Family Policies and Childbearing Behavior

Theoretical and Methodological Aspects of Research on the Impact of Family Policies on Fertility

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Abstract

This paper deals with the relationship between family policies and fertility. We ask whether the unsatisfactory and contradictory results of investigations into the effects of family policies on fertility are – at least in part – to be attributed to theoretical and to methodological aspects of such research. We argue that studies of the effects of policies need to be designed – conceptually and methodologically – in a way that makes it possible to measure potential effects (or non-effects). The first part of the paper deals with theoretical aspects of family policies. We look at the different ways in which family policies are conceptualized in family-policy research and sketch the consequences of different conceptualizations for demographic research and for the assessment of effects of family policies on fertility. The second part of the paper deals with methodological issues. We argue that the effects of family policies on childbearing and fertility can only be assessed properly if we study the impact of family policies on individual behavior, event-history models applied to individual-level data being the state-of-the-art of such an approach. We further show that investigations into the effects of family policies on childbearing and fertility need to contextualize family policies and take their features, time, space, and usage into account. In the last section of the paper we present studies on the impact of family policies on Swedish childbearing behavior and fertility dynamics to demonstrate that an analytical and methodological approach as we suggest it prevents us from drawing misleading conclusions about the effects of family policies on childbearing and fertility.

Consequences of family policies on childbearing behavior: Effects or artifacts?

Over the past quarter century total fertility rates in Europe have fallen below replacement level in almost all European countries. In 1980, 19 of the currently 46 members of the Council of Europe still had a Total Fertility Rate of 2.1 or more. By 1990, their number had declined to 10, and since the turn of the century only Turkey displays a Total Fertility Rate above 2.1. In the majority of countries the TFR lies even below 1.5 (Council of Europe 2005, Table 3.3). The persistently low fertility in Europe has spurred public and political interest in policies that could maintain or increase fertility levels. Despite the fact that most governments refrain from proclaiming pronatalist policies, half of all European governments and three-quarter of those who consider fertility too low admit to have policies in place to raise fertility levels. A third of the countries which consider their fertility level as satisfactory have implemented policies to maintain their fertility levels. Since the mid-1990s the number of countries which have endorsed policies that should raise or sustain fertility levels has increased (United Nations 2004). However, researchers differ in their opinion on whether family policies have an impact on fertility. Most macro-level analyses based on aggregate data suggest that differences in fertility levels among European countries may be attributed to differences in family policies. Yet most of these studies apply to the 1970s and up to the mid-1980s, when family policies where hardly developed in most European countries. Investigations that pertain to the 1990s and later when most European countries had a range of policies in place, usually find less encouraging results. The effects are often weak, inconclusive or even contradictory (for an overview see: Neyer 2003; Gauthier and Hatzius 1997; Sleebos 2003). As a consequence, many researchers caution that the results of family-policy

intervention to raise fertility are rather uncertain or at best marginal (Demeny 2003; Caldwell and Schindelmayer 2003). Yet, there are also sufficient in-depth micro-level studies that show that family policies do have an impact on childbearing behavior and may affect fertility levels (Hoem 1990; 1993; 2002; Andersson 1999, 2000; Andersson, Duvander, and Hank 2004; 2005). This, of course, offsets the assumption deduced from macro-level studies that family policies have no relevant impact on fertility development.

This paper deals with these puzzling results although not by delving into the question whether family policies (and which ones) have an impact on fertility and childbearing behavior (when, where, and of which group's). We rather ask whether the unsatisfactory and contradictory results of investigations into the effects of family policies on fertility are – at least in part – to be attributed to theoretical and to methodological aspects of such research. We argue that studies of the effects of policies need to be designed – conceptually and methodologically – in a way that makes it possible to measure potential effects (or non-effects). Otherwise we run the risk that the results of such studies reflect something else, but not the working of family policies.

The paper proceeds as follows: The first part of the paper deals with theoretical aspects of family policies. We look at some of the different ways in which family policies are conceptualized in family-policy research and sketch the consequences of different conceptualizations for demographic research and for the assessment of effects of family policies on fertility. The second part of the paper deals with methodological issues. We argue that the consequences of family policies on childbearing and fertility can only be proper assessed if we study the impact of family policies on individual behavior, taking the features of family policies, time, space and usage into account. The third part of the paper illustrates this. We present examples to show that such an approach prevents misleading conclusions about the effects of family policies on childbearing and fertility.

1. Configurations of family policies and their consequences for demographic research

Contrary to many other policies such as foreign policies or labor-market policies, family policies usually do not constitute a distinct policy area. Family policies rather comprise a variety of different policies, such as maternity policies, parental-leave policies, child-care policies or family law. They are often incorporated into other policy areas and may thus be spread over a number of political fields which differ historically and institutionally[1], such as health care, social security, housing, welfare, taxation, civil law, and so forth. This diversity has made it difficult for researchers to arrive at a common definition. Among the various attempts to conceptualize family policies three seem to be relevant for demographic research.

(1) Kamerman and Kahn (1978, 3; 1991) define family policies as "everything that government does to and for the family […] such as day care, child welfare, family counceling, family planning, income maintenance, some tax benefits, and some housing policies". They thus see family policies as the sum of all state activities directed towards the family.

(2) Bourdieu (1996, 24) points out that since family policies are directed towards the family, they also construct the family. In his view, family policies are those state activities that aim "to favour a certain kind of family organizations and to strengthen those who are in a position to conform to this form of organization" (ibid.) He thus considers family policies as state measures to construct and institutionalize a particular form of family as the prevailing form of private relationships in a society. In his view this does not only apply to the family as a social institution, like demographers view it. Bourdieu stresses that this includes the construction of what people consider a family, that is, the construction of a prevailing form of family in the minds of people (ibid). Family policies therefore aim at both, supporting a particular family organization and institutionalizing this family form as the norm.

(3) Feminist welfare-state researchers add two additional aspects: First, feminist welfare-state researchers argue that family policies constitute a central part of the welfare-state setup of a country. Following Esping-Andersen's (1990) approach to welfare-state analysis, feminist welfare-state researchers regard family policies as part of the state's policies to structure society (Orloff 1993; Lewis 1992; Langan and Ostner 1991). They thus expand the structuring aspects of family policies beyond the

family by considering the effects that family policies have on gender relationships, class relationships, race relationships and other social, economic, and private relationships in society. Second, feminist family-policy research stresses the need to decompose the family. Families may comprise different forms of private relationships, such as partnership and parenthood.[2] Since each of these may be addressed by different family policies (e.g. marriage law vs. parental-leave law) or since family policies may have different regulations for different forms of partnership and/or parenthood (e.g.: different parental-leave regulations for single, cohabiting, or married parents), family policies are defined as those policies that structure society through structuring private relationships, that is partnership and/or parenthood (Neyer 2003).

For demographic research interested in the impact of family policies on fertility and childbearing behavior each of these definitions points to some important issue: First, Kamerman and Kahn's approach call our attention to the variety of family policies and family-policy constellations that exist in industrialized societies. The effect of family policies on fertility may depend on the constellation of family policies in a country. This comprises two aspects, related to the "quantity" and the "timing" of family policies. By quantity we mean that the effect of family policy on fertility may depend on whether there exists a broad spectrum of family policies or whether there are only very few and restricted family-policy measures in force. Even if two countries have a very similar measure in place, the effect of this measure on demographic behavior and demographic outcome may be quite different depending on whether this measure is a rather singular family policy or whether it is one policy measure among a battery of others. Furthermore, the effect of a particular policy may also depend on which other measures the battery contains. The "timing" aspect refers to the fact that the effect of family policy on fertility may be dependent on when a particular measure was implemented and on the sequencing of the implementation of different family-policy measures.

The issues of "quantity" and "timing" imply that our assessments of the relationship between family policies and fertility need to be based on at least a rough picture of a country's family policies, their constellation and configuration, their

content, and their histories. These aspects should not only be taken into account in single-country studies, but they need to be considered in comparative research, in cross-sectional as well in longitudinal one. For example, the family-policy constellation in Europe in the 1960s was quite different from the family-policy constellation in Europe in the 1990s. The "quantity" of policies was differently distributed across countries in the 1960s than in the 1990s. There were fewer countries with fertility-relevant policies in place in the 1960s than in the 1990s. The content of the family-policy packages in the 1960s was also quite different from the one in the 1990s. While in the 1960s family policies comprised mostly measures to support marriage and families with several children, in the 1990s they usually comprise policies related to female employment (maternity leave, parental leave, childcare leave). Some countries started to introduce part of these policies, like maternity leave, in the late 19th century (e.g.: Germany, Switzerland, Austria); others implemented comprehensive packages of such policies in the 1960s and the 1970s (e.g.: Eastern Europe, the Nordic countries) and the rest followed in the 1980s and 1990s. The cross-country variation among some family policies (e.g.: parental-leave policies) has increased, but it has decreased for other policies (e.g.. maternity-leave policies, family law) (Neyer 2003). Single-country and cross-country studies that want to explore whether family policies have an effect on fertility need to take into account such differences in the configuration of family policies and in the dynamics of family-policy development, of the policies as a whole and of individual measures.

Second, Bourdieu's concept of family policies entails that the effect of family policies on fertility may depend on the extent to which people are able or want to conform to the behavior supported by family policies. Bourdieu's approach points to the need to look at the cleavages that exist between the social, the normative, and the family-policy development in a country. The effects of family policies on fertility may be weak or insignificant if the family policies in place do not correspond to the social life that the majority of people in a country want to live or if the family policies contradict the norms that guide people's life. While such effects are well documented for population-policy measures in developing countries (see, for instance, Bledsoe, Banja, Hill 1998; Bledsoe 2002), they have so far not been considered in studies of the relationship between family policies and fertility (in developed countries).

Bourdieu's approach to differentiate between two policy aims, the construction of reality and the construction of norms, also points to another aspect of family policies. Family policies reflect the norms that they are to create or to maintain. They signal which kind of behavior is expected (or at least supported). They therefore also exert their effect through their normative or symbolic function. With regard to behavior, this means that family policies always act on two levels, on the factual level and on the level of "perception". The (potential) effect of family policies on factual behavior depends on how a policy is perceived in the minds of people and what it signals with respect to their current and future life.

Some examples may illustrate these two aspects. The fact that Germany and Austria are among the countries with the lowest total fertility rates, yet the highest expenditures on family policies in Europe may be attributed to discrepancies between the social development and the orientation of the family policies, on the one hand and to the perception of the family policies, on the other hand. German family policies support marriage and the male-breadwinner family, Austrian family policies support the long-term "carer-mother". With increasing female employment, non-marital unions, and dual- or female-breadwinner families such policies seem no longer to correspond to the family life that women and men want to lead (at least in the particular stage in their life-course when they make their decision to have (a)nother child). The measures may thus only have a supportive impact on the childbearing behavior of those families "that are in a position to conform" (Bourdieu 1996, 24) or want to conform to the form of family organization backed by the policies (for an example of such effects resp. non-effects see: Hoem, Prskawetz, Neyer 2001a, 2001b). In fact, many people in Germany and Austria perceive the family policies of their country, in particular the long parental leave[3] and the lack of non-familial childcare services, as hampering childbearing, because the policies embody a particular image of motherhood, namely of the mother that devotes some years of her life solely to the care of her child(ren). To employers, the policies signal that women will interrupt their employment after childbirth for a long period of time rendering women "risky" employees; to women, the policies signal that it will be difficult to maintain their employment or career-options and to get adequate childcare for their child. As a consequence, as life-long employment becomes a part of women's life

plans, women may abstain from having children. The family policies may thus have a depressing effect on fertility - an issue rarely investigated in demographic studies.

Demographers who attribute the differences in fertility levels in Europe to the different ways in which countries have responded to women's increasing demands for (equal) employment opportunities and gender equity or to social changes in general have made similar observations regarding the discrepancies between social development, normative development, and family-policy responses. They regard the incoherence between these realms as a cause for the low fertility and argue that a greater concurrence between these realms leads to higher fertility levels (McDonald 2000a, 2000b; Billari 2004; DiPrete, Morgan, Engelhardt, Pacalova 2003).

As a consequence, we may conclude, that investigations into the effects of family policies on fertility need to consider both aspects of family policies, their normative or symbolic connotations and their correspondence with societal development. This implies that we cannot simply sum up the various family-policy measures and conclude "the more the better". Nor can we assume that the existence of (fertility-related) family policies must have an elevating effect on fertility. We rather need to examine which normative goals family policies pursue, which meaning they convey regarding proper family behavior, which family form they support and how these aspects relate to the social circumstances of the population that we study. Furthermore, we need to expand our notion of what we consider fertility-relevant effects of family policies. As far as the relationship between family policies and fertility is concerned, demographers tend to look primarily for fertility-elevating effects.[4] However, we maintain that no or only insignificant effects are also effects. In fact, policies are often constructed so that they produce no effect (for examples, see: paternal leave regulations in Austria; the child's right to a childcare place in Germany; Neyer 1998, 2003). Thus, if we find no or only insignificant fertility-elevating effects of family policies, our analysis should not stop, but we should start to seek an explanation for such findings. Provided that we have applied the correct method to suitable data (see next section), the answers may well lie in the construction of the policies and/or in the way in which the family policies of a country relate to its development, factually and normatively.

Third, the feminist welfare-state approach and its conception of family policies as policies that structure society highlights that these policies may not necessarily impact fertility directly; they may have an impact on fertility through their structuring of social, gender, economic, class, or race relationships in society, in the market, or in the family. In other words, the effect of family policies on fertility may be mediated through their effect on other social institutions, like partnership, parenthood, gender, class, race, and so forth. This implies that if we want to investigate the effects of family policies on demographic behavior we need to consider the effects which family policies have on creating, maintaining, or altering social, gender, race, class and other relationships in society. However, the potentially structuring implications of policies are usually not immediately noticeable if we simply acknowledge the existence of a policy or look only at the main parameters of the policies in question. In order to detect the structuring impacts that policies may have, we need to look at the content of the policies in more detail, at their history, to whom they apply, which conditions are tied to them, and so forth.

Some examples may illustrate this point: From their onset, maternity and parental-leave regulations across Europe were a means to regulate female labor-force participation and to gender employment and care (Neyer 1997; 1998; Wikander, Kessler-Harris, and Lewis 1995). But the directions of these intentions have been quite different: The policies of the Nordic countries are geared to support women's employment and men's care involvement, while the policies of many continental European countries pursue the opposite. The main parameters of the family policies do not necessarily reflect such different orientations. For instance, due to EU-regulations parental-leave regulations in European countries are gender neutral. But laws in many continental countries contain indirect restrictions to father's uptake of parental leave (low levels of benefit; impractical rules regarding the claim to parental leave, etc.), while the Nordic countries by and large have implemented measure that should facilitate fathers' uptake of parental leave (Rønsen and Sundström 1999, 2002; Neyer 2003). Another example pertains to the structuring function of family policies along the lines of social status or citizenship. In many countries, family policies differentiate between social groups, for instance, between public vs. private-sector employees, insured vs. non-insured workers, married vs. non-married couples,

nationals vs. foreigners; they may include some and exclude others from all or specific benefits or measures, or they offer more generous regulations to some and more restrictive ones to others. For demographic research these examples illustrate that any analysis of the effects of family policies on demographic behavior should be based on a careful study of the regulations of family policies, of their range, and of their potential impact on economic, social, and familial relationships.

In single country studies, such a task is easier to fulfill than in comparative research in which one of the major problems consists in classifying the policy regulations in a way that such elements are not eliminated. Situating family policies within the framework of welfare-state regimes is a suitable way of handling this problem. However, this may bring up another problem, namely the relationship between the family policies of a country and its welfare-state setup. These may not be in accordance with each other. Comparing the most common classification of welfare states, namely Esping-Andersen's (1990, 1999) grouping of welfare states, to groupings of the main family policies in Europe illuminates this. Esping-Andersen (1990, 1999) classifies welfare states according to de-commodification, stratification, social citizenship, and de-familialization into the liberal welfare-state regime (Anglo-Saxon countries), the conservative-corporatist welfare-state regime (the continental Western European countries), and the universalistic (social-democratic) welfare-state regime (the Nordic countries).[5] From a demographic perspective, Esping-Andersen's classification seems to work well to highlight differences that exist between countries that represent the prototypes of welfare-state regimes, such as Germany and Sweden. However, the classification falls short of describing, for examples, fertility differences between France and Germany, both of which belong to the conservative welfare-state regime. If we classify welfare states focusing on family policies and the way in which they structure gender and economic relationships through support of mother's employment, organization of care, the equal support of all forms of parenthood and partnership, and the promotion of "agency equality", i.e.: the equal access of all persons to societal institutions that grant welfare (education, market, social security, care, etc.), we arrive at a different classification of welfare-state regimes: The Nordic countries still largely constitute a welfare-state regime of their own, but the pattern of the conservative welfare states becomes more diverse, with France, Belgium, and

partly the Netherlands being clearly set off against the German-speaking and the Mediterranean countries (Gornick, Meyers, and Ross 1997; Meyers, Gornick, and Ross 1999; Anttonen and Sipilä 1996; Lewis 1992; Langan and Ostner 1991; Neyer 2003; Korpi 2000). This implies that if we want to investigate the effect of family policies on fertility we cannot simply resort to pre-determined classifications of welfare states. We need to cluster family policies according to different fertility-relevant dimensions and judge the structuring impacts of these dimensions. In doing so, we find not only that some family-policy regimes diverge from the welfare-state regime to which they belong, but we also find that some countries may belong to different family-policy regimes, depending on which policy we include or which aspect of the policies we stress. In other words, with the partial exception of the Nordic countries, the clustering of countries into family-policy regimes is not robust. This leads to the assumption that the impact of family policies on fertility may also depend on the coherence of family policies and on the homogeneity of the entire (welfare-state and family-)policy setup. Not only in demography, but also in the other social-science research which focuses on the effects of policies, these aspects have so far not received sufficient attention, but they need to be considered in impact analyses.

Summarizing our overview over different conceptions of family policies, we draw the following main conclusions: Any investigations into the effects of family policies on fertility and childbearing behavior needs to view family policies within a wider social, political, economic, and normative context. Family policies need to be placed in a framework that interrelates the state, the market, society, and the family (partnership and parenthood) and considers the normative principles that govern them. Such a framework needs to be a dynamic one. This implies that we need to consider the changes of the policies over time, over the groups they cover, and over space (across countries). It further implies that we need to consider the changes in society, in politics, and in the market which in turn may have an impact on the potential effect of the family policies on fertility. Conceptually, this requires that any demographic analysis of the impact of family policies on fertility needs to be coupled with a policy analysis which brings to light those aspects of family policies that may have an impact on fertility and the channels through which they work.

2. Methodological aspects of investigations into the effects of family policies on fertility

One of the main conclusions of our reflections on conceptual aspects of family policies in demographic research is that macro-analytical investigations based on aggregate indicators contribute little to our understanding of the impact of family policies on fertility. Neither effects nor non-effects of family policies can be measured if we rely on aggregate measures of behavior, like the Total Fertility Rate or the female labor-force participation rate, or on aggregate measures of family policies, like the amount of social spending, only (Neyer 2003b). There are too many intervening factors that may account for the differences in fertility levels that we observe in Europe. Moreover, macro-indicators do not grant insights into the working of family policies, that is, how family policies affect fertility. Macro-indicators neither allow us to sort out the policy-relevant elements that affect fertility, for example, which family policy, which factors of family policies or which arrangements of family policies affect fertility;[6] nor do they provide insight into the ways through which family policies impact demographic behavior. Macro-indicators furthermore do not reflect fertility-specific structuring effects of family policies and thus reveal group- or parity-specific effects of family policies. We are therefore unable to discern whether family policies (or a specific policy) affect all women or only specific groups of women (e.g.: married women or employed women), whether they have an effect on entry into motherhood or on parity progression and so forth. Yet, such differential insights into the working of family policies are important for an assessment of their consequences on fertility, because the effect of family policies on fertility may change if the composition of the population changes or if the conditions relevant for the working of the family policy change. If, for instance, family policies support childbearing in marriage, the effect of the policies on fertility may change if marriage becomes a less prevalent form of partnership. Similarly, if fertility-relevant family policies are tied to specific conditions, like insured employment prior to a birth, the impact of these

policies on fertility may decrease if unemployment or non-insured employment contracts increase. Aggregate measures cannot capture such linkages. Studies of the effects of family policies on fertility based on such measures therefore run the risk of rendering a false picture of whether, how, and to what extent family policies impact fertility.

In order to assess whether family policies affect fertility, we need research designs and research methods that enable us to grasp the impact of family policies on individual behavior. Methodologically this requires that we have longitudinal individual-level data that contain individual life-course histories and apply proper methods to them. Event-history models and multi-level event-history models are the state-of-the art in such research. Depending on the content and the comprehensiveness of the data, such methods allow us to study childbearing and partnership dynamics over a woman's and her partner's life-course, consider their education histories, employment histories, unemployment histories, parental-leave histories, and so forth – and link the individual life-course histories to contextual macro-indicators, including the development and dispersion of family policies.

Given the complexity of family policies, their dynamics, their interaction with other political and/or socio-economic factors, their multiple (and not necessarily uniform) impacts on various areas of an individual's life, we usually cannot just simply distinguish between different periods of time and try to explore the potential effects of family policies on individual behavior in such periods. We rather need to "reduce" the complexity of the family policies without eliminating their dynamics and their interactions with other political and/or socio-economic factors. There are several possibilities to do this – related to time, space, and usage.

As far as "time" is concerned, we need to focus on "critical junctures" (Thelen 1999) or "boundaries" (Pierson 2004), that is at times at which a (significant) change occurs that is likely to have an impact on subsequent childbearing behavior and on fertility trends. A "critical juncture" may be the introduction of a policy, a significant raise of a benefit or the elimination of one; it may be a change in the political or institutional setting, for example, the collapse of state-socialism; or it may be a change of socio-economic factors, for example, an economic crisis. In all of these cases the change occurs rather "rapidly". Although the moments of change can be clearly

marked in time, like the year, month, or day, in which a law came into force, the Iron Curtain fell, or the recession started, we need to consider the period prior to the "critical juncture", as well. This is necessary because a potential effect of the change on childbearing and fertility development can only be assessed in relation to the behavior and development prior to the change. It is furthermore necessary because people may anticipate a change and start to adapt their behavior accordingly (e.g.: if a government announces its plans to change a policy), affecting the timing when a potential effect can be recognized. In all cases, the change should occur while other factors remain largely invariant, so that we can explore the impact of the change on subsequent fertility behavior and fertility outcomes.

If, say, a change in a family policy (or in a family-policy package) is introduced, while the socio-economic circumstances are fairly stable, event-history models applied to longitudinal individual-level data (that span over sufficient time-periods before and after the change) allow us to see whether this change has any effect on the (subsequent) childbearing in general, on the progression to a specific parity, or on the childbearing behavior of specific groups of women. If, on the other hand, the socio-economic (or political and institutional) circumstances change, while the family policies remain the same, we are able to explore which kind of effects the policies have on childbearing (or other) behavior in different political, institutional, and/or socio-economic contexts. Demographic analyses that focus on "critical junctures" thus highlight the temporality of family policies and of their effects on fertility, providing us with much better insights into the workings of family policies on individual, demographic behavior.

A similar design is needed for comparative research. We are better able to attribute (measurable) differences in fertility behavior to family-policy impacts if we study individual-level effects of such "critical junctures" in countries that constitute "most similar cases" (Przeworski and Teune 1970). Only in a setting in which we have sufficient cross-country similarity over a (considerable) number of factors (e.g.: over institutional factors, economic factors, cultural factors, etc.) are we able to assess whether differences in childbearing behavior and fertility development are attributable to family-policy interventions. This, of course, does not imply that we have to preclude comparative research of family-policy effects across dissimilar countries.

But such a research setup amounts to a comparison of individual country studies or of regimes of similar countries, because otherwise we would not be able to isolate family-policy impacts on fertility from the impacts of other factors on fertility.

Not in all cases are we in a position to align our study around "critical junctures". Family policies often develop slowly over time. Their effect on fertility behavior may therefore be incremental and difficult to detect. An example of such a policy is the public provision of childcare services. Some countries may also have state-specific or region-specific family-policy regulations in place; others largely lack nation-wide uniform family policies, but there may exist employment-specific or occupation-specific measures. Examples of the latter include the firm- or occupation-specific family-leave regulations in the United States, the UK, and the Netherlands. In many of these cases, family policies vary across "space", that is they differ between states, regions, municipalities or companies. If we have individual-level information on where a woman "under risk" has lived or worked and if we have corresponding macro-level information on these localities, then we are able to study whether the respective family policies have an impact on childbearing behavior.

The existence of family policies does not necessarily mean that everybody is covered by them or makes use of them. Eligibility regulations (such as employment requirements for entitlements to parental-leave benefits), regionally different provisions (for instance, regarding access to childcare), or provisions attached to family status or the number of children (as is common for family benefits in many countries) limit the circle of those to whom the policies apply. Many fertility-related family policies are optional, such as parental leave, paternal leave, or care leave. This suggests that in order to measure the "factual" impact of family policies on fertility we should study the effect that the individual usage of a policy has on subsequent childbearing behavior. Here, too, event-history models applied to individual-level data that contain information on the uptake of family policies are the proper means to measure such "factual" impacts.

Concentrating on "critical junctures", "space", and "usage" in the analysis of family-policy impacts on fertility does not mean that we narrow the scope of family policies arbitrarily and limit the generality of the results. We rather suggest an approach that identifies the crucial components and the significant aspects of family

policies and situates them within time, space, and the realm of persons' individual and collective lives. Such an approach turns against the notion that family policies have a universal effect, independent of their temporal or spacial context. Family policies unfold their effect in time and space, both of which are structured and "peopled". We therefore regard it as essential to contextualize family policies and – to modify Pierson (2004, 172) – to environ any demographic event or process in its temporal location. Only then are we able to assess whether family policies have an impact on fertility.

In the following section we present three examples that show how such an analytical and methodological approach can provide better insight into the relationship between family policies and fertility and enlighten our understanding of the consequence of family policies on demographic behavior. We limit ourselves to examples from Sweden – not only because we can make use of individual-level register data – but also, because we thus need to depict the welfare-state setup and the family policies of one country, only.

3. Effects of family policies on fertility – the case of Sweden

We have argued that since family policies constitute part of the welfare-state policies that structure economic, social, gender and familial relationships we need to study the impact of family policies on childbearing within context of the welfare-state setup and the socio-economic development of a country. We have further argued that in order to assess the impact of family policies on individual behavior we need to reduce the complexity of family policies. This can be achieved if we study their impact on fertility with respect to "critical junctures", "space", and "usage", applying event-history models to longitudinal individual-level data. In what follows we present three examples, based on such analytical and methodological aspects. The results of the studies show that measurable effects, no effects, and ambivalent effects may in fact all be regarded as consequences of family policies. The examples further demonstrate that analyses based on macro-level aggregate data of behavior would

have led to a wrong picture of the impact of family policies on fertility. Such analyses would have failed to recognize impacts of family policies on childbearing behavior, while at the same time they might have attributed aggregate outcomes to family policies where effects are not directly detectable.

Like other Nordic countries, Sweden is one of the countries with the highest Total Fertility Rate in Europe. But contrary to the other Nordic countries, Sweden experienced a "roller-coaster-fertility" (Hoem 1990) in the 1980s and 1990s, with a remarkable increase of the Total Fertiltiy Rate in the 1980s up to reproduction level and a steep decline thereafter to the one of the lowest levels in Western Europe. From a demographic perspective that expects that high fertility correlates with a highly developed welfare state generous family policies, this development is quite surprising. For, Sweden is a highly developed welfare state, which combines universal, individual-based welfare coverage with generous family-oriented policies (Sipilä 1997, Leira 2002, Sainsbury 1999). Both the relatively high fertility of Sweden and its recent fluctuations need to be seen in the light of the specific setup of the Swedish welfare state and the configuration of its family policies. Its general orientation is directed towards the compatibility of family activities and the labour-force participation of women and men. The reconciliation of the family and working life of women is facilitated by (i) an individual taxation and an individual-based social-security system, which makes it less attractive for couples to pursue gendered segregation of work and care, (ii) an income-replacement based parental-leave system with a parental-leave benefit of 80% of a person's earning prior to childbirth (up to a certain ceiling), which gives women incentives to establish themselves in the labour market before considering childbirth, and (iii) a highly flexible parental-leave system, which allows women/men to take full-time or part-time parental leave and/or reduce their working hours until the child is 8 years old; (iv) the possibility to take paid leaves up to 120 days per child and per year to care for a sick child; (iv) subsidized childcare for children of all age groups, which allows women to return to work after their parental leave. A strong policy focus on gender equality aims not only at enhancing women's position in the labour market but also at encouraging men to be more active in childrearing tasks within the family sphere. These policies have been implemented in the 1970s and expanded since, with the intention to increase and

maintain female labor-force participation, to promote social and gender equality, and to enable women and men to combine employment and care. Sweden thus has a long tradition in which family policies have been a major means of structuring social, economic, gender, and family relationships.

In the 1980s, Sweden introduced a so-called "speed premium" in its parental leave system. Mothers who have their second or subsequent child within a certain period after their previous child receive benefits that are calculated on the basis of the income which they had before their previous child was born. This favors mothers who either interrupt their employment or reduce their working hours after the birth of a child and creates an incentive to have children at relatively short birth intervals. Hoem (1990, 1993b) and Andersson (1999; 2004) show that the introduction of these regulations triggered a change in childbearing behavior, namely a shortening of the birth intervals (Figure 1 and Figure 2). This led to the remarkable increase in the parity-specific birth intensities and the overall birth rate that we observe in Sweden in the 1980s. (By comparison, the other Scandinavian countries with a similar welfare-state setup, similar employment-supporting family policies and high female labor-force participation, did not experience such an increase). However, the economic crisis of the 1990s was accompanied by a considerable decline in the (parity-specific and general) birth rates. But this decline was not due to a reversal in the birth-spacing behavior. Women who had a second or subsequent child still got their child sooner after the previous one than before the introduction of the "speed premium". The decline was due to compositional effects attributable to the income-centered parental-leave system. Since the parental-leave benefit is calculated on the basis of a woman's prior income, it offers an incentive to women to establish themselves in the labor market before they have a child. Andersson (2000) and Hoem (2000) have shown that women in Sweden who have a decent income from earnings have a higher propensity to have a child[7] than women who are unemployed, in education, or have a generally weaker attachment to the labor market. In the crisis of the 1990s, the share of unemployed women and of women in education increased considerably and thus the share of those women who refrain from having a child, leading to the decline in the birth rates of the 1990s.

As to the effects of family policies on fertility, these analyses show that family policies can alter childbearing behavior in the long run, as did the "speed premium". Despite such long-term impacts on childbearing behavior, the effects of family policies on fertility levels can be temporal. In our case, we see that they are closely intertwined with the economic cycles. It seems that the setup and the features of family policies constitute an important element in the relationship between socio-economic development and fertility levels. In the case of Sweden, the close ties between employment and parental-leave benefits supported a pro-cyclical childbearing behavior. Other family-policy configurations may interact differently with the socio-economic development. This is demonstrated by a study by Vikat (2004), who shows that the Finnish care-leave regulations of the 1990s contributed to an upkeep of fertility levels during the crisis of the 1990s (but led to a considerable decline of women's labor-force attachment after childbirth, see: Rønsen and Sundström 1999, 2002). In both of these cases, these effects of family policies and economic development on childbearing behavior and fertility could not have been detected with aggregate-level investigations. Such investigations would not only have missed the effect that the "speed premium" has had on birth spacing; they would also have led to false conclusions about the impacts of family policies on childbearing and fertility.

We now turn to the study of the effect of childcare provisions on childbearing behaviour. In Sweden, public day care for children is regarded as an essential component of the overall welfare system and its direction towards a dual-breadwinner model, gender equality, and the promotion of equal opportunities for children of all social backgrounds (Bergqvist and Nyberg 2002). The provision of public child care improved substantially during the 1970s to 1990s, when the expansion of such services became a generally accepted policy objective. Children of all age-groups have a right to a place in public childcare, and at present, practically all children in Sweden have access to subsidized childcare of high quality. A study by Andersson, Duvander, and Hank (2004) examines if the local variation in child-care characteristics can be related to the childbearing dynamics of parents in different Swedish municipalities. They find no such indication (Table 1). Such an absence of effects could easily be interpreted as public provisions of childcare having no effect

on childbearing – an interpretation that finds ostensible support by studies in other countries (Norway, Germany), which render similar results (Kravdal 1996, Hank et al 2004). Andersson, Duvander, and Hank (2004) interpret the absence of effects as a reflection of the generally very appropriate level of child care in Sweden. They conclude that "despite some regional variation in the quantity, quality, and price of day care, the overall coverage with affordable, high-quality child-care opportunities is apparently on a sufficiently high level as to allow parents to make their fertility decisions relatively independent of the specific characteristics of their local area". This suggests that public childcare policies work in part through the way in which they are perceived by parents.

Our third example relates to the usage of family policies, and the effect of the variation in individual use of parental leave (see also Oláh 2001; 2003). Much of the present debate on the parental-leave system in Sweden focuses on the relatively low uptake of the leave by fathers (Haas and Hwang 1999, Sundström and Duvander 2002). Swedish fathers do take 10-15 percent of all parental leave, which is considerably higher than in any other country, but Swedish authorities see the slow progress towards a further increase in paternal involvement in the parental-leave scheme as being an obstacle to gender equality. It is also common to expect that increased paternal involvement in childrearing is related to higher fertility. A study by Duvander and Andersson (2004) suggests that there is indeed a positive relationship between fathers' uptake of parental leave and Swedish couples' propensity to have another child (Figure 3), but the relationship is not straightforward. As the study shows we cannot conclude that the more parental leave a father takes the more likely a couple is to have a(nother) child; there seems to be a rather fine balance between the amount of the father's leave and the impact that this has on subsequent childbearing.

What can we conclude from these results? Our first conclusion is that family policies can indeed impact childbearing behaviour and fertility, but such effects can rarely be detected if we use aggregate-level analyses, only. The effect of family policies on childbearing behavior can only be seen if we use individual-level data and study the impact that family policies have on individual behavior. Our examples further show that there is no universal effect of family policies on fertility. The effects are influenced by the setup and the content of the family policies and the way in

which they interact with economic, social, gender, and welfare-state factors. To illuminate this relationship we need demographic analyses that are sensitive to the temporal and spacial aspects of family policies and fertility development and pay attention to the features of family polices and their variation over time and space.

Notes

[1] Institutional differences may include, for example, the form of policy making or the groups that dominate the political process in an area, both of which can have an impact on the content and the potential impact of policies.
[2] Families may also be multi-generational. But these family forms play a minor role in family-policy research on fertility in industrialized countries.
[3] In both countries, parental-leave and care-benefit regulations allow employment interruptions or receipt of care benefits until the child is three years old (Neyer 2003).
[4] This applies primarily to countries with low fertility. For countries with high fertility, demographers tend to search for fertility-reducing effects of public policies.
[5] Some researchers (Leibfried 1992; Ferrera 1996) identify a fourth welfare-state regime, which comprises the Mediterranean countries (Mediterranean welfare-state regime). Others also regard Australia and New Zealand as a welfare-state regime of their own (Castles 1996).
[6] This does not only hold for cross-sectional analyses with macro-indicators, but also for longitudinal analyses based on time-series of macro-indicators, since different family policies have been implemented and/or changed at different times.
[7] A study of childbearing patterns by the labour-market attachment of Swedish women and men by Andersson, Duvander, and Hank (2005) reveals that the impacts of female and male earnings on a couple's childbearing behavior turn out to be fairly similar. The same applies to foreign women in Sweden (Andersson 2004c; Andersson and Scott 2005).

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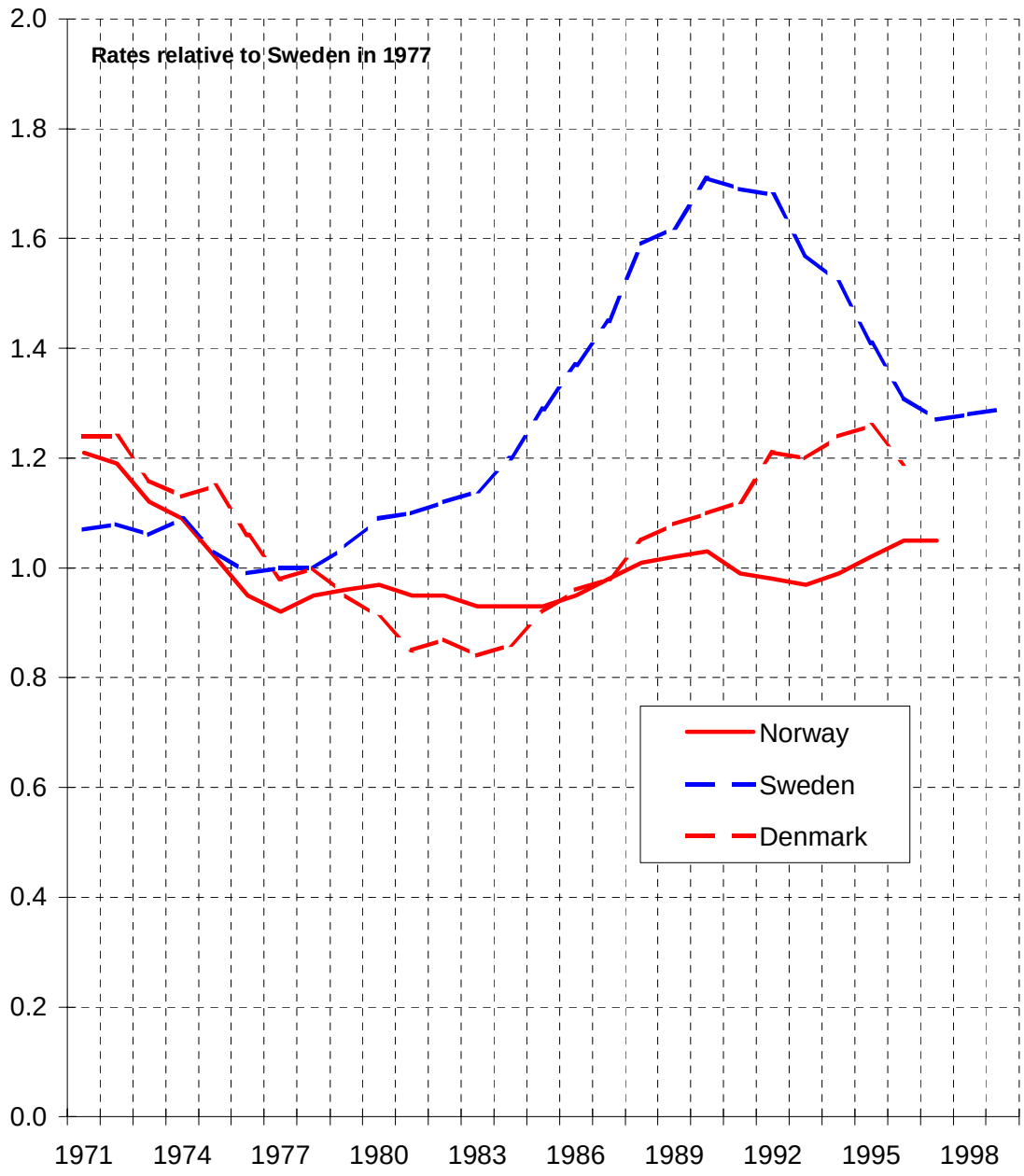
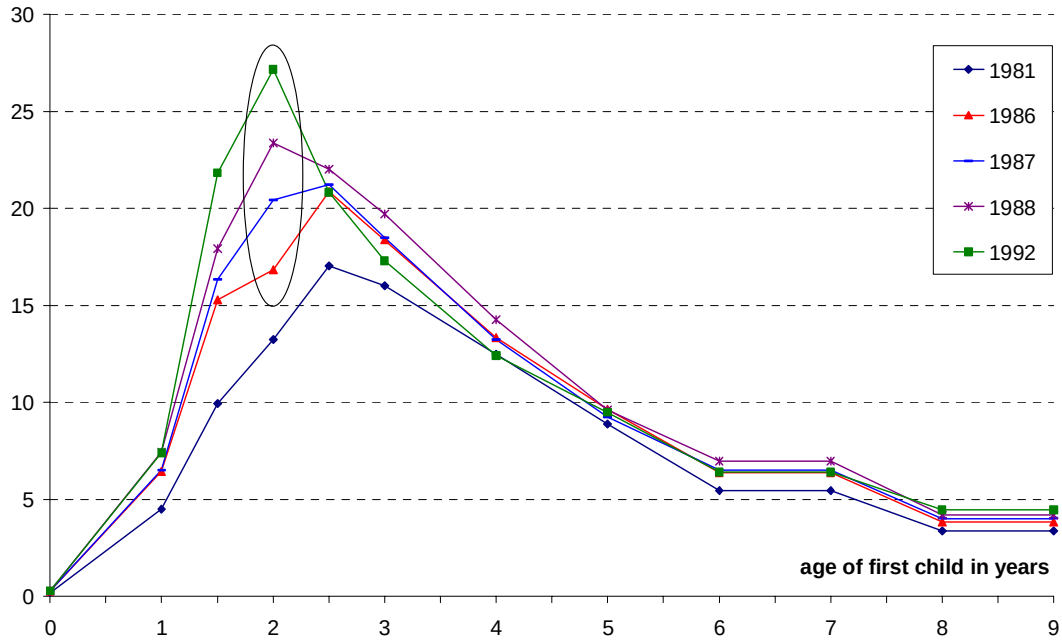
Figure 1: *Annual index of second-birth rates. One-child mothers in Sweden, Norway, and Denmark, 1971-1999; standardized for age of mother and time since first birth.*



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

Figure 2: *Second-birth rates, by time since first birth. One-child mothers in Sweden, 1981, 1986-88, and 1992; standardized for age of mother.*



Source: Swedish population registers, Statistics Sweden, authors' own calculations.

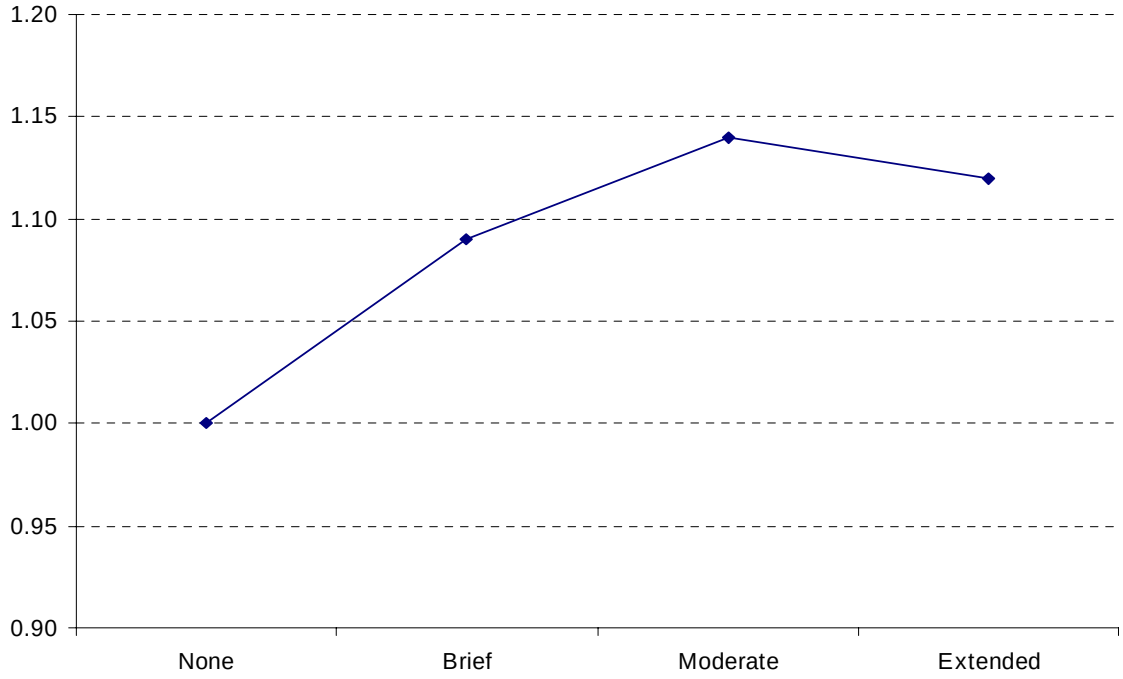
Table 1: *Relative risks of second birth, by local child-care characteristics. Swedish one-child parents in 1997-98; standardized for age of mother, time since first birth, parents' education, and type of municipality.*

Price of childcare	
Low	0.97
Medium	1
High	1.02
Supply of childcare	
Low	1.01
Medium	1
High	1.01
Quality of childcare	
Low	1.03
Medium	1
High	0.98

Source: Andersson, G., A.-Z. Duvander, and K. Hank, 2004. "Do child-care characteristics influence continued child bearing in Sweden? An investigation of the quantity, quality, and price dimension". *Journal of European Social Policy* 14(4): 407-418.

Note: "Low" refers to the quintile of one-child parents living in municipalities at the lower end of the measured scale; "High" refers to the quintile of parents at the higher end of the scale.

Figure 3: *Relative risk of second birth, by father's uptake of parental leave. Swedish one-child parents in 1988-99; standardised 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: Swedish population registers, Statistics Sweden, authors' own calculations.

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.