

Max-Planck-Institut für demografische Forschung Max Planck Institute for Demographic Research Konrad-Zuse-Strasse 1 · D-18057 Rostock · GERMANY Tel +49 (0) 3 81 20 81 - 0; Fax +49 (0) 3 81 20 81 - 202; http://www.demogr.mpg.de

MPIDR WORKING PAPER WP 2006-010 APRIL 2006

Family policies and fertility in Europe: Fertility policies at the intersection of gender policies, employment policies and care policies

Gerda Neyer (neyer@demogr.mpg.de)

© Copyright is held by the authors.

Working papers of the Max Planck Institute for Demographic Research receive only limited review. Views or opinions expressed in working papers are attributable to the authors and do not necessarily reflect those of the Institute.

### Max Planck Institute for Demographic Research,

Konrad-Zuse-Straße 1, D-18057 Rostock, Germany

Phone: +49-381-2081-151 Fax +49-381-2081-451 neyer@demogr.mpg.de

### FAMILY POLICIES AND FERILITY IN EUROPE

Fertility policies at the intersection of gender policies, employment policies and care policies

### Gerda Neyer

Paper presented at the Annual Meeting of the Population Association of America Los Angeles, March 30-April 1, 2006

**Abstract**: This article explores the relationship between family policies, fertility, employment and care. It suggests that similar family policies are likely to exert different effects in different contexts. It argues that a proper assessment of effects of family policies needs to take the combined spectrum of gender relations, welfare-state structures, and labor-market development into account.

**Acknowledgment:** I am grateful to Jan M. Hoem for comments on an earlier version of this paper.

### Family Policies and Fertility in Europe

# Fertility policies at the intersection of gender policies, employment policies and care policies

#### 1. Introduction

Family policies have recently moved anew to the centre of European politics, when the EU summit in Barcelona passed a recommendation that by 2010 member states should provide childcare to at least 33% of children under age three and to at least 90% of children between age three and mandatory school age (European Council 2002, 12). The purpose of the initiative was to increase women's labor-force participation rates in member states to 60%. Only a few years earlier the EU had endorsed a directive that required governments to implement employment-related family policies in their national legislation in order to enable men and women to reconcile their occupational and their family obligations and to enhance gender equality in the EU. The parental-leave Directive (Council Directive 96/34/EC)<sup>1</sup> introduced the individual right to a threemonths parental leave for fathers and mothers on the grounds of the birth or adoption of a child to enable them to take care of that child until a given age up to 8 years. With these initiatives the EU set common minimal standards in those family-policy areas in Western Europe that link issues of gender, employment, reproduction, and care. The initiatives of the EU coincided with increasing concerns in European countries about low fertility and the sustainability of welfare-state systems. These concerns revived debates about family policies as a remedy against fertility decline and its presumed consequences.

Against this background this article aims to shed some light on the link between family policies, fertility, employment, and care. It argues that an exploration of the relationship between family policies and fertility needs to place the investigation within a gender-sensitive welfare-state framework. It demonstrates that the effect of family policies on fertility does not only depend on their configuration, but also on the relationship between family policies, gender, and the labor market. The article proceeds as follows: It first provides a brief review of research findings to determine possible links between family policies, fertility, and employment and lays out the main dimensions of comparison. It proceeds with a depiction of the provisions of parental-leave, care-leave and childcare policies in Europe to locate commonalities and differences in the configuration of these policies. In conclusion, it presents some empirical examples to underline the need for a more comprehensive policy approach in addressing the interrelation between family policies, fertility, and employment.

# 2. Family policies, fertility, and female labor-force participation – is there a relationship?

Since the 1960s Europe has experienced a considerable fertility decline. Total fertility rates (TFR) dropped to an unprecedented low reaching an average of 1.45 in the EU-15 at the turn of the century. The level of fertility varies considerably among the European countries. In Southern Europe (Italy, Greece, and Spain), in Eastern Europe, and in the German-speaking countries (Austria and Germany) fertility has dropped to lowest-low levels (below 1.35 TFR), while Ireland (1.96 TFR), France (1.89 TFR), the Nordic countries (Norway: 1.78; Denmark: 1.74; Finland: 1.73, but not Sweden: 1.57 TFR) as well as the Netherlands (1.71 TFR) and Belgium (1.64 TFR) constitute the countries with the highest total fertility rates in Europe (Council of Europe 2001). Researchers attribute the differences in the patterns of Western European fertility levels to mainly demographic<sup>2</sup> and to socio-economic factors, among the latter in particular to the change in women's labor-force participation. Since the 1970s, women's employment rates have increased in all European countries. In most continental European countries female labor-force participation rates rose from just below 50% in the mid-1970s to about 60% in the mid 1990s (Schmidt 2000, 271). In southern Europe (Italy, Greece, and Spain) they were about ten percentage points lower; in Scandinavia they were about fifteen to twenty percentage points higher (Schmidt 2000, 257). The Eastern European countries had female labor-force participation rates at around 80% to 90%, but the rates have dropped considerably since (except in Hungary).

In cross-sectional or macro-level time-series comparison, the association between the total fertility rate and the female labor-force participation rate in Western countries reversed from negative to positive during this period. In the mid-1970s the countries that had high rates of female labor-force participation experienced low fertility levels. In the mid-1990s the countries with low rates of female labor-force participation had low levels of fertility while countries that had high female employment rates also experienced high fertility rates. For Eastern European countries the association was different. During the communist time, high female labor-force participation rates were coupled with high total fertility. Since the collapse of the communist regimes total fertility and female-labor force participation rates have declined dramatically. Researchers attribute the differences and developments in Western European countries to two factors, namely to differences in institutional factors, in particular differences in family policies that are associated with women's employment and childbearing, and to the different effects that these policies may exert on fertility and on female laborforce participation (Engelhardt/Prskawetz 2002). In Eastern Europe the economic changes and the erosion of welfare institutions are main factors in the developments.

But studies that investigate the effects of such family-policy measures on total fertility levels have yielded rather ambiguous results. As regards Western Europe, comparative and single-country studies find no effect or only weak and insignificant effects of family policies on fertility (Wennemo 1994; Hantrais 1997; Gauthier 2002; Castles 2003; Neyer 2003). Studies that explore the impact of family policies on total female-labor force participation also find inconclusive results (Daly 2000; Castles 2003). As regards Eastern Europe prior to 1989, there is more evidence that the family policies of the Eastern European countries led to

increases in total fertility rates; however, the effects were only temporarily (Kantorova 2004; Kreyenfeld 2004).

There seems to be more consistency in the findings of studies that look at the effects of family policies on women's re-entry into the labor market after childbirth. Comparative studies and single-country studies show that short or moderate periods of parental leave are associated with increases in women's employment, while longer leaves or extensions of parental leaves are negatively related to women's labor-force participation after childbirth. Contrary to these rather homogenous results the studies also show that the patterns of re-entry vary considerably - not only among different groups of women within a country, but also with regard to similar groups of women in different countries (Ruhm 1998; Ruhm/Teague 1997; Gustafsson et al. 1996; Saurel-Cubizolles et al. 1999; Rønsen/Sundström 2002; Neyer 1998; Ilmakunas 1997; Ondrich, Spiess, Yang, and Wagner 2003; Ziefle 2004).

Looked at together, we do find some indications that family policies, fertility, and female labor-force participation are interrelated. But we still lack a clear understanding of how and to what extent family policies affect reproduction and employment. Three factors may account for this. First, family policies may impact the issue to which they apply only indirectly. This is because they have effects on other issues, in particular – as feminist research has shown – on gender relations, and these in turn may be conducive to or impeding a particular behavior. Second, family policies may have elements that are not taken into account and that produce the differences in fertility and female labor-force participation that we find among similar countries. Third, neither the total fertility rate nor the general female labor-force participation rate are adequate measures of the impact of family policies on fertility and women's employment. As we know, the total fertility rate is sensitive to the timing of birth. If women postpone childbearing to some later time in their life, then the total fertility rate drops almost irrespective of changes in family policies or employment. Similar problems arise with respect to the female labor-force participation rate, which is dependent on the definition of employment. If, for example, women on parental leave are counted as employed in the computation of the female labor-force participation rate, then any extension

of parental leave (with a corresponding increase in the number of women who are on parental leave) will work towards an increase in the recorded female labor-force participation rate despite the fact that the share of women in active employment decreases (Neyer 1998).

These three issues suggest that we need to review family policies within a framework that (i) takes account of their potential impacts on other factors, and (ii) considers the policy regulations and implementation in more detail. The following chapter makes use of feminist welfare-state research to outline such a framework.

# 3. Family policies as part of welfare-state policies - A framework for comparison

Family policies constitute a central part of welfare-state policies.<sup>3</sup> Their impact on fertility and employment is therefore also shaped by the welfare-state setup in which they operate. Esping-Andersen's (1990) grouping of welfare states into liberal, conservative-corporatist, and universal-social-democratic welfare-state regimes provides an important classification of welfare-state setups. It is based on the principles that govern welfare-state policies towards labor-market absence, social stratification, and access to social benefits and thus underscores the employment-family-state nexus. However, feminist welfare-state research has shown that the principles that govern family policies do not in all countries correspond to the principles that govern welfare-state policies. The pattern of welfare-state regimes becomes more diverse if we put the emphasis on the way in which family policies structure gender relations in the family and in society. This structuring works through the social organization of parenthood, employment, and care along gender lines (Lewis 1992; Meyers et al. 1999; Anttonen/Sipilä 1996; Sainsbury 1999; Knijn/Kremer 1997). This approach has served to highlight some features of family policy that are important for an assessment of their potential effects on fertility.

First, employment and care cannot be regarded as two separate spheres of life nor can family policies be regarded only with respect to their connection with family and care. Family policies are intertwined with employment and care in a way that reaches beyond the mere "reconciliation of work and care". The significance of family policies with respect to employment lies in the extent to which these policies ensure women's access to paid work and to an income that allows them to maintain their own household independent of their partner's or other family members' income (Orloff 1993). This involves three aspects. A first aspect of this is whether family policies encourage women's employment and secure their employment maintenance irrespective of their care obligations. A second aspects is whether family policies are set up to retain an employment that provides social-security coverage and an income sufficient to maintain a household. A third aspect is whether family policies provide benefits that compensate for income loss and guarantee a livelihood beyond a minimum level during times in which care obligations restrict employment.

Second, since in all Western societies private care is primarily a task delegated to women, a key aspect of family policies is the extent to which they relieve women of unpaid care work. This concerns the social organization of care, that is, the distribution of care between the public sector, the market, men, and women. The state and the market largely determine the availability of defamilialized and de-privatized care services. Whether care services are provided by the state or by the market may have a decisive impact on their accessibility, their affordability, and their quality. The issue relevant to fertility and employment is whether family policies provide all children with childcare services that are available, affordable, and of recognized quality, irrespective of the parents' private circumstances and economic means. As regards the gender division of unpaid care the main issue is whether family policies promote an equal distribution of unpaid care work between women and men. Given the gender differences in employment, income, and care, a gender-neutral configuration of family policies may not be sufficient to restructure gender relationships. We need to explore to what extent family-policy regulations are configured to alter prevailing gender relationships, either through their general setup or through active measures that aim to involve men in care work.

Third, a crucial issue of family-related gender policies concerns the way in which family policies deal with reproduction, because this is the key to construct women's dependence or to assure their independence. This involves the question whether family policies address women as individuals (with parental obligations) or as partners men maintain. The issue is whether the claim to benefits and the access to care are seen as individual social rights or are tied to the presence and capacity of other adult family members.

Based on these dimensions we use the following section to discuss the setup and the main features of the family policies that are most closely related to fertility, employment, and care, namely parental-leave policies and childcare policies. The aim is to compare how the various countries have addressed the questions outlined above and how they incorporate issues of access to work, sustainability of livelihood, maintenance of independence, and options for care.

# 4. Parental leave, care leave, and childcare services in Western Europe – regulating employment, care, and reproduction

Tables 1 and 2 display provisions of parental leave, care leave, and childcare in Western Europe and partly also in Eastern Europe at the beginning of the 21<sup>st</sup> century. The data basically confirm the well-established pattern of Western European family-policy regimes with regard to childcare and benefit structure. The Nordic countries differ clearly from the other European countries by offering parental leaves with high benefits of up to 80% (or even above) of prior earnings and comparatively good childcare coverage for children of all ages. The relatively high rate of available childcare in France and Belgium sets these countries off from the other continental European countries, in particular countries in Southern Europe, which have low childcare provisions and unpaid leaves. The Netherlands, Ireland, and Great Britain deviate from these groups of countries in that parental leave is officially unpaid, but benefits are often provided through collective or contractual agreements.

The country pattern is less clear with regard to the length of leaves. Germany, Austria, Finland, Norway, and France (for mothers with more than one child) have implemented extended care leaves up to the child's third birthday. (For a detailed discussion of care leaves, see: Morgan and Zippel 2003.) However,

the policy objectives in these countries differ markedly. Germany and Austria aim to support the gender segregation of employment and care through employment restrictions and through a mix of parental-leave and care-leave systems, in which regulations concerning job-protected parental leave and regulations concerning the duration of benefits do not match. Benefits are flat-rate and in Germany, they depend on the partner's income. The French parental-leave setup combines labormarket considerations with pro-natalist objectives by targeting families of two and more children via an allowance system in which benefit levels depend on the number of children (Fagnani 1999). Finland and Norway supplement their systems of parental leave through extended care-leave options as an explicit alternative to the use of public childcare, namely by paying care-leave allowances to parents who take care of their child(ren) themselves at home or use private facilities (Ilmakunas childcare instead of public childcare 1997: Simonen/Kovalainen 1998). The regulations in Finland and Norway thus do not restrict employment options as is the case in Germany and Austria. This brings them closer to the countries that actively pursue employment-oriented parentalleave policies, namely, Sweden, Denmark, Belgium, the Netherlands, and France. Denmark encourages an early return to the labor market through a short parental leave; Sweden does the same through a longer leave with great flexibility concerning its use; and the Netherlands do it through a part-time work policy. Belgium has a three-month parental leave (following EU requirements). It also offers a (part-time or full-time) leave for up to a total of five years over the lifetime for all employees as part of its labor-market policy (Deven/Nuelant 1999; Deven/Moss 2005).

The Eastern European countries seem to split up into two different family-policy regimes, as far as their parental- and care-leave regulations are concerned. The majority of the countries tends towards supporting private care by mothers through long parental- and care-leaves, mostly until the child's third birthday. The Czech Republic offers childcare leave until the child is four years old, and Estonia even until a child is 8 years old (for families with several children). Benefits are usually flat rate at the level of the minimum wage, minimum pension or minimum social assistance. Only Slovenia, Romania, and Lithuania have income-related

benefits that substitute between 60% and 100% of the previous income, and Bulgaria pays 50% of the care-leave benefit to parents who do not take leave.

To alleviate familial care, part-time and piecemeal leaves have become a common element of European leave legislation. However, such options are often not granted as social rights but are conditional on the employer's consent or on one's work status, and they are often restricted with regard to duration, timing, maximum income, or benefit allocation. As a consequence, the practical implications of flexible parental-leave arrangements may vary, not only between countries, but even within countries. Only Sweden and Poland have introduced flexible "temporary care leaves" (with benefits at 80% of the average pre-birth income) in addition to its parental-leave system. In Sweden parents have the right to take a leave for up to 120 days per year and per child in case the child needs special care, 60 days of which may be used if the "usual carer" (that is the person or the center which usually cares for the child) is unable to care for the child. Polands grants "temporary care leaves" for up to 60 days a year.

Due to the EC-Directive, all countries grant fathers the right to parental leave; some countries also reserve part of the parental leave for fathers; Slovenia grants fathers 90 days extra leave. However, the levels of parental-leave benefits, employment restrictions during parental or care leave, the income gaps between women and men, and gender norms regarding employment and care pose obstacles to the uptake of parental leave by fathers. This is so even in the Scandinavian countries, which have otherwise geared their policies towards a gender-equal distribution of employment and care. (For rates of parental leave by fathers, see Bruning/Plantenga 1999.)

The different conceptions of care that underpin the parental-leave and careleave policies in Europe also determine the provision of childcare services. Although strict comparison is problematic due to differences in data collection and calculation method,<sup>4</sup> we encounter a divide between the Scandinavian countries, Belgium, and France on the one hand, and the other European countries on the other hand. In the Nordic countries, childcare is part of the policies that are meant to ensure women's labor-force participation, universal care services, social and gender equality, and citizens' (including children's) social rights. These countries provide an encompassing system of full-time public childcare for children of all ages, including school-age children. Even the introduction of careleave allowances in Finland and Norway in the 1990s did not replace the children's right to a public day-care place (Sipilä et al. 1997, 33ff.; Waerness 1998; Simonen/Kovalainen 1998; Leira 2002, 113ff.). France and Belgium also offer substantial childcare services for pre-school children, but differ administratively and organizationally from the Nordic countries. France has established a diversified system of different care options, including various public provisions as well as support for registered private childminders and tax deductions when they are used. In Belgium childcare is mainly based on a combination of public provisions and childcare services at home by independent carers who are often subsidized by the government (Bussemaker/van Kersbergen 1999, 37).

In the Mediterranean, the German-speaking, and the English-speaking countries public childcare for children below age three is hardly available, except for in England and East Germany. For children between three and school-entry age provisions are rather heterogeneous. In some countries, like Austria and Italy as well as East Germany, childcare is largely provided by the public sector (state or municipality). In West Germany, non-profit organizations play a considerable role. The Netherlands offer childcare on the basis of a "mixed economy", with services provided through public and private (marketized) institutions and through publicly subsidized employer-arranged care (Hemerijck 2002, 198ff.; Knijn 1998, 91f.; Bussemaker 1998; Hemerijck/Schludi 2000). Great Britain has started to promote market-based childcare services through "working-family tax credits" (Land/Lewis 1998; OECD 2001b, 179; Randall 2000). In all of these countries, institutional care is directed at supplementing family care rather than at offering an alternative to care provided or arranged by the parents. As a consequence, in Germany, the Netherlands, Austria, and the UK institutional care is to a large extent only provided on a part-time basis (Neyer, forthcoming; Ostner 1998, 130; The Clearinghouse 2000, Table 1.24).

The Eastern European countries have pursued a policy of reinstitutionalizing familial care and have cut back their publicly funded childcare provisions. Latvia, Slovakia, and the Czech Republic re-structured their care policies already in the first few years after the fall of communism and have drastically reduced their offers of childcare particularly for under-three year old children. The other countries followed somewhat later, with less dramatic cut-backs (Rostgaard 2004; Fodor et al 2002). Compared to other European countries, the Eastern European countries offer medium to low childcare coverage and there are less intentions to expand on public provision than even in the conservative countries of Western Europe.

If we assess these family policies in light of the issues outlined in Section 3, we recognize some distinct features: The establishment of parental-leave systems in Europe indicate a political recognition of the fact that employment and childcare are basically incompatible. The solution that most countries aim at is to enable mothers to provide care themselves rather than to enable them to participate in the labor market (on equal terms with men, i.e.: full time and without long-term employment interruptions). This policy has been particularly vigorously pursued by the Eastern European countries where the reinstitutionalization of gender-segregated employment- and care-patterns was regarded as a means of reducing unemployment. The tendency towards enabling mothers to care is also reflected in the tendency to make benefits independent of previous income, although previous employment may still be a pre-requisite to entitlement. Only the Nordic countries and Slovenia pursue policies that support labor-force participation and income retention, though Finland and Norway have started to deviate from this goal. In the other countries the leave policies vary greatly and range from the active support of mothers' long-term employment interruption (with partly restricted social rights of return) to individual contractual agreements, both of which may not be feasible options for all women.

As regards childcare we observe a similar picture. Public childcare services have been extended in some Western countries, but not always to the extent necessary for sufficient coverage, in particular for the children below age three. There is also a tendency to de-centralize, marketize, and privatize childcare services, particularly in conservative welfare states and in Eastern Europe. Such policies enlarge social and economic cleavages in accessibility, affordability, and

quality of childcare among different groups of women and contribute to an increase in the gender division of work (Mahon 2002; Illmakunas 1997; Leira 2002).

### 5. Family policies – a remedy against low fertility?

The overview above shows that despite the existence of family-policy regimes there is considerable cross-national variation in the provision and the modalities of family policies. Any broad categorization thus is likely to miss country-specific aspects that may be important for fertility and female employment. This further impairs investigations that try to link family-policy patterns to simple indicators like the total fertility rate and the female labor-force participation rate. As we mentioned earlier, both rates are unsuitable when it comes to studying the effects of policies. We therefore present some research findings that use approaches and measures more suitable to capture the effect of family policies and gender relations on fertility and female employment. We use examples with data from Sweden and Finland, two countries with similar welfare-state and gender policies, female labor-force participation rates and economic development in the 1990s, but with different parental-leave policies. We also use an example from Austria, a country that has a different welfare-state setup but nevertheless has a feature of its parental-leave policy that is similar to one in the Swedish parental-leave system. We further present findings from research on the impact of childcare services and women's and men's earnings on fertility. These examples serve to illustrate the "fine balance" (Daly 2000) between family policies, gender relationships, fertility, and female employment.<sup>5</sup>

Investigating the development of fertility in Sweden over the past two decades, Hoem (1990, 1993), Andersson (2000, 2002, 2004), and Andersson et al. (2006) show that a change in the Swedish parental-leave system in the mid-1980s, which allows women to retain their benefit level if they have their second or subsequent child within a restricted period of time after a previous child, led to a shortening in the spacing of births (Figure 1). During the 1980s this contributed to the increase in the rates of second (Figure 2) and subsequent births and to a rise in

the total fertility rate of Sweden (from 1.74 in 1985 to 2.13 in 1990). However, when an economic crisis hit Sweden in the early to mid-1990s, the total fertility rate dropped dramatically (to 1.50 in 1998-99); this despite the fact that spacing behavior did not reverse. The decline was to a great extent due to an increase in the number of non-employed women and of women in education. Since parental-leave benefits in Sweden are tied to prior earnings, fertility is generally much lower among the non-employed. The economic crisis reduced the risk of having children, and the reduction of parental-leave benefits (from 90% to 75%) contributed to this "pro-cyclical" decline (Andersson 2000, 2002; Neyer et al. 2006).

Like Sweden, Finland was also hit by an economic crisis in the 1990s. Contrary to Sweden, fertility rates did not decline in this country. Vikat (2004) attributes this partly to the Finnish system of home-care allowance, which paid a care-leave benefit to parents who did not use public childcare services. The benefit, which in the early 1990s was paid on top of unemployment benefits, allowed unemployed women to bridge the period of reduced employment possibilities. The benefit did not increase childbearing propensities but may have helped to maintain fertility levels. The uptake of care-leave benefit, however, had an adverse effect on women's re-entry into the labor-market. It led to a decrease of women's overall and full-time labor-force participation, particularly among women in lower-income brackets (Rønsen/Sundström 2002).

In 1990 Austria extended its parental-leave period and favored women who had their second or subsequent child within two years after the previous child. As in Sweden this policy measure had an effect on the timing of second and third births (Hoem et al. 2001; Prskawetz/Zagaglia 2005) (Figure 3 and Figure 4). But contrary to Sweden it did not contribute to any changes in the total fertility rate. This may be attributed to three facts: first, that like in Sweden the relevant policy changes in Austria mainly worked to the advantage of women who had been employed and acquired entitlements to benefits prior to the previous birth, but that the proportion of such women is much lower in Austria; second, that the benefit level and the lack of childcare services are less conducive to further childbearing than in Sweden; and third, that there was no general tendency of

increasing fertility to contribute to in the first hand. As in Finland, the extension of parental leave in Austria led to a decline of women's re-entry into the labor market after childbirth, in particular among blue-collar workers (Neyer 1998).

Surprisingly, studies that investigate the effects of the amounts of childcare provisions (in Sweden, Norway, and Germany) on childbearing behavior give only insignificant results. Fertility in areas with high childcare coverage and in areas with low childcare coverage largely do not differ (Hank et al. 2004; Kraydal 1996).

Studies on the impact of gender equality in income and care also render surprising effects, and these differ across welfare states. Swedish investigations reveal that a woman's income rather has a greater influence on childbearing propensities than her partner's income. The higher a woman's earnings and the lower the gender gap in income between the partners, the more likely a couple is to have another child (Andersson et al. 2004). The strong link between the level of individual earnings and the parental-leave benefit in Sweden is one of the main reasons for this. Another one is the availability of childcare which reduces adverse effects of employment interruptions through parental leaves. In Austria, by contrast, the partner's income (measured via his educational level) has a greater impact on the propensity to have a second or third child than the woman's income (measured via her educational level and her employment status) (Hoem et al. 2001; Prskawetz/Zagaglia 2005). Like in other conservative-familistic welfare states, the low level of parental-leave benefit and the lack of childcare services for the under-threes make women's childbearing propensities dependent on the partner's income and reduce employed women's inclination to have another child.

Gender equality in the sharing of parental leave is far from realization in Europe. But the uptake of (some) parental leave by fathers increases the propensity of couples to have another child (Oláh 2003; Duvander/Andersson 2006) (Figure 5).

These examples provide some insight into the diversity of relationships between family policies, gender relations, fertility, and employment. First, even if family policies have an impact on childbearing behavior, they need not lead to an increase in the total fertility rate nor have a long-term effect on the level of

fertility. As the comparison between Sweden and Finland showed, labor-market developments and women's opportunities for employment may be more important determinants of fertility than specific family-policy regulations. Second, policies that support a woman's access to work, secure her employment retention, and ensure her sufficient income in most cases seem to be a pre-requisite for her to consider having a(nother) child. It is essential that policies of this kind aim at mothers' labor-market integration. Third, the differences in total fertility levels between countries with low childcare provisions, like Austria and Germany, and countries with high provisions, like the Nordic countries, further suggest that these policies also exert an effect through their symbolic meaning. The lack of childcare services, low benefit levels, long parental or care leaves, and gendersegregating policies signal to women that it might be difficult, if not impossible, to combine employment and motherhood, reenter the labor-market after parental or care leave, and maintain the standard of living in the short and the long run. This is likely to lead to reduced fertility. More adequate provision of childcare services, high levels of benefits, parental leaves with options to take piece-meal leaves of moderate lengths flexibly, and gender-equality oriented policies may reduce the concerns about the compatibility of employment and care, re-entry into employment, and income maintenance, and may thus ease the decision to have a(nother) child.<sup>6</sup>

In conclusion, these findings show that investigations of the impact of family policies on fertility and female labor-force participation need to take the welfare-state, gender relations, and labor-market context into account. Longitudinal, individual-level analyses which capture the impact of macro-level developments on micro-level behavior are the pre-requisite to arrive at proper insights into the short-term and long-term effects of family policies on fertility. As to the practical politics the findings further suggest that policies directed at employment and income maintenance, gender equality, and care support may be more conducive to fertility increases in Europe than explicitly fertility-focused family policies.

17

#### **Endnotes**

<sup>1</sup> Council Directive 96/34/EC of 3 June 1996 on the framework agreement on parental leave concluded by UNICE, CEEP and ETUC (OJL 145, June 19, 1996, 4-9).

- <sup>2</sup> Demographically, the rise in mean age at first birth and thus the postponement of childbearing is considered one of the main factors for the decrease in total fertility rates. Some demographers maintain that the differences in fertility levels reflect the recuperation of childbearing among women above age 30 (Lesthaeghe/Moors 2000, 167).
- 3 There are also family policies which are usually not classified as welfare-state policies, such as family law. In the past these policies were important means of regulating employment and care, for example, through making a married woman's employment dependent on her husband's consent. However, the amendments of family laws in the second half of the 20<sup>th</sup> century eliminated such regulations. Since the 1970s, employment- and care- related family policies have become one of the dominant measurements among family policies.
- <sup>4</sup> This is partly due to the way in which coverage is calculated. As Korpi (2000, 145) noted it is not always clear whether the available data represent percentage of children attending, children with the right to claim a place, or available places. Furthermore, children who use more individualized forms of childcare (e.g.: child-minders) may not always be included in the data.
- 5 The studies apply event-history analyses to longitudinal individual-level data. We mainly concentrate on fertility because we lack studies with research designs that allow for a systematic comparison of the impact of family policies on women's employment. The results of single-country studies of the effect of parental-leave on women's re-entry into the labor-market after childbirth are summarized in Section 2.
- 6 This partly explains the results of the effect of childcare on individual childbearing behavior in single-country studies and the missing effect of the Austrian parental-leave extension on the fertility level.

#### References

- Andersson, Gunnar (2000). The impact of labor-force participation on childbearing behavior. Pro-cyclical fertility in Sweden during the 1980s and the 1990s, in: European Journal of Population 16, 293-333.
- Andersson, Gunnar (2002). Fertility development in Norway and Sweden since the early 1960s, in: Demographic Research 6(4), 67-86: <a href="http://www.demographic-research.org/Volumes/Vol6/4/">http://www.demographic-research.org/Volumes/Vol6/4/</a>
- Andersson, Gunnar (2004). Childbearing developments in Denmark, Norway, and Sweden from the 1970s to the 1990s: A comparison, in: Andersson, Gunnar/Gerda Neyer (eds.): Contemporary Research on European Fertility: Perspectives and Developments. Demographic Research Special Collection 3(7): 155-176: <a href="http://www.demographic-research.org">http://www.demographic-research.org</a>
- Andersson, Gunnar/Ann-Zofie Duvander/Karsten Hank (2004). Erwerbsstatus und Familienentwicklung in Schweden in paarbezogener Perspektive, in Angelika Tölke/Karsten Hank (Hg.): Männer Das "vernachlässigte" Geschlecht in der Familienforschung (Sonderheft 4 der Zeitschrift für Familienforschung), Wiesbaden, 220-234.
- Andersson, Gunnar/Jan Hoem/Ann-Zofie Duvander (2006). Social differentials in speed-premium effects in childbearing in Sweden, in: Demographic Research 14(4), 51-70. Available http://www.demographic-research.org/Volumes/Vol14/4.
- Anttonen, Anneli/Jorma Sipilä (1996). European social care services: Is it possible to identify models?, in: Journal of European Social Policy, 6(2), 87-100.
- Bruning, Gwennaële/Janneke *Platenga* (1999). Parental leave and equal opportunities: experiences in eight European countries, in: Journal of European Social Policy 9(3), 195-209.
- Bussemaker, Jet (1998). Rationales of care in contemporary welfare states: The case of childcare in the Netherlands, in: Social Politics 5(1), 70-96.
- Bussemaker, Jet/Kees van Kersbergen (1999). Contemporary social-capitalist welfare states and gender inequality. in: Diane Sainsbury (Hg.) (1999): Gender and welfare state regimes, 15-46.
- Castles, Francis G. (2003). The world turned upside down: Below replacement fertility, changing preferences and family-friendly public policy in 21 OECD countries, in: Journal of European Social Policy 13(3), 209-227.
- Council of Europe (2001). Recent demographic developments in Europe 2000, Strasbourg.
- Daly, Mary (2000). A fine balance. Women's labor market participation in international comparison, in: Fritz Scharpf/Vivien A. Schmidt (Hg.) Welfare and work in the open economy. Vol. II. Diverse responses to common challenges, Oxford, 467-510.

- Deven, Fred/Tanja Nuelant (1999). Parental leave and career breaks in Belgium, in: Peter Moss/Fred Deven (Hg.): Parental leave: Progress or pitfall? Research and policy issues in Europe, Brussels, 141-154.
- *Deven*, Fred/Peter *Moss* (eds.) (2005). Leave policies and research. Reviews and country notes. CBGS-Werkdocument 3.
- Duvander, Ann-Zofie/Gunnar Andersson (2006). Gender equality and fertility in Sweden: A study on the impact of the father's uptake of parental leave on continued childbearing, in: Marriage and Family Review 39, forthcoming.
- Engelhardt, Henriette/Alexia Prskawetz (2002). On the changing correlation between fertility and female employment over space and time. MPIDR Working Paper WP-2002-052, http://www.demogr.mpg.de/papers/working/wp-2002-052.pdf
- Esping-Andersen, Gøsta (1990). The three worlds of welfare capitalism, Cambridge.
- *Esping-Andersen*, Gøsta (1999). Social foundations of postindustrial economies, Oxford.
- *European Council* (2002). Presidency Conclusions. Barcelona European Council 15 and 16 March 2002. <a href="http://europa.eu.int/council/off/conclu/">http://europa.eu.int/council/off/conclu/</a>.
- Fagnani, Jeanne (1999). Parental leave in France, in: Moss, Peter/Fred Deven (1999). Parental leave: Progress or pitfall? Research and policy issues in Europe. NIDI/CBGS Publications 35: Brussels, 69-83.
- Fodor, Eva/Christy Glass/Janette Kawachi/Livia Popescu (2002). Family policies and gender in Hungary, Poland, and Romania, in: Communist and Post-Communist Studies 35, 475-490.
- Gauthier, Anne H. (2002). Family policies in industrialized countries. Is there a convergence?, in: Population, 57(3), 447-474.
- Gornick, Janet C./Marcia K. Meyers/Katherin E. Ross (1997). Supporting the employment of mothers: Policy variation across fourteen welfare states, in: Journal of European Social Policy, 7(1), 45-70.
- Gustafsson, Siv/Cécile Wetzels/Jan Vlasblom/Shirley Dex (1996). Women's labor force transitions in connection with childbirth. A panel data comparison between Germany, Sweden and Great Britain, in: Journal of Population Economics, 9(3), 223-246.
- Hank, Karsten/Gunnar Andersson/Ann-Zofie Duvander/Michaela Kreyenfeld/Katharina C. Spieβ (2004). Öffentliche Kinderbetreuung und individuelle Fertilitätsentscheidungen in Deutschland und Schweden, in: Yve Ströbel-Richter/Elmar Brähler (Hg.): Demographischer und sozialer Wandel, Gießen, 47-57.
- Hantrais, Linda (1997). Exploring relationships between social policy and changing family forms within the European Union, in: European Journal of Population, 13, 339-379.

- Hemerijck, Anton C. (2002). The self-transformation of the European social model(s), in: Gøsta *Esping-Andersen*/Duncan *Gallie*/Anton C. *Hemerijck*/John *Myles*: Why we need a new welfare state, Oxford, 173-213.
- Hemerijck, Anton C./Martin Schludi (2000). Sequences of policy failures and effective policy responses, in: Fritz W. Scharpf/Vivien A. Schmidt (Hg.): Welfare and work in the open economy. Volume I: From vulnerability to competitiveness, Oxford, 125-228.
- Hoem, Jan M. (1990). Social policy and recent fertility change in Sweden, in: Population and Development Review, 16, 735-748.
- Hoem, Jan M. (1993), Public Policy as the fuel of fertility. Effects of a policy reform on the pace of childbearing in Sweden in the 1980s, in: Acta Sociologica, 36, 19-31.
- Hoem, Jan M./Alexia *Prskawetz*/Gerda *Neyer* (2001). Autonomy or conservative adjustment? The effect of public policies and educational attainment on third births in Austria, 1975-96, in: Population Studies, 55, 249-261. For a longer version see: <a href="http://www.demogr.mpg.de/Papers/Working/wp-2001-016.pdf">http://www.demogr.mpg.de/Papers/Working/wp-2001-016.pdf</a>
- Ilmakunnas, Seija (1997). Public policies and childcare choice, in: Inga *Persson/* /Christina *Jonung* (Hg.): Economics of the family and family policies, London, 179-193.
- Kantorova, Vladimira (2004). Education and entry into motherhood: The Czech Republic during state socialism and the transition period (1970-1997), in: *Andersson*, Gunnar/Gerda *Neyer* (eds.): Contemporary Research on European Fertility: Perspectives and Developments. Demographic Research Special Collection 3(10): 245-274: <a href="http://www.demographic-research.org">http://www.demographic-research.org</a>
- Knijn, Trudie (1998). Social care in the Netherlands, in: Jane Lewis (Hg.): Gender, social care and welfare state restructuring in Europe, Aldershot, 85-109.
- *Knijn*, Trudie/Monique *Kremer* (1997). Gender and the caring dimension of welfare states: towards inclusive citizenship, in: Social Politics, 4(3), 328-361.
- *Korpi*, Walter (2000). Faces of inequality: Gender, class, and patterns of inequalities in different types of welfare states, in: Social Politics, 7(2), 127-189.
- *Kravdal*, Øystein (1996). How the local supply of day-care centers influences fertility in Norway: A parity-specific approach, in: Population Research and Policy Review, 15, 201-218.
- Kreyenfeld, Michaela (2004). Fertility decisions in the FRG and GDR: An analysis with data from the German fertility and family survey, in: *Andersson*, Gunnar/Gerda *Neyer* (eds): Contemporary Research on European Fertility: Perspectives and Developments. Demographic

- Research Special Collection 3(11): 275-318: <a href="http://www.demographic-research.org">http://www.demographic-research.org</a>
- Land, Hilary/Jane Lewis (1998). Gender, care and the changing role of the state in the UK, in: Jane Lewis (Hg.): Gender, social care and welfare state restructuring in Europe, Aldershot, 51-84.
- *Leira*, Arnlaug (2002). Working parents and the welfare state. Family change and policy reform in Scandinavia, Cambridge.
- Lesthaeghe, Ron/Guy Moors (2000). Recent trends in fertility and household formation in the industrialized world, in: Review of Population and Social Policy, 9, 121-171.
- Lewis, Jane (1992). Gender and the development of welfare regimes, in: Journal of European Social Policy, 3, 159-173.
- Mahon, Rianne (2002). Gender and Welfare State Restructuring: Through the Lens of Child Care, in: Sonya Michel /Rianne Mahon (Hg.): Child Care Policy at the Crossroad. Gender and Welfare State Restructuring. New York, 1-27.
- Meyers, Marcia K./Janet C. Gornick/Katherin E. Ross (1999). Public childcare, parental leave, and employment, in: Diane Sainsbury (Hg.): Gender and welfare state regimes,: Oxford, 117-146.
- Missoc (2001 and subsequent years). Social protection in the member states in the EU member states and the European economic area: <a href="http://europa.eu.int/comm/employment\_social/missoc/index\_en.html">http://europa.eu.int/comm/employment\_social/missoc/index\_en.html</a>.
- Morgan, Kimberly/Kathrin Zippel (2003). Paid to Care. The Origins and Effects of Care Leave Policies in Western Europe, in: Social Politics, 10(1), 49-85.
- Moss, Peter/Fred Deven (Hg.) (1999). Parental leave: Progress or pitfall? Research and policy issues in Europe. NIDI/CBGS Publications 35: Brussels.
- Neyer, Gerda (forthcoming). Family change and family policy in Austria, in: Thomas *Bahle/*Peter *Flora* (Hg.): Family change and family policies in Europe, Oxford.
- Neyer, Gerda/Gunnar Andersson/Marit Rønsen/Andres Vikat/Lisbeth Knudsen (2006). Fertility development and family policies in the Nordic countries (forthcoming MPIDR working paper).
- Neyer, Gerda (2003). Family policies and low fertility in Western Europe, in: Journal of Population and Social Security (Population), 1 (Suppl.), 46-93; a longer version is available as MPIDR-Working Paper WP 2003-021 at: http://www.demogr.mpg.de/papers/working/wp-2003-021.pdf
- *Neyer*, Gerda (Hg.). (1998). Karenzurlaub. Forschungsbericht des Instituts für Demographie, Wien.
- *OECD* (2001a). Employment outlook. Chapter 4: Balancing work and family life: Helping parents into paid employment, Paris.

- OECD (2001b). Starting strong. Early childhood education and care, Paris.
- Oláh, Livia S. (2003). Gendering fertility: Second births in Sweden and Hungary, in: Population Research and Policy Review 22, 171-200.
- Ondrich, Jan,/Katharina Spiess/Qing Yang/Gert G. Wagner (2003). The liberalization of maternity leave policy and the return to work after childbirth in Germany, in: Review of Economics of the Household, 1, 77-103.
- *Orloff*, Ann Shola (1993). Gender and the social rights of citizenship: The comparative analysis of gender relations and welfare states, in: American Sociological Review, 58(3), 303-328.
- Ostner, Ilona (1998). The politics of care policies in Germany, in: Jane Lewis (Hg.): Gender, social care and welfare state restructuring in Europe, Ashgate, 111-137.
- *Prskawetz*, Alexia/Barbara *Zagaglia* (2005). Second birth in Austria, in: Vienna Yearbook of Population Research, 143-170.
- Randall, Vicky (2002). Child care in Britain, or, how do you restructure nothing?, in: Sonya Michel/Rianne Mahon (Hg.): Child care policy at the crossroads. Gender and welfare state restructuring, New York/London, 219-238.
- Rostgaard, Tina (2004). Family Support Policies in Central and Eastern Europe A Decade and a Half Transition. UNESCO.
- *Rønsen*, Marit/Marianne *Sundström* (2002). Family policy and after-birth employment among new mothers a comparison of Finland, Norway and Sweden, in: European Journal of Population 18, 121-152.
- Ruhm, Christopher J. (1998). The economic consequences of parental leave mandates: Lessons from Europe, in: Quarterly Journal of Economics, 285-317.
- Ruhm, Christopher J./Jacqueline L. Teague (1997). Parental leave policies in Europe and North America, in: Francine D. Blau/Ronald C. Ehrenberg (Hg.): Gender and family issues in the workplace, New York, 133-165.
- Sainsbury, Diane (1999). Gender, policy regimes, and politics. in: Daine Sainsbury, (Hg.): Gender and welfare state regimes, Oxford, 245-275.
- Saurel-Cubizolles, Marie-Josèphe/Patrizia Romito/Vicenta Escriba-Aguir/Nathalie Lelong/Rosa Mas Pons/Pierre-Yves Ancel (1999). Returning to work after childbirth in France, Italy, and Spain, in: European Sociological Review 15(2), 179-194.
- Schmidt, Vivien A. (2000). Values and discourse in the politics of adjustment, in: Fritz W. Scharpf/Vivien A. Schmidt (Hg.): Welfare and work in the open economy. Volume I: From vulnerability to competitiveness, Oxford, 229-309.
- Simonen, Leila/Anne Kovalainen (1998). Paradoxes of social care restructuring. The Finnish case, in: Jane Lewis (Hg.): Gender, social care and welfare state restructuring in Europe, Aldershot, 229-255.

- Sipilä, Jorma with Margit Andersson, Sten-Erik Hammarqvist, Lars Nordlander, Pirkko-Liisa Rauhala, Kåre Thomsen, Hanne Warming Nielsen (1997). A multitude of universal public services how and why four Scandinavian countries get their social care service model?, in: Jorma Sipilä, (Hg.): Social care services. The key to the Scandinavian welfare model, Aldershot, 27-50.
- The Clearinghouse on international development in child, youth and family policy at Columbia University (2000): <a href="http://www.childpolicyintl.org/intpublications.html">http://www.childpolicyintl.org/intpublications.html</a> and <a href="http://www.childpolicyintl.org/ecec.html">http://www.childpolicyintl.org/ecec.html</a>.
- Vikat, Andres (2004). Women's Labor Force Attachment and Childbearing in Finland, in: Gunnar Andersson/Gerda Neyer (Hg.): Contemporary Research on European Fertility: Perspectives and Developments. Demographic Research, Special Collection 3(8), 177-212: www.demographic-research.org
- Waerness, Kari (1998). The changing 'welfare mix' in childcare and care for the frail elderly in Norway, in: Jane *Lewis* (Hg.): Gender, social care and welfare state restructuring in Europe, Aldershot, 207-228.
- Wennemo, Irene (1994). Sharing the costs of children. Studies on the development of family support in the OECD countries, Swedish institute for social research 25, Stockholm.
- Ziefle, Andrea (2004). Die individuellen Kosten des Erziehungsurlaubs: Eine empirische Analyse der kurz- und längerfristigen Folgen für den Karriereverlauf von Frauen, in: Kölner Zeitschrift für Soziologie und Sozialpsychologie 56(2), 213-231.

**Table 1: Parental Leaves and Childcare Leaves in Western Europe (1999-2002)** 

Country	Duration	Benefit (% of wage or others)	Max. age of child	Part-time	Father
Norway	42 to 52 weeks (incl. maternity leave) + 1 year cash-for-care	100% for 42 weeks 80% for 52 weeks Flat rate	2	yes	1 month 'use or lose'
Sweden	15 months + 3 months unpaid	80% (1 year; flat rate rest)	8	yes	1 month 'use or lose'
Finland	26 weeks + home-care allowance until child is 3	43%-82% flat rate + suppl. per child	3	yes yes	yes yes
Denmark	13 weeks each parent or 26 if child is under 1	flat rate (60% of max. unemployment benefit)	8		yes
Austria	2 years	flat rate (30 months + 6 months for father)	3; 3 months unpaid until child is 7	yes	6 months 'use or lose'
France	3 years	flat rate if two+ children	3	yes	yes
Germany	3 years	flat rate 2 years, means-tested	3; 1 year paid until child is 8	yes	yes
Belgium	3 months + career break for 5 years	flat rate	4; 10 public sector	yes	yes
Italy	10 months total	30% of monthly earnings	8	yes	yes, plus 1 month if father takes 3 months
Spain	3 years	unpaid	3; 6 civil servants in part time	yes	yes
Luxembourg	6 months	flat rate	5	yes	yes
Netherlands	6 months each parent	unpaid	8	yes	yes
Portugal	6 months each parent; 2-3 years in case of 3rd+ birth	unpaid	3	yes	yes
Ireland	14 weeks	unpaid	5	yes	yes
United Kingdom	13 weeks each parent	unpaid	5	yes	yes
Greece	3.5 months each parent	unpaid	31/2; 8 public sector	yes	yes

Sources: Moss and Deven 1999; OECD 2001a; The Clearinghouse on International Child, Youth and Family Policies at Columbia University 2000; Leira 2002

 Table 1 cont.: Parental Leaves and Childcare Leaves in Eastern Europe (2002 - 2005)

Country	Duration	Benefit (% of wage or others)	Max. age of child	Part-time	Father
Slovenia	260 days; 75 of which can be saved until child is 8	100%	8		90 days extra (15 while mother on maternity leave); 75 till child is 8
Romania	2 years	85%	2	no	yes
Lithuania	1 year 2 years	60% 75% of minimum wage	1 1≤3		yes
Bulgaria	2 years	flat rate (minimum wage) 50% of flat rate if not on leave Unpaid	2	yes	yes
	1 year		3		
Hungary	2 years	flat rate (minimum pension amount)	1≤3	no	yes
Slovakia	3 years	Flat rate (50% of minimum wage) Child not in kindergarden	3	yes	yes
Latvia	3 years	flat rate 25% of flat rate	18 months 18 months ≤ 3	20h / week 34h / week	yes
Poland	24 months (60 days of sick-childcare leave)	flat rate (means tested) 80% wage	26 months		yes
Czech Republic	4	Flat rate (minimum social assist.) Crèche use only few hours/months	4	minimal	yes
Estonia	3 years 8 years, if one child is ≤ 3 8 years if more than 3 children	50% of flat rate 50% flat rate for each child $\leq$ 3 25% of flat rate for each child $3 \leq$ 8 50% flat rate for each child $\leq$ 3 25% of flat rate for each child $3 \leq$ 8	3 8 8	no	yes

Source: MISSESC 2005; The Clearinghouse at Columbia University 2004

Table 2: Percent of children in publicly funded childcare in Europe, 1993/1994 and 1998/2000

Country		(0 - < 3) in ded childcare	Guaranteed childcare (0 - <3)	Children (3–6) in publicly funded childcare		Guaranteed childcare (3 - 6)	Children (6-10) in publicly funded after-school care
	1993/1994	1998/2000		1993/1994	1998/2000		1993/1994
Denmark	48	64	yes	82	91	yes	80
Sweden	33	48	>18 mo	72	80	yes	64
Norway	31	40	no	72	80	no	31
Germany East	41	36		117	111	yes	34
Belgium	30	30	>2.5	95	97	yes	
United Kingdom	2	$34^{2}$	no	60	60(1)	yes	5
France	23	29	>2	99	99	yes	65
Finland	32	22	yes	59	66	yes	65
Portugal	12	12		48	75	>5	10
Germany (united)	2	10	no	85	78	yes	
Italy	6	6	no	91	95	yes	7
Netherlands	8	6	no	71	98	>4	5
Germany West	2	3		85	87	yes	5
Spain	2	5		84	84		
Austria	3	4	no	75	79	no	6
Greece	3	3		70	70		
Ireland	2	$38^{1}$		55	56	no	
Luxembourg	2			58		no	

<sup>&</sup>lt;sup>1</sup> children under age 5

Sources: Daly 2000; Gornick et al. 1977; OECD 2001a; OECD 2001b

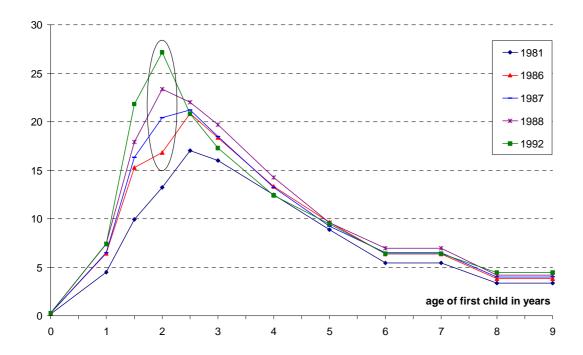
Table 2 cont.: Children in publicly funded childcare in Eastern Europe: 1989 and 1997/2000

Country	Children $(0 - < 3)$ in publicly funded		Children (3–6) in publicly funded		
	childcare		childcare		
	1989	1997/2000	1989	1997/1998	
Estonia		18		85	
Latvia	40	12		50	
Bulgaria	12	10		65	
Hungary		10		85	
Poland	5-10	2	70-90	33-50	
Czech Republic	16	1		85	
Romania	6	1		65-70	

Source: Rostgaard 2004

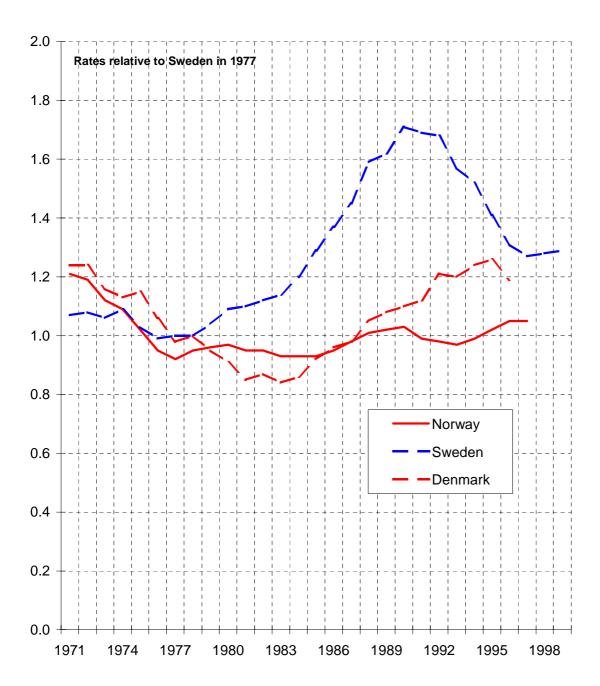
<sup>&</sup>lt;sup>2</sup> England only

Figure 1: Second-birth rates, by time since first birth. One-child mothers in Sweden, 1981, 1986-88, and 1992; standardized for age of mother.



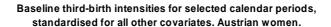
Source: Andersson, G., J. Hoem, and A.-Z. Duvander, 2006. "Social differentials in speed-premium effects in childbearing in Sweden". *Demographic Research* 14(4): 51-70. Available http://www.demographic-research.org/Volumes/Vol14/4.

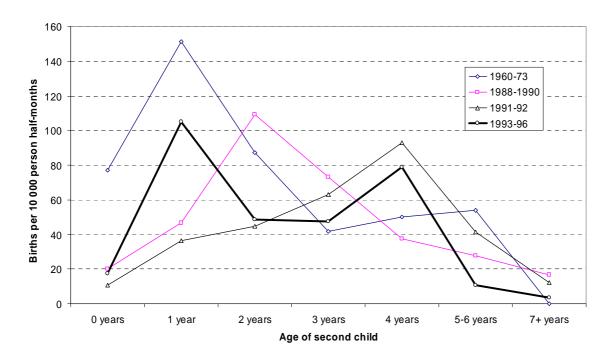
Figure 2: Annual index of second-birth rates. One-child mothers in Sweden, Norway, and Denmark, 1971-1999; standardized for age of mother and time since first birth.



Source: Andersson, G., 2004. "Childbearing developments in Denmark, Norway, and Sweden from the 1970s to the 1990s: A comparison". In: Andersson, G. and G. Neyer (eds.): Contemporary Research on European Fertility: Perspectives and Developments. *Demographic Research* Special Collection 3 (7): 155-176. Available http://www.demographic-research.org.

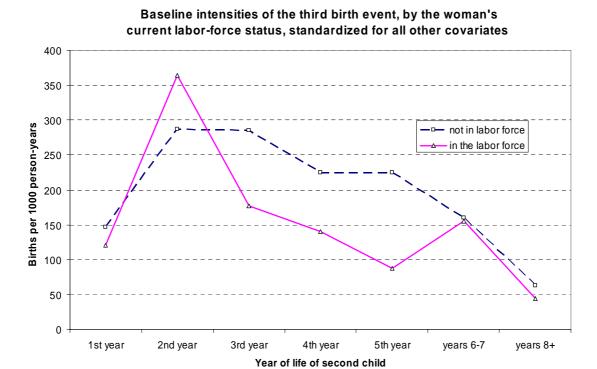
Figure 3: Impact of parental-leave extension in Austria on the spacing of births.





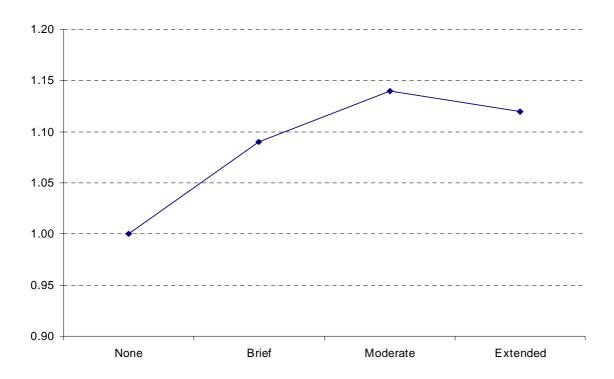
*Source: Hoem*, J., A. Prskawetz, and G. Neyer, 2001. "Autonomy or conservative adjustment? The effect of public policies and educational attainment on third births in Austria, 1975-96". *Population Studies* 55: 249-261. For an extended version see: <a href="http://www.demogr.mpg.de/Papers/Working/wp-2001-016.pdf">http://www.demogr.mpg.de/Papers/Working/wp-2001-016.pdf</a>

Figure 4: Impact of Parental-leave Extension in Austria



*Source: Hoem*, J., A. Prskawetz, and G. Neyer, 2001. "Autonomy or conservative adjustment? The effect of public policies and educational attainment on third births in Austria, 1975-96". *Population Studies* 55: 249-261. For an extended version see: http://www.demogr.mpg.de/Papers/Working/wp-2001-016.pdf

**Figure 5:** Relative risk of second birth, by father's uptake of parental leave. Swedish one-child parents in 1988-99; standardized for age of mother, age difference between parents, time since first birth, mother's uptake of parental leave, couple earnings, parents' education, and calendar year.



Source: Duvander, A.-Z., and G. Andersson, 2006. "Gender equality and fertility in Sweden: A study on the impact of the father's uptake of parental leave on continued childbearing". *Marriage and Family Review* 39: forthcoming.

Note: "Brief" refers to the situation where parental-leave benefits amount to less than 3% of the father's earnings during the first two years following first birth; "Moderate" means that 3-10% of earnings came from parental-leave benefits; "Extended" that more than 10% of earnings were from this insurance.