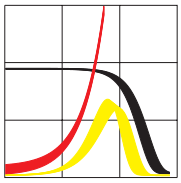

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Consequences of Family Policies on Childbearing Behavior: Effects or Artifacts?

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Abstract

This paper argues that theoretical and methodological aspects account for the ambiguous results of investigations into the effects of family policies on fertility. Theoretically we employ approaches of comparative welfare-state research, of the sociology of "constructed categories", and of the "new institutionalism" to demonstrate that investigations into the effects of policies on fertility need to contextualize policies and reduce their complexities by focusing on "critical junctures", "space", and "usage". As regards methods we argue that the policy effects can only be assessed properly if we study the impact of policies on individual behavior, event-history models applied to individual-level data being the state-of-the-art of such an approach. We present studies on the impact of family policies on Swedish childbearing behavior to demonstrate that an analytical and methodological approach as we advocate prevents us from drawing misleading conclusions about the effects of family policies on childbearing and fertility.

Over the past quarter century total fertility has 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 (TFR) of 2.1 or more. By 1990, their number had declined to 10, and since the turn of the century only Turkey (still) displays a TFR 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 indeed 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 in most European countries were very rudimental. 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 2003a; 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, 1993b; Andersson 2004a; Rindfuss et al. 2007). 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 the theoretical and 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 properly assessed if we study the impact of family policies on individual behavior, taking the features of family policies and their various connections with dimensions of time, space, and usage into account. A proper study of policy effects on individual behavior requires that the policy can be depicted in a way so that there is some variation in how it affects individuals. The third part of the paper illustrates this. We present examples to show that such an approach can prevent misleading conclusions about the effects of family policies on childbearing and fertility.

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 further aspects: First, they stress 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 2003a).

For researchers interested in the impact of family policies on fertility and childbearing behavior each of these definitions points to some important issues. 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). Some countries started to introduce part of these policies, like maternity

leave, in the late nineteenth 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 2003a). 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, and 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 have been among the countries with the lowest total fertility, 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. At present, there is a reorientation of German family policies but until now they have systematically supported marriage and the male-breadwinner family, while 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 and non-effects, see Hoem, Prskawetz, and Neyer 2001a, b). In fact, many people in Germany and Austria have come to 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 many years of her life solely to the care of her child(ren). To employers, these 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, many women in German-speaking countries abstain from having children. These 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, b; Billari 2004; DiPrete et al. 2003).

Consequently, we may conclude, that investigations into the effects of family policies on fertility need to consider both the normative or symbolic connotations of family policies 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 the discussions of paternal leave regulations in Austria and the child's right to a childcare place in Germany by Neyer 1998, 2003a). 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, 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 contents 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: 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 measures that should facilitate fathers' uptake of parental leave (Rønsen and Sundström 1999, 2002; Sundström and Duvander 2002; Haas 2003; Neyer 2003a). 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 2003a; 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 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 investigation 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.

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

One of the 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 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 that 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 do not 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 continued family building, and so on. 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 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 data that contain individual life-course histories and apply proper methods to them. Event-history models and multi-level analyses 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 any partner's life-course, consider their education histories, employment histories, unemployment histories, parental-leave histories, and so on – and link the individual life-course histories to contextual macro indicators, including the development and dispersion of family policies. In this respect, it is important too that the policies themselves can be

depicted in a way so that there is scope for variation across individuals and individual life spells in how the particular policies are implemented.

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 on 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, like the introduction of the earnings-related parental-leave systems in the Nordic countries in different years in the 1970s and 1980s or in Germany in 2007, it may be a significant raise of a benefit or the elimination of one; it may be a radical 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 really explore the impact of the change itself on subsequent 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., institutional, economic, and cultural factors) 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. In the latter case, the use of a certain policy and childbearing may be endogenous to each other, making it hard to judge whether associations between the two reflect causality of the policy on fertility behavior. This still 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, and the modeling should incorporate techniques (like multi-process modeling) that allow for the detection of causality in effects.

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 spatial 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 four 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 from this country – but also because we thus need to depict the welfare-state setup and the family policies of one country, only.

Effects of family policies on fertility – examples from 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 the 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 four 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.

The Swedish context

Like other Nordic countries, Sweden is one of the nations with the highest total fertility in Europe. But contrary to the other Nordic countries, Sweden has experienced a "roller-coaster-fertility" (Hoem and Hoem 1996) in recent decades, with a remarkable increase of total fertility in the 1980s up to reproduction level in the early 1990s, a steep decline thereafter down to one of the lowest levels in Western

Europe at the end of the 1990s, and a renewed strong increase during the first decade of the twenty-first century. Analyses of individual-level data producing more accurate fertility measures than the TFR (Hoem 1993a) show that the fertility swings have been due to changes in behavior at all birth orders (Andersson 2004b). From a policy-oriented demographic perspective that expects that high fertility correlates with a highly developed welfare state and its generous family policies, these developments may appear 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.

The general orientation of Swedish welfare policies is directed towards the compatibility of family activities and the labor-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 labor market before considering childbirth, (iii) the flexibility of the 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 to care for a sick child; and (v) 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 labor 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 ever 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.

Critical juncture 1: a policy intervention in the 1980s

Our first example of a critical juncture refers to the introduction of the so-called "speed premium" in the Swedish parental leave system during the 1980s. The effect of this policy intervention on childbearing dynamics has been demonstrated extensively in the demographic literature (Hoem 1990, 1993b; Andersson 1999, 2002, 2004a; Andersson, Hoem and Duvander 2006). The effect is of general interest since it constitutes one of the clearest demonstrated cases of a true causal effect of a social-policy change on fertility behavior in a modern society. In their discussion on causation in demography, Ní Bhrolcháin and Dyson (2007) refer to it as an example that meets their causation criteria. They found it persuasive because of the demonstrated "detail of the timing changes, the absence of analogous shifts in adjacent countries, and the lack of a good alternative explanation" (Ní Bhrolcháin and Dyson 2007: 12). The impact on childbearing comes about as mothers who have their second or subsequent child within a certain period after their previous birth receive parental-leave benefits that are calculated on the basis of the income which they had before their previous child was born. This regulation affects mothers who may anticipate a reduction in their working hours after the birth of a child, and creates an incentive to have children at relatively short birth intervals. Figure 1 demonstrates how the change in 1986 in these regulations triggered a change in childbearing behavior, namely a shortening of the birth intervals, which was also related to the remarkable increase in the parity-specific birth intensities (Figure 2) and the overall fertility that we observe for Sweden in the 1980s. The change in childbearing behavior was not a temporary phenomenon that vanished during the subsequent fertility decline of the 1990s: ever since 1986 have Swedish women had their children at a faster tempo than before the policy intervention of that year (Ní Bhrolcháin and Dyson 2007: Figure 3). The case for causality in effects is strengthened by the observation that in Denmark and Norway, with a similar culture and welfare-state setup, similar employment-supporting family policies, and high female labor-force participation, there was no change in birth spacing behavior during the same period (Andersson 2004a)[7].

Critical juncture 2: a turnaround in the business cycle

The Swedish economy had some particularly bleak years in the early to mid 1990s. Interesting to us is that the economic turnaround of the early 1990s was swiftly accompanied by a pronounced decline in birth rates. As mentioned, this was not due to a reversal in the birth-spacing behavior and not very much due to the cessation of the fertility-stimulating effect of ever shorter birth intervals either. Instead, the decline was of more general nature. To a large extent, it was due to compositional effects of the childbearing population in Sweden attributable to the income-centered parental-leave system. Since the parental-leave benefit is calculated on the basis of a woman's prior earnings, it offers an incentive to women to establish themselves in the labor market before having a child. Hoem (2000) and Andersson (2000) show that women in Sweden who have a decent income from earnings have a higher propensity to have a child[8] than women who are nonemployed, in education, or have a generally weaker attachment to the labor market. In the recession years of the 1990s, the share of nonemployed and of women in education increased considerably and thus the share of those who are more inclined to refrain from having a child, contributing to the decline in the birth rates of the 1990s. Towards the end of the same decade, the situation reversed and employment rates and fertility rose in tandem.

Our example shows that the setup and the features of family policies can 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 (Andersson 2000). 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).

As to the role of critical junctures, our examples show that family policies can alter childbearing behavior in the long run, as did the "speed premium". In other cases, policy effects may be temporal, and closely intertwined with the economic cycles. In both our examples, the 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.

Spatial variation in policy effects

We now turn to our study of the effect of childcare provisions and childcare characteristics on childbearing behavior. 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 heavily 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 municipalities of Sweden. 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[9] (Kravdal 1996; Hank and Kreyenfeld 2003). 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.

Variation in individual use of a policy component

Our last example relates to policy differentials by individual usage of certain policies, and the effect of the variation in individual use of parental leave on childbearing (see also Oláh 2001; 2003). Much of the present debate on the parental-leave system in Sweden focuses on the perceived low uptake of the leave by fathers (Haas and Hwang 1999, Sundström and Duvander 2002). Swedish fathers nowadays do take close to 20 percent of all parental leave (Duvander and Andersson 2006: Table 1), which is considerably higher than in any other country, but Swedish authorities have seen the previously slow progress towards increased paternal involvement in the parental-leave scheme as being an obstacle to gender equality. Furthermore, it is common to expect that increased paternal involvement in childrearing is related to higher fertility (see, e.g., McDonald 2000a,b). A study by Duvander and Andersson (2006) 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 another child; there seems to be a rather fine balance between the amount of the father's leave and the association that this has with subsequent childbearing. In addition, we cannot assess to what extent the association indeed reflects causal effects of the policy component we study and how much it reflects a selection of fertility-prone fathers into parental leave. To clarify these issues, one would need to resort to more advanced modeling techniques.

Conclusions

What can we conclude from these results? Our first conclusion is that family policies can indeed impact childbearing behavior and fertility, but such effects can rarely be detected if we use aggregate-level analyses, only. Instead of studying macro level associations of crude measures of fertility, like the TFR, with other crude measures of policies we need to resort to much more refined analyses. Fertility needs to be depicted at the individual level with accurate information on the timing of childbearing events across individual life cycles, and policies need to depicted so that there is some variation in how they apply to the individuals in the population that is

studied. Policy data need to be linked to life course data. 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 these relationships we need demographic analyses that are sensitive to the temporal and spatial aspects of family policies and fertility development and pay attention to differences in how individuals are entitled to or prone to use different policy components.

Notes

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[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 2003a).

[4] This applies primarily to countries with low fertility. For (developing) 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).

[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 components of family policies have been implemented and/or changed at different times.

[7] Data for Finland reveal a gradual shortening of birth intervals in that country during the 1980s and the 1990s (Neyer et al. 2006). In Finland, there was no sudden or drastic change in behavior like in Sweden, but the Finnish case shows that under some circumstances a long-term development towards shorter birth intervals could occur also without a policy intervention like that of Sweden.

[8] Studies of childbearing patterns by the labour-market attachment of Swedish women and men by Andersson, Duvander, and Hank (2005) and by Andersson and Scott (2007) reveal 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-born women in Sweden (Andersson and Scott 2005, 2007).

[9] One recent study indeed convincingly finds a positive effect of child-care supply on first-birth rates: Rindfuss et al. (2007) derive such results by applying fixed-effects multi-level models of local childcare characteristics and individual childbearing of women in Norway. Their study suggests that it may be important to control for unobserved municipality characteristics that affect both childcare supply and childbearing in an area if true causal effects of childcare on childbearing are to be detected.

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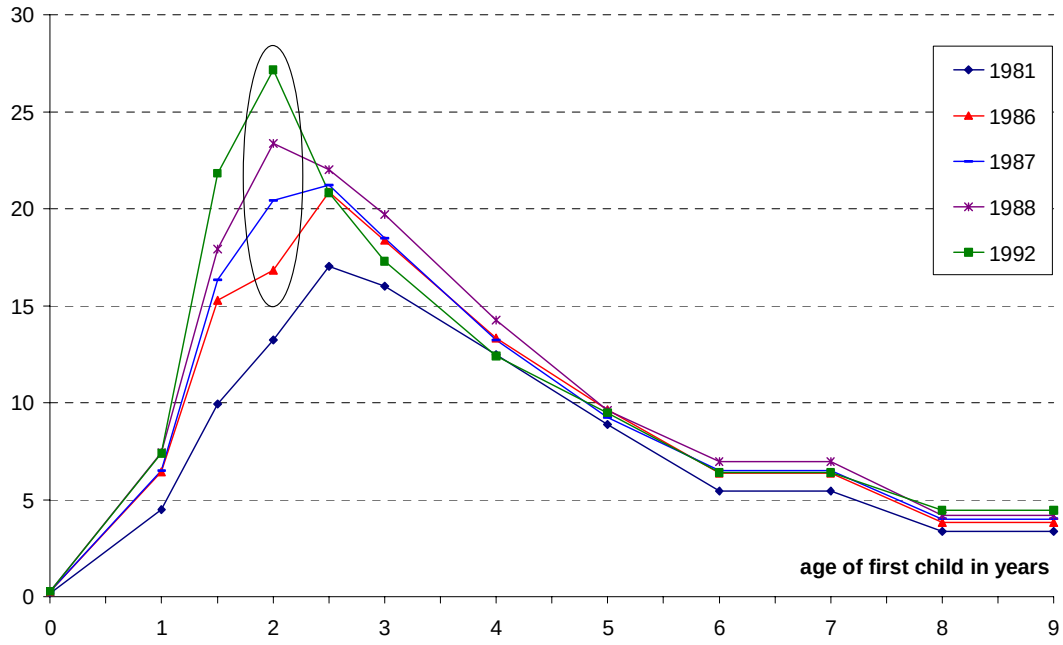
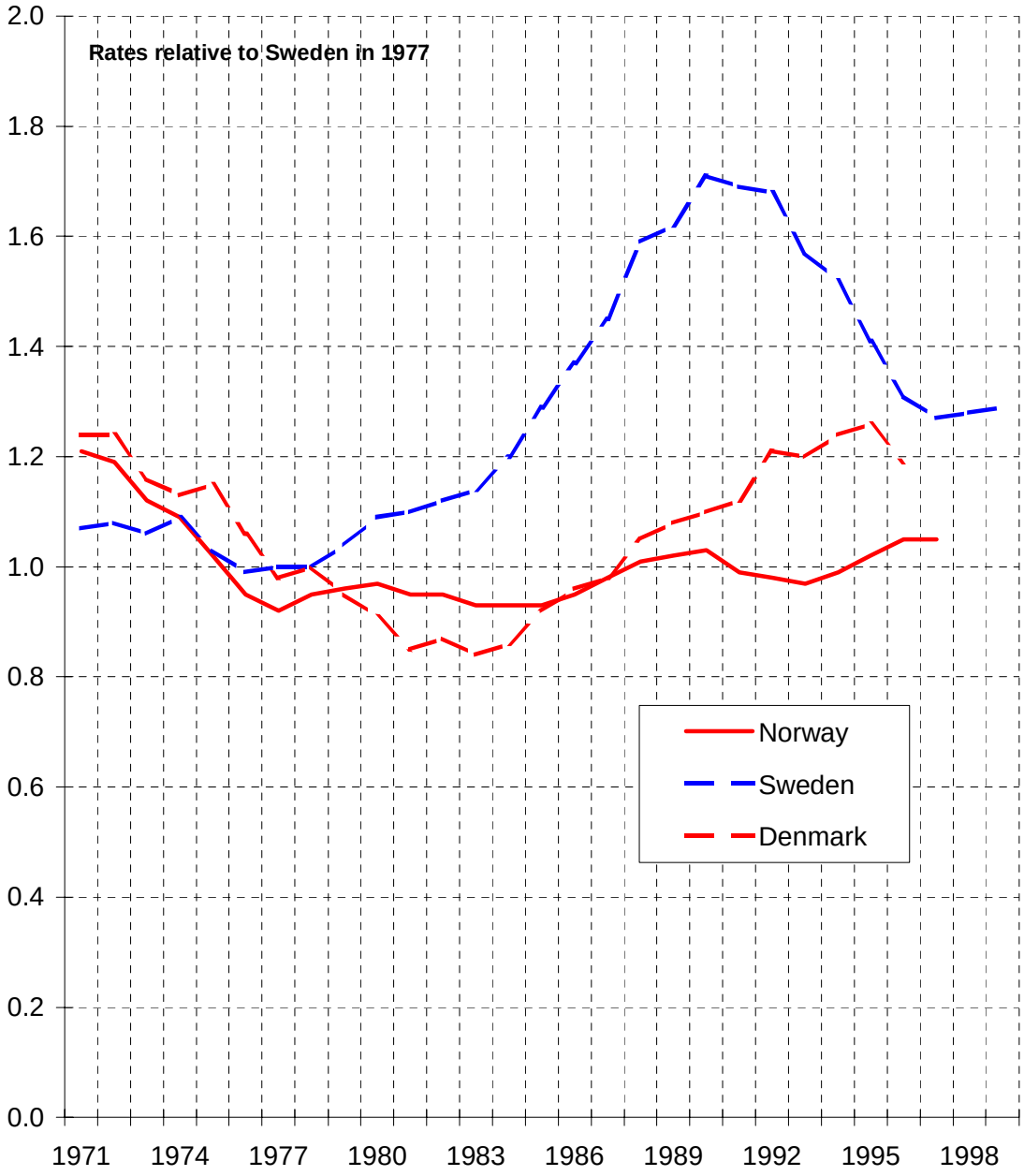
Figure 1: *Second-birth rates, by time since first birth. One-child mothers in Sweden, 1981, 1986-88, and 1992; standardized for age of mother.*



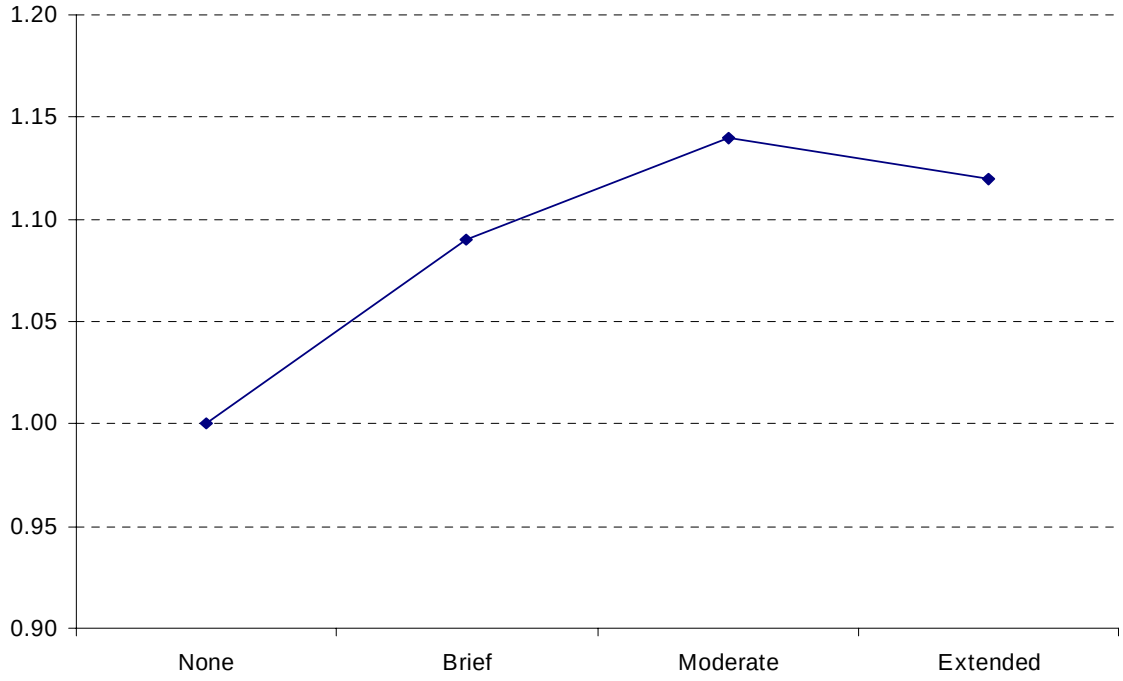
SOURCE: Andersson, Hoem, and Duvander (2006).

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 (2004a).

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.*



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 social insurance.

SOURCE: Duvander and Andersson (2006).

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

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.

SOURCE: Andersson, Duvander, and Hank (2004).