

The Family Gap in Pay



CASE Research Associates Susan Harkness and Jane Waldfogel have compared the “family gap in pay” – the differential in hourly wages between women with and without children – in seven countries: Australia, Canada, the United Kingdom, the United States, Germany, Finland, and Sweden.



There is wide variation across the countries in the effects of children on women’s employment. There are also large differences in the effects of children on women’s hourly wages even after controlling for characteristics such as age and education.



Among the seven countries, the UK displays the largest wage penalties to women with children. In Sweden there is no significant penalty, but in the UK the penalty rises from 8 per cent for one child to over 30 per cent for three or more children. Looking at full-time workers only, there is no significant penalty for one child in the UK, but it remains nearly 30 per cent for three or more children.



The family gap in pay is larger in the UK than in other countries both because UK mothers are more likely to work in low-paid part-time jobs, and because even among full-time workers, women with children in the UK are lower paid relative to other women than are mothers in other countries.



Why does the family gap in pay vary so much across countries? The variation in the family gap in pay across countries is not primarily due to differential selection into employment or to differences in wage structure. Future research should examine the impact of family policies such as maternity leave and child care.

Further information

A detailed account of this research can be found in CASEpaper 30, *The Family Gap in Pay: Evidence from seven industrialised countries* by Susan Harkness and Jane Waldfogel. Copies are available free of charge from Jane Dickson, CASE at the address below or can be downloaded from our internet site:
<http://sticerd.lse.ac.uk/Case>.

Measuring the family gap in employment and pay

Previous UK and US studies show a persistent family gap in pay between women with children and women without children, but there have been no comparisons of the family gap between countries. Susan Harkness and Jane Waldfogel used microdata on employment and earnings from seven industrialised countries to investigate whether countries have similar family gaps and, if not, what might account for variation across countries. The countries studied were Australia, Canada, the UK, the USA, Germany, Finland and Sweden.

Raw Gender and Family Gaps in Employment

Table 1 shows the raw gender and family gaps in employment and wages in the sample countries, unadjusted for any differences in characteristics (such as age and education) between countries. Comparing all women to all men in the same country, the raw gender gap varies widely – from Australia where women’s employment is 25 percentage points lower than men’s to Sweden, where the women’s rate is 4 points higher than men’s. However, in all of the countries women without children are generally much more likely to be employed. In all but one country, when women with children are compared to women without children, there is a substantial family gap in employment, ranging from a 11 points in Finland to 29 points in Australia and the UK (the exception is Sweden, where the family employment gap is less than 1 percentage point). These gaps in employment are larger when only full-time employees are considered (as women – particularly mothers – are more likely to work part-time).

Table 1: Raw Gender and Family Gaps in Employment and Wages

	Employment:		Wages:	
	Gender gap (percentage points)	Family gap (percentage points)	Gender gap (per cent)	Family gap (per cent)
Australia	-24.8	-29.3	-11.8	+6.9
Canada	-9.7	-14.1	-18.1	+0.2
United Kingdom	-17.0	-28.8	-25.4	-12.6
United States	-19.6	-19.0	-21.7	-7.3
Germany	-17.1	-18.3	-13.3	-2.7
Finland	+3.4	-10.8	-18.3	-0.4
Sweden	+4.3	-0.9	-16.1	-1.6

Employment rates vary a great deal by the age of the youngest child. In all but one of the sample countries (Sweden again is the exception), employment rises as the age of the youngest child rises, but there are some differences in timing. Employment rates become very similar across the sample countries by the time children reach age 11 and start middle or secondary school.

Raw Gender and Family Gaps in Wages

Table 1 also shows the ratio of women's mean hourly wages to men's mean hourly wages for all women, and for women by family status. The raw gender gap in pay varies a good deal, ranging from 12 per cent in Australia to a high of 25 per cent in the UK. The raw family gap in pay varies as well. In five countries, women with children are paid about the same as or even more than women without children, but in the other two there is a substantial family gap: 7 per cent in the USA and 13 percent in the UK.

The pattern for full-time workers only is much more consistent across countries, with the wages of women without children exceeding the wages of women with children in each of our sample countries and with the United Kingdom now looking much like the others. This difference is because women who work part-time have much lower wages than full-time workers in the UK (and to a lesser extent in the USA), whereas they have higher hourly wages than full-time workers in several of the other countries.

The Effects of Children on Women's Wages

Some of these differences result from variation between countries in women's characteristics – such as age or education – or in other aspects of their labour markets. To isolate the effects of children adjusted for these differences, the authors estimated multivariate models of wages and employment.

The results from the wage models, summarised in Table 2, show sizeable negative effects of children on women's wages in all four Anglo-American countries: the pay penalty for one child ranges from about 4 per cent in Canada and the USA to 8 per cent in the UK; that for two children from 5 per cent in Canada to 24 per cent in the UK; and that for three or more children from 10 per cent in Australia to 31 per cent in the UK. In each instance, the pay penalty to children is highest in the UK.

Table 2: Estimated Effects of Children on Women's Wages

	One Child	Two Children	Three or more children
Australia	-7.4	-10.7 **	-10.1 *
Canada	-3.7 **	-5.3 **	-12.6 **
United Kingdom	-8.2 **	-24.3 **	-30.6 **
United States	-3.9 **	-7.4 **	-11.4 **
Germany	-1.7	-11.2 **	+2.2
Finland	-4.2 **	-2.5	-5.8 **
Sweden	-0.8	-1.4	-2.5

Note: Coefficients (times 100) from OLS models that also include controls for age, age squared, education, race or ethnicity, region, urban residence, and marriage. * figures significant at 10 per cent level, ** at 5 per cent level.

The results for Germany are less conclusive, with an 11 per cent penalty for two children but no significant penalties for one child or for three or more children. In Finland, in contrast, there is only a small penalty to one child (4 per cent) or three or more children (6 per cent), and no significant penalty for two children, while in Sweden, we find no significant child penalties at all.

When the sample is limited to full-time workers, the effects of children become smaller in the UK and USA, but the effects of two, or three or more children are still larger in the UK than in any other country: 18 per cent for two children and 30 per cent for three or more. The lower pay of mothers relative to other women in the UK is thus not due solely to the fact that they are more likely to work in low-paid part-time jobs, since a substantial pay penalty to children remains even among full-timers.

A first explanation for the differences in the family gap across countries could be *differential selection* – the difference in the negative pay effects of children across countries could reflect the differential selection of women into employment across our sample countries. However, the authors find no evidence to support this.

A second possible explanation is *differences in wage structure*. Previous studies found that to a large extent, the difference in the gender earnings gap across countries could be explained by variations in earnings inequality across countries. This explanation, however, does not fit as well when it comes to explaining differences in the family gap in pay. The authors calculated the position of each woman in each country in the male earnings distribution in their country, and then calculated the average percentile ranking of women in each country. The results suggest that differences in wage structure only explain a small part of the differences in the family gap in pay.

A third possible explanation is the *variation in family policy*. The authors were not able to test this hypothesis with the data used (since it covered only one point in time). Therefore, they call for more research on this question, and on the impact of family policies more generally on the employment and pay of mothers, and non-mothers.

About the research

The authors used microdata from the Luxembourg Income Study for six of the countries and from the Swedish Level of Living Survey. They are grateful to LIS and the Swedish Institute for Social Research for these data and for funding to the William T. Grant Foundation, the National Institute for Child Health and Development and to the ESRC via CASE.