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Fertility and family income on the move: An international comparison over 20 Years

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Luxembourg Income Study Working Paper Series

Working Paper No. 360

**Fertility and Family Income on the Move:
An International Comparison Over 20 Years**

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Luxembourg Income Study (LIS), asbl

Nicola Dickmann:
Fertility and Family income on the move
– an international comparison over 20 years

1 Introduction

The income situation of families has always been a major topic for politicians and the public in modern welfare states. The ongoing call for better funding of families reflects the hardship of couples with children who seem to be unable to sustain the living standards of childless couples in similar circumstances. Much research has been conducted to reveal the differences in poverty lines among families across nations and to describe the circumstances of child poverty (see for example *Smeeding et al.*, 1999 or *Vleminckx*, 2001). With the emerging problems of demographic change, the supposedly poor economic situation of families is also taken into consideration as fertility rates are falling far below replacement levels in most industrialised countries (*Dickmann*, 2003, p. 51). In this context, children are often seen as a fundamental contribution to society and no longer treated as an entirely personal decision of couples who, therefore, have to face the consequences whatsoever. Instead, the discussion about pronatalistic policies to foster the number of children has started and is now being made a subject not only in traditionally pro-natalistic policy nations like France but also in Germany. Hitherto such debates had been avoided in this country for a long time due to the horrible experiences of racially glorified motherhood under the Nazi-regime (*Schwarz*, 2000, p. 431).

This study aims at providing some interesting facts about the correlation of fertility and income and on the income situation of families in order to provide a sound basis for further political discussions. It looks at the relative economic situation of families in comparison to childless couples so as to reveal incentive structures for couples to decide for or against children. Hereafter, investigations of different sources of family income try to clarify the reasons behind the observed developments over time. Furthermore, the often suggested correlation between low income and many children or high income and few descendants is being tested statistically in order to measure the relevance of the economic situation for the fertility decision.

The paper is organised as follows: After explaining the methodological background of the selected sample and the calculation with the data of the Luxembourg Income Study (LIS), the study analyses the correlation between income and fertility. Next an investigation of the economic situation of families in comparison to childless couples at the very beginning of the 1980s is being conducted and compared with the data around 1990 and 2000. The paper then looks for explanation of the observed differences, first in comparing the cash benefits to families across countries over time followed by a closer look on the development of the personal income of family members. The paper ends with a brief discussion of the political implications of the findings.

2 Methodological background

In order to compare living standards of families and childless couples over time it would be desirable to look back at the relevant figures after the active family phase has been terminated. However, cohort related event data is not available at international level. The study therefore uses panel data from the Luxembourg Income Study to compare living standards across six nations at three time points.¹ As the LIS is based on national panel data, it is not possible to compare countries in exactly the same year. For the medium-term perspective of this study, however, this does not represent any major restriction. The paper therefore compares the data of the USA, Canada, the United Kingdom, Germany, Sweden, and Finland using the surveys around 1980, 1990, and 2000.²

All national income figures have been transformed to international dollars in order to enable a better comparability, using the purchasing power parity concept of the World Bank (*The World Bank*, 2001). The reasoning behind this concept are the defaults of exchange rates in reflecting living standards across nations, as popularly documented by the “Big-Mac-Index” of the magazine “The Economist”. This index compares the prices of a hamburger from the fast food company MacDonald’s around the world. As

¹ The samples do not content the same persons but people selected at random.

² The exact elicitation years are: Germany 1981, 1989, 2000. United Kingdom 1979, 1991, 1999. United States of America 1979, 1991, 2000. Canada 1981, 1991, 1998, Sweden 1981, 1992, 2000. Finland 1987, 1991, 2000. Earlier data for Finland is not available, some tests with the surveys around 1980 therefore exclude Finland.

the fast food chain operates internationally with a franchising system, the hamburgers are almost exactly the same in each country. Despite this, the national prices converted into US-Dollars at current exchange rates show astonishing differences, due to the volatility of currencies and non-reflected short-term changes in relative prices. In order to improve the comparability of living standards, the World Bank therefore developed the concept of purchasing power parities, based on an evaluation of more than 100 goods relative to the medium price of a sample of countries (*World Resource Institute*, 1997, chapter 7). This concept is used here.

Furthermore, a weighting factor has been applied to protect the sample from distortion. This factor restores the balance between different groups according to their original probability in the sample, as some groups are actually more willing to respond to the investigators than others. The weighting factors are provided by the LIS member countries surveys who use certified distributions in the total population for correction. In most countries the weighting factor also inflates the sample to population size. To avoid false proves of significance, the wheighting, therefore, has not been used in this study when looking at statistical correlations and significance tests.

In panel data there is hardly ever any information available on the final number of children born to a mother. Instead, the number of children under the age of 18 living in the parent's household is being counted. On the one hand, this leads to major problems in comparing families and childless couples, as every couple turns to be statistically childless when the children have left home to live on their own, e.g. all pensioners tend to show up as childless. A comparison without age restrictions on the sample would therefore lead to severe misjudgements. On the other hand there is no theoretically correct rule for setting the age lines of the sample. It proves to be quite difficult to find the right sample and not to set the age lines too narrow and hence damaging the significance of the data for the population as a whole. More educated mothers tend to get their children later than less educated women (*Klein*, 1989, p.497). This also leads to problems in defining the active family. A teenage pregnancy would leave the mother statistically childless already in her late thirties, while academically educated women tend to start their family around that time. By looking at the data of the six countries in

question, the level of childless women seems to be a good indicator for the relevant family phase. At the age of 30, the group of childless women, measured by the mean of all countries, descends for the first time under the level of any other group with one or more children. At the age of 43 it takes the lead again. The study therefore compares the relevant data of couples with the spouse being between the age of 30 and 42. The sample is restricted to married couples in order to explore the economic situation of two adults living with or without children. Hence, the often severe economic problems of lone mothers are ignored in this study. This does not indicate any underestimation of the dimension of this problem, but shall not be the focus here.

3 Income and fertility

According to the economic theory of fertility, couples decide rationally over the number of children they want, taking the costs of raising children and their income situation into account (*Becker, 1960*). A higher income should primarily provide a stimulus for couples to have more children, being able to afford the costs of raising more children than couples in worse financial conditions (known as the income effect). On the other hand, higher income leads to higher opportunity costs, provided that both parents contribute to the family income and one has to give up paid work in order to spend time at home, raising the children. Furthermore, according to Becker, educated parents tend to invest more in the education of their children and are therefore facing higher costs of raising children (substitutional effects). Which effect dominates the other has been debated extensively in the context of the low fertility levels in industrialised countries. Quite often, researchers say that high income couples have fewer children than low income couples, therefore giving a priority to the substitutional effect (*Schwarz, 1999*). This phenomenon is known as the demographic paradox (*Birg, 2001, p. 42ff*). However, studies, providing empirical evidence for this are hard to find. In most cases, researchers quote the high levels of childlessness among academic women as a prove or revert to the macroeconomic evidence that rich countries have lower fertility rates than poor countries. But neither fact indicates the correlation of fertility and income based on the view of the deciding couples. The following study therefore takes a closer look at the

correlation of income and fertility, measured by the Pearson correlation in six countries at two time points.

Table 1 and 2 here

Contrary to the assumption of the demographic paradoxon, the tables give no strong indication for an income-fertility-correlation today or twenty years ago. The testing of the significantly relevant cases leads to only very weak correlations, the Pearson correlation coefficient being between -0.1 and 0.1. Canada shows the most significant finding in 1980 with a negative correlation of -0.102, the United States of America at that time with a two percent significance have a Pearson coefficient of -0,064.³ In 2000, Finland holds the most significant case with a positive correlation of 0,094, while the other two significant cases, the USA and the UK, have negative correlations of -0,034 respectively -0,073. All significant findings therefore stand for very weak correlations and cannot sustain any dominance of the mentioned income or substitutional effects.

What can be seen, however, is a change in the fertility behaviour of the lowest income group. At the beginning of the 1980s couples with little income almost always had the greatest number of children. They stayed always below the mean of the country except for Sweden. This is no longer the case. Instead, in every country, people in this class have fewer children than the average. In the UK they are just at the mean level. Furthermore, the differences between the income classes fade. Measured by the standard deviation, the scattering of the number of children is getting smaller. The northern American countries hardly show any differences of fertility behaviour between the different income classes in 2000 at all, while Germany still demonstrates major differences between income classes, though not clearly correlated to income levels.

Although this study cannot prove any global correlation between fertility and income level, it can falsify the often stated argument, that the substitutional effect dominates the income effect and with this the conjecture that couples with higher income generally

³ Finnish data is not available for 1980, the data for 1987 is shown in the table just to demonstrate the development 1987 to 2000.

have fewer children than couples with lower income. One could assume that these theories came from the fact, that twenty years ago couples in the lowest income classes did have considerably more children than other couples. The wealth in children has changed however and nowadays, the former “proletarians”⁴ do no longer have many children but are often singled out as the class with the lowest fertility of all.

4 The development of family income

In order to study the living standard of families in relation to childless couples, the study compares the net disposable income of the households. The effects of family policies, e.g. cash benefits or tax subsidies, are therefore already taken into account. Non-cash benefits like free schooling or child care differ very much across nations, are hard to quantify and hence not considered here.

In the wave of 1980 there is an obvious discrimination of families detectable in terms of economic well-being: The assignment of family income stays clearly to the left of the income of childless couples in every examined country besides Sweden. This indicates that families are on the one hand more often located in lower income groups than childless couples, because of living in a household with several persons.

Figure 1 here

On the other hand families are less often found in the high income classes, though this does not apply for the highest income class which does not show any differences between families and childless couples. In Germany, for example, nine percent of childless households earned between 60.000 and 70.000 international dollar, while this was only true for four percent of the family households. However, three percent of both households types each reached the highest income level above 70.000 international dollars. In contrast, Sweden showed only very small differences between families and

⁴ The word “proletarian” was used in ancient roman times for the lowest income class, defined by their many descendants (latin: *proles*). Later on, the word grew famous under the marxist’s definition of the poor working class.

childless couples in any income class at that time. The displacement to the left can be seen for the family income curve only taking a closer look at a subtler classification of income levels.⁵ Figure 1 demonstrates these findings for Germany, the USA, the UK and Sweden.⁶

In German scientific literature, these structural differences of families are considered as almost natural until today (see for example *Stutzer*, 2000, p. 434 ff.; *Eggen*, 1997, p. 68 ff). And it holds true for German data of the 1990s and 2000. However, the other nations in consideration have changed quite a bit over time and besides Germany, only the United Kingdom still shows the same features as in the 1980s. Contrary to this stagnation, in the USA and Canada there is no longer any detectable difference between the two groups. Thus, the differentiation of families has given way to a single income curve of families and childless couples at a time. Figure 2 shows these findings for the US and Finland in contrast to the stagnant situation in the UK and Germany in 2000.

Figure 2 here

Finland surprises with an inversion of the original situation: families in 2000 are structurally better off than couples without children, who are more often found to be located in some of the lower income classes and do no longer dominate the high income levels. For example, 17 percent of Finnish couples without children had an annual income between 10.000 to 20.000 international dollars while only 5 percent of the families were in this income class. On the other hand, 18 percent of Finnish families earned between 40.000 and 50.000 international dollars per year while only 13 percent of childless couples did. Sweden showed the same favourable distribution for families in 1990 but has returned to an equal distribution in 2000.

⁵ All test have been made with a subtler classification to avoid distortion. For graphic reasons, however, the number of income classes in the figures has been reduced to eight.

⁶ Finland shows the same features as Sweden from 1987 onwards, however, earlier data is not available.

5 Do cash benefits for families explain the differences in income development?

In search for an explanation for the observed differences in the development of family income across nations, one could first of all think of differences in national family policies – as promises of higher cash benefits to families always attract voters. It is, however, very difficult to measure the outcome of family policies. There are neither clear concepts what is to be taken into account, nor is there an approved way of how to deal with non-cash benefits (see for example *Bradshaw/Finch*, 2003, p.1 ff.). In some countries like Germany or the US, married couples can use marital tax splitting and benefit from lower tax rates. But this applies to all married couples, whether parents or not. It is, therefore, difficult to consider this as a pure family benefit. On the other hand, there are clear family aids, but differing in form. Child care for example, can be facilitated by credit notes or tax deductions, accounting clearly for cash benefits for families. Or the state can provide tax financed child care for everyone – and it will be nearly impossible to quantify the cash benefit for a single family.

Due to these troubles in measuring family policies there is no strict evaluation of the outcome of family policies on the family income measurable. However, there is some evidence, indicating that different family policies are not the reason behind the income developments shown in figure 1 and 2: A recently conducted study of the EU concludes, that Germany dedicates more resources in terms of cash benefits to families than Sweden or Finland who are also overtaken by the United Kingdom (*Abramovici*, 2003). According to the findings of the present study, one would expect the US, Canada, Sweden and Finland to have improved their benefits to families more than Germany. This is not the case according to Abramovici. Furthermore, another international comparison of family policies by Forssén demonstrates, that there are neither child nor maternal allowances paid by the state in the USA and that e.g. the maternal leave in the US is the shortest of all countries in this comparison (*Forssén*, 1998, p. 6). A recent study comparing child benefit packages in 22 countries also ranks the USA and Canada among the countries with lowest child benefits (*Bradshaw/Finch*, 2003, p. 27), lower than Germany. It is therefore unlikely, that the documented favourable development of family

incomes in the United States in comparison to Germany should be due to better tax subsidies for families.

In addition, this study compares the development of child or family allowances and maternity allowances with the LIS-data for the countries in question. The USA are not included as there are no such benefits available for all families. The comparison of the quotients of child, family and maternity allowances to net disposable income reveals no evidences for the theory, that the development of family benefits has been substantially better in the Scandinavian and Northern American countries in comparison to Germany and the United Kingdom.

Table 3 here

Except for the United Kingdom, all countries show a tendency towards granting more benefits but to fewer people. The share of parents benefiting from government aid has decreased from 91 to 86 percent of all parents in Germany and from 87 to 57 in Canada, while it remained at roughly the same share in Sweden and Finland. From the families who received financial aid, in 1980 only 19 percent in Germany and 3 percent in Canada got more than 10 percent of the total family income through aid. In 2000 42 percent of families in Germany and 23 percent in Canada received more than 10 percent of their family income through family benefits. The same development can be observed in Sweden and Finland. Only the family benefits in the United Kingdom developed in the contrary direction: Substantially more families got aid in 2000 compared to 1980, but the funding of family income was lower than twenty years ago. There is hence no evidence for an explanation of the observed differences in family income through the development of benefits to families of the studied countries.

6 Explanation of income differences via labour force participation of wives

More promising than comparing the different patterns of cash benefits to families is a look at the personal income distribution of household members. According to the LIS

data there are no differences detectable between the income schemes of childless men and family fathers over the years (data not explicitly presented here). Both distributions resemble the income distribution of the entire household and do not differ in any extend. This indicates that the personal income of men was the most important income for households in the 1980s and remains the main source today. In contrast, women's personal income has changed remarkably over the past 20 years as shown in figure 3.

Figure 3 here

Around 1980 the data document clearly the predominance of the male-breadwinner-model: It is not common among married women to earn their own living and this applies even more to mothers. In Germany and the UK more than 80 Percent of mothers do not have any notable personal income. While this holds also true for 60 percent of married women without children in Germany, only around 30 percent of childless women in other countries do not have any personal income at that time. Twenty years later, childless women have entered the labour market and show a normal one-peaked income distribution. Only ten to twenty percent do not have a relevant income of their own. In Germany, the share of childless women without personal income is with 6 percent especially low.

However, the working patterns of mothers in 2000 differ remarkably across countries. While mothers in Finland, Sweden, and the USA earn structurally less than childless women but show the same one-peaked income structures as men, the biggest group of mothers in Germany still does not have any notable income of their own. In the UK, most women are in the first and second lowest income class and in the higher classes show remarkable differences to women without children as was observed in Germany. In contrast, in Canada in contrast, mothers without income still represent with 40 percent of mothers the biggest group. However, there are only slight differences to women without children in higher income classes.

Besides the noted differences in the work force participation of mothers, there is a remarkable gap between the working patterns of childless women and mothers in

Germany. The comparatively very high quota of German female academics without children fits into this pattern (*Grünheid*, 2003) and indicates structural obstacles for German women to combine work and family. A study of Harkness and Waldfogel (2002) also based on the LIS data demonstrates, that mothers face live-long income disadvantages even if they return to full-time work after a while and that the differences to the income of childless women are especially high in Germany. Childless women working full time earn 88 percent of men's hourly wages, mothers get only 79 percent in Germany. In Sweden and Finland the differences is only two or four points between mothers and childless women.

The explanation of the different income situation of families via work force participation of women is backed by a comparison with the OECD work force participation rates of young women between 25 and 34 years of age.⁷ Germany and the United Kingdom have the lowest participation rates of the observed countries in 1980 and, though with shrinking distance, still in 2000 (OECD, 2003).

Table 4 here

7 Conclusion

The study has shown considerable differences in the development of the relative economic situation of families in the past 20 years across nations. While Germany and the UK still represent the well known patterns of income differentials of families in comparison to childless couples, the figures for the USA, Canada, Sweden and Finland demonstrate a fundamental change towards more equal income distribution or even more favourable relative income situations for families. No statistical evidence was found, however, that political direct redistribution of income from childless tax payers to families accounted for this change in the time observed here. On the contrary, the changing working patterns of women and especially of mothers were identified to explain major parts of the findings. While the four states with more favourable economic situations for families demonstrate a high work force participation of mothers, the

couples in the other two countries seem mainly to stick to the traditional family model with one parent going to work and the other staying at home caring for the children.

These findings could have important political impacts. From an economic point of view, it would be advisable for Germany and the United Kingdom to intensify their activities to support the working ambitions of mothers as this proves to be an effective way of increasing the family income. Furthermore this would be a good reaction to the expected demographic shrinking of the work force. To enable the labour force participation of both parents it would be crucial to provide for professional child care services. However, there is no consensus in society if this is desirable from a child oriented and social point of view. Sociological evidence of the impacts of professional child care on children's development is still ambiguous (Blau, 2003, p.208f.). Some scientist in Germany even promote a state-financed wage for mothers or fathers to encourage parents to stay home in order to foster child rearing by their own parents (*Kirner/Schwarze*, 1996). Apart from sociological and economic reasoning, there is deeply rooted psychological bias against child care by non-relatives in parts of society. This holds especially true for Germany. Thus, these conflicts need further debate in society and cannot be solved from an exclusive economical point of view.

Even in Germany, there are, however, signs that the younger generation is moving in the direction of combined parenthood and labour force participation. A recent study among university students proves, that a vast majority of women in academic training would later on in life like to have two or more children and keep on working (*Middendorf*, 2003, p. 12). In contrast, 42 percent of academic women in there 40s actually remained childless, more than in any other industrialised country. This points to major difficulties in the conciliation between family and work for career oriented women in Germany. In this context, the main problem for career chances for mothers does not seem to be the actual break around birth, but the devaluation of human capital through the long absences from mothers in the years when the children are still very young. In Germany this can easily accumulate to 6 years of working absence, if the mother opts for two

⁷ OECD Work force participation rates from women between 30 and 42 years are not available.

children and uses the options provided by the long parental leave. A parental wage would foster these long absences from work even more and hence prevent an adaptation of the income situation of families to childless couples. It is therefore questionable if this would be a good way to help families and fertility in the long run, as well trained women might anticipate their individual losses through the long absence and choose a life without children.

A better conciliation of working life and family could instead ease the natural trade offs between time at work and time for the family. Better child care facilities, flexible working hours and a more equal distribution of the work in the household between husband and wife could improve the economic situation of families and meet the desires of young women to work and have a family at the same time. The decision to have children should of course remain with the couple. Backed by labour market arguments the state, however, could set the right frames to give most young women incentives to work and have children at the same time.

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Table 1. Income and fertility at the beginning of the 1980s

	USA 1979	West Germany 1981	Canada 1981	UK 1979	Sweden 1981	Finland 1987
Average number of children per woman and income level						
Less than 5.000 int. Dollar	2,56	-	2,00	2,11	1,88	2,00
5.000 up to 10.000	1,96	2,00	2,07	2,14	1,83	2,00
10.000 up to 15.000	2,18	0,78	2,12	2,01	1,74	2,00
15.000 up to 20.000	2,11	1,14	2,04	1,84	1,86	1,27
20.000 up to 25.000	1,91	1,48	1,99	1,98	1,98	0,28
25.000 up to 30.000	2,00	1,77	1,86	1,69	2,00	1,00
30.000 up to 35.000	1,78	1,74	1,87	2,17	2,33	1,21
35.000 up to 40.000	1,96	1,83	1,65	1,71	-	1,51
40.000 up to 45.000	1,73	1,59	1,65	1,50	-	1,02
45.000 up to 50.000	2,10	1,43	1,73	2,50	-	1,67
50.000 up to 55.000	2,31	1,69	1,56	1,33	-	1,40
55.000 up to 60.000	1,33	1,67	2,75	1,50	-	1,26
60.000 up to 65.000	3,00	1,81	2,14	2,00	-	1,12
65.000 up to 70.000	2,61	1,24	1,25	2,00	-	1,29
70.000 up to 75.000	0,00	1,68	0,75	0,00	-	1,16
More than 75.000	3,00	1,88	2,43	2,50	-	1,61
Statistical interpretation						
Variance	0,49	0,25	0,21	0,34	0,04	0,20
Standard deviation	0,70	0,50	0,46	0,59	0,19	0,44
Maximum difference	1,67	1,22	2,00	1,17	0,60	1,72
Mean	2,03	1,48	1,87	1,81	1,95	1,36
TFR of elicitation year¹	1,81	1,43	1,70	1,82 ²	1,63	1,59 ³
Correlation Income – Fertility						
Significance	0,002**	0,764	0,000***	0,059	0,241	0,000***
Correlation coefficient⁴	-0,064	0,012	-0,102	-0,051	0,024	0,077

¹US Bureau of the Census, 2003 ²Office for national statistics (UK), 2003 ³EU, 2001

⁴Pearson test with non classified data

Source: Author's calculation with LIS files

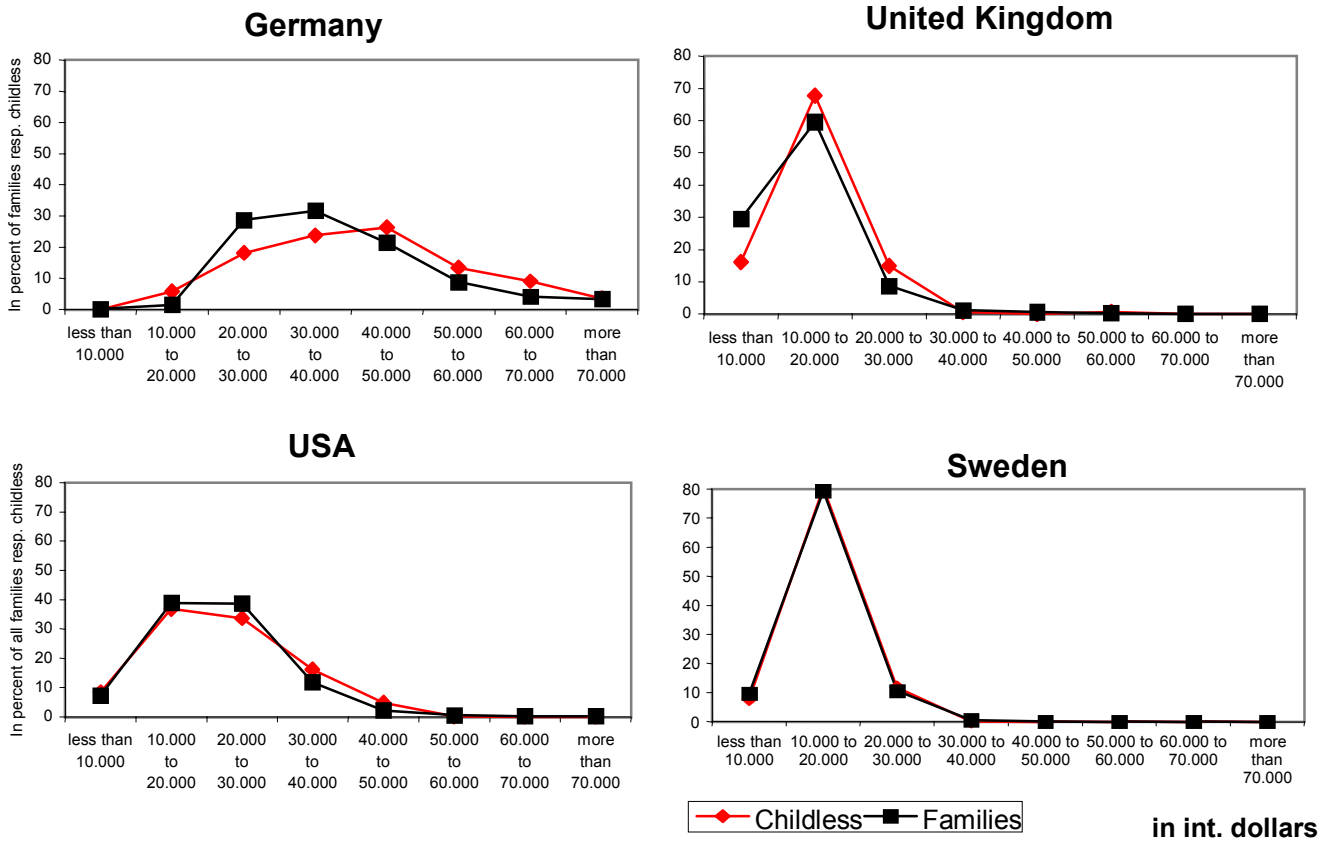
Table 2. Income and Fertility around the year 2000

	USA 2000	Germany 2000	Canada 1998	UK 1999	Sweden 2000	Finland 2000
Average number of children per woman and income level						
Less than 10.000 int. Dollar	1,43	0,47	1,47	1,48	1,31	1,05
10.000 up to 20.000	1,83	1,17	1,61	1,79	1,61	0,93
20.000 up to 30.000	1,89	1,66	1,61	1,88	1,73	1,67
30.000 up to 40.000	1,81	1,49	1,66	1,66	1,98	1,75
40.000 up to 50.000	1,72	1,21	1,60	1,39	1,85	1,88
50.000 up to 60.000	1,67	1,42	1,62	1,42	1,84	1,90
60.000 up to 70.000	1,70	1,58	1,57	1,41	1,89	1,84
70.000 up to 80.000	1,65	1,58	1,52	1,26	2,34	1,77
80.000 up to 90.000	1,67	1,23	1,51	1,28	2,13	1,63
90.000 up to 100.000	1,73	1,92	1,51	1,07	2,00	2,15
More than 100.000	1,65	1,13	1,32	1,52	2,14	2,33
Statistical interpretation						
Variance	0,014	0,143	0,009	0,056	0,079	0,171
Standard deviation	0,120	0,378	0,095	0,236	0,281	0,413
Maximum difference	0,46	1,44	0,34	0,81	1,03	1,40
Mean	1,71	1,35	1,55	1,47	1,89	1,72
TFR of elicitation year¹	2,06	1,35	1,60	1,65	1,86	1,70
Correlation Income – Fertility						
Significance	0,002**	0,713	0,024	0,000***	0,146	0,000***
Correlation coefficient²	-0,034	-0,011	-0,028	-0,073	0,031	0,094

¹US Bureau of the Census, 2003 ²Pearson test with non classified data

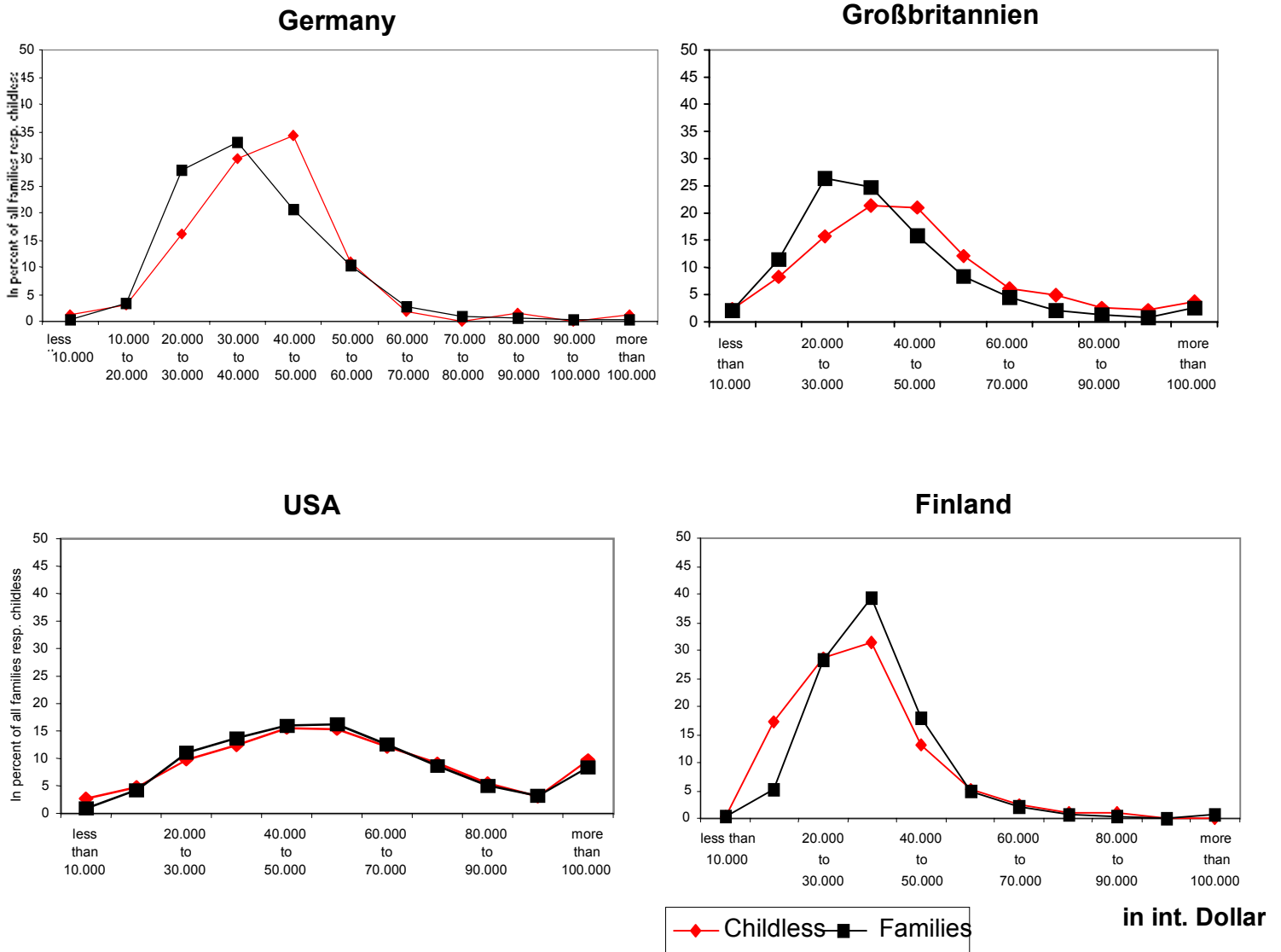
Source: Author's calculation with LIS files

Figure 1. Income of families and childless couples in 1980
 - net disposable income per year, households with wives between 30 and 42 -



Source: Author's calculation with LIS files

Figure 2. Income of families and childless couples in 2000
 - net disposable income per year, households with wives between 30 and 42 -



Source: Author's calculation with LIS files

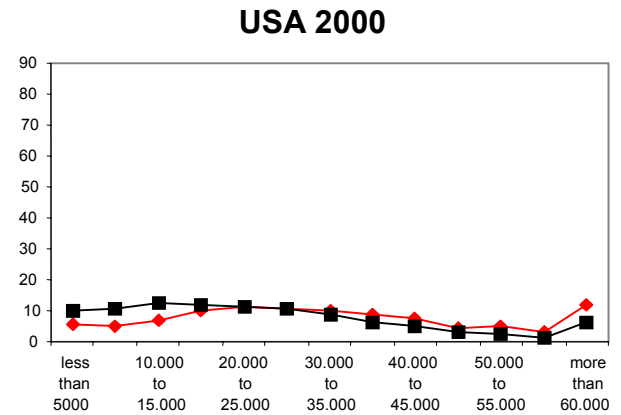
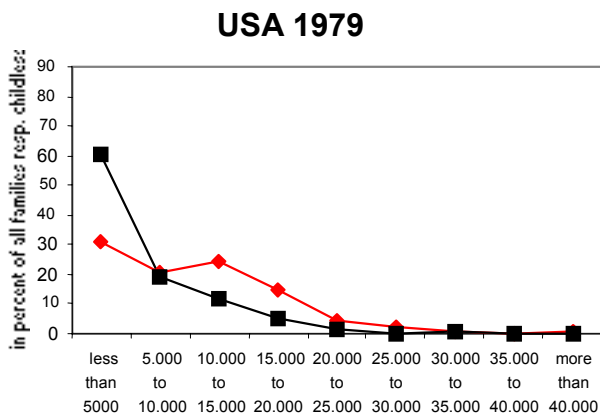
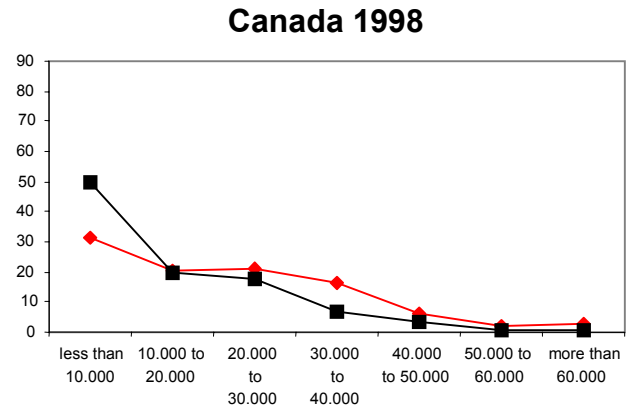
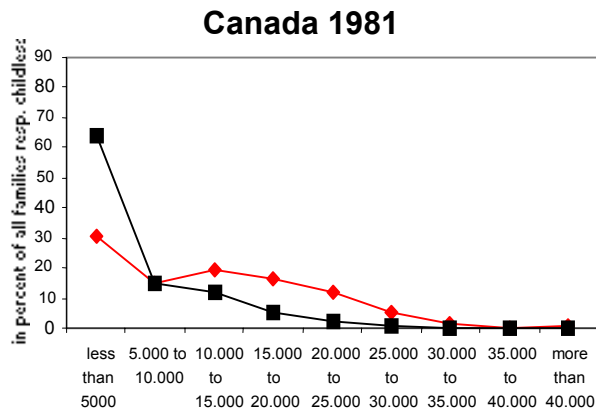
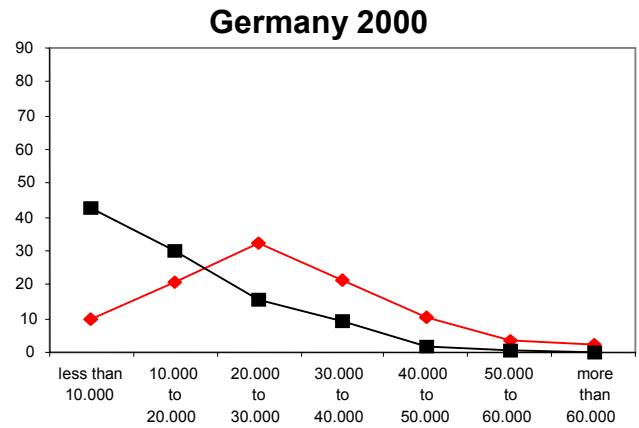
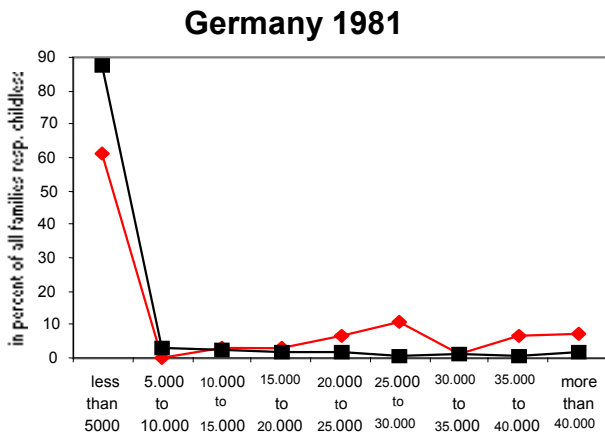
Table 3. Comparison of governmental funding* for families

Grant-aided parents as percentage of all parents	UK		Germany		Canada		Sweden		Finland	
	1979	1999	1981	2000	1981	1998	1981	2000	1987	2000
	91,5	93,1	91,1	86,0	86,8	56,9	93,6	91,8	92,2	91,0
Thereunder: Average contribution of aid to net disposable income										
under 10 percent	74,9	83,4	81,3	57,8	97,1	76,6	78,0	56,1	84,0	55,6
10 to 20 percent	20,0	14,0	16,4	34,0	2,9	14,2	13,6	27,5	7,1	21,1
20 to 30 percent	3,4	1,3	2,3	6,0	0,0	5,2	4,5	6,7	4,6	10,5
30 to 40 percent	1,1	0,4	0,0	1,2	0,0	2,5	1,9	4,6	2,8	7,0
40 to 50 percent	0,2	0,3	0,0	0,8	0,0	0,6	1,2	3,1	1,0	3,8
more than 50 percent	0,4	0,6	0,0	0,2	0,0	0,9	0,8	2,0	0,5	2,0

*Child, family and maternity allowances

Source: Author's calculation with LIS files

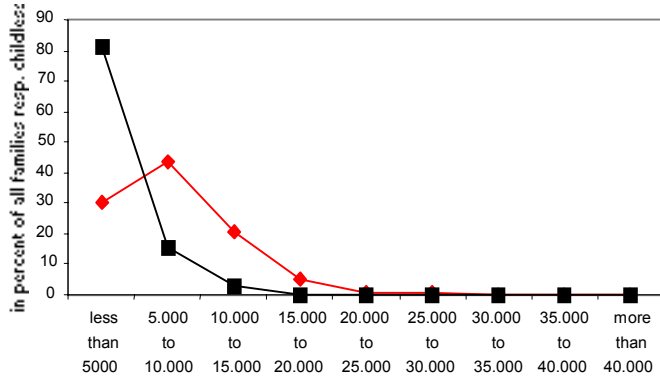
Figure 3. Personal income of wives around 1980 and 2000
 - gross wage/salary of wives between 30 and 42 with and without children -



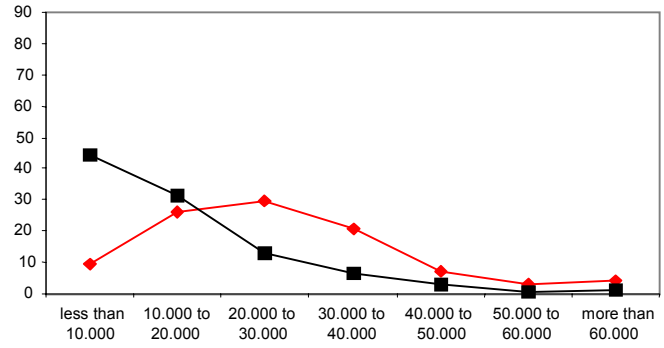
—◆— Childless —■— Families

int. Dollar

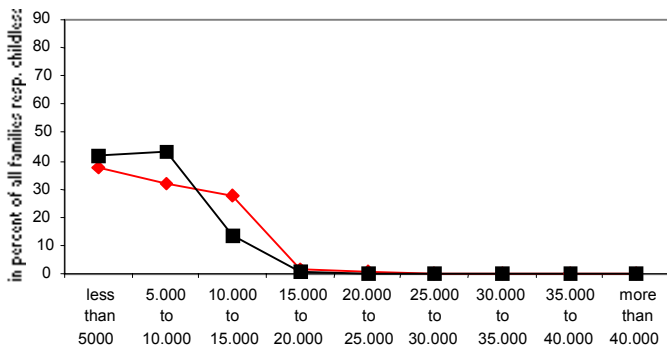
United Kingdom 1979



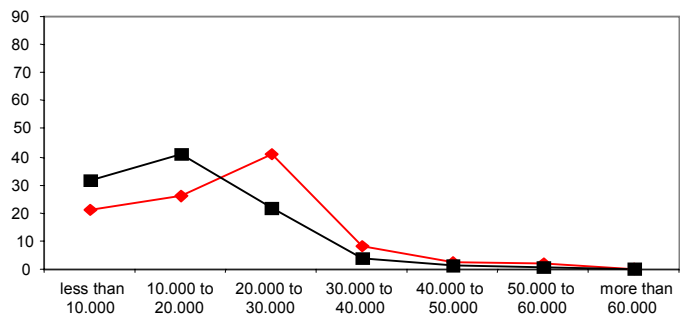
United Kingdom 1999



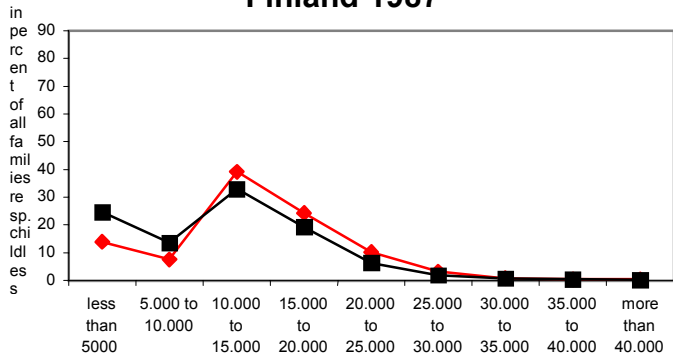
Sweden 1981



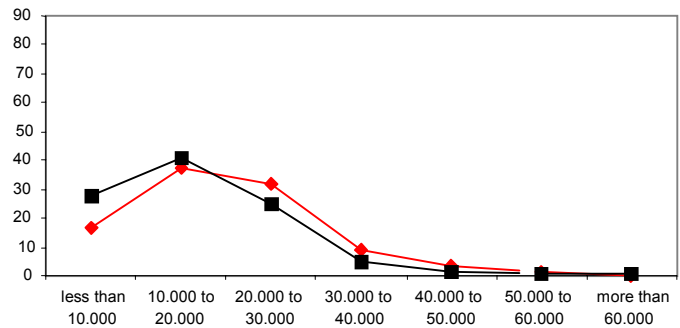
Sweden 2000



Finland 1987



Finland 2000



—♦— childless —■— families

in intern. Dollar

Table 4: Work force participation of young women

	OECD work force participation rate*	
	1980	2000
Finland	81,8	78,3
Sweden	81,4	81,9
USA	65,5	76,1
Canada	62,8	79,7
Germany	61,1	75,5
United Kingdom	56,1	75,3

*Labour force participation of women aged 25 to 34 in percent of female population same age

Source: OECD, 2003