



FERTILITY AND SUPPORTING THE COSTS OF CHILDREN

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Paper for

Recent fertility trends in Northern Europe

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Introduction

The overriding trend across Europe and beyond is that reproductive behaviour is changing and fertility is declining. The determinants of low fertility levels are complex. But investigating these is important for understanding the role that policy has in influencing fertility. From the British perspective, reproductive behaviour is considered to be a private rather than a public issue. Such is the case that the UK does not have any fertility policy as such. But policy can influence behaviour in ways that it does not intend. Using our recent comparative study of the child benefit package in 22 countries (Bradshaw and Finch 2002) we shall examine the influence of financial incentives on fertility by relating the child benefit package to fertility levels. We begin by presenting the possible explanations for low fertility.

Explanations for low fertility

McDonald (2000) has identified four theoretical perspectives to explain low fertility – post-materialist values theory, gender equity theory, rational choice theory and risk aversion theory. These shall be discussed in turn.

Post-materialist values theory

It has been long been assumed that high levels of fertility are associated with the male breadwinner family – traditional family values and traditional gender divisions of labour in the workplace (Castles, 2002). According to this assumption, it is female autonomy that has brought about the demise of the male breadwinner family, resulting in low fertility. It is argued that a growth of individual self-realisation, satisfaction of personal preferences, liberalism and freedom from traditional forces of authority (such as religion), the emancipation of women, the increased role for women in the paid labour market, the contraceptive revolution and the liberalisation of divorce and abortion legislation have all lead to increased material independence for women and increased individual choice in relation to marriage and childbearing (Pearce et al,1999, Coleman, 1999). Women are able to exercise a real choice to live independently, delay having children, restrict the number of children they have and to remain childless (Pearce et al,1999).

Cleary advances in reproductive technology and its widespread acceptance have been revolutionary. Castles (2002) demonstrates that the diffusion of contraceptive methods fits in with the trends in low fertility. In the period 1960-1980, fertility decline was almost exactly inversely proportion to initial fertility levels across the OECD, except in Greece, Ireland, Portugal and Spain, countries in which legal and religious prohibitions delayed the adoption of such methods. After 1980, substantial fertility decline took place in just these four countries, which, during this period, relaxed bans on the use and supply of reproductive technology. For the first time, women were able to control their own fertility.

However, the assumption that the traditional breadwinner family is associated with high fertility, and increased (female) independence with low fertility, is not upheld by current cross-national analysis. As we can see from the fertility rates in chart 1, Italy and Spain (both 1.2), Austria and Greece (both 1.3) have the lowest fertility rates; fertility now

tends to be lowest in countries which, as Cesnais (1996) has pointed out, as "still commonly labelled traditional, Catholic, and family orientated." Amongst our 22 countries, only Israel has an above replacement fertility of 2.1 and the USA is achieving the replacement fertility rate¹.

Italy Austria Greece Japan Germany Portugal Belaium UK Netherlands Australia Finland Denmark Luxemboura Norway France New Zealand USA Israel

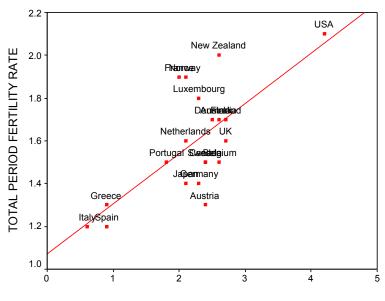
Chart 1 Total Period Fertility rate¹ in 22 countries²

Monnier and de Guibert-Lantoine (1996) note that the countries with the highest fertility levels also tend to have high divorce rates, high rates of cohabitation and high levels of extra-marital fertility. Indeed, the data we collected from national informants upholds this. Excluding the main outlier, Israel, from the analysis, our data demonstrates a significant positive correlation between the fertility rate and the crude divorce rate (chart 2); extra marital births (chart 3); teenage births (chart 4) and lone parents (chart 5).

¹ We use the total period fertility rate, which is the number of children that would be born to a woman if the current pattern of fertility persisted throughout her child-bearing life.

² The fertility rates are for 2001 where possible, but it was not possible for some countries to provide data for this year. These countries have provided data for the nearest year for which data is available.

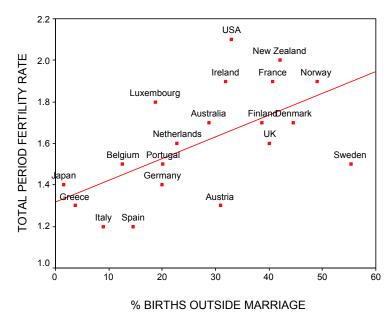
Chart 2 Total period fertility rate by crude divorce rate



CRUDE DIVORCE RATE (PER 1000 POPULATION)

r=0.70**³, Country excluded: Israel

Chart 3 Total period fertility rate by extra marital births



r=0.60**

³ The strength of the probability that there is a correlation between two factors is indicated by the number of asterisks following the *r value* (i.e. the *Pearson's correlation coefficient*): zero asterisks = no significant probability of correlation

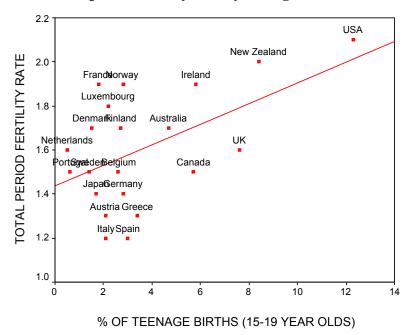
^{* =} $p \le 0.05$ (fair probability of correlation)

^{** =} p ≤ 0.01 (strong probability of correlation)

^{*** =} P ≤ 0.001 (very strong probability of correlation)

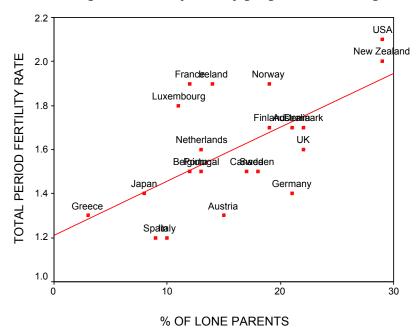
Country excluded: Israel

Chart 4 Total period fertility rate by teenage births



r=0.52* Country excluded: Israel

Chart 5 Total period fertility rate by proportion of lone parents



r=0.62**. Country excluded: Israel

Moreover, Castles (2002) has demonstrated that, whilst Catholic adherence had a significant positive correlation with the total periodic fertility rates in 1980, and the total divorce rate had a significant negative correlation, this had been reversed by 1998. So, the theory that low fertility can be explained by greater female autonomy (or the demise of the breadwinner family) is not wholly supported by the data. It is not women's ability to form households of their own per se that explains low fertility.

Indeed, research into fertility aspirations suggests that a significant minority of men and women are not having as many children as they would like or intend to have (British Social Attitudes survey, 1994; World Values Survey, 1995-1997). Far from emancipated, this suggests that women's choices are, in some way, being constrained. How?

The costs of having children

There are both direct and indirect economic costs of having children. The indirect costs are the earnings lost because of the need to spend time bearing and caring for the child. The direct costs of a child is the actual pound expenditure on the child less any financial benefits that are received through the tax-transfer system because of the presence or the child. Esping Anderson (1999), Castles (1998) and the OECD (1999) have all identified high levels of fertility in countries where women's labour force participation is greatest. Castles (2002) has demonstrated that in 1980, female employment, female labour force participation, female tertiary education and service employment were all negatively correlated with total period fertility rates, but by 1998, they were *positively* correlated. This suggests that women's labour force behaviour lies at the heart of fertility change. Gender equity theory attempts to explain how.

Gender equity theory

The fall in the fertility rate has been attributed to the growing costs of having children, especially the direct and indirect financial costs, but also the psychological costs associated with giving up paid work. The indirect costs of having children include curtailed earnings and reduced career prospects (Daly, 1989; Hakim, 1996; Joshi, 2002; Rubery and Fagan, 1994). Women's improved career prospects means that increasing numbers have a great deal to lose should they decide to stop work to raise a family. If women are provided with opportunities near or equivalent to those of men in education and the labour market, but these opportunities are severely curtailed by having children, women will restrict the number of children they have and therefore fertility will be very low (Macdonald, 2000). The option of non-parental child care to enable each partner to remain in full time work introduces other monetary or time costs. Also, since women still do a disproportional amount of the housework and childcare, working full time will inevitable result in a 'double burden.'

McDonald (2000) theorises that fertility will only rise from very low levels if gender equity moves to high levels in family orientated institutions ie. if the male breadwinner model of the family ceases to be the assumption upon which family orientated institutions are founded. Full gender equity would only be achieved if gender was not a determinant of which member of a couple undertook the three forms of family work: income-earning work, caring work and household work. In other words, both men and women should

have an individual right to choose whether to undertake one role over the other, or to combine the roles (McDonald, 2000). Indeed, Hall has concluded that, given the availability of contraception, high level of education, rising living standards and how these impact on women's lives in term of labour force participation, 'it seems unlikely that fertility will rise much unless a wide range of public policy measures are introduced to help parents combine parenthood with paid work.' (1993:7).

Other authors argue that MacDonald gives undue emphasis to the importance of paid work in women's lives. (Hakim, 2001; Manne, 2001). In the United Kingdom, Hakim (2000) concludes that, whilst some women are career-centred, and others are homecentred, the majority try to achieve a balance between the two. This has sparked a discussion about the appropriateness of some policies directed towards supporting women in their roles as paid workers and parents. Rational choice theory and Risk Aversion Theory shift the emphasis of an explanation for low fertility being focused on female employment to a more general theory centring on the costs of children.

Rational choice theory

Rational choice theory states that, in deciding to have a child, people calculate that the benefit of an additional child outweighs the costs. If the economic cost of children rises, some individual psychological thresholds will be crossed and the decision will be made not to have a(nother) child. The psychological benefits fall with each child as a person gets older. In a society in which the psychological benefits of having a child are low or economic costs of having a child are high, fertility will also be low, childlessness high and people will have fewer children.

Risk Aversion theory

An extension of this is the assumption that in having a child people make a decision to change their *future* life course and their decision depends upon their *future* orientation and therefore *future* cost and benefits. If people perceive economic, social or personal future to be under strain, they may decide not to have a child to avert the risk. As a result, people invest in economic security (education, attachment to the labour force, long hours of work, savings) rather than in the insecurity of having children.

Thus a society that does not compensate for children will inevitably have fewer children. Decreased fertility rates, mainly due to an increase in childlessness, could therefore be a pragmatic response to the lack of social supports - having children is not economically rational or structurally possible. Rational choice theory and Risk Aversion theory imply that if we wish to have a positive impact on fertility decision-making, we should try to raise the psychological benefits threshold or to reduce the economic costs of children (either through the market or the welfare state). Gender equity theory implies that we should try to reduce the costs of children that curtail the benefits of mothers' participation in the labour market.

The Child benefit Package

The child benefit package is concerned with state intervention in reducing the costs of children. It does this by reducing the economic costs of children by giving cash benefits,

reducing housing, education and health costs etc. for families with children. It also reduces the costs of working by introducing services in kind; reducing the costs of childcare, introducing tax credits etc. The generosity of the child benefit package is certainly not the only factor that could influence fertility, nor perhaps the most important. But on theoretical grounds it is likely to be a factor (McDonald, 2000). In this paper we investigate whether more generous child benefit packages indicate higher fertility levels.

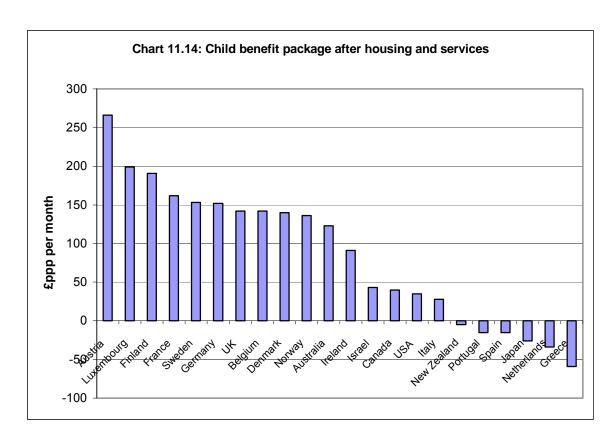
Every welfare state has a package of tax benefits, cash benefits and services in kind that mitigate the costs to parents of raising children. Whilst the ultimate aim of this package may be to tackle child poverty, it may also have the affect of creating financial incentives to have (more) children (also reconciling work and family life/reducing risk of divorce/unemployment and underwriting gender equity). Our comparative study of child benefit packages sought to compare state support for the costs of caring for children across 22 countries using the model family matrix method⁴.

In order, to compare the child benefit package between countries across the whole family models population, we constructed a summary measure of the child benefit package based on a "representative" selection of 34 model families.

Chart 11.14 presents the average ranking of countries that we obtained for the 'representative' selection of families after all elements of the child benefit package have been taken into account. We can see that Austria has by far the most generous package, followed by Luxembourg and Finland. The UK comes seventh equal in a second group of countries – a considerable better relative position than in earlier studies and a reflection of the improvements that the government has made in the child benefit package since 1989. Six countries have negative packages – that is any financial support they provide for families with children is cancelled by the charges for services that the children use.

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⁴ See website: http://www.york.ac.uk/inst/spru/research/summs/childben22.htm for examples of completed family model matrices.



The rankings that have been obtained bear little relationship to the rankings that would be inferred using Esping-Anderson's (1990) regime types. The social democratic (Nordic) welfare states tend come in the top half of the table but they are not the leaders and Denmark is well down the rankings. The liberal (Anglophone) welfare states are distributed throughout the rankings with Ireland, the UK and the USA in the top half on some of the ranking. New Zealand is consistently towards the bottom of the rankings. The conservative (corporatist) countries tend to be found in the upper half of the table but the Netherlands is a big exception. Austria is something of an outlier with considerably more generous child benefit package than any other country after housing costs and services. The southern EU countries are in the bottom half of the table but spread, with Italy somewhat above the others. Japan, our only representative of the Pacific Rim/Confucian model, is found towards the bottom. This study is not the first to point out that Esping-Anderson's regime types do not fit family policies (see for example Kilkey, 2001) and he has acknowledged as much himself (Esping-Anderson, 2001).

In the final section of this paper, we examine whether these groupings are related to the variation in fertility levels.

The relationship between the child benefit package and Fertility levels

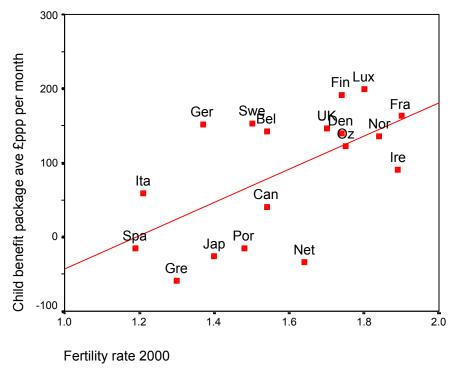
In Chart 6 we see a strong positive relationship between fertility rates and the strength of the child benefit package. It has to be noted though that the main outliers, - i.e. Austria (fertility rate = 1.30), New Zealand (fertility rate = 2.00), the USA (fertility rate = 2.05) and Israel (fertility rate - 3.00) – have been excluded from the chart because their fertility patterns seemed to contradict the main trend exhibited by the other countries. Greece and

Austria have the same fertility rates with hugely different child benefit packages. The USA has replacement fertility with a comparatively low child benefit package – the same is true of New Zealand (in both these cases their fertility rates are driven upwards by high fertility in ethnic minority communities).

France and the UK have similar levels of generosity of their child benefit packages but different fertility rates. However in UK fertility is sustained by an extremely high rate of teenage births (and is falling) and in France the fertility rate has risen above the UK recently. Ireland, has experienced the most rapid decline in fertility of any industrialised country at a time when it has been improving its child benefit package – indeed it has been able to afford to improve it because of the decline in fertility (along with the Celtic Tiger economy).

However it is generally the case that countries with the more generous child benefit packages have higher fertility and those with little or no support for child-rearing costs have the lowest. It might be argued that the latter are also the poorest countries - Greece, Italy, Portugal, Spain. Certainly in our earlier studies of child benefit packages we found a closer relationship between the level of the child benefit package and GDP per capita than with fertility. But the same is not true of Japan (or the Netherlands or Canada). Japan has the resources to pay for a generous child benefit package and chooses not to. Not only is Japan's expenditure on family benefits and services very low as a proportion of GDP, it is also very low as a proportion of social expenditure. So even given the small size of their welfare state Japan is making rather little effort in support of families with children compared to other countries. Of course this weak association between the child benefit package and fertility tells us nothing about causal direction of the relationship.

Chart 6 Child benefit package by fertility rate

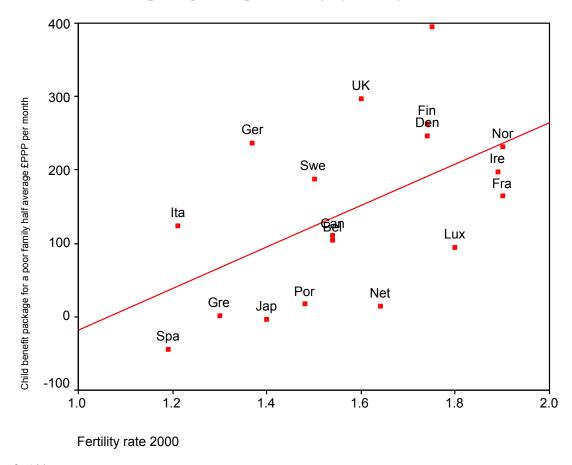


r = 0.60**

Countries excluded: Austria, Israel, New Zealand, US

Further we find that the child benefit package for a small rich family and for a large family are not significantly correlated with the fertility rate. However, the child benefit package for a poor family is significantly positively correlated. Thus suggests that states which support the costs of poor families may influence poor people to have (more) children. There is evidence, at least in Britain, that fertility has declined most for better educated mothers (Rendall and Smallwood 2003) and thus a higher proportion of births are to poorer mothers. If this is the case elsewhere it may indicate that the child benefit package paid to poorer mothers may be the key factor in influencing fertility – they need it more and may be more responsive to it.

Chart 7 Child benefit package for a poor family by fertility rate



r=0.54*

Countries excluded: Austria, Israel, New Zealand, US

Conclusion

In this paper, we have examined whether more generous child benefit packages are associated with higher fertility rates. We can conclude that there is an association between the child benefit package and fertility levels; a generous package will (usually) indicate higher fertility levels. At present, the exceptions to this rule are Austria, New Zealand, USA and Israel. The latter three are probably exceptions because of their ethnic /migrant characteristics. Of course it is impossible to conclude from this that it is generous child benefit packages that determines. Countries may have a more generous child benefit package simply because its fertility level is high and therefore children and their provision are deemed as a (more) important issue than in countries with low fertility. Or the policy and the fertility may be a reflection of a pro childrearing culture. However the association is suggestive and warrants further research.

References

Castles, F.G (1998) Comparative Public Policy, Edward Elgar, Cheltenham

Castles, F.G (2002) Three facts about fertility: cross-national lessons for the current debate in *Family Matters* No. 63, pp. 22-27

Daly, M (1989) Woman and Poverty. Dublin: Attic Press.

Esping- Anderson, G. (1990) *The Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.

Esping-Anderson, G (1999) Social Foundations of Past-industrial Economies, Oxford University Press, Oxford

Esping Anderson, G. *et al.* (2001) 'A new architecture for European welfare states'. Paper prepared for the Belgian Presidency, as yet unpublished.

Hakim (1996) Key Issues in Women's Work: Female Heterogeneity and the Polarisation of Women's Employment. London: The Athlone Press Ltd.

Hakim, C (2000) *Work-Lifestyle Choices in the 21st Century: Preference Theory* Oxford: Oxford University Press.

Hakim, C (2001) Taking Women Seriously, *People and Place* Vol. 9, no.4, pp.1-6.

Hall, R (1993) Europe's Changing Population, Geography Vol. 78, No. 338 pp.3-15

Joshi, H (2002) Production, Reproduction, and Education: Women, Children, and Work in a British Perspective, *Population and Development Review* Vol. 28, No. 3, pp.445-474.

Kilkey, M. (2001) Lone Mothers between Paid Work and Care. The policy regime in twenty countries, Aldershot: Ashgate.

Manne, A. (2001) How to Breed Australians: It's not as simple as you think, *The Age*, 15 December

McDonald, P. (2000) The 'toolbox' of public policies to impact on fertility – A global view, Paper prepared for the Annual Seminar 2000 of the European Observatory on Family Matters, Low Fertility, Families and Public Policies, Sevilla (Spain), 15-16 December

OECD (1999) A caring World: The New Social Policy Agenda, Paris

Rendall, M. and Smallwood, S. (2003) An examination of the relationship between attainment of higher educational qualifications and later entry to motherhood and how

these are associated with the pace of subsequent childbearing, *Population Trends*, 111, 18-26, Spring 2003.

Rubery, J. and Fagan, C. (1994) 'Wage Determination and Sex segregation in Employment in the European Community', *Social Europe*, Supplement 4/94. Luxembourg: Office for Official Publications of the European Communities.