them reduced working hours.

The state as an employer.—The role of the welfare state as an employer completes our argument. With the expansion of public social services, many services have been transferred from the private sphere to the state domain. This process has a twofold effect on employment opportunities for women; first, it enables mothers to allocate more time to paid work, and second, it provides women with new job opportunities. Moreover, the public-welfare sector offers white-collar and service jobs, many of which are "female-typed" service and semiprofessional occupations. It also offers flexible employment hours and programs that tolerate paid absenteeism. As such, the public service sector has become one of the most preferred segments of employment for women (Rein 1985; Esping-Andersen 1990; Alestalo et al. 1991; Kolberg 1991; Hansen 1995, 1997; Gornick and Jacobs 1998). The nature of jobs in the public service sector, coupled with favorable and convenient work conditions, appears to channel women in disproportionate numbers into feminine occupational niches and away from lucrative and powerful positions. Hence, the expansion of the public service sector is likely to increase gender occupational segregation (Rein 1985; Alestalo et al. 1991; Hansen 1995, 1997).

Several studies have demonstrated that the overrepresentation of women in the exceptionally large Swedish and Danish public sectors contributes to the lessening of their economic gains (Gornick and Jacobs 1998; Datta Gupta, Oaxaca, and Smith 2000). Feminist scholars have also pointed out that the rise of the welfare state, accompanied by a massive entrance of women into the labor force, did not alter the traditional division of labor between men and women. Rather, it actually transferred the gendered division of labor from the private sphere into the public domain. In this process traditional gender roles are perpetuated; women are disproportionately channeled to public services and care roles, while men get hold of more desirable jobs (Hernes 1987; Siim 1988; Langan and Ostner 1991; O'Connor 1993; Chang 2000). Hernes referred to this process in terms of "the family 'going public'" where "women have become clients and employees of a highly developed welfare state with a large public service sector" (Hernes 1987, pp. 32, 37).

In fact, a high concentration of women in the protected public sector and the practice of statistical discrimination by employers are not mutually exclusive but rather interdependent. Women's job preferences are influenced by both employers' behavior and labor market opportunities. In labor markets where employers are reluctant to hire women to powerful and high positions, it is less likely that women would be motivated to compete with men for such positions. On the other hand, a large public service sector, which offers job protection and convenient working conditions, is likely to attract women. Although we cannot distinguish between employees' and employers' preferences, these two mechanisms are interrelated; their negative impact on women's occupational attainments are expected to be more pronounced in countries with a highly developed welfare state.

To sum up our arguments: we contend that the massive entrance of women into the labor force of well-developed welfare states has not been accompanied by their equivalent entrance into powerful and desirable positions. On the contrary, in highly developed welfare states the "glass ceiling" has become lower and wider. Social rights attached to women's employment in advanced welfare states are likely to increase employers' tendency to discriminate against women in recruitment to powerful and elite positions in the private sector. Likewise, in a large "protected" public sector women are likely to be relegated mostly to female-typed service jobs. Although under these conditions the concentration of women in feminine niches can be seen as a rational choice, we tend not to view it as a purely free choice, mainly because job preferences are shaped by labor market opportunities, which cannot be separated from employers' discrimination.

Although some of these arguments have been advanced in the feminist literature for quite some time, they have not been systematically tested with cross-national comparative data. Thus, in the analysis that follows we provide a cross-national empirical examination of the hypotheses that developed welfare states—measured quantitatively by their family policies and size of the public service sector—are characterized by high rates of labor force participation among women, while at the same time they also exhibit a high concentration of women in female-typed occupations and low access for women to positions of power, authority, and high economic rewards.

DATA SOURCES, VARIABLES, AND MEASURES

Our data set has information on both individual-level and country-level characteristics. The individual-level variables were obtained from the

Luxembourg Income Study (LIS), which serves as an archive for comparable microdata sets for a large number of industrialized countries.[5] The analysis reported here was restricted to the 22 countries that provided detailed information on demographic and labor market attributes of men and women, ages 25–60, during the middle to the end of the 1990s.[6] Information on welfare state characteristics was obtained from a variety of secondary sources (a detailed list of the data sources for each country is displayed in app. table A1).

The individual-level variables included in the analysis are those traditionally employed in models predicting economic activity. They were recoded to ensure comparability as follows: gender (women = 1), marital status (married = 1), education (academic degree = 1), age (in years), number of children, and the presence of preschool children (= 1). Although the analysis reported here is primarily concerned with country-level effects, controlling for individual-level variations is crucial since one cannot assume similarity across countries in the distribution of men and women in such characteristics as education, age, marital status, and presence of children, all of which are significant determinants of economic activity and occupational achievement.

The dependent variables used in the analysis include two indicators of women's rate of labor force participation, an indicator for the amount of participation (i.e., part-time work vs. full-time employment), and three indicators of gender occupational inequality. The two indicators of participation are rate of labor force participation among women ages 25–60 and rate of participation among mothers of preschool children, respectively. Amount of participation is based on Hakim's (1997) distinction between four categories of employment: full-time employment (more than 39 weekly hours), reduced-hours employment (30–39 weekly hours), half-time employment (15–29 weekly hours), and marginal employment (under 15 weekly hours). Gender occupational inequality was measured by the net odds (women relative to men) to be employed in an occupational category, according to three variables. The first variable captures women's access to powerful and elite positions by the net odds of women (relative to men) to attaining "managerial occupations." Since definitions of managers can vary across countries, and in order to capture confidently elite and top positions, an alternative is to estimate women's access to "lucrative-managerial occupations." While managerial occupations were defined according to the standard classification of occupations for each country, lucrative-managerial occupations were restricted to those that ranked in

[5] http://www.lisproject.org.

[6] Data for Norway were based on the Norwegian Level of Living Survey 1995.

the top three deciles of the occupational earnings distribution.[7] The third variable captures women's occupational segregation. We measured the net odds of women (relative to men) of being employed in "female-typed occupations." Female-typed occupations were defined according to two combined criteria: the relative proportion of women in an occupational category at the two-digit occupational classification level and a statistical significance test.[8]

The key independent variable utilized in the analysis is an index that reflects the overall protection that the welfare state provides to working mothers (see Mandel and Semyonov 2005). It is designed to capture state interventions that affect the employment of women via both family policies and state employment (hereafter WSII or Welfare State Intervention Index). Following previous researchers (i.e., Gornick, Meyers, and Ross 1997; Korpi 2000; Wilensky 2002; Gornick and Mayers 2003) we relied on indicators that represent the scope of family policies (i.e., paid maternity leave and publicly funded day-care facilities). In addition, we also included among the components of the index an indicator of the size of the public service sector. It serves us as a proxy for the volume of public services provided by the state and the relative magnitude of the welfare state as an employer.

The three indicators were combined to construct the index: the number of fully paid weeks of maternity leave (number of paid weeks multiplied by the percentage of wage replacement during the leave), the percentage of preschool children in publicly funded day-care facilities, and the percentage of the workforce employed in the public welfare sector (public health, education, and welfare). Each of the three components captures somewhat different aspects of the state's activities. Maternity leave policy indicates the benefits that the state offers to working mothers, while publicly funded child-care facilities and the size of the public service sector capture the prevalence of social services provided by the state and the demand for female labor. We believe that when combined into an index the three components represent a broad phenomenon that transcends the unique effect of each component. The index was constructed using the

[7] The LIS variable "pocc," combined (when relevant) with the LIS variables "pactiv" and "ptypewk," which provide information on occupational activity in some countries.

[8] According to the first criterion the proportion of women in an occupation should exceed 150% of the female proportion of a country's work force. Since the absolute size of occupations varies substantially across countries, the second criterion was a *t*-test for statistical difference between proportions (of men and women) in each detailed occupational category. Occupations in which the proportion of women was both higher and statistically different from the proportion of men (at $P < .01$) were coded as female-typed occupations. Since some countries did not provide detailed occupational categories, data on this variable were available for only 19 countries.

first principal component of a factor analysis and was scaled to range between 0 and 100.[9]

In addition to the theoretical measures we also included in the analysis a series of country-level control variables that were used in previous comparative studies on related topics (i.e., gender occupational segregation and wage inequality; see, e.g., Charles [1992], Blau and Kahn [1995], Sjoberg [2004]). These variables are income inequality (measured by the Gini index[10]), economic development (measured by GDP per capita[11]), unemployment rate (OECD 2006[12]), and gender egalitarianism (estimated by factor analysis using attitudinal data regarding gender and family roles collected by the International Social Survey Program[13]). Other contextual variables such as the level of "postindustrial economic structure" (commonly measured by the size of the service sector [Charles 2003]), "left government," or "socialist welfare state" (Siaroff 2000) were not included in the analysis since they are endogenous to our key independent variable—the welfare state index. The country-level control variables enable us to examine whether and to what extent these variables could be driving relationships between the WSII and gender occupational inequality.

METHOD OF ANALYSIS AND FINDINGS

Method

We start the analysis by plotting correlations between the WSII, women's labor supply (participation and working hours), and measures of gender occupational inequality. Gender occupational inequality was estimated through a series of logistic regression equations, one for each country, predicting the odds of employment in each occupational category as a function of gender, marital status, age, education, number of children, and the presence of preschool children. The exponent of the coefficient for gender in each equation represents the relative odds of women (vs.

[9] All three indicators are highly and positively correlated, as reflected in their factor loadings: WSII = .828 × maternity + .721 × child care + .845 × public services (variance explained 64%).

[10] Data were taken from the LIS Web site (see n. 5) and refer to years 1990–97.

[11] Data were taken from Penn World Tables, Center for International Comparisons (CIC), University of Pennsylvania. The data pertain to 1996. http://pwt.econ.upenn.edu/php_site/pwt6n_form.php.

[12] Data are standardized and were taken from the OECD (2004, statistical annex, table A [data refer to 1995, except Israel of which the data refer to 1997]).

[13] The selection of items for the construction of this index was based on Sjoberg (2004). Data for most countries were taken from the 1994 module and for a few countries from the 2002 module. Belgium and Luxembourg do not provide data for this variable.

men) to be employed in an occupational category (managerial, lucrative-managerial, or female typed), net of all other variables included in the equation. We believe these measures capture the essence of gender occupational inequality as discussed in the theoretical section.

We continue the analysis by employing a logistic hierarchical linear model (HLM) to estimate the impact of the WSII on the odds of labor force participation or employment in a specific occupational category, while controlling for both other country-level characteristics and variations in human capital attributes at the individual level. The HLM models can be represented by the following set of equations:

$$\log\text{-odds}(\text{manager})_{ij} = \beta_{0j} + \beta_{1j}(\text{gender})_{ij} + \boldsymbol{\beta}_j \mathbf{X}_{ij}. \tag{1}$$

At the individual level, the dependent variable—manager in this illustration—is a binary variable indicating whether a person is employed in a managerial position. The logistic regression models estimate the log-odds of being employed in a managerial position as a linear function of the covariates. The coefficient β_{0j} is the country-specific intercept, denoting the log-odds of being a manager in country j for a man with a vector of covariates with the average values.[14] "Gender" denotes whether the individual is male or female (coded 0 and 1, respectively), and its coefficient β_{1j} represents the gender log-odds gap in country j. $\mathbf{X}_{ij}$ and $\boldsymbol{\beta}_j$ are vectors of five independent variables (marital status, education, age, number of children, and presence of preschool child) and their respective coefficients. This equation allows the effects of all independent variables (β_{1j}–β_{6j}) and the intercept (β_{0j}) to vary across countries (i.e., to be random), assuming that their effects are not necessarily equal across countries.

At the second level, country characteristics are employed to explain cross-country differentials (the random effect of β_{0j} [intercept] and β_{1j} [gender]), as presented in equations (2)–(3):

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{WSII}) + \gamma_{02}X + \nu_{0j}, \tag{2}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{WSII}) + \gamma_{12}X + \nu_{1j}, \tag{3}$$

$$\beta_{kj} = \gamma_{k0} + \nu_{kj} \quad (k = 2, 3, 4, 5, 6). \tag{4}$$

In equation (2), the variation between countries in β_{0j} (the "baseline"/"average male" log-odds) is modeled as a function of contextual factors (the WSII and a vector of other country-level characteristics which are introduced as controls); ν_{0j} is the error term of the second level of the hierarchical model and is assumed to follow a normal distribution with

[14] All individual-level variables were centered around their grand mean.

mean zero and unknown variance. Our main interest is in equation (3), which represents the effect of the WSII on the gender odds gaps. β_{1j}—the dependent variable—denotes the effect of gender on the log-odds of being employed in a managerial position (i.e., countries' log-odds gap between men and women). The WSII is introduced to explain the variation across countries in these odds, net of a vector of country-level characteristics. A negative sign of γ_{11} would indicate that in countries ranking higher on the index women tend to have lower odds of being employed in a managerial position compared to men. Equation (4) estimates the average effect, across countries, of the individual-level control variables. Estimation of the model consisted of two steps. First, a separate logistic regression was fitted for each country according to model 1. Second, using the estimated coefficients and their standard errors, models 2–4 were estimated using the "V-known" approach (see Bryk and Raudenbush 1992, chap. 7).

Welfare State Intervention Index

The distributions of the index and its three components are displayed in figure 1 and in appendix table A1, respectively. The values reveal considerable variation across countries. The variation is most pronounced with regard to maternity leave, with an average of 17.3 weeks with full pay (SD = 11.1), and least pronounced with regard to publicly funded child-care facilities, with an average of 40.8% (SD = 13.7). The relative size of the public service sector ranges from 25% in Sweden and Denmark to 5% in Eastern European countries such as the Czech and Slovak Republics.

In general, the data presented by the index are highly correlated with previous scales of family policies and are in line with the tripartite welfare state regimes typology offered by Esping-Andersen (1990).[15] Countries traditionally classified as social democracies (e.g., Sweden, Denmark, Norway, and Finland, along with Israel) are at the top of the distribution, while those identified with the liberal regimes (e.g., the United States, Australia, Canada, and Ireland, along with Switzerland) are at the bottom of the distribution. Countries representing the conservative welfare regime (e.g., Italy and Spain, along with Eastern European countries) are at the middle of the index distribution. The high correlation of WSII with pre-

[15] For example, the Spearman correlation between the WSII and Korpi's rank on the "Dual Earner policy scale" is $r = .95$ (Korpi 2000, table 2). The Pearson correlation between the WSII and the Gornick-Meyers "index of family policy that affect families with children under the age of six" is $r = .92$ (Gornick and Meyers 2003, table C.3, index A).

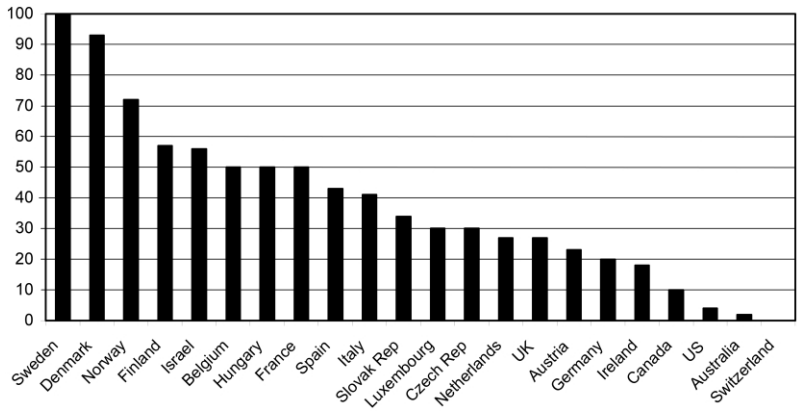

FIG. 1.—Distribution of the Welfare State Intervention Index in descending order

vious indices and its affinity with Esping-Andersen's typology strengthens our confidence in the ability of the index to capture the scope and essence of state interventions of the kind described here.

Labor Force Participation

At the outset of this article we suggested, following previous researchers, that women's economic activity is likely to be higher in developed welfare states. In figure 2 we display labor force participation rates for women ages 25–60 and for mothers of preschool children, respectively, for the 22 countries included in the analysis. On average, the rate of participation is higher when computed for all women ages 25–60 (mean = 63.6, SD = 12.6) than for mothers (mean = 56.5, SD = 14.5). The two distributions, however, are quite similar, with Scandinavian countries (i.e., Sweden, Norway, and Denmark) having the highest values and with Spain, Italy, and Ireland having the lowest values. While in most countries participation rates of mothers of preschool children are lower in comparison to the total population of women, in Sweden, Norway, and Denmark—countries with the highest rates of female participation—and in Spain and Italy—countries with the lowest rates—there are no significant differences between the two measures. Belgium is an exception, with low participation rates for the total population of women and very high participation rates among mothers of preschool children.

In figures 3 and 4 we plot rates of labor force participation for all women and for mothers of preschool children against the WSII. The data strongly support the expectation that a well-developed welfare state is associated with higher rates of labor force participation among women,

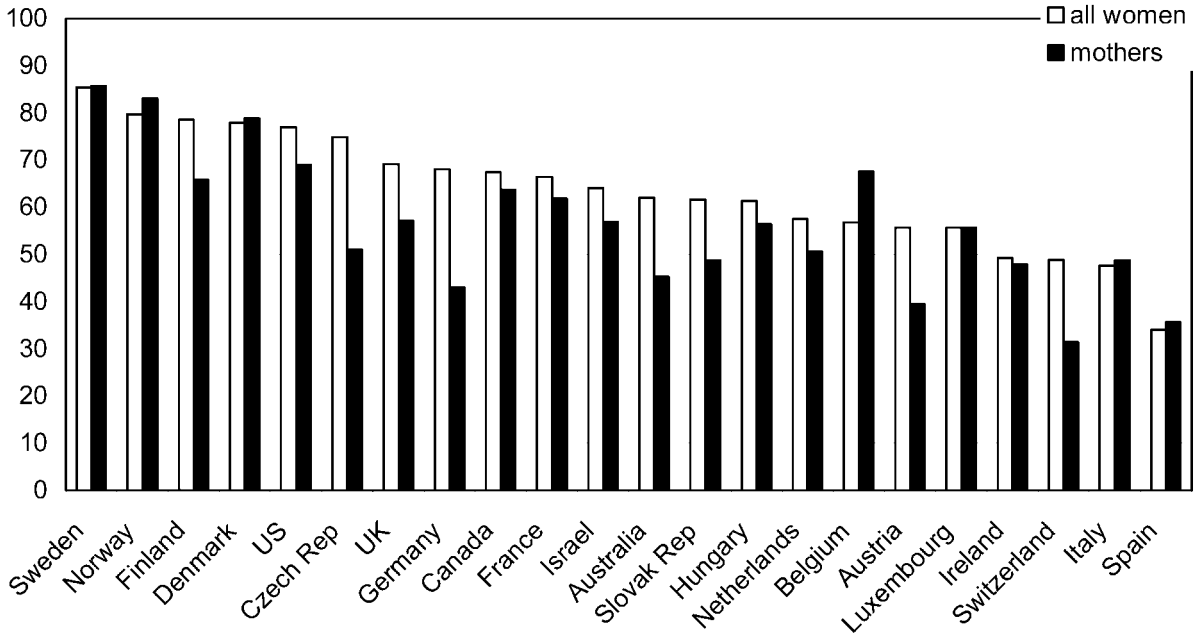

FIG. 2.—Labor force participation rates of women (ages 25–60) and mothers of preschool children

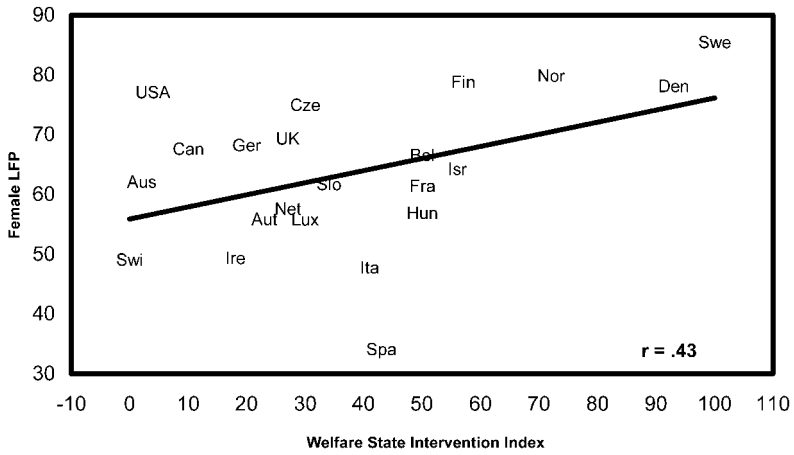

FIG. 3.—Labor force participation rates of women (ages 25–60) by Welfare State Intervention Index.

especially among mothers of preschool children. The correlation between WSII and rate of female labor force participation is $r = .43$; it becomes substantially stronger ($r = .70$) when participation rate is computed for the population of mothers of preschool children.

Similar positive and significant correlations are revealed when associating participation rates for mothers of preschool children with each of the three components of the WSII. Participation is positively associated with maternity leave policies ($r = .56$), with availability of child-care facilities ($r = .39$), and with the size of the public service sector ($r = .70$).[16] Our data, thus, support the thesis that countries characterized by well-developed family policies and by a large public welfare sector provide women, especially mothers of young children, with better opportunities to become economically active. These findings do not eliminate the possibility that rate of participation may affect, in turn, family policies and the size of the welfare sector (e.g., Huber and Stephens 2000). High participation rates of women may increase the demand for public services, on the one hand, and generate pressure on policy makers to provide such services, on the other hand.

It should be noted, however, that in Canada and the United States the rate of participation is higher than expected on the basis of the values of the WSII (see figs. 3 and 4). This could be explained by the fact that in

[16] The relatively low correlation between child-care facilities and the female participation rate reflects the state's responsibility for the care of young children regardless of its effort to facilitate employment for mothers.

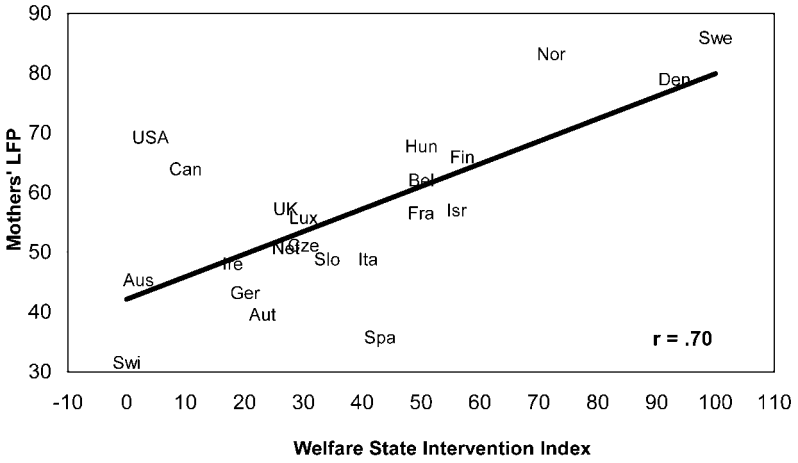

FIG. 4.—Labor force participation rates of mothers of preschool children by Welfare State Intervention Index.

market-oriented states, social services such as child-care institutions, and other benefits to working mothers such as maternity leave, are provided, to a large extent, by the private market. The WSII, therefore, underestimates other contextual characteristics that affect women's employment in a market-oriented welfare regime.

Part-Time Work

Labor force participation masks substantial differences in the extent of women's involvement in paid work. While there is very little variation in men's mode of employment (most men work on a full-time basis), women's mode of employment ranges from full-time employment to marginal employment. Figure 5 displays Hakim's (1997) four types of employment: full, reduced, half, and marginal (the figure pertains only to economically active women since the distributions for mothers of preschool children across countries are very similar and thus not shown here). The data reveal enormous variation across countries. Working hours are highest among women in the Czech Republic, Hungary, and the United States and lowest in the Netherlands, Sweden, Norway, Ireland, and the United Kingdom. Likewise, the proportion of women employed full-time is substantially higher in the former group of countries than in the latter group. Reduced working hours is the most common pattern of employment in Finland, Sweden, France, Norway, and Belgium—all are countries with a high score on the WSII—and least common in the Czech

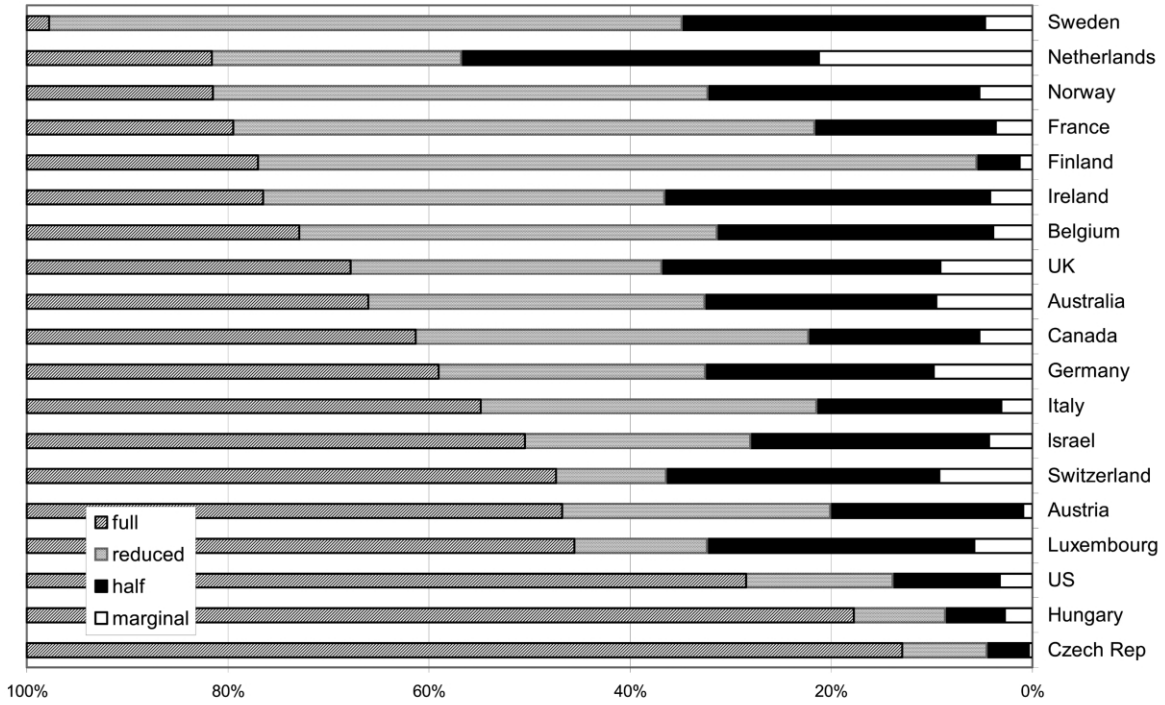

FIG. 5.—Distribution of working hours among employed women, ages 25–60

Republic, Hungary, Switzerland, Luxembourg, and the United States, countries with medium and low ranks on the index scale.

While working hours in general are not related to the development of welfare policies, some employment modes are more common in well-developed welfare states. Table 1 presents the correlations between WSII and Hakim's categories of working hours to examine whether and to what extent employment types are systematically related to the scope of welfare state interventions. The data reveal that reduced working hours is a more common employment mode in well-developed welfare states ($r = .569$ for all women, and $r = .592$ for mothers of preschool children). On the other hand, both marginal employment and full employment are less common in highly developed welfare states. As noted at the outset of the article, while high levels of part-time employment can be found across all welfare regimes (the United Kingdom, Australia, and the Netherlands are good examples of high levels of part-time employment in the conservative and liberal regimes) this mode of employment is more common in highly developed welfare states, where large proportions of mothers of young children are economically active and a large public service sector offers attractive part-time jobs with social benefits (e.g., paid vacation, job security).[17] The data presented here thus suggest that the state's efforts to "decommodify" part-time workers are likely to increase employment on a reduced-time basis, but not on a marginal or full-time basis.[18]

The expansion of the welfare state and the increase in part-time employment are also associated with the trend toward the postindustrial society. This trend, however, has been less evident in the former socialist countries than elsewhere (Drobnic 1997). Thus, in order to examine the extent to which the findings presented here were influenced by the inclusion of the former socialist countries in the analysis, the correlations between the WSII and mode of employment were estimated while excluding Hungary and the Czech Republic (table 1). The results provide additional support to the argument that welfare state policies are likely to increase

[17] Indeed, among the three components of our index, the size of the public service sector has the strongest relationship with working hours. It is positively correlated with women's ($r = 0.59$) and with mothers' ($r = 0.55$) tendency to work reduced hours and is negatively related to women's and mothers' tendency to work full-time (with respective correlations $r = -0.557$ and $r = -0.480$).

[18] It should be noted that reduced working hours is also a common phenomenon among men in developed welfare states such as Sweden, Norway, Finland, Belgium, and France. However, marginal and part-time jobs are very rare among men in all countries, and, except for Sweden, the overwhelming majority of men work on a full-time basis (i.e., more than 39 weekly hours).

TABLE 1
Correlation Matrix between the Welfare State Intervention Index and the Distribution of Working Hours across Countries

WSII	Marginal Work (0–14 Weekly Hours)	Half-Time Work (15–29 Weekly Hours)	Reduced-Hours Work (30–39 Weekly Hours)	Full-Time Work (40+ Weekly Hours)
All employed women	−.270	.033	.569**	−.419*
	(−.277)[a]	(.089)	(.680**)	(−.638**)
Employed mothers to preschool children	−.380	−.041	.592**	−.307
	(−.395)	(−.002)	(.672**)	(−.510*)
N	19 (17)	19 (17)	19 (17)	19 (17)

Source.—LIS 1990–2000 (see n. 5). Denmark, Slovak Republic, and Spain did not provide data on working hours.
[a] The correlations in parentheses exclude Eastern Europe.
* $P < 0.05$.
** $P < 0.01$.

women's tendency to work on a reduced-time basis ($r = 0.68$) and to decrease their tendency to enter full-time employment ($r = -0.64$).

To further examine the relationship between welfare policies and women's working hours we also correlated the WSII with OECD data on change in annual working hours between 1990 and 2002 across 15 of the countries included in the analysis (OECD 2004). The data (not shown here) reveal that during the last decade women have reduced their annual working hours in well-developed welfare states such as Finland, Sweden, and France but have gained between two and three hours in countries such as Canada, Ireland, the United Kingdom, and the United States (all ranked at the bottom of the index distribution). The overall correlation between changes in women's working hours and the WSII is $r = -0.40$.[19]

Gender Occupational Inequality

The findings discussed thus far reveal that developed welfare states are associated with high rates of women's, especially mothers', labor force participation, although often not on a full-time basis. Higher rates of labor

[19] The correlation between the index and the change in working hours remains similar ($r = -0.35$) when the change is measured in relative terms (women's change − men's change).

force participation among women, nevertheless, are only one aspect of gender equality. As previously argued, the state's efforts to minimize gender inequality in one sphere (i.e., labor force participation) could result in opposite effects in other spheres of gender inequality (i.e., occupational attainment). In the following section we analyze the relationship between welfare state interventions and the three measures of occupational inequality.

The findings presented in table 2 and figures 6 and 7 demonstrate that net of human capital and demographic characteristics, in an average country, women's odds of attaining a managerial position or a high-income managerial position are less than half of those of men with similar attributes. In contrast, women's relative odds of working in a female-typed job are almost 12 times higher than men. Women's relative odds of being in a managerial position are lowest in Denmark, the Slovak Republic, and the Netherlands (exp. $b = 0.24$, 0.26, 0.28, respectively) and highest in Canada, the United States, and Switzerland (exp. $b = 0.84$, 0.79, 0.78, respectively). While in most countries women's relative odds of employment in managerial and in lucrative-managerial jobs are very similar, in Austria, the United Kingdom, Spain, Australia, and Norway the former are much higher than the latter.[20] Women's concentration in female-typed jobs is highest in the United Kingdom and all the Scandinavian countries and lowest in Belgium, the Czech Republic, Ireland, and Switzerland.

To test the hypothesis that developed welfare states are associated with low representation of women in managerial and lucrative-managerial positions, and with high representation of women in female-typed jobs, we estimated the relations between WSII and each of our measures of occupational inequality. The findings presented in figures 8, 9, and 10 support our hypothesis: women's relative odds of entering both managerial and lucrative-managerial occupations tend to be lower in countries characterized by medium to high scores on the WSII than in countries with low scores. For example, women's odds of attaining managerial jobs are lower in Denmark, Norway, the Netherlands, and the Slovak Republic than in Canada, the United States, and Switzerland (the correlation between WSII and managerial and lucrative-managerial positions are $r = -.60$ and $r = -.45$, respectively). In contrast, women's relative odds of employment in female-typed occupations tend to be higher in countries ranked at the top of the welfare index distribution (e.g., the Scandinavian countries) and lower in countries ranked at the bottom (e.g., Switzerland,

[20] Possible explanations are self-employed defined as managers and a comparatively high concentration of female managers in the public sector, which is characterized by lower salaries when compared to the private sector.

TABLE 2
DESCRIPTIVE STATISTICS FOR THE THREE MEASURES OF OCCUPATIONAL INEQUALITY

	Managerial Positions	Lucrative-Managerial Positions	Female-Typed Occupations
Mean (SD)	.49 (.17)	.42 (.19)	11.9 (4.7)
Minimum	.24	.19	5.9
Maximum	.84	.84	25.9
N (countries) ...	22	22	19[a]

SOURCE.—LIS 1990–2000 (see n. 5).
NOTE.—Women's net odds of being employed in each occupational position as compared to men.
[a] Australia, Israel, and Italy did not provide detailed occupational categories and therefore were not included in this analysis.

the United States, and Ireland), with the correlation between WSII and female-typed jobs being $r = .57$.

Multilevel Analysis

In order to estimate accurately the net effect of the WSII on both rates of female labor force participation and gender-based occupational inequality we estimated a series of logistic HLM regression equations. The HLM enables us to estimate regression equations while simultaneously controlling for both individual-level and country-level characteristics. Whereas the large LIS samples enable inclusion of all relevant individual-level variables in the equations, we were limited in the number of country-level variables that could be included in the analysis. Therefore, country-level (second-level) control variables were introduced into the equations (in addition to the variables of theoretical interest) one at a time.

The results of the HLM are displayed in table 3. In model 1 we let labor force participation be a function of gender, age, marital status, education, number of children, and presence of preschool children (at the individual level) plus the WSII (at the country level). In models 2, 4, and 6, respectively, we predict the log-odds of attaining managerial occupations, lucrative-managerial occupations, and female-typed occupations as a function of the individual-level attributes plus WSII. In models 3, 5, and 7 we include female labor force participation rate as an additional country-level variable. The results of the analysis provide further insights into the differential impact of the welfare state on labor force participation and gender occupational inequality.

The findings revealed by model 1 reconfirm the hypothesis that welfare-state activities increase women's participation in the labor force. More specifically, the individual-level effects in model 1 suggest that the odds of labor force participation are likely to rise with academic education but

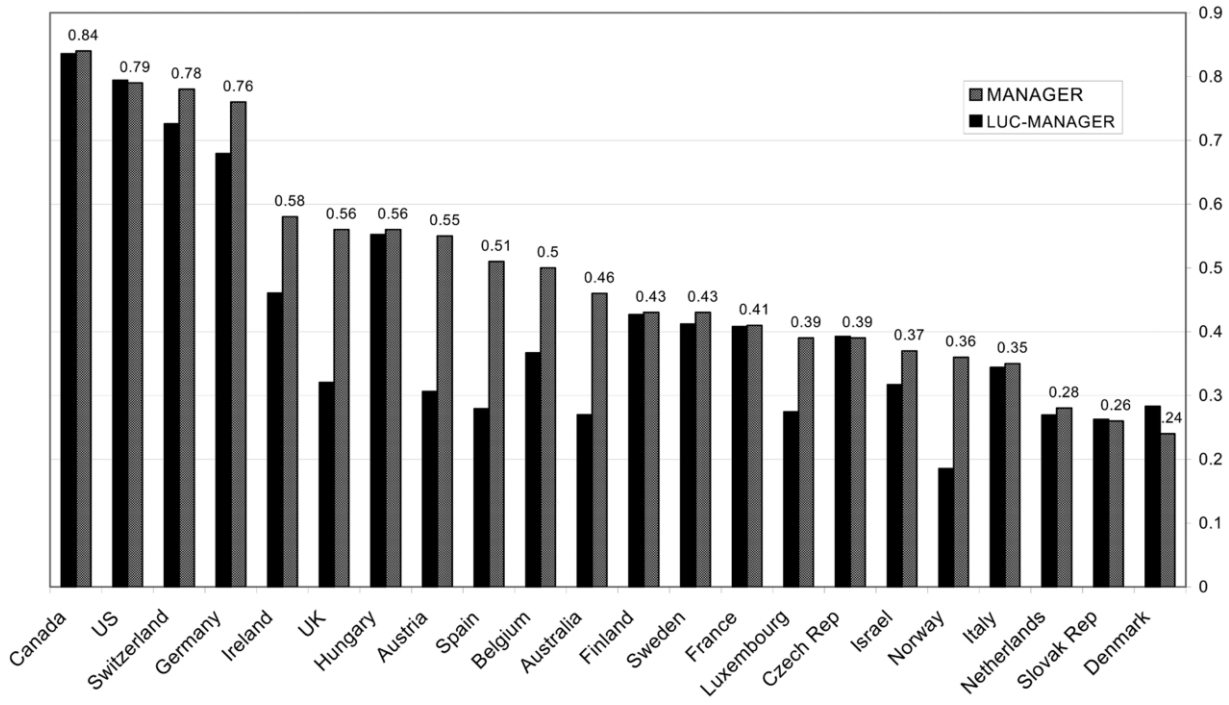

FIG. 6.—Distribution of the net odds (female = 1) to be employed in managerial and in lucrative-managerial positions

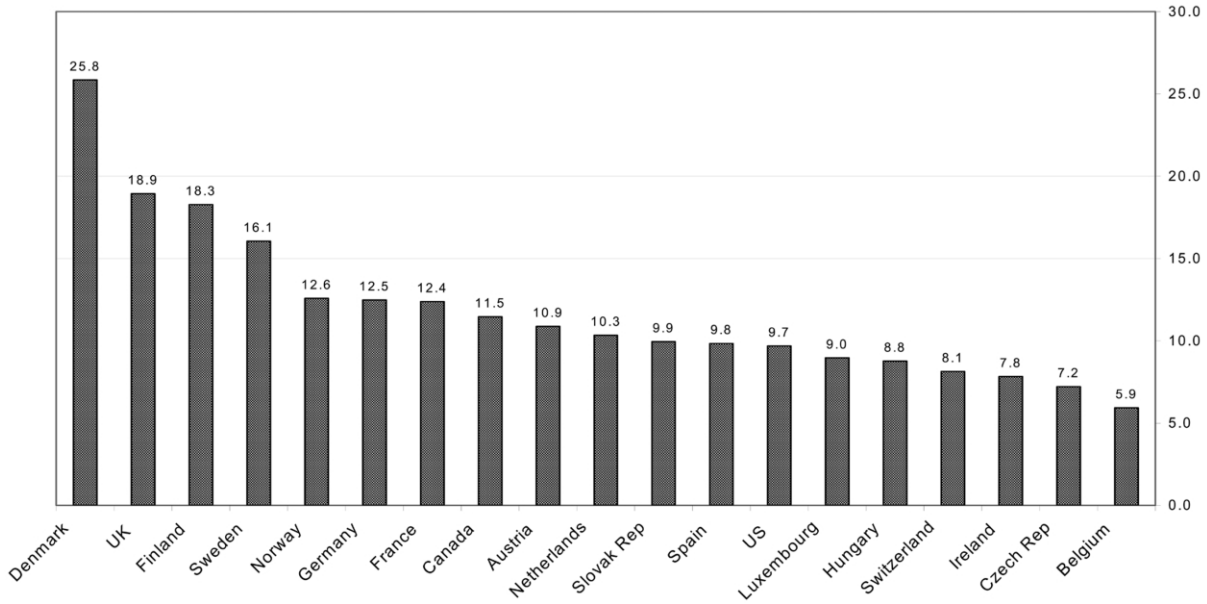

FIG. 7.—Distribution of the net odds (female = 1) to be employed in female-typed occupations

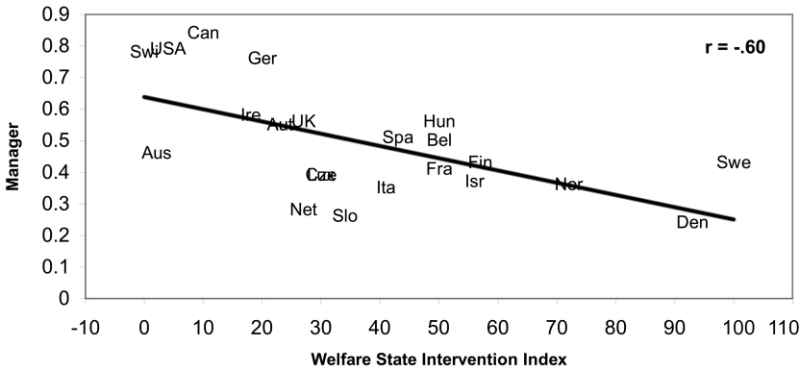

FIG. 8.—Net odds (female = 1) to be employed in managerial positions by Welfare State Intervention Index.

to decrease with age, number of children, and the presence of preschool children.[21] The odds of labor force participation are also higher among married persons and among men. Net of individual-level attributes, the index does not affect odds of employment among men, while the relative odds of women's employment are significantly higher in developed welfare states. Apparently, other things being equal, women's odds of employment (compared to men) are almost three times higher in a country ranked at the top of the WSII scale than in a country ranked at the bottom of the scale ($b = 1.05$, exp. $b = 2.9$).

To ensure that the effects of other country characteristics are not mistakenly attributed to the WSII, all HLM regression equations presented in table 3 were estimated while controlling for four contextual variables: GDP, unemployment, Gini index, and attitudes toward gender egalitarianism. None of the four country-level controllers exerted a significant effect on any of the dependent variables. Moreover, inclusion of country-level control variables in the analysis did not alter the impact of the welfare index on the dependent variables.[22]

[21] The effects of marital status, presence of preschool child, and number of children can differ for men and women. Nevertheless, we chose not to include these interaction variables in our models since that would alter the meaning of the dependent variables in the second level, and obviously we have no theoretical interest in examining here the effects of these individual-level characteristics. As our interest is in country-level effects, the individual-level variables (level 1) are introduced to control for differences between countries in the composition of human capital among men and women.

[22] As noted, because the number of countries included in the analysis is limited, the second-level control variables were inserted into the models one at a time. The data are not presented here for the sake of parsimony but are available from the authors upon request.

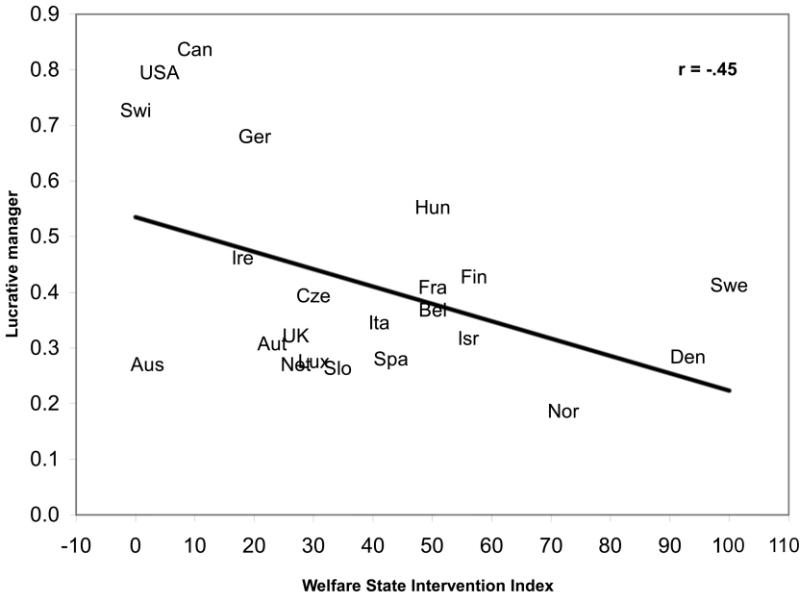

FIG. 9.—Net odds (female = 1) to be employed in lucrative-managerial positions by Welfare State Intervention Index.

Models 2–7 lend further support to the hypothesis that in well-developed welfare states women are less likely to attain managerial and lucrative-managerial jobs and are more likely to be employed in female-typed occupations. The effects of the individual-level characteristics in all models are consistent with theoretical expectations. Participation in both managerial and lucrative-managerial occupations is likely to increase with academic education and age, and is considerably higher among married persons and among men. These individual-level variables exert inverse effects on the odds of working in female-typed occupations. Number of children and presence of preschool children do not exert significant effects when other characteristics are controlled for.

Net of individual-level attributes, the WSII significantly decreases odds of employment in managerial and lucrative-managerial positions, for women much more than for men (models 2 and 4, respectively), and raises women's odds of holding female-typed occupations (model 6). In countries ranked at the top of the WSII scale, the net odds of women (relative to men) attaining managerial and highly paid managerial positions are only half ($b = -.76, -.55$, exp $b = .47, .58$, respectively) of those in countries placed at the bottom of the scale. Likewise, women's relative odds of being employed in female-typed occupations in countries at the top of the

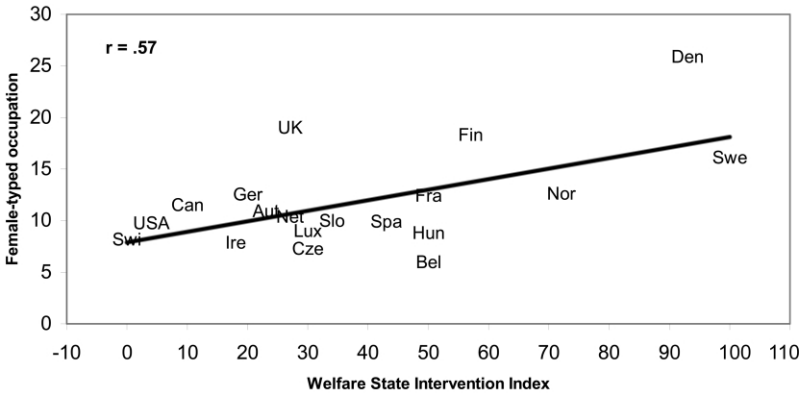

FIG. 10.—Net odds (female = 1) to be employed in female-typed jobs by Welfare State Intervention Index.

index are double the odds of their counterparts in countries placed at the bottom of the index ($b = .73$, exp. $b = 2.08$). These effects hardly change when other contextual variables are introduced as control variables.

Despite the unequivocal effect of WSII on women's occupational attainment, it is still possible that gender occupational inequality is differentially affected by each of the components of the index. In order to refine our understanding of the relationship between welfare state interventions and occupational inequality we reestimated models 1, 2, 4, and 6 presented in table 3, replacing WSII by each of its three components, that is, maternity leave, child-care facilities, and the size of the public service sector. The results of the reanalysis are presented in appendix table A2. Regardless of the component and regardless of the measure of gender occupational inequality used in the reanalysis, the data reveal similar findings and lead to similar conclusions. This is not surprising, given the strong correlations between the components noted earlier in the paper.

Notwithstanding the general similarities between the effects of the three components on our measures of occupational inequality, some meaningful differences are observed. The negative effect of length of maternity leaves on women's odds of attaining managerial positions is more pronounced than the impact of the other two components, which conforms to our argument that institutional arrangements which allow long absence from paid work encourage discrimination by employers.[23] The data also reveal an especially large (positive) effect of the size of the public service sector on women's segregation into the female-typed jobs. This is in line with

[23] See also Mandel and Semyonov (2005) for the consequences of maternity leave for gender earnings gaps.

our claim that the nature of jobs in the public service sector, coupled with favorable and convenient work conditions, are likely to attract women in disproportionate numbers into feminized occupational niches.

These nuances aside, the overall similarities between the effects of the index and its components on various facets of occupational inequality reinforce the validity of the WSII. It also provides additional support for our contention that the index as a whole is a better proxy for the overall configuration of welfare state interventions than any of its components. Specifically, in contrast to the other two components of the index, child-care arrangements allow women to devote more time to paid work and should therefore increase their ability to compete with men for powerful and prestigious positions. On the face of it, the strong negative relationship of this component to women's odds of attaining managerial positions therefore seems counterintuitive. However, extensive child-care provision usually goes hand in hand with generous maternity leave and extensive public social services. We believe that its correlation with these other components of our index is what accounts for the anomaly. This finding thus strengthens our view that the index effectively captures a broad phenomenon of "mother-friendliness" which transcends individual policies. As we have argued theoretically, it is welfare state "interventionism" more than discrete and specific interventions which fuels the mechanisms that undermine women's job opportunities.

It might be argued that the effect of the WSII on women's occupational attainment should be estimated, net of women's rate of labor force participation, given that the WSII was found to be associated with both. Accordingly, in models 3, 5, and 7 of table 3, we let the three occupational indicators be a function of both the WSII and the rate of women's labor force participation. The results lend further support to the hypothesis that gender occupational inequality is more pronounced in countries characterized by developed family policy and large public sector employment. In all models the effect of the index is significant and in the expected direction, even after controlling for female participation. As before, women's odds of attaining managerial and lucrative-managerial positions tend to decline with the values of WSII, while their odds of working in female-typed jobs tend to rise.

The analysis also reveals that, net of WSII, a high female rate of labor force participation slightly increases women's odds of entering well-paid managerial positions and also increases women's odds of joining female-typed occupations. The inclusion of female participation rates in the equations, however, does not alter the effect of the WSII on occupational attainment. Consequently, we can conclude that the mass entrance of women into the labor force of countries with well-developed welfare states cannot be the sole cause of their high concentration in female-typed oc-

TABLE 3

PREDICTIONS OF LOG-ODDS FOR EMPLOYMENT IN THE LABOR FORCE IN MANAGERIAL, LUCRATIVE-MANAGERIAL, AND FEMALE-TYPED OCCUPATIONS

	Labor Force Participation	Managerial Position		Lucrative-Managerial Position		Female-Typed Occupation	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Individual-level effects:							
Intercept	2.06**	−2.03**	−2.37**	−2.36**	−2.79**	−2.20**	−.33
	(.16)	(.22)	(.71)	(.18)	(.59)	(.21)	(.52)
Married	.33**	.30**	.30**	.32**	.32**	−.05*	−.05*
	(.10)	(.04)	(.04)	(.05)	(.05)	(.03)	(.03)
Bachelor's degree	1.00**	1.13**	1.13**	1.34**	1.34**	−.83**	−.83**
	(.07)	(.14)	(.14)	(.12)	(.12)	(.19)	(.19)
Age	−.05**	.02**	.02**	.02**	.02**	−.00	−.00
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
Preschool child	−.56**	.03	.03	.02	.02	.03	.03
	(.09)	(.04)	(.04)	(.03)	(.03)	(.03)	(.03)
No. of children	−.04*	−.02	−.02	−.02	−.02	.01	.01

	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)
Gender (female = 1)	−1.66**	−.48**	−.83**	−.74**	−1.52**	2.13**	−1.44**
	(.23)	(.10)	(.33)	(.13)	(.40)	(.12)	(.35)
Country-level effect: On the intercept							
WSII	−.10	−1.20**	−1.30**	−1.22**	−1.34**	−.69	.14
	(.34)	(.48)	(.52)	(.40)	(.42)	(.44)	(.38)
Female labor force participation			.01		.01		−.03**
			(.01)		(.01)		(.01)
Country-level effect: On the gender coefficient							
WSII[a]	1.05*	−.76**	−.86**	−.55*	−.75**	.73**	.52**
	(.50)	(.22)	(.23)	(.29)	(.28)	(.26)	(.25)
Female labor force participation			.006		.013*		.012*
			(.005)		(.007)		(.006)
N	22	22	22	22	22	19[b]	19[b]

SOURCE.—LIS 1990–2000 (see n. 5).

NOTE.—Results from logistic HLM regression equations. SEs in parentheses.

[a] The values of WSII were divided by 100; the coefficient indicates the gender differences in log-odds to participate in the labor force or to be employed in a specific occupational category, between a country placed at the bottom of the WSII and a country at the top.

[b] Australia, Israel, and Italy did not provide detailed occupational categories and therefore were excluded from this analysis.

* $P < .05$, one-tailed test.

** $P < .01$.

cupations. Nor can it explain their low representation in managerial positions. These findings lead us to reject the argument that low selectivity of women into the labor force of well-developed welfare states is responsible for their low occupational attainments (Hansen 1995, 1997; OECD 2002, p. 106).

Integrative Analysis

An important limitation of previous comparative research in this area is that the multiple dimensions of women's labor market integration are usually studied in isolation from one another. Our comprehensive approach reveals that no country or group of countries approximates unambiguous gender equality. As anticipated, the social-democratic model of women's integration into the labor market is accompanied by their crowding in female-dominated occupations and their relative exclusion from managerial occupations. On the other hand, the liberal model is less effective in mobilizing women into employment but is more open to their entry into elite positions. Finally, the conservative model typically disadvantages women in both respects.

To underline the cross-national diversity of the opportunity structures that women face, we conducted a factor analysis procedure using all dependent variables utilized in the analysis (labor force participation, working hours, managerial occupations, lucrative-managerial occupations, and female-typed occupations). Two significant factors, representing two unrelated configurations of gendered employment patterns, emerged from the analysis (see app. table A3). The first factor, which we dub "participation/segregation," loads strongly on female participation rates, concentration of women in female-typed occupations, and on reduced working hours rather than full-time employment. In our data set Sweden and Finland have the highest scores on this factor while the former socialist countries, Switzerland, and Luxembourg generate the lowest scores. The second factor captures "equality of opportunity"; it singles out gender equality in access to managerial jobs and also a tendency toward full-time employment among working women. In this respect, the North American countries stand at the top of the scale while the Netherlands and Norway are placed at the bottom.

The thesis advanced in this paper suggests that the two labor market profiles (captured by the two factors) should be closely related to the scope and character of the welfare state. In line with our expectations, the correlation between the WSII and the "participation/segregation" factor is positive ($r = .555$) while the correlation between the WSII and the "equality of opportunity" factor is negative ($r = -.524$). Furthermore, when clustering the countries using the two sets of factor scores (not

shown) we find that most of them fall into one of three distinctive configurations whose membership runs parallel with Esping-Andersen's (1990) welfare regimes. Of the 16 countries available for the factor analysis, three with the lowest WSII scores (United States, Canada, and Switzerland) form a liberal cluster characterized by exceptionally high rates of entrance into managerial positions ("equality of opportunity" factor). The Scandinavian countries, representing the social-democratic regime, with the highest scores on the WSII, also have exceptionally high scores on the "participation/segregation" factor and below-average scores for "equality of opportunity." Finally, most of the Continental states and Ireland (representing the conservative welfare state regime) cluster with intermediate levels of WSII and below-average scores on both factors.[24]

CONCLUSIONS

The objective of the present research has been to provide a systematic examination of the impact of welfare state activities on the labor force participation of women and on gender occupational inequality. Utilizing data from 22 industrialized countries we found the impact of welfare states on women's employment opportunities to be complex and to vary from one aspect of economic activity to another (i.e., labor force participation and occupational inequality). This impact, therefore, can be properly understood and delineated only when the interrelations among the multiple aspects of women's economic activity are simultaneously considered.

Consistent with theoretical expectations and with previous studies, the data show that women's rate of labor force participation tends to be higher in countries with progressive welfare states. Apparently, expansion of family-oriented services, availability of public child-care facilities, and a large public service sector provide women with better opportunities to become economically active. By increasing the incorporation of women into the paid economy, the welfare state has significantly contributed to increasing women's economic independence, and, by implication, to strengthening their power within the household and the society at large.

However, once women have become economically active, benefits to working mothers and high demand for female labor in the public services serve to restrict their occupational achievements. Our data show that in countries characterized by a progressive welfare system women are dis-

[24] Although most countries fit neatly into the schema described here, three exceptions are evident: Belgium is located within the conservative group despite having a high WSII score, Germany is placed with the liberal group, and the United Kingdom is placed close to the Scandinavian countries.

proportionately underrepresented in managerial positions and overrepresented in female-typed jobs. We contend that family-friendly policies and employment practices assume the primacy of women's familial responsibilities. As such they are designed to allow women time off for the care of young children through extended maternity leaves and support of part-time employment. These policies, in turn, discourage employers from hiring women for managerial and powerful positions and foster women's attachment to female-typed occupations and jobs with convenient work conditions. Although we cannot empirically separate employer discrimination from women's employment preferences, we have suggested that the two are interrelated and jointly have detrimental consequences for women's occupational achievements.

Paradoxically, therefore, the same welfare state activities that promote one dimension of gender equality appear to inhibit another dimension. This trade-off can best be understood in relation to specific welfare regimes. The social-democratic regime promotes women's integration into the labor market by providing them with convenient and flexible working conditions. However, this goal is achieved at the cost of greater occupational segregation and restricted opportunities for women to enter the most desirable positions. By contrast, the market-oriented liberal regime neither restricts nor supports women's economic activities, and no special work arrangements are mandated for mothers. In the liberal market economies women, like men, are expected to work continuously and on a full-time basis. These conditions may not meet the justified desire of many women for family-supportive working arrangements, and may discourage mothers from joining the labor force. At the same time, women who become economically active are in a better position to compete for high-status managerial jobs than are their counterparts in social-democratic countries.

It follows that each welfare state configuration has its own advantages and disadvantages for women. The singular contribution of this study is that it highlights some negative implications of "women-friendly" interventions that have been insufficiently appreciated. Given the unquestionable importance of women's paid work for their economic autonomy, and the utility of family-supportive policies for their incorporation into paid employment, it is important to draw attention to the unintended consequences of these policies. Our research underlines the challenge of developing institutional arrangements that not only support mothers' employment but also assist economically active women in successfully competing with men.

APPENDIX

TABLE A1
THE COMPONENTS OF THE WELFARE STATE INTERVENTION INDEX FOR 22 COUNTRIES

Country	Index of Welfare Policy*	Maternity Leave (no. of Fully Paid Weeks)	% Children (Ages 0–6) in Publicly Funded Child Care	Public Welfare Sector as Share of Total
Sweden	100	41	56	25
Denmark	93	28	65	25
Norway	72	42	30	20
Finland	57	32	35	16
Israel	56	12	57	18
Belgium	50	12	63	13
France	50	16	61	11
Hungary	50	24	48	12
Spain	43	16	45	14
Italy	41	17	52	11
Slovak Republic	34	25	44	5
Czech Republic	30	19	47	5
Luxembourg	30	16	35	11
United Kingdom	27	8	28	16
Netherlands	27	16	39	8
Austria	23	16	22	6
Germany	20	14	35	7
Ireland	18	10	18	11
Canada	10	8	29	7
United States	4	0	30	8
Australia	2	0	23	10
Switzerland	0	8	16	7
Average	38	17.3	40.8	12.1
SD	27	11.1	13.7	5.9
Range	0–100	0–42	16–65	5–25
N	22	22	22	22

SOURCE.—Mandel and Semyonov (2005). Can be downloaded from http://www2.asanet.org/journals/asr/2005/048sup4.pdf.

* Listed in descending order of the index values.

TABLE A2

PREDICTIONS OF LOG-ODDS FOR EMPLOYMENT IN THE LABOR FORCE, IN MANAGERIAL, LUCRATIVE-MANAGERIAL, AND FEMALE-TYPED OCCUPATIONS

	Labor Force Participation			Managerial Position			Lucrative-Managerial Position			Female-Typed Occupation		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Individual-level effects:												
Intercept	2.00**	2.28**	2.02**	−1.84**	−1.71**	−2.26**	−2.25**	−2.19**	−2.39**	−1.84**	−2.23**	−2.00**
	(.17)	(.28)	(.21)	(.21)	(.42)	(.33)	(.18)	(.37)	(.27)	(.22)	(.40)	(.27)
Married	.33**	.33**	.33**	.30**	.30**	.30**	.32**	.32**	.32**	−.05*	−.05*	−.05*
	(.10)	(.10)	(.10)	(.04)	(.04)	(.04)	(.05)	(.05)	(.05)	(.03)	(.03)	(.03)
Bachelor's degree	1.00**	1.00**	1.00**	1.13**	1.13**	1.13**	1.34**	1.34**	1.34**	−.83**	−.83**	−.83**
	(.07)	(.07)	(.07)	(.14)	(.14)	(.14)	(.12)	(.12)	(.12)	(.19)	(.19)	(.19)
Age	−.05**	−.05**	−.05**	.02**	.02**	.02**	.02**	.02**	.02**	−.00	−.00	−.00
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
Preschool child	−.56**	−.56**	−.56**	.03	.03	.03	.02	.02	.02	.03	.03	.03
	(.09)	(.09)	(.09)	(.04)	(.04)	(.04)	(.03)	(.03)	(.03)	(.03)	(.03)	(.03)
No. of children	−.04*	−.04*	−.04*	−.02	−.02	−.02	−.02	−.02	−.02	.01	.01	.01
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)

Gender (female = 1)	−1.68**	−1.69**	−1.77**	−.48**	−.17	−.50**	−.74**	−.60**	−.69**	2.14**	2.21**	1.94**
	(.25)	(.46)	(.31)	(.12)	(.19)	(.17)	(.14)	(.25)	(.18)	(.15)	(.26)	(.14)
Country-level effect: On the intercept												
Maternity leave	.001			−.038**			−.034**			−.024**		
	(.008)			(.011)			(.009)			(.010)		
Child care		−.006			−.019*			−.015*			−.001	
		(.006)			(.010)			(.009)			(.009)	
Public sector			.000			−.019			−.036*			−.024
			(.016)			(.025)			(.020)			(.020)
Country-level effect: On the gender odds gap[b]												
Maternity leave	.024*			−.017**			−.012*			0.015*		
	(.012)			(.006)			(.007)			(.007)		
Child care		.010			−.014**			−.008			.005	
		(.010)			(.00)			(.005)			(.006)	
Public sector			.042*			−.022*			−.021			.039**
			(.023)			(.012)			(.013)			(.010)
N	22	22	22	22	22	22	22	22	22	19[a]	19[a]	19[a]

SOURCE.—LIS 1990–2000 (see n. 5).

NOTE.—SEs in parentheses.

[a] Australia, Israel, and Italy did not provide detailed occupational categories and were therefore excluded from this analysis.

[b] All models were estimated with and without controlling for female labor force participation. The effects were very similar.

* $P<.05$, one-tailed test.

** $P<.01$.

TABLE A3
FACTOR ANALYSIS LOADINGS (TWO FACTORS SOLUTION): RESULT OF A PRINCIPAL COMPONENT ANALYSIS

Variables	Factor 1: Participation/ Segregation	Factor 2: Equality of Opportunity
Female labor force participation rates ...	.710	.160
% women working reduced working hours	.846	−.296
% women working full-time	−.679	.435
Managerial		.937
Lucrative-managerial		.956
Female-typed occupation	.871	
Pearson correlation with the WSII	.555	−.524
N[a]	16	16

NOTE.—Total variance explained by the two factors 75.5%. Empty cells indicate absolute values less than 0.1.

[a] Denmark, Slovak Republic, and Spain have no data on working hours; Australia, Israel, and Italy have no data on female-typed occupation.

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