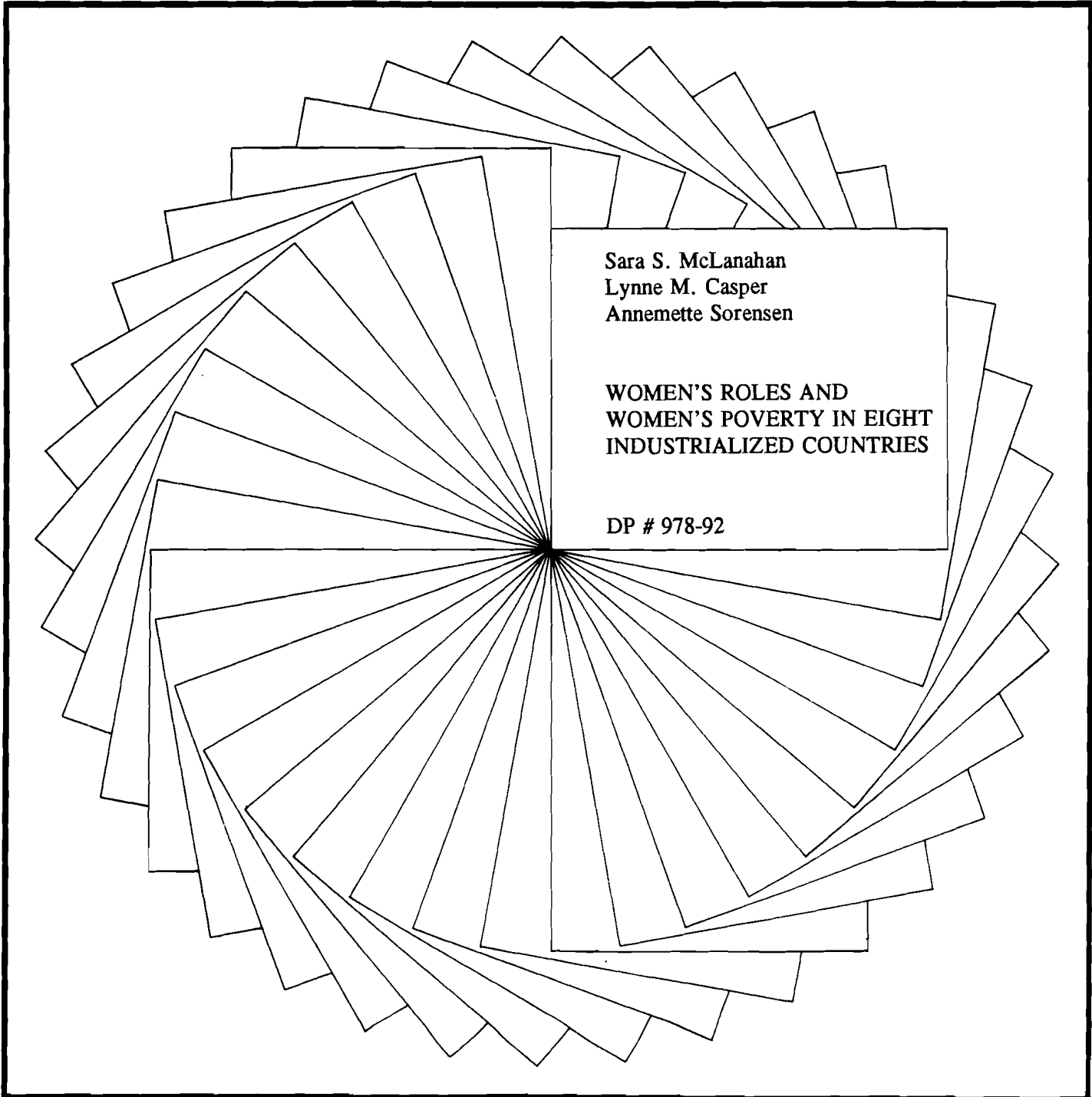


University of Wisconsin-Madison

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Sara S. McLanahan
Lynne M. Casper
Annemette Sorensen

WOMEN'S ROLES AND
WOMEN'S POVERTY IN EIGHT
INDUSTRIALIZED COUNTRIES

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**Women's Roles and Women's Poverty in
Eight Industrialized Countries**

Sara S. McLanahan
Department of Sociology
Princeton University
Institute for Research on Poverty
University of Wisconsin-Madison

Lynne M. Casper
Office of Population Research
Princeton University

Annemette Sorensen
Department of Sociology
Harvard University

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Abstract

Using data from the Luxembourg Income Study, the authors study the relationship between women's poverty and women's roles--being married or single, having children or not, and working or not. Specifically, they test the assumption that women who play the "traditional" role of married-mother-homemaker are protected from poverty, and they investigate the extent to which "nontraditional" women--that is, women who are single, childless, and work outside the home--are at risk of poverty. The authors conclude that although marriage and work reduce the risk of poverty, being a mother increases it; the only mothers who have a better-than-average chance of staying out of poverty are those who combine motherhood with work and marriage. As for women who play the nontraditional roles of single and employed, they are actually less likely to be poor than any other group of women, including traditional women.

Women's Roles and Women's Poverty in Eight Industrialized Countries

INTRODUCTION

Women's roles in the United States have changed dramatically during the past several decades. Whereas in the early 1950s most American women devoted their lives to domestic work and child-rearing activities, today many women are pursuing careers outside the home and combining home production with market work. Similarly, whereas in the early 1950s most women married and stayed married to the same partner for their entire life, today women are delaying marriage, cohabiting, divorcing, and changing partners more frequently. As a consequence of these changes, more women are living alone and raising children alone. Some commentators view these changes as a gain in women's status, indicative of a new-found freedom and independence (Bergmann, 1986). Others mourn the loss of domestic life and point to the feminization of poverty that has occurred over the past several decades. According to some analysts (Hewlett, 1986; Fuchs, 1988), the increase in women's independence has outpaced the increase in institutional supports for child rearing and gender equality. Consequently, many women pay a high price for their new freedom.

Hewlett's (1986) analysis suggests that American women are doing worse because they are abandoning the traditional roles of wife and mother and entering new positions that provide less economic security. A wife and mother is presumed to be protected from poverty because she lives with a male breadwinner. In contrast, a single woman must rely on her own resources, which are often insufficient. While this characterization may accurately describe the situation of women in the United States, it may not apply to women in other industrialized nations. First, in other countries women may not be as willing as their American counterparts to exchange traditional roles for activities that provide more freedom but have higher economic costs. Second, in some countries,

women in nontraditional roles may be better able to manage on their own, either because the labor market is more hospitable or because the social and political institutions are more supportive.

Why would we expect women in nontraditional roles to be doing better in some countries than in others? Esping-Andersen (1990) sheds some light on this question in his discussion of capitalist welfare states. He argues that Western, capitalist countries differ with respect to their income transfer systems, their labor market policies, and their commitment to gender equality. He proposes a typology of welfare states that he believes captures the major policy differences among countries in Western Europe and North America. According to this typology, social democratic countries have the most egalitarian policies. They have generous income transfers that cover all individuals regardless of their family status, they support full employment and high wages, and they promote gender equality. Corporatist welfare states also have generous income transfer systems, and their labor market policies foster high wages. Income transfers in these states, however, are organized around families rather than individuals and are based on previous earnings. Thus they tend to reproduce existing economic inequalities rather than redistribute income. Finally, liberal welfare states, as the name implies, take a "hands off" approach and let the market have a free rein in distributing resources. Consequently, the minimum standard of living in these countries is low, as is gender equality.

If Esping-Andersen is correct about the ways in which capitalist countries differ in their social welfare policies, we would expect to find cross-country differences in women's economic status. For example, we would expect women's poverty to be lower in corporatist and social democratic countries than in liberal countries, since the former provide a higher income floor below which no citizen is allowed to fall. Moreover, we would expect poverty rates for nontraditional women to be lowest in social democratic countries because of the emphasis on gender equality. Finally, we would expect to

find the widest variation in economic status in liberal countries where the government does the least to redistribute income across the population.

This paper examines women's roles and women's economic status in eight industrialized countries. The analysis consists of two parts: Part I looks at the variation in women's roles across countries, and part II looks at the relationship between roles and poverty rates in different countries. The data are taken from the Luxembourg Income Study, which is made up of surveys from eighteen industrialized countries.¹ The country-specific data sets provide a wealth of information on household income from all sources as well as demographic information pertaining to household members.

The analysis is based on data collected in the mid-1980s in eight countries: Australia, 1985-86; Canada, 1987; Germany, 1984; Italy, 1986; the Netherlands, 1987; Sweden, 1987; the United Kingdom, 1986; and the United States, 1985. We selected these countries because we could obtain information on the marital status, parental status, and employment status--the building blocks of our analysis--of the women who live in them, and because they represented different types of welfare states. According to Esping-Andersen, Germany, Holland, and Italy exemplify "corporatist" welfare states, Sweden is a "social democratic" country, and the four English-speaking countries are "liberal" welfare states.

We should note that Esping-Andersen's typology is only a proxy for welfare policy variables in each country. Ideally, we would like to have direct measures of these variables so that we could determine which particular policies predict women's poverty and which policies go together or complement each other. This information is not readily available, however, and therefore we rely on the typology to guide our hypotheses.

I. WOMEN AS WIVES, MOTHERS, AND WORKERS

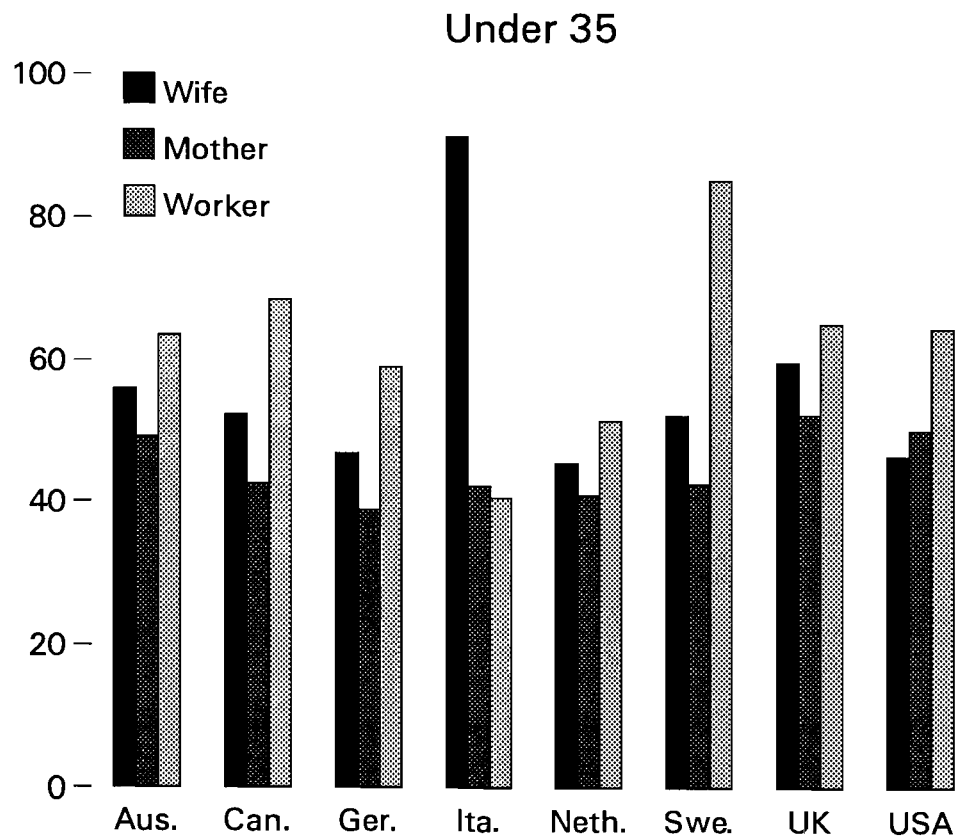
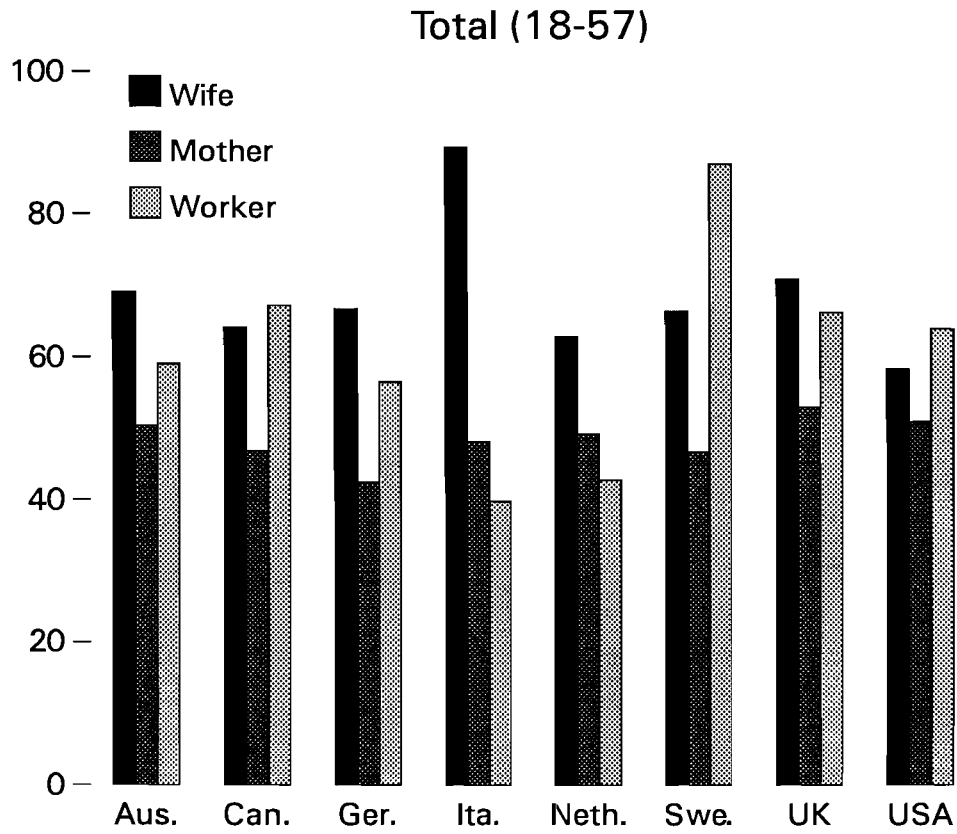
We begin by looking at the extent to which women in each of the eight countries are engaged in various roles. Figure 1 reports the percentage of women who are wives, mothers, and workers. In this study, women are defined as wives if they are legally married, except in Sweden, where cohabiting women are also classified as wives.² Women are identified as mothers if they live in a household with a minor child who is at least fourteen years younger than they are,³ and they are classified as workers if they are employed either full-time or part-time.

According to Figure 1, a majority of women in all eight countries are wives. The percentages range from a low of 58.2 percent in the United States to a high of 89.1 percent in Italy. These figures exclude women over 57, so differences in marriage patterns across countries are due primarily to differences in behavior rather than to differences in the availability of male partners.

The percentage of women raising children is much smaller than the percentage of women who are wives. The United Kingdom, the United States, and Australia have the highest percentage of mothers, while Germany has the lowest percentage. With the exception of Germany, the range in the numbers is quite narrow. In seven of the eight countries we examined, between 47 and 53 percent of women are engaged in child rearing. In Germany, only 42 percent are doing so.

Although working outside the home is often viewed as a nontraditional activity for women, we found that in most of the countries we examined, a majority of women are employed. There is, however, much broader cross-country variation in the worker role than in the wife and mother roles. The wide variation is almost entirely accounted for by the unusually low percentage of workers among Italian and Dutch women (39.7 and 44.2 percent respectively) and the unusually high percentage of workers among Swedish women (86.8 percent). In the other five countries, the numbers are very close: approximately 60 percent of women work outside the home.

Figure 1
 Percent of Women Who are Wives, Mothers, and Workers



To get a better idea of the variation in women's roles across countries, we constructed eight different role combinations based on the three roles of wife, mother, and worker. The distribution of women in these eight categories is reported in Table 1 for each country.

Role Combinations among Married Women

The first row in Table 1 reports the percentage of women who occupy the role of wife-mother-homemaker. This particular combination of activities is what most people have in mind when they speak of women's traditional role. According to our estimates, only a minority of women in each country actually occupy this role at any point in time. In five of the eight countries--Australia, Canada, Germany, the United Kingdom and the United States--the percentages range from about 15 percent to 21 percent. In Italy and Holland, the numbers are slightly higher--26 percent and 28 percent respectively--and in Sweden, they are much lower (only 4 percent).

While it is clear that a majority of women do *not* occupy the traditional role at any point in time, in Germany and Holland the greatest percentage of women are married mothers who do not work. Note also that Italian, Dutch, and German women are more likely to occupy this role than women in the other five countries.

Row 2 reports the percentages of women who are wives-mothers-workers. Women in this position are traditional insofar as they are married and raising children. The fact that they are working outside the home, however, suggests that they are moving toward greater independence. The proportion of women in this category ranges from 13.2 percent in the Netherlands to 35.1 percent in Sweden. One interesting point to note is that in the English-speaking countries and Sweden, more women occupy this role combination than occupy the traditional role of wife-mother-homemaker. Sweden has the highest ratio of working mothers to homemaker mothers, whereas Germany, Italy, and the Netherlands have the lowest ratios.

TABLE 1
Percentage of Women in Each Role Combination
(Mean Age in Parentheses): Selected Industrialized Countries

Role Combination	Australia	Canada	Germany	Italy	Netherlands	Sweden	United Kingdom	United States
<u>Women aged 18-57</u>								
Married mom, not working	20.6 (34.7)	14.9 (35.2)	20.6 (36.6)	26.1 (37.5)	27.7 (36.6)	4.3 (36.1)	18.4 (33.9)	15.7 (35.1)
Married mom, working	23.5 (36.1)	24.5 (36.0)	17.0 (37.6)	19.5 (36.5)	13.2 (37.1)	35.1 (36.9)	24.7 (37.3)	21.0 (35.7)
Married, no kids, not working	10.5 (49.6)	7.4 (45.5)	11.7 (48.5)	29.6 (36.2)	9.7 (48.3)	3.2 (46.1)	6.6 (47.6)	7.3 (44.9)
Married, no kids, working	14.4 (40.3)	17.2 (38.7)	16.7 (42.1)	13.9 (35.8)	10.2 (36.9)	23.6 (42.3)	20.1 (40.1)	14.2 (41.0)
Single mom, not working	3.8 (33.3)	3.2 (33.1)	1.5 (36.9)	0.8 (41.3)	4.5 (33.9)	0.8 (34.7)	4.5 (31.5)	6.1 (31.7)
Single mom, working	2.5 (34.9)	4.3 (35.5)	2.6 (35.2)	1.6 (40.1)	1.9 (36.4)	6.4 (35.7)	4.3 (35.3)	8.0 (34.1)
Single, no kids, not working	6.2 (34.1)	7.5 (30.0)	9.1 (27.6)	3.8 (40.4)	11.4 (30.2)	4.9 (29.0)	2.5 (35.4)	7.1 (30.0)
Single, no kids, working	18.6 (28.4)	21.1 (29.3)	20.1 (30.4)	4.7 (38.3)	19.6 (28.4)	21.7 (31.7)	15.8 (29.1)	20.6 (30.3)
Mean age of all women	36.1	35.1	37.0	36.9	35.4	36.8	36.0	35.1
<u>Women aged 34 and under</u>								
Married mom, not working	22.5 (28.5)	14.7 (28.4)	19.9 (29.2)	22.4 (28.7)	23.2 (29.7)	4.5 (29.0)	22.6 (28.3)	15.6 (28.5)
Married mom, working	19.7 (29.7)	20.8 (29.9)	14.0 (29.9)	18.7 (29.8)	8.3 (30.3)	30.4 (29.2)	18.3 (29.7)	18.3 (29.1)
Married, no kids, not working	2.2 (25.1)	2.9 (25.0)	2.2 (25.9)	33.4 (22.2)	2.2 (26.8)	1.5 (23.8)	1.8 (26.5)	3.1 (25.7)
Married, no kids, working	11.5 (26.7)	13.9 (26.4)	10.0 (26.9)	16.5 (24.6)	9.9 (26.7)	15.7 (25.2)	16.1 (26.3)	9.2 (27.0)
Single mom, not working	4.3 (25.9)	3.6 (26.4)	1.4 (27.2)	0.4 (26.7)	4.5 (27.3)	0.9 (27.2)	6.2 (25.5)	7.6 (25.6)
Single mom, working	2.5 (27.2)	3.5 (27.9)	2.8 (26.7)	0.6 (30.0)	1.7 (29.2)	6.7 (28.8)	4.1 (27.0)	8.4 (27.7)
Single, no kids, not working	7.5 (22.2)	10.3 (22.2)	16.4 (21.6)	3.3 (23.6)	16.3 (21.4)	8.2 (21.9)	1.6 (21.6)	9.5 (22.0)
Single, no kids, working	29.8 (23.7)	30.3 (24.0)	32.6 (23.6)	4.6 (26.6)	31.9 (24.7)	32.2 (23.8)	24.7 (22.7)	28.3 (24.3)
Mean age of all women	26.4	26.3	25.8	25.8	26.3	26.1	26.2	26.3

Source: Luxembourg Income Study.

Note: "Mom" refers to a woman who lives in a household with a minor child who is at least fourteen years younger than she is. "No kids" refers to a woman who lives in a household with no minor children who are at least fourteen years younger than she is; note, however, that that woman may have given birth to children who no longer live in the household with her.

Rows 3 and 4 report the percentages of married women who are not raising children. Recall that in our analysis, motherhood is defined as living with a child under 18. This means that a substantial percentage of women in these two categories are mothers of children who have grown up and left home. Also included here are young married women who have not yet had children. Thus, the women in row 3 may well be traditional women who have entered the "empty nest" phase of the life course. If this is true, the percentage of women in each country who might be thought of as traditional is actually higher than the percentages reported in row 1.

Except in Italy, about a quarter of all women are married and not raising children. In Italy, nearly 44 percent of women fall into this category. The fact that so many Italian women are married and childless is partly due to the fact that women marry at a younger age in Italy. This difference is reflected in the fact that the average age for Italian women in this category is about five years lower than that for women in the other countries. Note also that the percentage of women who are single (rows 5 through 8) is quite low in Italy.

In all countries except Italy, the percentage of married working women with no children in the household is greater than the percentage of married nonworking women with no children in the household. In some countries, such as Sweden, the ratio of workers to homemakers is quite high, almost 8 to 1. Again, the percentages in rows 3 and 4 reinforce the finding that a large proportion of women in traditional roles (wife) are moving into nontraditional activities (worker).

Role Combinations among Single Women

Rows 5 and 6 report the percentages of single mothers in each country. This combination of roles represents a blend of traditional and nontraditional activities that has attracted a good deal of attention in the United States in recent decades. Single-mother families have increased rapidly since the early 1960s, and their growth is closely associated with the "feminization of poverty" (Garfinkel and McLanahan, 1986). According to Table 1, the percentage of women occupying the role of single

mother is quite small in most countries, ranging from a low of 2.4 percent in Italy to a high of 14.1 percent in the United States. We should note that if Swedish mothers were classified according to their legal marital status rather than their cohabiting status, the percentage of single mothers would be substantially higher in Sweden. We believe these households should not be thought of as "single-mother families," however, since they include a male worker who in most cases is the biological father of the woman's child.

The distribution of single mothers between workers and homemakers shows considerable diversity across the different countries. In the United States, Canada, Germany, Italy, and Sweden, single mothers are more likely to work outside the home than to be homemakers. In the United Kingdom, Holland, and Australia, homemakers are more common than workers. Sweden and Holland represent two extremes. In Sweden, the ratio of employed single mothers to homemakers is 8 to 1, whereas in the Netherlands, it is 2.5 to 1 in favor of homemakers. The English-speaking countries are split with respect to the work behavior of single mothers, with U.K. and Australian mothers leaning toward homemaking and U.S. and Canadian mothers leaning toward combining work and motherhood.

Rows 7 and 8 in Table 1 report the percentages of women who are not married and not living with children. These two categories, and row 8 in particular, are generally thought of as nontraditional roles for women. In most of the countries, between a quarter and a third of all women fall into one of these two categories. Italy is the exception with only 8.5 percent of women occupying these positions. In all countries except Italy, women in these two role-combinations are younger than average, which means that many of them will eventually move into more-traditional positions. The ratio of workers to homemakers is above one in all the countries.

In sum, the results in Table 1 suggest that women in Italy, Germany, and the Netherlands are more traditional than American women, whereas women in Sweden are less traditional. Taken

together, these findings provide indirect support for the notion that the three types of welfare states form distinct clusters, at least with respect to women's choices about the roles they occupy. It stands to reason that in countries where economic benefits are organized around the family, women would be more likely to be involved in traditional roles. This appears to be the case in Italy, the Netherlands, and, to a lesser extent, in Germany. On the other hand, in countries whose policies emphasize gender equality, we would expect to find more women in nontraditional roles, and Sweden seems to fit this model.

Role Combinations among Women under 35

Would our story be different if we looked only at younger women rather than at women between the ages of 18 and 57? The graph at the bottom of Figure 1 depicts the percentages of women under age 35 who are wives, mothers, and workers. Comparing the two graphs we find that in most countries younger women are somewhat less likely to be wives and mothers than older women, and they are also somewhat more likely to be working outside the home. The difference in labor force attachment most likely represents a real change in the work behavior of younger cohorts of women, whereas the difference in marriage and motherhood is due to both cohort and life-cycle or age effects. Given their age, we would expect a smaller percentage of younger women to be married and raising children.

When we examine the numbers in the bottom panel of Table 1, we find that younger women are less likely than older women to be married mothers (sum rows 1 and 2), and that the ratio of young married mothers who work to those who do not work is lower than the ratio of older married mothers who work to those who do not work (ratio of row 2/row 1). Again, both of these contrasts reflect life-cycle differences as well as possible cohort trends toward greater independence. Younger women are less likely to occupy the traditional role of wife and mother because they have not had

time to find a mate and start a family. And younger married mothers are more likely to be homemakers because their children are young and their child care responsibilities are greater.

There is some evidence that single motherhood is becoming more common in the eight countries. The percentages of women occupying this role are nearly identical for the two samples. Yet, given the age difference of the women, we would have expected to find a lower percentage of single mothers in the younger sample just as we found a lower percentage of married mothers. The fact that single motherhood is more common among younger women while married motherhood is less common suggests that some substitution from one type of family arrangement to another is occurring among younger cohorts.

II. ROLE COMBINATIONS AND THE PERCENTAGE OF WOMEN IN POVERTY

The next step in our analysis is to examine the relationship between women's roles and their economic status. Here we focus on the bottom end of the income distribution--women who are at risk of being poor. Our measure of poverty is based on the amount of disposable income available to each adult (or adult equivalent) within a household.⁴ Much research has focused on constructing a so-called equivalence scale by assessing how the income necessary to maintain a given household size varies by household size. In a recent review of this literature, it was shown that most of the equivalence scales can be described well by a single parameter: the family size elasticity of need (Buhman et al., 1988). In this paper we use a family size adjustment of .56, which is roughly equivalent to the one used to define the official poverty lines in Canada, Sweden, and the United States (Buhman et al., 1988). For our purposes the poverty status of a woman is determined by her position in the distribution of household incomes for the entire population. This "relative" measure of poverty defines women as poor if they live in a household whose disposable income is less than 50 percent of the median disposable income for all households in the country.

Table 2 reports poverty rates for women in each of the eight role-combinations. The top panel reports numbers for women between the ages of 18 and 57, and the bottom panel reports similar rates for women under 35. These numbers represent the mean values for each role combination. The last row in each panel shows the percentage of all women living below the poverty line. In the following section we present multivariate results.

According to Table 2, women in the United States have the highest poverty rates of all women: nearly 20 percent of American women have disposable incomes that are less than 50 percent of the median disposable income. In contrast, women in the Netherlands, Germany, and Sweden have the lowest poverty rates, 4.9, 6.7, and 8.6 percent respectively. The rates for women in the other countries are right in the middle, between 10 and 13 percent.

When we look at the different role combinations, we see that poverty is highest among single mothers. The percentage of single mothers in poverty ranges from a low of 3.5 percent in Sweden (for single mothers who are working) to a high of 73.6 percent in the United States (for single mothers who are not working). We should note that the unusually high poverty rate for Swedish women who are single, childless, and not working is not an accurate measure of the economic status of these women. Most of the women in this role combination are students or young adults who are living at home and sharing income with their parents. Because of the construction of the Swedish data, parents' income is not counted as part of the disposable income of women over 18, and therefore the poverty rates of these young women look much higher than they actually are.⁵

Married women without children who are working are the least likely to be in poverty in all the countries except Great Britain. The range is much narrower than it is for single mothers, going from 1.2 percent for women in the Netherlands to 5.0 for women in the United Kingdom. Women who occupy the traditional role of wife-mother-homemaker have a greater than average chance of being poor in all of the countries except Germany and Holland.

TABLE 2
Percentage of Women in Poverty (Percentage in High Education Category
in Parentheses), by Role Combination: Selected Industrialized Countries

Role Combination	Australia	Canada	Germany	Italy	Netherlands	Sweden ^a	United Kingdom	United States
<u>Women aged 18-57</u>								
Married mom, not working	15.2 (25.2)	19.8 (20.5)	6.6 (11.3)	16.8 (25.8)	4.2 (14.9)	8.9 --	18.7 (24.5)	20.4 (24.8)
Married mom, working	8.3 (35.5)	5.6 (36.5)	2.6 (13.5)	4.0 (26.6)	6.2 (20.7)	2.5 --	7.5 (28.4)	9.9 (34.2)
Married, no kids, not working	9.4 (14.8)	10.5 (11.5)	4.0 (5.9)	11.0 (26.4)	3.5 (6.9)	12.0 --	6.7 (17.1)	11.9 (21.0)
Married, no kids, working	4.1 (38.7)	3.2 (34.1)	2.0 (11.0)	2.6 (30.3)	1.2 (23.5)	1.7 --	5.0 (31.8)	2.9 (40.0)
Single mom, not working	71.7 (20.0)	65.1 (5.8)	44.9 (12.7)	39.4 (25.4)	12.5 (24.0)	24.0 --	24.8 (15.9)	73.6 (9.6)
Single mom, working	25.9 (38.3)	20.9 (28.6)	14.5 (9.0)	8.5 (60.3)	7.6 (44.4)	3.5 --	15.4 (28.9)	31.8 (25.3)
Single, no kids, not working	27.5 (21.4)	31.8 (18.2)	23.8 (56.8)	24.8 (35.1)	9.0 (43.5)	66.9 --	11.5 (22.9)	34.6 (30.2)
Single, no kids, working	5.4 (45.0)	9.3 (38.4)	4.0 (21.9)	5.7 (52.6)	2.4 (39.3)	12.9 --	4.4 (46.6)	10.6 (42.9)
All women	12.7 (32.1)	12.9 (29.6)	6.7 (17.2)	10.5 (28.9)	4.9 (25.1)	8.6 --	10.1 (29.8)	18.2 (31.9)
<u>Women aged 34 and under</u>								
Married mom, not working	17.3 (28.4)	24.8 (19.5)	9.6 (12.1)	18.4 (34.5)	2.7 (18.7)	5.7 --	22.6 (25.6)	23.9 (23.7)
Married mom, working	9.4 (37.4)	4.6 (31.6)	3.6 (17.2)	3.8 (35.4)	5.4 (32.0)	2.5 --	7.6 (28.4)	14.3 (30.4)
Married, no kids, not working	14.7 (27.0)	14.8 (19.6)	3.5 (37.8)	14.0 (28.8)	9.8 (30.5)	22.9 --	9.8 (37.5)	15.4 (32.3)
Married, no kids, working	3.2 (47.6)	3.5 (40.1)	2.5 (20.1)	2.3 (37.5)	0.0 (36.1)	1.3 --	5.8 (53.6)	2.1 (51.5)
Single mom, not working	78.5 (18.2)	66.4 (6.8)	52.4 (22.2)	71.9 (50.3)	13.1 (21.2)	24.9 --	27.1 (12.3)	74.5 (8.1)
Single mom, working	36.6 (35.3)	21.7 (24.8)	16.2 (10.6)	23.4 (64.5)	0.0 (42.6)	6.1 --	19.6 (29.3)	35.2 (21.8)
Single, no kids, not working	21.6 (26.6)	23.8 (19.4)	21.7 (69.1)	26.0 (36.0)	9.7 (54.4)	85.2 --	9.1 (57.1)	27.8 (35.4)
Single, no kids, working	5.4 (46.4)	9.6 (39.0)	4.8 (21.4)	2.0 (47.0)	2.2 (40.6)	17.0 --	4.2 (52.4)	11.4 (43.8)
All women	14.0 (37.3)	14.0 (30.5)	9.3 (26.6)	11.3 (34.1)	4.6 (35.6)	14.6 --	12.1 (37.7)	21.5 (33.2)

Source: Luxembourg Income Study.

Note: "Mom" refers to a woman who lives in a household with a minor child who is at least fourteen years younger than she is. "No kids" refers to a woman who lives in a household with no minor children who are at least fourteen years younger than she is; note, however, that that woman may have given birth to children who no longer live in the household with her.

^aNo education information is available for Sweden.

III. MODELING THE EFFECTS OF ROLES ON POVERTY AMONG WOMEN

In comparing poverty rates across different roles, we must be concerned about the possibility that women are sorting themselves into different roles, depending on their earnings capacity and risk of being poor. If this is true, it would be incorrect to conclude that the association between roles and poverty status reflects the "effects" of particular roles. To deal with this problem we need to control for characteristics of the women that are related to their earnings capacity and that predate their choice of roles.

Education and work experience would be the best proxies for earnings capacity, but the LIS data have only limited information on them. Most of the countries in our sample have data on women's education (Sweden is the exception), but the coding is very crude in some surveys and it is not comparable across countries. To deal with the problem of selectivity, we decided to create a variable that classified women according to their relative educational status within their own country. Women who fell in the top 30 percent of the educational distribution (of women) were classified as "highly educated." All others were classified as being "low educated."⁶ In Germany and Holland the education variable did not allow us to set the cutoff point at 30 percent. In the case of Germany, we could only identify women in the top 17 percent of the educational distribution, and in Holland we could only identify the top 25 percent of the distribution. Thus in these two countries, women with "high educations" represent a more select group of women than their counterparts in the other countries. The percentages of women in each role who are "highly educated" are reported in Table 2 (in parentheses).

Looking at the variation in the distribution of highly educated women, it is obvious that a good deal of sorting by education is taking place. For example, in most cases childless women who are employed are more likely to be highly educated than are women in the other groups.⁷ In

contrast, married-mother-homemakers, single-mother-homemakers, and married-childless-homemakers are less likely to be highly educated than other women.

The Effect of Roles on Poverty: Women Aged 18-57

We begin our examination of the effect of roles on poverty with the full sample of women aged 18-57. To further clarify the relationship between roles and poverty rates, we specified logistic regressions that treated poverty as the outcome variable and controlled for education and age. Separate models were estimated for each country and for each sample of women. The results from the "best fitting" models are reported below in Table 3.

Rows 2 through 4 in the table report the effects of being single, motherhood, and work, controlling for education and age. The coefficients indicate that each of the three basic roles has a direct effect on poverty. In every country being single significantly increases the likelihood that a woman will be poor. This finding is consistent with the notion that marriage protects women from poverty.⁸ In contrast, occupying the nontraditional role of "worker" reduces women's risk of poverty, whereas filling the traditional role of "mother" increases the risk of poverty in most countries. (In Holland being a mother has no significant effect on poverty, and in Sweden it is associated with lower poverty rates.) The effects of motherhood and work do not support the notion that traditional roles protect women from poverty while nontraditional roles increase the risk of poverty. This suggests that the relationship between roles and poverty is more complicated, involving interactions among roles.

The next three rows in Table 3 report the coefficients for the two-way interactions among being single, motherhood, and work. Note that the main effects must be added to the interaction effects in order to determine the total effect of each role combination. (These calculations are presented in Table 4 and are discussed in the next section.) In four of the countries the coefficient for

TABLE 3
Best-Fitting Logistic Regression Models of Poverty:
Women in Selected Industrialized Countries

Variable	Australia		Canada		Germany		Italy		Netherlands		Sweden		United Kingdom		United States	
	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2	$\hat{\beta}$	χ^2
<u>Women aged 18-57</u>																
Constant	-2.780	247.46	-2.159	110.51	-3.618	871.86	-1.756	418.75	-3.518	200.06	.825	3.22	-2.117	42.36	-2.361	1317.23
Married (Single = 1)	1.402	54.15	1.211	89.25	2.423	512.98	1.012	184.04	1.023	22.52	1.740	33.25	.323	3.83	1.326	926.55
Mom	.658	19.52	.654	29.85	.647	37.45	.511	97.35	--	--	-.817	3.51	.857	17.02	.586	169.78
Work	-.666	25.53	-1.384	288.94	-.486	8.03	-1.620	560.57	-1.063	6.93	-2.632	120.32	-.437	3.23	-1.422	1600.36
Single * mom	1.203	27.47	.744	14.36	--	--	--	--	--	--	-1.197	5.57	--	--	.958	253.63
Single * work	-1.166	29.22	--	--	-1.705	76.10	--	--	-.760	2.96	--	--	-.565	3.901	--	--
Mom * work	--	--	--	--	-.652	8.69	--	--	1.517	15.43	1.143	6.60	-.490	3.16	.6404	158.38
Single * Mom * Work	--	--	-.476	5.34	1.305	25.64	--	--	--	--	--	--	1.017	9.74	-.898	238.29
Age	--	--	-.006	2.95	--	--	-.009	17.91	--	--	-.063	45.57	-.017	9.57	-.009	65.43
Education (Low = 1)	.530	18.18	.403	19.28	.249	7.96	--	--	.380	2.94	NA	NA	.429	11.64	.905	1040.15
Model Chi-square	486.87		884.50		1098.70		844.87		55.79		378.53		189.28		12802.14	
Degrees of freedom	6		7		7		4		5		6		8		8	
<u>Women aged 34 and under</u>																
Constant	-1.995	133.15	.159	.30	-3.618	529.14	-1.049	22.80	.021	.001	2.639	8.72	-3.183	331.70	-1.415	123.21
Married (Single = 1)	.351	3.18	--	--	2.376	226.54	.791	27.42	--	--	3.116	45.21	--	--	.667	52.45
Mom	--	--	.531	13.95	1.289	67.21	.573	32.94	--	--	--	--	1.578	80.26	.589	43.68
Work	-1.576	52.74	-1.831	142.47	--	--	-1.775	223.88	-1.805	21.55	-3.265	84.95	--	--	-2.001	186.13
Single * mom	2.518	64.25	1.691	72.51	--	--	2.060	33.26	--	--	-2.273	12.26	--	--	1.414	177.43
Single * work	--	--	.935	25.43	-1.740	213.14	-.820	5.81	--	--	--	--	--	--	1.008	42.45
Mom * work	.945	11.25	--	--	-1.051	27.76	--	--	1.710	8.89	1.930	10.81	-1.285	37.65	1.423	85.45
Single * mom * work	-1.143	6.69	-1.007	11.05	.976	8.92	--	--	--	--	--	--	1.097	11.51	-1.990	134.24
Age	--	--	-.064	27.74	--	--	-.035	13.00	-.107	14.40	-.178	30.28	--	--	-.032	85.77
Education (Low = 1)	.529	10.33	--	--	--	--	--	--	--	--	NA	NA	.512	9.30	.712	390.90
Model Chi-square	310.45		492.88		476.32		533.98		43.34		309.38		138.77		6731.78	
Degrees of freedom	6		6		5		6		3		5		4		9	

Source: Authors' computations based on Luxembourg Income Study.

Note: Only significant coefficients are listed; a dash (--) indicates coefficient was not significant.

"single-mother" is significant. In Australia, Canada, and the United States, the effect is positive, and in Sweden, it is negative.

In four of the countries--Australia, Germany, the Netherlands, and the United Kingdom--the interaction term for "single-working" is significant. The effect is negative and relatively large for the women in these countries. In five of the eight countries, there is a "working-mother" effect. The direction of this effect is inconsistent, however, and the size of the coefficients are generally smaller in comparison to the other interaction terms. In Germany and the United Kingdom, being a working mother reduces the risk of being poor, whereas in the Netherlands, Sweden and the United States it increases the risk of poverty. The difference in effects may reflect cross-country differences in the selection into work among mothers.

The last coefficient is a three-way interaction for "single-working-mother." In four countries, being a single working mother is significantly associated with the probability of being poor. In Canada and the United States it decreases the chances of being poor, while in Germany and the United Kingdom it increases the chances of being poor.

The Effect of Roles on Poverty: Women under 35

In order to investigate the possibility that the effects of these roles differ for women in different cohorts or life stages, we estimated the same logistic regressions using the sample of women under 35. Panel 2 of Table 3 reports the best-fitting logistic regression models for the younger sample. According to these results, certain roles matter more for younger women than for all women, while other roles matter less. In general, being single has a weaker effect on the risk of poverty. This probably reflects the fact that a greater number of younger women work and are therefore better able to support themselves. In fact, in Canada, the Netherlands, and the United Kingdom, being single is no longer significant in predicting poverty status. Also, the marriage effect in Australia, Italy, and the United States, though still significant, is greatly reduced. In only two

countries does the effect of being single remain large: Germany and Sweden. A second point worth mentioning is that in all of the countries except Great Britain and Germany, the "effects" of work are much stronger for younger women. In other words, in most countries work is more important in reducing a younger woman's likelihood of being poor than it is in reducing the chances that the average woman is poor.

IV. PREDICTED POVERTY RATES AMONG WOMEN, CONTROLLING FOR AGE AND EDUCATION

We have now seen that certain roles are more important than others in determining a woman's poverty. We have also seen that the relative importance of these roles varies across countries. In order to get a clearer picture of the relative importance of the different role combinations in determining women's poverty, we calculated predicted poverty rates for all women and for women under 35, using the coefficients from the best-fitting logistic regression models presented in Table 3. These rates differ from the ones reported in Table 2 in that we calculated them after controlling for education and age. The results are reported in Table 4 and Figure 2 (p. 25). These predictions were calculated using the coefficients reported in Table 3 and using the average education and mean age for all women within each country.

The first point to note about the estimates in Table 4 and Figure 2 is that the range of predicted poverty rates is quite different across the eight countries. In the United States, roles matter a lot. A woman's chance of being poor ranges from a low of 3 percent to a high of almost 70 percent, depending on her status as wife, mother, and worker. In contrast, the roles that Dutch women occupy matter, but their effect is much smaller than it is in the United States. In Holland, women's predicted poverty rates range from 1.3 to 14 percent. The ranges for the other countries fall in between those for the United States and Holland.

TABLE 4
Predicted Poverty Rates for Women, Controlling for Education and Age,
by Role Combination: Selected Industrialized Countries

Role Combination	Australia	Canada	Germany	Italy	Netherlands	Sweden	United Kingdom	United States
<u>Women aged 18-57</u>								
Married mom, not working	14.66	19.17	5.93	17.01	3.79	8.89	17.01	18.67
Married mom, working	8.11	5.61	1.98	3.90	5.85	2.15	7.50	9.50
Married, no kids, not working	8.17	10.98	3.19	10.95	13.79	18.10	8.00	11.33
Married, no kids, working	4.37	3.00	1.99	2.38	1.34	1.56	5.32	2.99
Single mom, not working	69.93	62.64	41.54	36.06	9.88	14.38	22.06	69.25
Single mom, working	27.13	20.69	13.25	10.04	7.48	3.65	14.96	29.56
Single, no kids, not working	26.55	29.28	27.12	25.29	9.88	--	10.73	32.48
Single, no kids, working	5.47	9.40	4.00	6.28	1.74	8.30	4.23	10.40
<u>Women aged 34 and under</u>								
Married mom, not working	15.93	27.13	8.88	20.10	5.72	11.94	21.66	23.33
Married mom, working	9.16	5.63	3.29	4.09	5.23	3.45	27.11	14.59
Married, no kids, not working	15.93	17.97	2.61	12.43	5.72	11.94	5.40	14.45
Married, no kids, working	3.77	3.39	2.61	2.35	0.99	0.52	5.40	2.23
Single mom, not working	76.95	66.89	51.18	81.33	5.72	23.96	21.66	70.91
Single mom, working	36.18	23.15	14.57	24.52	5.23	7.66	18.65	33.88
Single, no kids, not working	21.21	17.97	22.41	6.05	5.72	--	5.40	24.76
Single, no kids, working	5.27	8.21	4.83	2.28	0.99	10.47	5.40	10.87

Source: Luxembourg Income Study.

Note: Predicted rates are based on coefficients from best-fitting logistic regression models in Table 3. "Mom" refers to a woman who lives in a household with a minor child who is at least fourteen years younger than she is. "No kids" refers to a woman who lives in a household with no minor children who are at least fourteen years younger than she is; note, however, that that woman may have given birth to children who no longer live in the household with her.

To get an idea of the upper limit of women's risk of poverty in each of the countries, consider the predicted poverty rates for single mothers who are homemakers (row 5). Recall from Table 2 that this is the poorest group of women in nearly all the countries (Sweden is the exception). The large variation in the percentages of single mothers who are predicted to be poor demonstrates quite well that some countries do much better than others in protecting the most vulnerable women in the population. Note also that Great Britain does much better than the other English-speaking countries in protecting single mothers from poverty.

Row 1 in Table 4 reports the predicted poverty rates for women in the traditional role combinations. The rates range from a low of 3.8 percent in the Netherlands to a high of 19.2 percent in Canada. Except in Germany and Holland, the predicted poverty rates for women who occupy the traditional role of wife-mother-homemaker are higher than the actual poverty rates for all women (Table 2, row 9). This is somewhat surprising given the fact that many people believe that traditional roles protect women from poverty. In Germany and Holland, traditional women are predicted to be slightly better off than the average woman, with 5.9 percent and 3.8 percent, respectively, predicted to be poor. Esping-Andersen has argued that corporatist countries, such as Germany and Holland, place a high value on traditional roles for women, and therefore we might expect that the institutions needed to support women in traditional roles would be more effective in these countries than elsewhere. The predicted poverty rates for traditional women in Italy (17 percent) do not fit this pattern, however, even though Italy is also in the "corporatist block."

The rates reported in row 2 indicate that in all of the countries except Holland, married mothers who work outside the home are less likely to be poor than married mothers who occupy the classic traditional role. The predicted percentages range from a low of about 2 percent for women in Germany and Sweden to a high of about 9.5 percent for women in the United States. We should note that while we have controlled for women's education to some degree, some of the advantages

associated with marriage may stem from differences in husbands' characteristics. In other words, some of the differences in the "gains from marriage" across countries may be due to differences in mating patterns, as opposed to social institutions.

The predicted poverty rates of married women not living with children are reported in rows 3 and 4. In general, these women are less likely to be poor than more-traditional women. The predicted poverty rates range from a low of about 5 percent in Germany (rows 3 and 4 summed) to a high of almost 20 percent in Sweden. As we noted in the previous section, it is difficult to say whether or not the women in these two categories are childless or whether they have had children who have since grown up and left the household. In either event, adding the nontraditional role of "worker" improves women's economic status. In all of the countries except the United Kingdom, married women who are working and not raising children have the lowest predicted poverty rates. (In Germany, the predicted poverty rates for working-married-mothers and working-childless-wives are virtually identical).

As noted before in Table 2, single-mother-homemakers in all countries except Sweden have the highest poverty rates of all women. The predicted poverty rates for this group of women (Table 4) range from a low of 9.9 percent in the Netherlands to a high of nearly 70 percent in Australia and the United States. In half the countries, women in this category are at least three times more likely to be poor than women occupying the traditional role of wife-mother-homemaker. Although working reduces the chances that a single mother is poor, the risk is still very high, ranging from about 3.7 percent in Sweden to about 30 percent in the United States. Again, we should emphasize that single mothers who work are most likely selected on the basis of their earnings capacity. Although we control for women's age and education, these two variables do not capture the full range of differences between mothers who work and mothers who stay at home.

The predicted poverty rates for women who are single and childless are reported in rows 7 and 8 of Table 4. We do not report an estimate for Swedish women in row 7 since we believe household resources are not measured accurately for this group. As with other groups of women, working lowers the probability of being poor for single women who are not raising children. The predicted rates of poverty for nonworking single women with no children in the household range from a low of 9.9 percent in the Netherlands to a high of 32.5 percent in the United States, while for working singles who are not raising children these rates range from a low of 1.7 in the Netherlands to a high of 10.4 in the United States.

Panel 2 of Table 4 provides the predicted poverty rates for women under the age of 35. The first point to note is that younger married mothers (both traditional and working) are more likely to be poor than older mothers. This is partly due to the fact that these women are married to younger men who have less work experience and lower earnings. In all countries except the Netherlands and the United Kingdom, younger nonworking single mothers are more likely to be poor than older nonworking single mothers. In all countries except the Netherlands, younger working single mothers are more likely to be poor than older working single mothers. Thus, in the Netherlands, younger single mothers are less likely to be poor, regardless of their work status, than older single mothers. In all countries with the exception of Sweden, single childless women are less likely to be poor if they are young. This probably reflects the higher education levels of younger women.

CONCLUSIONS

The results reported above are quite consistent with respect to what they tell us about the relationship between women's roles and women's poverty status. If we rank the different role combinations with respect to how well women are doing in each of the categories, we find that

married-childless-workers rank either first or second in all of the countries. Also doing well are women who are single-childless-workers and women who are married-mother-workers.

Controlling for education and age, single-mother-homemakers have the highest poverty rates of all women in every country except in Sweden and Holland where they rank sixth and seventh out of eight. Somewhat surprisingly, and again controlling for education and age, women in the traditional role of wife-mother-homemaker have at least the fourth-highest poverty rate in all of the countries except the Netherlands.

It is evident that marriage and work reduce the risk of poverty for women in all countries, whereas motherhood increases their chances of being poor. The only mothers who have a better-than-average chance of staying out of poverty are those who combine parenthood with work and marriage. Again, the finding that married mothers who work fare better than traditional mothers holds in all of the countries except for Holland where traditional women rank one step higher than working mothers.

Thus, we conclude that it is not nontraditional roles per se that increase women's risk of poverty. Single women who are childless and working are "nontraditional" on all three counts. Yet, as our predicted poverty rates show, they do better than the average woman in each country and much better than women who occupy the traditional role of wife-mother-homemaker. Similarly, working women almost always do better than homemakers, regardless of what other roles they occupy.

Clearly, it is motherhood or childrearing, rather than being single or working, that increases a woman's risk of poverty. When motherhood occurs outside marriage, women are especially vulnerable, although some countries do much more to support single mothers than others. Even within marriage, having a minor child in the household places women at a serious disadvantage relative to other married women.

How do our results line up with Esping-Andersen's typology of welfare states? Do the eight countries fall into three distinct clusters? Do women in liberal countries do worse on average than

women in the social democratic and corporatist countries? And finally, do women in nontraditional roles do better in our one example of a social democratic country--Sweden--than they do in other places?

With respect to the first and second questions, the liberal countries--Australia, the United Kingdom, the United States, and Canada--do form a cluster, and women in these countries appear to have higher poverty rates on average (see Figure 2) than women in other countries. There are two qualifications to this statement, however: women in Great Britain have lower poverty rates than we would expect to find in a liberal country, and women in Italy have higher rates than we would expect to find in a corporatist country. Indeed the poverty rate for all women in the United Kingdom is slightly lower than the rate for all women in Italy. If we take into account the fact that the United Kingdom is the most generous of the liberal states and Italy is the poorest of the corporatist countries, these exceptions are not inconsistent with the general rules set out by Esping-Andersen.

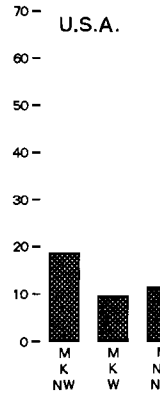
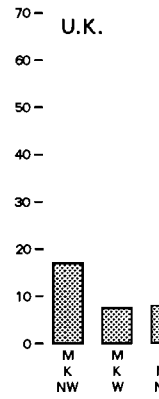
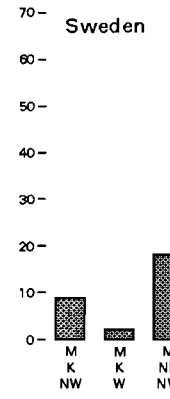
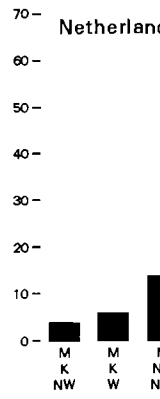
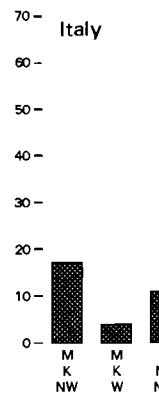
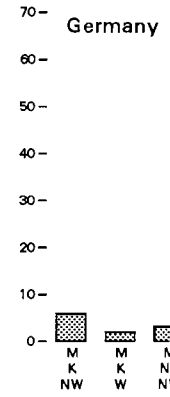
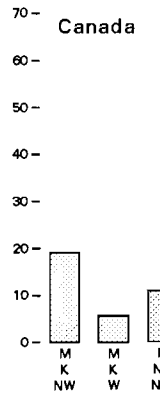
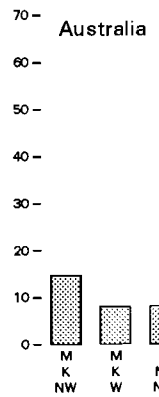
With respect to the question of whether nontraditional women fare better in countries that promote gender equality, the answer is less clear. If we compare Sweden to Germany--the prototypes of the social democratic and corporatist welfare states--it looks as though nontraditional women fare much better under the social democratic regime. Single mothers are much better off in Sweden than in Germany in an absolute sense, and they are better off relative to traditional mothers.

If we compare Sweden to Holland, however, the typology does not hold. Single mothers in Holland do about as well as single mothers in Sweden, both absolutely and relative to traditional women in these countries. Finally, the typology does not do a very good job of predicting the degree of inequality across roles within each country. Judging from Figure 2, inequality is lowest in Sweden, Holland, and Great Britain, each of which represents a different welfare state.

In closing, two points are worth emphasizing with regard to future work on welfare states. First, our examination of eight countries clearly demonstrates that the selection of countries is

Figure 2

Predicted Poverty Rates Using Best Fitting Model for Each Country



* Data not valid

M: Married S: Single
 K: Has Kids NK: No Kids
 W: Working NW: Not Working

important in determining the results. Studies that compare Sweden, Germany, and the United States, for example, may produce a sharper contrast than studies that use the United Kingdom and Holland as examples of liberal and corporatist states. This suggests that analysts should be cautious about generalizing from a selected group of countries.

Second, our results indicate that the effects of different roles on women's poverty status vary greatly across countries and that future studies should proceed on two fronts: by trying to model the process that sorts women into different roles and by trying to measure directly the particular policies that reduce the risk of poverty associated with the different roles.

Endnotes

¹For more information on the LIS data base, see the LIS-CEPS information guide (1991).

²There is no marital status variable available for Sweden. However, it is possible to distinguish male/female couples from other individuals. Although it is likely that a relatively high percentage of Swedish couples are actually cohabiting, we do not believe this is a problem for the purposes of our study. We are interested in the association between marriage and poverty, and as far as we know, cohabiting women are treated the same as married women by Swedish laws governing income transfers, labor market policy, and gender equality.

³The LIS data do not provide information on women's fertility history. Nor are there any variables that allow us to link women with specific children in the household. We were, however, able to use the age of the woman and the age of the youngest child in the household to get a proxy measure of motherhood. If a woman lived in a household in which the youngest child was age 17 or younger (16 in Australia) and was at least fourteen years younger than the woman herself, this woman was classified as the mother of that child.

⁴LIS defines disposable income after taxes as follows: $DPI = \text{Earnings} + \text{cash property income} + \text{pension income} + \text{transfer income} + \text{other cash income} - \text{income taxes} - \text{mandatory payroll taxes}$ (where earnings = gross wages and salaries + self-employment income).

⁵By the same token, the poverty rate of Swedish parents living with adult children as reported in the LIS data is too low, since it underestimates the needs of those households.

⁶Based on the distribution of the education variables and the detail of their classification schemes, high education was defined as follows:

Australia:	Other certificate, bachelor's degree or higher, other qualification
Canada:	Postsecondary diploma, university degree

Italy:	College graduate, high school degree, less than high school (six to eight years)
Germany:	Technical high school, general high school, other education
Netherlands:	Secondary, university
Sweden:	NO EDUCATION VARIABLE AVAILABLE
U.K.:	Seventeen through high (age at which education was completed)
U.S.:	Fifteen through nineteen years of schooling

⁷There are some notable exceptions. In Germany, 56.8 percent of single women who are childless but not working are highly educated; in Italy, 60.3 percent of single mothers who work are highly educated; and in Holland, over 40 percent of single mothers who work and single women who do not work are highly educated.

⁸It is important to note that the effects of all of the coefficients should be interpreted net of the other effects in the model.

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