

Büchel, Felix; Mertens, Antje; Orsini, Kristian

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**Is Mothers' Employment an Effective Means
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Empirical Evidence from Seven European Countries**

Kristian Orsini, Felix Büchel, Antje Mertens

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Is Mothers' Employment an Effective Means to Fight Family Poverty? Empirical Evidence from Seven European Countries

Felix Büchel^{1,2,3,4,5}, Antje Mertens^{1,6} and Kristian Orsini⁷

1. Max Planck Institute for Human Development, Berlin, Germany

2. Technical University of Berlin, Germany

3. Free University of Berlin, Germany

4. German Institute for Economic Research (DIW), Berlin, Germany

5. IZA, Bonn, Germany

6. Humboldt University of Berlin, Germany

7. DULBEA at the Free University of Brussels, Belgium

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Abstract:

Using data from the mid-1990s from the Luxembourg Income Study (LIS), we analyze for several household types the effect of mothers' work participation on families' relative income position and poverty risk. Results are compared across seven European countries with contrasting family policies: the UK, Germany, France, the Netherlands, Italy, Sweden, and Finland. Findings based on traditional research designs first indicate a strong positive effect of mothers' labor market participation on families' income situation in almost all countries and family types. By applying selectivity models, however, we show that a substantial part of this positive effect is caused by the fact that mothers in employment are a positively selected group. This implies that continuing policy measures to expand mothers' labor market participation – which are, nevertheless, strongly recommended – are likely to become less efficient as the work participation of mothers increases.

Keywords: Poverty, female employment, selectivity, cross-country analysis

JEL: D31, I30, J16, J22

1. Introduction

In most industrialized countries, income inequality has risen over the last two decades (Atkinson et al. 1995; Smeeding 2000). As a consequence, poverty is a substantial societal problem even in today's highly developed economies. Children play an important role in this context. While they probably suffer most from poverty (Vleminckx and Smeeding, 2001; Duncan and Brooks-Gunn, 1997), they also contribute by their mere existence to their family's risk of becoming poor. In most countries, households with children are more likely to be poor than single households or couples without children (Oxley et al., 2001). Having children increases household expenditure by a considerable amount, and, at the same time, often decreases household income due to problems arising from the combination of childcare and work. There is a vast amount of literature that deals with female labor force participation and the factors determining their employment probability. These factors include cultural norms (Albrecht et al., 2000; Antecol, 2000), historical experience, and institutional effects resulting from employment policy decisions (for an overview, see Clark et al., 2003). In the latter context, analyses of the effects of the availability and costs of childcare (Powell, 1998; Anderson and Levine, 2000; Baum, 2002; Pettit and Hook, 2002), regulations such as maternity leave legislation (Ondrich et al., 2003), and kindergarten or school schedules play a dominant role in the literature (for an overview, see Scheiwe, 1994; Gornick et al., 1997; 1998, Voicu and Buddelmeyer, 2003). Related topics that have been widely analyzed include the effect of tax regulations on female employment (Beer, 1998; Meyer and Rosenbaum, 2001) and the impact of family policy on the family gap in pay (Harkness and Waldfogel, forthcoming). However, considerably less has been written on the family income effects of mothers' employment, especially with respect to low-income families. Although the bulk of the literature discussing anti-poverty strategies focuses on the effects of public transfers (Frick et al., 2000; Sainsbury and Morissens, 2002), the few existing works on the relation between mothers' employment and poverty (see Section 2) seem to indicate that employment issues play an even more important role. Since more flexible work arrangements and the relative increase in women's wages have opened up more opportunities for female employment in most industrialized countries, this aspect is of increasing relevance.

In this paper, we analyze whether promoting mothers' employment may significantly help to reduce family poverty. As it is well known that partial effects of family policy are difficult to identify (Christopher, 2002), we try to assess the overall institutional effects by comparing the

situation across countries. Here we control for female labor market involvement in as standardized a manner as possible. We use data from the Luxembourg Income Study (LIS) for seven European countries with contrasting welfare and family policies: the UK, Germany, France, the Netherlands, Italy, Sweden, and Finland. Although we are aware that it is hardly possible to separate institutional from social effects and cultural norms, by comparing patterns of results across countries, we can identify those regimes that are most successful in protecting families from poverty by means of mothers' employment. This may help to formulate policy recommendations.

The remainder of this paper is structured as follows. Section 2 gives an overview of the existing literature on female employment as a strategy to combat family poverty. In Section 3, we outline our data source and the choice of models. Here, we account for the selective access of mothers to work; this constitutes the innovative element of the paper. Descriptive results and outcomes from the models are discussed in Section 4. Our conclusions are then presented in the final Section 5.

2. Existing Literature

In view of the vast literature on female labor market behavior, we will restrict this overview of previous work to the specific focus of our analysis, and discuss work on female labor market participation in the context of income inequality and poverty.

Using the Bank of Italy Survey of Households' Income and Wealth (SHIW), Del Boca and Pasqua (2002) found that increased female employment in Italy would reduce inequality in family incomes. Several authors have reached similar conclusions for the US, e.g. Betson and van der Gaag (1984) and Cancian and Reed (1998), both using Current Population Survey (CPS) data. Finally, Cancian et al. (1992) use US data from the March Current Population Survey (CPS) to analyze – among other things – the effects of wives' earnings on mean family income. They found increasing effects from the 1968-1978 period to the 1978-1988 period, with the effects for black females always being more pronounced than those for white women.

An early study by Förster (1994) using LIS data shows substantially lower poverty rates for families with two earners than for one- or zero-earner households in all 13 of the countries analyzed. O'Connor and Smeeding (1995) follow a similar approach based on the same data, now differentiating between household types. They find the poverty-reduction effect of mothers' employment to be substantial in the US, Canada and Sweden, and lower in the UK and the Netherlands. A study by Oxley et al. (2001) compares OECD data on 16 countries, and also indicates a much lower risk of child poverty in double-earner families (Oxley et al., 2000: 387f.). A study by Solera (2001) compares the role of public transfers and support for mothers' employment in the fight against poverty. Solera uses data from the Luxembourg Income Study (LIS) to compare the situation in Italy, the UK and Sweden. She concludes that "it appears that cash transfers are not the key factor in explaining differences in family across countries. The primary reason for the 'Swedish success' (with low family poverty; the authors) is that women are integrated into the labour force" (Solera, 2001:475). The same conclusion is drawn by Davies and Joshi (1998), who use British data from the Family Expenditure Survey (EFS): "Women's earnings were an important factor in keeping families out of poverty" (p. 33). This is confirmed by Becker (2002) using very similar German data from the *Einkommens- und Verbrauchsstichprobe* (EVS). Becker concludes that, for wives, even a part-time job may secure her family's protection against poverty (Becker 2002:139). Consequently, all of these studies recommend that employment and family policy makers increase efforts to expand female employment and especially mothers' employment.

However, all existing studies that have analyzed the relation between poverty and mothers' employment neglect the fact that those women who may additionally enter the labor market might well differ in their labor market performance from those who are already in employment and observable as working females in our data. In other words, working mothers are a positively selected group with respect to productivity (cf. Del Boca et al., 2000). We therefore can expect additional female employment to be less productive and hence to yield lower wages and lower poverty-protection effects than observed in the existing data. If this were the case the expected effect of enhanced policy measures would be overestimated. We therefore extend the existing body of literature by controlling for this selectivity problem in our models.

3. Data and Methods

Our data comes from the Luxembourg Income Study (LIS). The LIS project collects data from almost 30 OECD countries and re-classifies it in order to generate a harmonized data set. The original microdata are collected by different national statistical offices at both the household and the personal level (the latter being divided into adults and children). More than 100 socio-demographic variables and almost 50 economic variables are available at the household level. The statistical information at the personal level is slightly narrower, as most surveys focus on the household, rather than on single individuals (cf. Smeeding et al., 1990; Smeeding, 2002, for additional information). From this data set, we select seven European countries with contrasting family policies: the UK, Germany, France, the Netherlands, Italy, Sweden, and Finland. The information we use is the latest available and refers to the mid-1990s: three of the surveys refer to 1994 (Germany, France, and the Netherlands) and four to 1995 (UK, Italy, Sweden and Finland).

Our units of analyses are households. We restrict our sample to prime-age households. These are defined as complete families with a father aged 25 to 60 or single-parent families with a head of this age. After this selection, the number of cases ranges from 3,436 for the Netherlands to 9,179 for Sweden. The focus of our analysis is on families (be they complete and single-parent) with at least one child aged up to 16 years; couples with no children serve as the reference category. In our basic descriptive tables, we provide information on other household types as well.

The most important variable in our analyses is the annual disposable household income. To reduce outlier effects, we perform top- and bottom-trimming to exclude the upper and lower ends of the country-specific income distributions (0.5% at both tails). We then equalize incomes using the so-called old OECD equivalence scale, with weights of 1 for the head of household, 0.7 for other household members aged 14 and older, and 0.5 for children below 14. The resulting variable can be easily compared across countries. From that we calculate the relative income position of households per country (mean per country = 100). Beyond the analysis of relative income positions, we also focus on poverty, using the concept of relative poverty within countries. Households are categorized as being poor if their equivalised annual disposable household income is lower than 60% of the country-specific mean. Table 1a and

1b show mean values of relative income position and poverty rates per household type and country.

The central aim of our analyses is to identify differences across family structures. Our main focus is on the economic consequences of having children in the household. We define children as household members aged up to 16 years, since in many countries compulsory education ends at that age. We then distinguish different types of families with children: couples with one child up to 16, couples with two or more children up to 16, and single-parent households with child(ren) up to 16. Since the latter group is socially most heterogeneous with regard to whether the lone parent is a single mother or a single father, we restrict this subgroup to single-mother households, losing only very few cases. We also treat the somewhat special group of households including children aged both up to and over 16 as a group in its own right. Couples without children form the “natural” reference group for all of these household types. Other household types are of minor interest in our family-minded research design. Nevertheless, we include single male and female households, couples with child(ren) aged above 16 years, and a residual category of other households (mainly a few three-generation households) in the following analysis.

The LIS administration makes a great effort to ensure that information be compatible across countries, and we set a special priority on using only fully comparable variables. The price to pay for this strategy is that – because questionnaires vary across participating countries – the information available is not as we would prefer. For our analysis this means, for example, that we only know how many weeks females have been employed, and not how many hours they have worked. Thus, we are not able to control for part-time status, but are forced to measure females’ work participation in rather undifferentiated form, using a threshold variable that equals one if they worked for more than 35 weeks in the last year in the descriptive tables, and the weeks worked in the last year (divided by 52) in the models. Tests for robustness showed that our results remain largely stable when choosing other thresholds like 30 or 40 weeks of female labor market participation per year.

To measure the effect of female labor market participation on household income, we first break down all household categories into those with working females and those without. This reveals differences in mean relative income positions and poverty rates according to female employment per household type.

In a next step, we then control – additionally to the household type – for socio-economic background variables such as the age and education of the household head. We further control in very simple form for the potential income of the husband, if present, by controlling the intensity of his labor market participation. The latter is measured in terms of weeks worked in the last year, divided by 52 (for single-mother households: value = 0). To tap the impact of female work as precisely as possible, we calculate terms of interaction per household type. We start by looking at the influences on relative income position within a traditional OLS model. To this end, we regress relative income position y_i on a constant and the described set of covariates x_i :

$$y_i = \mathbf{a} + \mathbf{b}'x_i + u_i \quad (1)$$

Using the same covariates, we also compute the probability of being poor p_i using a simple probit model:

$$p_i = \mathbf{g} + \mathbf{d}'x_i + v_i \quad (2)$$

As already mentioned in the introduction, these results may be biased if mothers' access to work is not random but selective. Indeed, it is most likely that those mothers in employment are a selective group, and it can be assumed that the selection process is related to our dependent variables referring to the household income. We therefore try to capture this effect by including controls for selection.

For the relative income position, a ML approach for sample selection is applied. Starting from our regression:

$$y_i = \mathbf{a} + \mathbf{b}'x_i + u_{1i} \quad (3)$$

we also have a selection equation for female employment:

$$e_i^S = \mathbf{a}^S + \mathbf{b}'^S z_i^S + u_{2i} \quad (4)$$

where e^S is a dummy indicating whether or not the female works, z^S is the vector of covariates, and u_{2i} is the error term. The identification of the entire model is secured by controlling for a different covariate set including single-mother status, age structure of the children in the household, females' age and education, and additional household income in the selection equation. Appendix Tables A1 and A2 document female labor participation rates and present a single probit model of female labor supply, confirming Shirahase's (2003) finding that female labor supply has similar determinants across countries, but on different levels. In this selection model both error terms are assumed to be normally distributed with $N(0,\sigma)$ and $N(0,1)$ respectively. If the correlation \mathbf{r} between the two error terms is not equal to zero, then standard OLS applied to (3) yield biased results.

The poverty probit with sample selection is similar (Van de Ven and Van Praag, 1981). As before, we take our poverty probit equation:

$$p_i = \mathbf{g} + \mathbf{d}'x_i + v_{1i} \quad (5)$$

and a probit selection equation for female employment:

$$e_i^S = \mathbf{a}^S + \mathbf{b}^{S'}z_i^S + v_{2i} \quad (6)$$

In this bivariate probit model both error terms are assumed to be normally distributed $N(0,1)$. Again, if the correlation \mathbf{r} between the two error terms is not equal to zero, then standard probit techniques applied to (5) yield biased results and we therefore make use of the selectivity model.¹

4. Results

4.1 Descriptive Results

Basic Information on Relative Income Positions and Poverty Rates

Table 1a shows the relative income position measured in terms of equivalised net household income by household type and country. It can easily be seen that across all analyzed countries couples without children usually fare best, with relative income positions of around 130, well

¹ Both models are estimated using Stata 7.

above the average of 100. Singles as well as couples with children older than 16 are also frequently found to have relative income positions above the average. The presence of children reduces the equivalised net household income, showing that transfers or tax concessions to families with children do not make up for the costs associated with having children. While one child leads to relative income positions around the average of 100, two or more children reduce relative income positions drastically, to values between 76 and 86. Interestingly, the age structure of the children does not play a major role: the results for households with two or more children aged up to 16 years do not differ greatly from those for households including children aged both up to and over 16. Not surprisingly, single mothers in all countries are by far the worst off, with relative income positions that, in some countries, drop to almost half the mean of the country-specific relative income position. Finally, we also observe below-average income positions for our residual category. This is consistent with our expectations that this group consists mainly of multi-generation households.

** Table 1a about here **

Several interesting features emerge from the cross-country comparison. In general, differences across household types are more pronounced than differences across countries. Single mothers are considerably better off in the Nordic countries of Finland and Sweden, where the social system is well established and the tax-benefit system has a strong leveling impact (see the atypically low values for singles in these countries), but also in Italy. The latter finding comes as a surprise, as there is little state support for mothers in Italy. It may be the case, however, that these observations are based on a positive selection of single mothers, i.e., those in employment and with higher than average earning capacity. Many single mothers in Italy are able to rely on the typically well-established Italian family network and move back to their parents and are thus not detected by our household typology. Indeed, the share of single mothers in our sample is lowest in Italy (see Table 3). An analogous interpretation could apply for the observation that singles in Italy have by far the highest relative income positions across countries. In fact, Italian children tend to leave the parental home at a very mature age by European standards, only once they have achieved a secure economic situation. In France, parents are less economically disadvantaged than in other countries. This may be related to the widespread provision of day-care facilities, allowing mothers to serve at least as an additional earner. Indeed, mothers' work participation is rather high in France (see Table

3). This is promoted by the typical French combination of basic universal child benefit and targeted extra help for parents in one of the most child-friendly tax systems.

Table 1b shows poverty rates on the household level in terms of the share of households where the equivalized annual disposable household income is lower than 60% or 50% of the country-specific median. In our interpretation, we focus on the 60% results and leave the 50% results uncommented, as additional information for the reader.

** Table 1b about here **

A first important result from the cross-country comparison is that families living in the two Scandinavian countries analyzed have a very low poverty risk. This is by no means a foregone conclusion given the previous relative income position analysis, and indicates that Swedish and Finnish family policy succeeds in supporting low-income families and thus ensuring a compressed income distribution. This result is particularly remarkable considering that rather many poor individuals can be observed among Scandinavian singles, especially Finnish ones. Complete families with young children are much more vulnerable to poverty in the UK and Italy. In almost all countries, single mothers run the highest poverty risks of all analyzed household types, above all in the liberal welfare state of the UK (61%), where single mothers are far more vulnerable than in Finland (8%), for example. Finally, a look at the undifferentiated total poverty rates across countries yields three clusters of states: Sweden and Finland with a successful poverty-protection policy; Germany, France, and the Netherlands with intermediate poverty rates, and the UK and Italy, where poverty protection does not seem to be a major policy goal.

Female Employment and Household Income

In the following analyses, we restrict our sample by excluding singles, families where all children are aged above 16, and the residual category consisting mainly of multi-generation households. Thus, the sample now includes only households in which children aged up to 16 years live with their parents or their mother alone, as well as couples without children, serving as the reference category.

We first consider the influence of female employment on the relative income position of a household (Table 2a). At a first glance, we can state that female employment has a major influence on the household income situation in all analyzed countries. Differences across household types within countries are not very pronounced, the situation in single-mother households being an exception. Not surprisingly, the question of whether or not a single mother works is crucial to household income. Differences within household types across countries are much more pronounced. For all household types, we observe the highest differences between households with and without female labor market participation in Italy. The female work/non-work differential ranges from 64% for Italian couples with one child to 137% for Italian single mothers. The income of working single mothers in Italy almost equals the mean of the Italian (equivalized) income distribution (97), whereas that of non-working single mothers is far lower (41). This is the lowest relative income position we found across all household types and nations, and supports our earlier conjecture that, compared to other countries, single working mothers in Italy are a positively selected group – because policies to support single-parent families are largely non-existent, single mothers with no market income opportunity are forced to live with their parents. On the other hand, we find the by far lowest effect of female work in Swedish households. Values range from a 9% differential in families with older children to one of just 23% in single-mother households. This signals that family policy to support single families is very successful in Sweden. In addition, bearing in mind that Swedish female labor market participation is very high, the Swedish results indicate that the households with non-working females are atypically well-off.

** Table 2a about here **

Focusing on the poverty-reduction effect of female work (Table 2b), we observe that, in some countries and for some household types, female work may reduce the household's poverty risk to almost zero. This is the case for couples with no children or just one child aged up to 16 in Germany, France, Sweden, and Finland. Since poverty rates for complete families with one child are about 6% in Germany and France (see Table 1b), the poverty-reduction effect of female work in these two countries is extremely large (close to 90%). Poverty reduction due to female work seems to be lowest in the Netherlands and, in complete families, highest in France. The poverty-reduction effect for working single mothers is highest in the Scandinavian countries (85%). The main outcome of this part of analysis, however, is that

poverty-reduction effects in all countries are very sizeable, ranging mainly from 65 to 85% regardless of household type.

** Table 2b about here **

4.1 Results from the Models

Table 3 presents information about the distribution of all variables used in the models. Although we do not plan to discuss this information in detail, some aspects seem worthy of comment. While the measures reveal a great deal of diversity in social structure across countries, some similarities are notable. First of all, the distribution of “regular” household types is rather similar across countries, with the exception of the low numbers of families with older children in Sweden which, as mentioned above, can be attributed to the design of the Swedish survey. A contrasting situation is given for single-mother households. Figures in our sample vary from 2.2% in Italy to 12% in the UK. Female labor market participation rates per household type also vary substantially, not only within countries across household types, but also within household types across countries.

** Table 3 about here **

Results from the Basic Models

When analyzing relative income positions by controlling for various socio-economic measures including female labor market participation by household type (Table 4a), results concerning the income positions of “regular” household types largely mirror the descriptive results shown in Table 1a. Childless couples have the highest relative income position in all countries under consideration. Compared to them, the losses incurred by couples with only one child are the smallest. Losses incurred by complete families with two or more children are of a similar magnitude, regardless of the age structure of their children. This pattern can be observed in all analyzed countries. However, the descriptive results for single-mother households must be relativized. Results from our models reveal that, in many countries, single-mother status is correlated with a relatively poor socio-economic background.

Therefore, the low incomes shown for this group in Table 1a should not simply be considered a “penalty” for the lack of a partner, but are at least partly determined by negative selection. As expected, the differences in income positions across household types are lowest in Sweden. However, in all analyzed countries, the income positions of all types of family are significantly lower than that of the reference group of childless couples. The improvement in relative income position brought about by female work remains substantial in all household types across all countries, even when controlling for household background characteristics. In general, household income profits most from additional female earnings in families with one child, regardless of whether these families are complete or not. For our control variables, we find the expected correlations. In all countries, the relative income position rises concavely with increasing age, and is positively correlated with the education and labor market participation of the household head.

** Table 4a about here **

Turning to families’ risk of poverty, the pattern of results presented in Table 4b is very similar to that described for Table 1b above. In all countries, families with children are more likely to be poor than childless couples, even when important socio-economic background variables are controlled. Families with more than one child and single mothers are at increased risk. The interactions are highly significant and show that female employment dramatically reduces the risk for poverty. Terms of interaction by type of household show, in general, the highest poverty-reduction effects for families with older children and single mothers. Concerning our control variables, we find that the poverty risk is more evenly distributed across age groups than was indicated by the relative income position analysis. Better education and active labor market participation on the part of male partners, however, are important poverty-protection factors in all analyzed countries.

** Table 4b about here **

Results from the Selection Models

Thus far, it seems that households where females work rank significantly higher in the income distribution and are less likely to be poor in all countries under investigation. However, the

story might not be as simple if only those females with relatively good earnings possibilities are offered jobs with a rate of pay above their reservation wage and actually enter or remain in employment. If this is the case, the (female employment * household type) interaction terms are likely to be biased upwards in the relative income position equations and downwards in the poverty condition regression. Women at the lower end of the wage distribution might not reduce the poverty risk much, if at all (see discussion in Section 3).

** Tables 5a, 5b about here **

Tables 5a and 5b suggest that this does indeed seem to be the case.² The likelihood ratio test of independent equations significantly rejects the null hypothesis that \mathbf{r} equals zero in most cases. The interaction terms indicate that the previously reported results were biased. In most cases, the interaction terms between household type and female employment become insignificant, or at least much less significant. It now seems that female employment does not significantly increase the relative income position and, on average, does not reduce the probability of poverty. As set out above, this is probably because only those females who have higher earnings possibilities and receive good wage offers actually return to work after having a child. If females with lower earnings possibilities returned to work, they would not have such a great effect on the poverty risk.

5. Conclusions

Our results first confirmed the established finding that poverty risks are very low in households where the mother works. Additional household income beyond the contribution of a male breadwinner, and the employment of single mothers, seem to be very effective means to protect families from poverty. However, the employed mothers in our data set seem to form a positively selected group of mothers with respect to their expected productivity. In other words, if motivated by the empirical results of traditional research designs that fail to account for such selective access of mothers to the world of work, the effectiveness of policy measures to support mothers' employment may be seriously overestimated. This does not

² Model 5a revealed collinearity problems for the interaction between the "female works" variable and single-mother status in the Netherlands. We therefore dropped this interaction term in the Dutch model. Furthermore, we encountered problems with the low number of cases for Swedish households including children aged both up to and over 16. This is because people aged 19 and older are treated as a household of their own in the Swedish survey, even if they still live with their parents. Therefore, we dropped this household type in the Swedish model. Analogous restrictions hold for Model 5b.

mean to say that mothers' employment should not be supported. It is evident that this is one of the main strategies to combat family poverty, and that it also yields other positive effects beyond poverty aspects. However, family policies that aim at improving mothers' labor market participation may become less efficient as the labor force participation of mothers increases. Further research in this field should analyze this correlation in more detail.

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Table 1a: Relative (Equivalized) Income Position, by Household Type, in Seven European Countries

| Household Type | UK | GE | FR | NL | IT | SW | FI |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Single males | 119 | 115 | 116 | 123 | 145 | 103 | 100 |
| Single females | 107 | 104 | 112 | 113 | 127 | 101 | 102 |
| Couples with children, all > 16 | 113 | 100 | 101 | 88 | 104 | 98 | 107 |
| Couples, no children | 133 | 130 | 125 | 129 | 134 | 125 | 122 |
| Couples with children, some = 16, some > 16 | 87 | 78 | 79 | 73 | 77 | 81 | 84 |
| Couples with one child = 16 | 98 | 95 | 105 | 99 | 105 | 99 | 101 |
| Couples with two or more children = 16 | 77 | 76 | 85 | 76 | 76 | 79 | 86 |
| Single mothers, at least one child = 16 | 54 | 59 | 68 | 57 | 77 | 77 | 80 |
| Else | 89 | 88 | 84 | 74 | 99 | 81 | 92 |
| All | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.
Only households with a head aged 25-60.

Source: Own calculations based on LIS data (1994/95).

Table 1b: Poverty Rates, by Household type, in Seven European Countries

| Household Type | Poverty Line | UK | GE | FR | NL | IT | SW | FI |
|---|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Single males | 60% | 13.2 | 8.9 | 9.4 | 4.4 | 10.3 | 6.6 | 12.1 |
| | 50% | 7.0 | 5.6 | 4.4 | 2.1 | 9.7 | 4.6 | 4.7 |
| Single females | 60% | 9.2 | 10.2 | 6.2 | 4.7 | 8.4 | 3.2 | 6.6 |
| | 50% | 4.4 | 4.7 | 3.6 | 4.4 | 5.3 | 2.1 | 3.5 |
| Couples with children, all > 16 | 60% | 5.9 | 6.4 | 8.2 | 13.0 | 13.4 | 4.0 | 2.3 |
| | 50% | 2.9 | 1.4 | 4.1 | 9.4 | 8.8 | 2.1 | 0.9 |
| Couples, no children | 60% | 8.5 | 3.4 | 4.5 | 3.5 | 11.1 | 1.6 | 2.1 |
| | 50% | 5.7 | 1.9 | 1.9 | 2.1 | 6.8 | 0.8 | 1.0 |
| Couples with children, some = 16, some > 16 | 60% | 19.4 | 15.9 | 21.6 | 18.1 | 33.0 | 10.0 | 9.9 |
| | 50% | 13.8 | 5.7 | 11.4 | 11.7 | 20.8 | 2.2 | 3.9 |
| Couples with one child = 16 | 60% | 17.3 | 6.0 | 5.7 | 5.9 | 10.9 | 2.1 | 2.7 |
| | 50% | 11.5 | 2.9 | 3.5 | 4.0 | 7.0 | 1.1 | 1.0 |
| Couples with two or more children = 16 | 60% | 28.9 | 15.8 | 13.7 | 9.5 | 27.9 | 6.2 | 5.9 |
| | 50% | 21.2 | 8.4 | 6.9 | 6.7 | 20.6 | 2.5 | 2.0 |
| Single mothers, at least one child = 16 | 60% | 61.4 | 42.3 | 29.9 | 27.6 | 32.6 | 11.6 | 7.5 |
| | 50% | 42.9 | 30.1 | 12.6 | 14.1 | 28.1 | 4.8 | 3.5 |
| Else | 60% | 28.7 | 17.7 | 20.7 | 28.4 | 20.7 | 10.7 | 4.9 |
| | 50% | 16.7 | 10.5 | 11.7 | 16.2 | 14.1 | 2.8 | 1.8 |
| All | 60% | 23.2 | 11.9 | 12.9 | 10.3 | 20.7 | 5.3 | 5.4 |
| | 50% | 15.9 | 6.2 | 6.6 | 6.8 | 14.2 | 2.4 | 2.0 |

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.
Only households with a head aged 25-60. Poverty line relates to country-specific median.

Source: Own calculations based on LIS data (1994/95).

Table 2a: Relative (Equivalized) Income Position, by Household Type and Female Work Participation, in Seven European Countries

| Household Type | Female Work Status | UK | GE | FR | NL | IT | SW | FI |
|---|----------------------|-----|-----|-----|-----|-----|-----|-----|
| Couples, no children | Female does not work | 112 | 107 | 104 | 107 | 97 | 113 | 107 |
| | Female works* | 144 | 140 | 142 | 143 | 172 | 130 | 140 |
| | % improvement | 28 | 30 | 37 | 34 | 77 | 15 | 31 |
| Couples with children, some = 16, some > 16 | Female does not work | 78 | 69 | 65 | 63 | 59 | 75 | 70 |
| | Female works* | 93 | 84 | 88 | 82 | 107 | 82 | 85 |
| | % improvement | 19 | 21 | 34 | 30 | 82 | 9 | 21 |
| Couples with one child = 16 | Female does not work | 85 | 83 | 89 | 86 | 78 | 89 | 84 |
| | Female works* | 111 | 105 | 113 | 109 | 129 | 102 | 105 |
| | % improvement | 31 | 26 | 25 | 26 | 64 | 14 | 25 |
| Couples with two or more children = 16 | Female does not work | 70 | 69 | 71 | 67 | 56 | 72 | 70 |
| | Female works* | 85 | 83 | 96 | 86 | 101 | 82 | 8 |
| | % improvement | 21 | 20 | 34 | 28 | 81 | 14 | 20 |
| Single mothers, at least one child = 16 | Mother does not work | 45 | 43 | 52 | 53 | 41 | 69 | 43 |
| | Mother works* | 74 | 77 | 75 | 69 | 97 | 86 | 78 |
| | % improvement | 64 | 79 | 43 | 30 | 137 | 23 | 81 |

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.
 Only households with a head aged 25-60. Relative income position relates to country-specific mean (=100).

* female works > 35 weeks/year

Source: Own calculations based on LIS data (1994/95).

Table 2b: Poverty Rates, by Household Type and Female Work Participation, in Seven European Countries

| Household Type | Female Work Status | UK | GE | FR | NL | IT | SW | FI |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Couples, no children | Female does not work | 15.4 | 10.0 | 9.5 | 4.7 | 18.3 | 3.1 | 4.3 |
| | Female works* | 5.0 | 0.3 | 0.3 | 2.8 | 3.6 | 0.9 | 0.9 |
| | <i>% reduction</i> | <i>67</i> | <i>96</i> | <i>96</i> | <i>41</i> | <i>80</i> | <i>71</i> | <i>79</i> |
| Couples with children, some = 16, some > 16 | Female does not work | 39.0 | 26.1 | 37.4 | 26.9 | 44.8 | 18.2 | 17.8 |
| | Female works* | 5.1 | 6.9 | 6.2 | 8.0 | 10.6 | 5.0 | 6.6 |
| | <i>% reduction</i> | <i>86</i> | <i>73</i> | <i>83</i> | <i>70</i> | <i>76</i> | <i>73</i> | <i>63</i> |
| Couples with one child = 16 | Female does not work | 28.3 | 11.0 | 13.4 | 7.3 | 16.6 | 3.4 | 4.2 |
| | Female works* | 7.2 | 1.5 | 1.4 | 4.8 | 5.9 | 1.5 | 1.6 |
| | <i>% reduction</i> | <i>74</i> | <i>86</i> | <i>89</i> | <i>34</i> | <i>64</i> | <i>56</i> | <i>62</i> |
| Couple with two or more children = 16 | Female does not work | 40.4 | 23.0 | 25.3 | 13.3 | 42.6 | 10.6 | 8.9 |
| | Female works* | 13.1 | 6.2 | 2.6 | 4.7 | 8.2 | 3.7 | 3.3 |
| | <i>% reduction</i> | <i>67</i> | <i>73</i> | <i>89</i> | <i>64</i> | <i>80</i> | <i>65</i> | <i>63</i> |
| Single mothers, at least one child = 16 | Mother does not work | 75.4 | 62.0 | 56.1 | 31.1 | 56.6 | 17.7 | 13.5 |
| | Mother works* | 25.0 | 19.1 | 13.7 | 13.6 | 15.9 | 2.7 | 2.0 |
| | <i>% reduction</i> | <i>66</i> | <i>69</i> | <i>75</i> | <i>56</i> | <i>72</i> | <i>85</i> | <i>85</i> |

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.

Only households with a head aged 25-60. Poverty line relates to 60% of country-specific median.

* female works > 35 weeks/year

Source: Own calculations based on LIS data (1994/95).

Table 3: Means and Standard Deviations of Covariates used in the Econometric Model

| | UK | | GE | | FR | | NL | | IT | | SW | | FI | |
|--|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| | mean | std. dev. | mean | std. dev. | mean | std. dev. | mean | std. dev. | mean | std. dev. | mean | std. dev. | mean | std. dev. |
| Couples with children, some = 16, some > 16 | 0.076 | 0.26 | 0.127 | 0.33 | 0.139 | 0.34 | 0.096 | 0.29 | 0.210 | 0.4 | 0.029 | 0.16 | 0,147 | 0,354 |
| Couples with one child = 16 | 0.157 | 0.36 | 0.211 | 0.40 | 0.200 | 0.40 | 0.120 | 0.32 | 0.219 | 0.41 | 0.182 | 0.38 | 0,162 | 0,369 |
| Couples with two or more children = 16 | 0.344 | 0.47 | 0.312 | 0.46 | 0.365 | 0.48 | 0.408 | 0.49 | 0.355 | 0.47 | 0.360 | 0.48 | 0,353 | 0,478 |
| Single mothers, at least one child = 16 | 0.120 | 0.32 | 0.048 | 0.21 | 0.061 | 0.23 | 0.038 | 0.19 | 0.022 | 0.14 | 0.062 | 0.24 | 0,041 | 0,199 |
| Age of head | 40.381 | 9.12 | 40.478 | 9.48 | 40.597 | 8.64 | 40.316 | 8.56 | 41.613 | 8.1 | 42.865 | 9.24 | 42,023 | 8,832 |
| Age of head, squared/100 | 17.138 | 7.73 | 17.283 | 8.10 | 17.229 | 7.35 | 16.988 | 7.31 | 17.973 | 6.99 | 19.229 | 7.99 | 18,439 | 7,580 |
| Head: Secondary education | 0.468 | 0.49 | 0.597 | 0.49 | 0.545 | 0.49 | 0.427 | 0.49 | 0.285 | 0.45 | 0.464 | 0.49 | 0,511 | 0,500 |
| Head: Tertiary education | 0.257 | 0.43 | 0.178 | 0.38 | 0.211 | 0.40 | 0.238 | 0.42 | 0.103 | 0.3 | 0.286 | 0.45 | 0,197 | 0,398 |
| Male's work participation (annual weeks worked/52) | 0.547 | 0.46 | 0.796 | 0.33 | 0.689 | 0.42 | 0.760 | 0.38 | 0.811 | 0.32 | 0.676 | 0.43 | 0,758 | 0,384 |
| Terms of interaction:* | | | | | | | | | | | | | | |
| Fem.'s work part. | | | | | | | | | | | | | | |
| * Couples w. children, some =16, some > 16 | 0.605 | 0.49 | 0.583 | 0.49 | 0.532 | 0.50 | 0.469 | 0.50 | 0.352 | 0.48 | 0.621 | 0.49 | 0.776 | 0.42 |
| Fem.'s work part. * Couples with one child = 16 | 0.522 | 0.50 | 0.578 | 0.49 | 0.635 | 0.48 | 0.525 | 0.50 | 0.539 | 0.50 | 0.681 | 0.47 | 0.667 | 0.47 |
| Fem.'s work part. | | | | | | | | | | | | | | |
| * Couples with two or more children = 16 | 0.433 | 0.50 | 0.458 | 0.50 | 0.537 | 0.50 | 0.431 | 0.50 | 0.431 | 0.50 | 0.647 | 0.48 | 0.629 | 0.48 |
| Fem.'s work part. | | | | | | | | | | | | | | |
| * Single mothers, at least one child = 16 | 0.308 | 0.46 | 0.583 | 0.49 | 0.656 | 0.48 | 0.237 | 0.43 | 0.636 | 0.48 | 0.435 | 0.50 | 0.659 | 0.47 |
| Female: secondary education | 0.502 | 0.50 | 0.597 | 0.49 | 0.494 | 0.5 | 0.403 | 0.49 | 0.292 | 0.45 | 0.503 | 0.50 | 0,551 | 0,497 |
| Female: secondary education | 0.263 | 0.44 | 0.127 | 0.33 | 0.223 | 0.41 | 0.176 | 0.38 | 0.103 | 0.30 | 0.296 | 0.45 | 0,212 | 0,409 |
| Child < 3 years | 0.193 | 0.39 | 0.115 | 0.32 | 0.191 | 0.39 | 0.173 | 0.37 | 0.158 | 0.36 | 0.186 | 0.38 | 0,173 | 0,378 |
| Child 3-5 years | 0.140 | 0.34 | 0.144 | 0.35 | 0.161 | 0.36 | 0.127 | 0.33 | 0.164 | 0.37 | 0.140 | 0.34 | 0,128 | 0,334 |
| Age of female | 38.356 | 8.91 | 38.048 | 9.01 | 38.325 | 8.41 | 37.96 | 8.39 | 38.42 | 7.94 | 40.668 | 9.18 | 40,219 | 8,691 |
| Age of female, squared/100 | 15.506 | 7.30 | 15.289 | 7.41 | 15.396 | 6.86 | 15.115 | 6.83 | 15.392 | 6.46 | 17.382 | 7.64 | 16,931 | 7,200 |
| Log (additional hh income) | 9.545 | 1.23 | 10.713 | 1.05 | 11.633 | 1.27 | 10.744 | 1.74 | 9.879 | 1.59 | 12.409 | 0.70 | 11,942 | 0,727 |

* Measures of terms of interaction are restricted to specific household types and thus indicate female labor market participation rate per household type.

Fem.'s work part. = Female's work participation (annual weeks worked/52)

(=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.
ly households with a head aged 25-60.

Source: Own calculations based on LIS data (1994/95).

Table 4a: Determinants of Families' Relative (Equivalized) Income Position, in Seven European Countries (OLS)

| | UK | GE | FR | NL | IT | SW | FI |
|---|-----------------------------|--------------------|--------------------|-----------------------------|---------------------|--------------------|--------------------|
| Couples with children, some = 16, some > 16 | -58.85** (6.33) | -63.31** (3.26) | -61.66** (2.85) | -71.66** (3.18) | -75.46** (3.52) | - | -66.24** (3.24) |
| Couples with one child = 16 | -58.96** (4.39) | -50.63** (2.65) | -40.38** (2.85) | -51.42** (2.99) | -55.87** (3.80) | -27.66** (1.87) | -42.38** (2.54) |
| Couples with two or more children = 16 | -74.48** (3.29) | -64.22** (2.20) | -54.04** (2.22) | -71.78** (1.91) | -74.41** (3.25) | -43.16** (1.46) | -60.92** (1.83) |
| Single mothers, at least one child = 16 | -83.32** (4.54) | -52.33** (5.35) | -60.51** (5.00) | -44.79** (3.78) | -58.70** (11.99) | -39.90** (2.43) | -34.72** (4.43) |
| Age of head | 7.62** (1.07) | 4.23** (0.73) | 5.06** (0.68) | 3.14** (0.75) | 1.55** (1.20) | 0.61 (0.41) | 1.54** (0.55) |
| Age of head, squared/100 | -9.13** (1.27) | -5.08** (0.86) | -5.21** (0.82) | -3.63** (0.89) | -0.68 (1.41) | -0.11 (0.48) | -1.00 (0.65) |
| Head: Secondary education | 15.04** (2.59) | 7.21** (1.57) | 19.46** (1.49) | 10.93** (1.51) | 29.87** (2.13) | 10.56** (0.96) | 6.52** (1.14) |
| Head: Tertiary education | 45.39** (2.89) | 32.21** (2.01) | 64.45** (1.81) | 32.93** (1.76) | 63.82** (3.19) | 27.63** (1.06) | 31.52** (1.42) |
| Male's work participation (annual weeks worked/52) | 10.50** (2.43) | 36.61** (2.33) | 11.38** (1.65) | 38.32** (1.95) | 39.95** (3.35) | 10.29** (1.07) | 31.31** (1.45) |
| Female's work participation * Couples with children, some = 16, some > 16 | 11.26 (7.95) | 14.95** (3.97) | 19.49** (3.47) | 14.92** (4.28) | 34.16** (4.38) | - | 20.15** (3.61) |
| Female's work participation * Couples with one child = 16 | 27.87** (5.57) | 22.49** (3.16) | 26.32** (3.15) | 21.18** (3.92) | 47.71** (4.23) | 9.15** (2.17) | 22.26** (2.99) |
| Female's work participation * Couples with two or more children = 16 | 13.96** (3.76) | 14.55** (2.49) | 19.76** (2.18) | 18.33** (2.11) | 32.13** (3.35) | 3.90* (1.56) | 23.09** (1.94) |
| Female's work participation * Single mothers, at least one child = 16 | 19.36** (6.65) | 29.16** (6.61) | 18.71** (5.82) | - | 47.08** (14.56) | 15.09** (3.30) | 16.26** (5.32) |
| Constant | 36.60 ⁺ 21.43 | 2.45 13.97 | -2070 13.45 | 27.36 ⁺ 14.80 | 36.35 23.95 | 78.30** 8.48 | 51.36** 11.10 |
| R ² | 0.31 | 0.45 | 0.38 | 0.55 | 0.43 | 0.36 | 0.41 |
| Adj. R ² | 0.31 | 0.44 | 0.38 | 0.55 | 0.43 | 0.36 | 0.41 |

Levels of significance: ** p < 0.01; * p < 0.05; + p < 0.10.

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.

Only couples with or without children and single mothers with a head aged 25-60. Relative income position relates to country-specific mean (=100).

Reference groups: couple without children; head with primary education.

Note: Model specifications may vary across countries to secure econometric stability.

Source: Own calculations based on LIS data (1994/95).

Table 4b: Determinants of Families' Poverty Risk, in Seven European Countries (Probit Model)

| | UK | GE | FR | NL | IT | SW | FI |
|---|--------------------|-------------------|-------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|
| Couples with children, some = 16, some > 16 | 1.14** (0.17) | 1.59** (0.18) | 1.50** (0.12) | 1.86** (0.22) | 1.34** (0.12) | - - | 1.57** (0.16) |
| Couples with one child = 16 | 0.99** (0.13) | 0.87** (0.17) | 0.91** (0.13) | 0.65* (0.26) | 0.48** (0.13) | 0.20 (0.14) | 0.75** (0.16) |
| Couples with two or more children = 16 | 1.34** (0.11) | 1.52** (0.153) | 1.25** (0.11) | 1.37** (0.17) | 1.12** (0.11) | 0.69** (0.10) | 1.47** (0.12) |
| Single mothers | 1.49** (0.13) | 1.23** (0.24) | 1.46** (0.18) | 0.38 ⁺ (0.19) | 0.67 ⁺ (0.34) | 1.05** (0.13) | 0.91** (0.22) |
| Age of head | -0.07* (0.03) | 0.00 (0.04) | -0.01 (0.03) | -0.02 (0.05) | 0.03 (0.04) | 0.06 ⁺ (0.03) | 0.00 (0.03) |
| Age of head, squared/100 | 0.08* (0.04) | -0.02 (0.05) | 0.00 (0.04) | 0.01 (0.06) | -0.08 (0.05) | -0.06 ⁺ (0.03) | -0.01 (0.04) |
| Head: Secondary education | -0.21** (0.079) | -0.27** (0.08) | -0.81** (0.06) | -0.55** (0.10) | -0.73** (0.08) | -0.26** (0.06) | -0.09 (0.07) |
| Head: Tertiary education | -0.56** (0.09) | -0.77** (0.14) | -1.48** (0.11) | -1.31** (0.22) | -0.081** (0.16) | -0.45** (0.08) | -0.64** (0.11) |
| Male's work participation (annual weeks worked/52) | -1.14** (0.07) | -1.67** (0.12) | -1.00** (0.07) | -1.81** (0.12) | -1.30** (0.10) | -0.15* (0.07) | -0.70** (0.09) |
| Female's work participation * Couples with children, some = 16, some > 16 | -1.29** (0.28) | -1.16** (0.22) | -1.23** (0.15) | -0.80** (0.28) | -1.10** (0.15) | - - | -0.88** (0.17) |
| Female's work participation * Couples with one child = 16 | -0.86** (0.18) | -1.09** (0.25) | -1.33** (0.20) | 0.01 (0.34) | -0.95** (0.18) | -0.17 (0.17) | -0.62** (0.20) |
| Female's work participation * Couples with two or more children = 16 | -0.90** (0.11) | -0.89** (0.13) | -1.41** (0.12) | -0.72** (0.17) | -1.12** (0.12) | -0.30** (0.09) | -1.07** (0.11) |
| Female's work participation * Single mothers, at least one child = 16 | -1.28** (0.17) | -1.29** (0.28) | -1.32** (0.20) | - - | -1.36** (0.43) | -0.96** (0.21) | -1.34** (0.35) |
| Constant | 0.89 (0.67) | -0.44 (0.86) | -0.10 (0.67) | 0.07 (1.12) | -0.31 (0.85) | -3.15** (0.67) | -1.29 ⁺ (0.73) |
| Pseudo R2 | 0.2964 | 0.2993 | 0.3301 | 0.3875 | 0.2656 | 0.0747 | 0.1832 |

Levels of significance: ** p < 0.01; * p < 0.05; + p < 0.10.

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.

Only couples with or without children and single mothers with a head aged 25-60. Poverty line relates to 60% of country-specific median.

Reference groups: couple without children; head with primary education.

Note: Model specifications may vary across countries to secure econometric stability.

Source: Own calculations based on LIS data (1994/95).

Table 5a: Determinants of Families' Relative (Equivalised) Income Position, in Seven European Countries, Corrected for Selective Female Access to the Labor Market (OLS with Correction for Sample Selection)

| | UK | GE | FR | NL | IT | SW | FI |
|---|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|
| Couples with children, some = 16, some > 16 | -15.86 (57.67) | -95.13** (35.02) | -93.20** (35.96) | -54.77 (64.55) | -66.69 (145.64) | - | -59.72** (14.76) |
| Couples with one child = 16 | -109.37** (36.43) | -100.43** (22.90) | -87.31** (24.88) | -88.63 (54.00) | -96.77 (73.09) | -57.67 (36.97) | -31.26** (10.75) |
| Couples with two or more children = 16 | -98.20** (25.86) | -94.71** (21.04) | -85.08** (19.59) | -120.11** (29.94) | -151.73* (79.95) | -64.33** (20.84) | -60.77** (6.83) |
| Single mothers | -94.24+ (53.98) | -100.61+ (60.09) | -129.20** (45.27) | -74.85** (7.77) | 85.88 (220.44) | -98.55* (42.16) | -26.67+ (14.90) |
| Age of head | 6.46** (1.23) | 5.04** (0.94) | 5.41** (0.79) | 7.18** (1.14) | 1.70 (2.13) | 0.24 (0.51) | 6.82** (0.72) |
| Age of head, squared/100 | -7.79** (1.46) | -6.19** (1.12) | -6.10** (0.95) | -8.98** (1.37) | -0.35 (2.55) | 0.36 (0.60) | -6.86** (0.84) |
| Head: Secondary education | 6.77** (2.52) | 8.56** (1.95) | 14.68** (1.62) | 10.57** (2.14) | 27.58** (4.20) | 9.51** (1.13) | 6.58** (1.31) |
| Head: Tertiary education | 20.51** (2.99) | 25.51** (2.45) | 41.17** (2.17) | 34.28** (2.52) | 56.61** (6.12) | 23.68** (1.28) | 28.53** (1.67) |
| Male's work participation (annual weeks worked/52) | -2.97 (2.66) | 12.13** (3.19) | 3.95* (1.93) | 26.73** (3.24) | 43.08** (6.03) | 18.25** (1.85) | 17.33** (1.86) |
| Female's work participation * Couples with children, some = 16, some > 16 | -36.80 (60.41) | 45.03 (36.90) | 36.80 (37.63) | -17.33 (67.51) | -9.11 (151.77) | - | 2.46 (15.34) |
| Female's work participation * Couples with one child = 16 | 75.18+ (38.32) | 66.14** (24.20) | 65.39* (26.07) | 43.43 (56.60) | 60.06 (76.39) | 41.44 (38.50) | 0.36 (11.10) |
| Female's work participation * Couples with two or more children = 16 | 40.75 (27.16) | 39.42+ (22.22) | 39.63+ (20.45) | 51.33 (31.33) | 81.51 (83.47) | 28.26 (21.72) | 11.08 (6.90) |
| Female's work participation * Single mothers, at least one child = 16 | -6.99 (56.45) | 54.88 (63.08) | 79.77+ (47.28) | - (230.89) | -135.56 (230.89) | 72.29 (44.09) | -11.94 (14.63) |
| Constant | -35.64 (25.25) | -6.86 (18.67) | -23.19 (15.87) | -45.99* (22.32) | 63.66 (45.44) | 62.33** (10.64) | -59.03** (14.94) |
| lambda | 71.16 | 40.17 | 49.62 | 33.96 | -11.30 | 35.58 | 35.92 |
| LR test on independent equations | 581.90** | 283.73** | 628.91** | 32.73** | 1.14 | 524.98** | 358.82** |

Levels of significance: ** p < 0.01; * p < 0.05; + p < 0.10.

UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.

Only couples with or without children and single mothers with a head aged 25-60. Relative income position relates to country-specific mean (=100).

Reference groups: couple without children; head with primary education.

Note: Model specifications may vary across countries to secure econometric stability.

Source: Own calculations based on LIS data (1994/95).

Table 5b: Determinants of Families' Poverty Risk, in Seven European Countries, Corrected for Selective Female Access to the Labor Market (Probit Model with Correction for Sample Selection)

| | UK | GE | FR | NL | IT | SW | FI |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Couples with children, some = 16, some > 16 | 3.02 (2.48) | 5.16** (1.93) | 5.67** (1.60) | 2.04 (2.37) | 0.53 (2.39) | - - | -0.11 (0.91) |
| Couples with one child = 16 | 2.30 (1.50) | 4.76** (1.77) | 3.08* (1.56) | 3.73 (3.62) | 3.03 (2.47) | 0.07 (0.41) | -1.27 (0.78) |
| Couples with two or more children = 16 | 2.41** (0.84) | 1.80 (1.46) | 1.40 (1.62) | 1.83 (2.34) | 0.46 (2.38) | 0.22 (0.41) | 2.02* (1.00) |
| Single mothers | 0.85 (2.10) | 6.98* (3.04) | 2.13 (2.34) | 0.89* (0.39) | 0.15 (2.40) | 0.70+ (0.42) | 0.38 (1.97) |
| Age of head | -0.11* (0.04) | -0.06 (0.08) | -0.19** (0.05) | -0.10 (0.08) | 0.12 (0.08) | -0.02 (0.01) | 0.02 (0.07) |
| Age of head, squared/100 | 0.12* (0.05) | 0.05 (0.10) | 0.21** (0.07) | 0.13 (0.10) | -0.16 (0.10) | 0.02 (0.01) | -0.04 (0.08) |
| Head: Secondary education | -0.15 (0.09) | -0.09 (0.15) | -0.93** (0.11) | -0.71** (0.16) | -0.72** (0.18) | -0.05+ (0.03) | -0.04 (0.10) |
| Head: Tertiary education | -0.50** (0.12) | - - | -1.42** (0.23) | - - | -0.83** (0.30) | -0.14** (0.05) | -0.82** (0.22) |
| Male's work participation (annual weeks worked/52) | -0.75** (0.14) | -1.14** (0.22) | -0.78** (0.15) | -1.27** (0.25) | -0.95** (0.18) | -0.00 (0.04) | -0.50** (0.14) |
| Female's work participation * Couples with children, some = 16, some > 16 | -2.89 (2.62) | -4.10* (2.03) | -4.43** (1.67) | -0.92 (2.45) | -0.10 (2.49) | - - | 1.04 (0.92) |
| Female's work participation * Couples with one child = 16 | -1.92 (1.59) | -4.43* (1.95) | -2.66 (1.66) | -2.94 (3.80) | -3.33 (2.61) | -0.01 (0.42) | 1.57* (0.77) |
| Female's work participation * Couples with two or more children = 16 | -1.78* (0.88) | -.43 (1.53) | -0.39 (1.69) | - - | - - | - - | -1.49 (1.03) |
| Female's work participation * Single mothers, at least one child = 16 | -0.00 (2.20) | -6.40* (3.20) | -1.17 (2.43) | - - | - - | - - | -0.42 (2.02) |
| Constant | 2.07* (0.94) | 0.15 (1.69) | 3.20** (1.17) | 1.39 (1.71) | -3.26+ (1.88) | -0.19 (0.33) | -2.14 (1.58) |
| rho | -0.84 | -0.59 | -0.75 | -0.60 | 0.19 | -0.99 | 0.25 |
| LR test on independent equations | 36.49** | (8.27)** | 62.71** | 6.75** | 0.38 | 84.13** | 0.70 |

Levels of significance: ** p < 0.01; * p < 0.05; + p < 0.10. UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.
 Only couples with or without children and single mothers with a head aged 25-60. Poverty line relates to 60% of country-specific median.
 Reference groups: couple without children; head with primary education.
 Note: Model specifications may vary across countries to secure econometric stability.

Appendix Table A1: Female Labor Market Participation¹, by Household Type, in Seven European Countries (%)

| | UK | GE | FR | NL | IT | SW | FI |
|---|------|------|------|------|------|------|------|
| Couples, no children | 65.6 | 69.7 | 55.8 | 61.3 | 49.2 | 68.9 | 65.9 |
| Couples with children, some = 16, some > 16 | 59.3 | 53.9 | 53.8 | 48.9 | 35.0 | - | 72.6 |
| Couples with one child = 16 | 52.0 | 52.9 | 63.6 | 54.5 | 53.3 | 69.6 | 60.6 |
| Couples with two or more children = 16 | 43.2 | 44.8 | 53.2 | 44.8 | 43.2 | 65.9 | 55.7 |
| Single mothers, at least one child = 16 | 30.3 | 45.6 | 66.2 | 20.8 | 61.6 | 45.1 | 54.4 |
| All | 52.9 | 57.8 | 57.0 | 51.8 | 39.7 | 61.8 | 61.7 |

¹ Share of those females who worked more than 35 weeks in previous year.
 UK=United Kingdom; GE=Germany; FR=France; NL=The Netherlands; IT=Italy; SW=Sweden; FI=Finland.
 Only households with a head aged 25-60.

Source: Own calculations based on LIS data (1994/95).

Appendix Table A2: Determinants of Female Labor Market Participation in Seven European Countries (Probit Model)

| | UK | GE | FR | NL | IT | SW | FI |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Single mothers | -0.80** (0.09) | -0.60** (0.15) | -0.73** (0.10) | -0.92** (0.16) | 0.40* (0.19) | -0.72** (0.07) | -0.61** (0.11) |
| Female: Secondary education | 0.19** (0.07) | 0.34** (0.06) | 0.58** (0.05) | 0.55** (0.06) | 0.78** (0.06) | 0.36** (0.04) | 0.30** (0.05) |
| Female: Tertiary education | 0.53** (0.08) | 0.58** (0.09) | 1.04** (0.06) | 1.02** (0.08) | 1.27** (0.09) | 0.54** (0.05) | 0.64** (0.07) |
| Child < 3 years | -0.87** (0.07) | -1.54** (0.10) | -0.43** (0.06) | -0.64** (0.08) | -0.10 (0.08) | -0.09 (0.05) | -1.30** (0.06) |
| 3 years < child < 5 years | -0.65** (0.08) | -0.89** (0.08) | -0.27** (0.06) | -0.68** (0.09) | -0.04 (0.07) | 0.01 (0.05) | -0.27** (0.06) |
| Age of female | 0.09** (0.03) | 0.06* (0.03) | 0.17** (0.02) | 0.00 (0.03) | 0.15** (0.03) | 0.07** (0.02) | 0.23** (0.02) |
| Age of female, squared/100 | -0.13** (0.03) | -0.10** (0.03) | -0.22** (0.03) | -0.04 (0.04) | -0.20** (0.04) | -0.07** (0.02) | -0.28** (0.03) |
| Log (additional household income) | -0.17** (0.03) | -0.25** (0.04) | -0.70** (0.04) | -0.16** (0.03) | -0.08** (0.02) | -0.14** (0.03) | -0.29** (0.04) |
| Constant | 0.06 (0.56) | 1.97** (0.63) | 4.83** (0.54) | 2.17** (0.63) | -2.39** (0.62) | 0.50 (0.51) | -0.68 (0.60) |

Source: Own calculations based on LIS data (1994/95).