Family policies and fertility intentions across new and old EU member states

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Abstract

The debate over how policies influence demographic behavior continues and, in contexts of very low fertility, the question of how policies might support higher fertility has become central. Due to dramatic shifts in care provision in the formerly socialist countries, family policies may particularly be relevant in how child care is distributed and how decisions to have another child are influenced. This paper uses ESS 2004/2005 data to analyze variations in fertility intentions according to multi-dimensional family policy indicators. Multi-level models indicate whether family policy generosity is related to the desire to have another child across national contexts, paying close attention to how this relationship varies by labor force attachment and education. This research contributes to the general debate over whether policies matter to fertility as well as to the methodological debate over policy measurement.

Introduction

The debate over whether policies influence demographic behavior continues and, in contexts of very low fertility, the question of how policies might support higher fertility has become central. Looking broadly across Western Europe, Ekert (1986) and Blanchet and Ekert-Jaffe (1994) found a positive influence of family policies on fertility. In OECD countries, Castles (2003) found that childcare availability increases fertility and Gauthier and Hatzius (1997) found higher cash benefits had a modest effect on fertility. These comparative macro-level analyses generally support the idea that family policies matter to fertility. A larger body of research exists on whether single policies within one or a few countries appear to encourage childbearing (see Gauthier 2007 for an overview), which also overwhelmingly suggests that generous or supportive family policies increase fertility. Few studies, however, have attempted to comprehensively capture a set of family policies and how it might matter to childbearing across a wide range of countries with individual-level data. Moreover, earlier studies have not sufficiently considered that policies have been developed with different aims and have different consequences. Therefore, a policy perspective that is multidimensional is needed in the discussion (e.g. Sainsbury 1996; Korpi 2000; Korpi et al 2009).

This study aims to identify if and how family policies influence women's intention to have a child. Analyzing intentions restricts the focus to whether policies encourage the desire for children, rather than whether they increase fertility, which is a question that may be seen as having a pro-natalist orientation (Philipov 2009). Moreover, studying intentions rather than behavior shortens the chain of causality and omits the confounding effect of factors that support or suppress the link between intentions and actual behavior.

This research contributes to the general debate over whether policies matter to fertility as well as to the methodological debate over policy measurement. In a recent analysis, Kalwij (2010) uses individual-level data for 16 western European countries and finds that increased expenditure on reconciliation policies[1] appears to encourage childbearing. While expenditure data captures policy generosity, it does not reflect other important policy elements such as under which conditions and for how long a benefit may be received. For example, two equal values could either reflect high earnings-replacement/short duration or low flat-rate benefit/long duration. The family policy index employed in this study is based on an innovative approach that allows us to quantitatively represent the complexity of a comprehensive set of family policies across many countries.

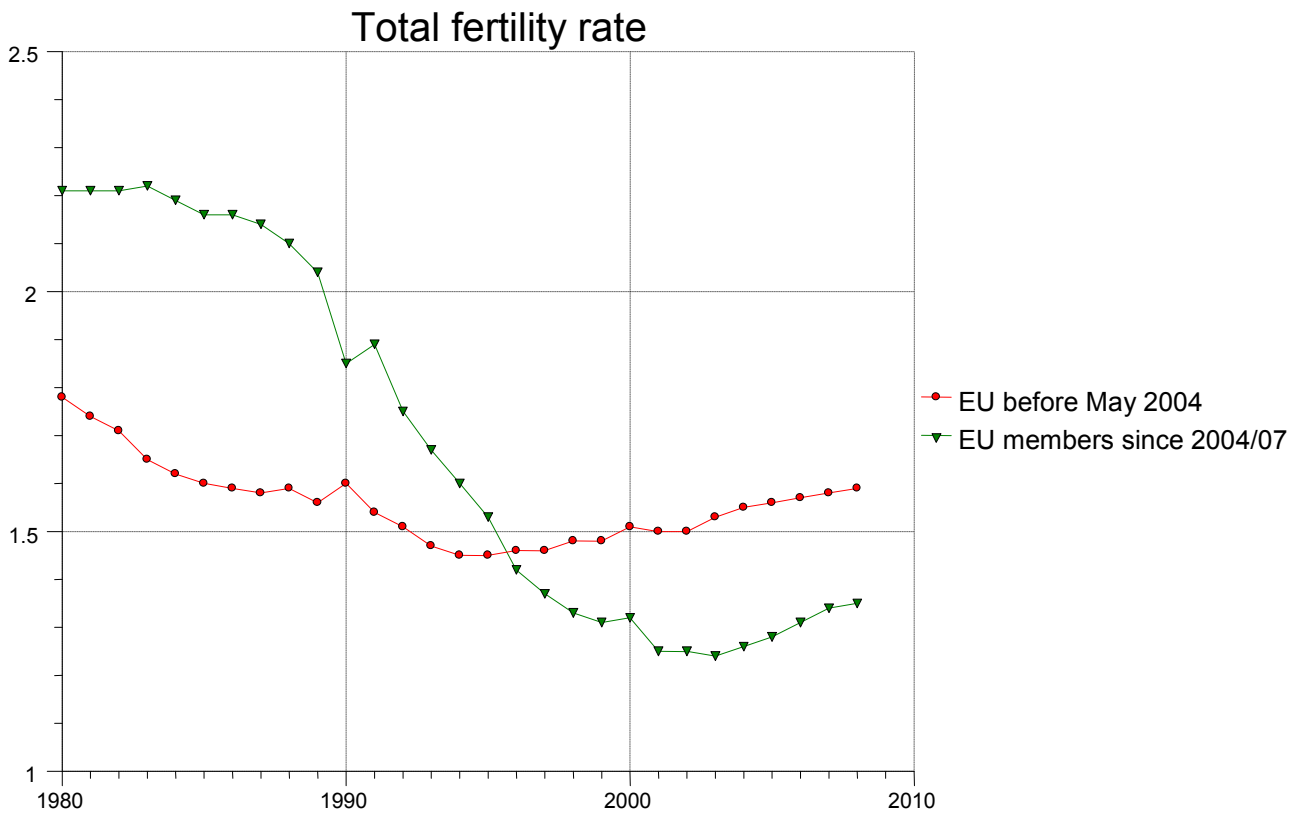
The majority of the debate thus far has revolved around old EU member states and has rarely sought to integrate new EU member states into research on the relationship between policies and fertility. Considering that new member states have had the lowest fertility in Europe since the mid 1990s, this omission is significant (See Figure 1). Additionally, family policies may particularly be relevant to fertility

[1] Reconciliation policies refer to those that facilitate a better balance between women's demands at home and at work.

intentions in these contexts due to the shifts in care provision, family support and reconciliation policies that occurred after the fall of the Berlin Wall.

The paper proceeds as follows: next we discuss how fertility intentions might be related to family policies. Then we outline the dimensions of family policy on which our measure is based, followed by an explanation of how family policy is operationalized. The following section describes the data and methods involved in the analysis and the final sections discuss the results and conclusions.

Figure 1. Total fertility rates in new and old EU member states



Source: European health for all database, WHO Regional Office for Europe, Copenhagen, Denmark.

Fertility and Family Policy

The forces behind fertility decisions have been theorized about at length, including groundbreaking contributions to the discussion by Becker (1981), who hypothesized that the decision results from a rational analysis of the cost of raising a child and the mother's time as well as the quality of the child desired, and Lesthaeghe and van de Kaa (1986), who proposed that the demand for children is related to the degree to which the context promotes and provides opportunities for individualization and greater self-realization. Another theoretical development in the debate is that the decision to have a

child is a result of a complex set of personal background factors and beliefs that include norms, attitudes and perceived behavioral control (Ajzen & Fishbein 2005). There is reason to believe some of these antecedents are more likely to be influenced by policy than others. For example, attitudes and perceived costs appear more malleable (Nauck & Klaus 2007), while normative pressure more static (Billari et al. 2009). Family policies are intuitively linked to fertility in light of each of these explanations of fertility behavior. Reconciliation policies are at heart constructed to minimize opportunity costs, whereas child allowances and benefits seek to offset the cost of raising a child. These policies also allow women a greater capacity to make decisions about career and life that reflect individual desires and goals. Besides a direct impact on finances and time-related decisions, policies also signify expectations about women's decisions regarding family and work that may impact norms (Neyer & Andersson 2008).

Much has been written about how family policies, both independently and as a package, might impact fertility.[2] Taking Gauthier's (2007) review of both macro and micro-level analyses as a starting point, as well as the introduction to a special issue on whether policies can enhance fertility (Gauthier and Philipov 2008), we synthesized theory and findings to model pathways on which our analyses are based. Figure 2 summarizes and links the key elements. First, family policies are rarely aimed at increasing fertility, at least in the public discourse;[3] rather, they aim to compensate the cost of childbearing, encourage labor force participation, or increase gender equality (Gauthier & Philipov 2008). In recent years, a discourse surrounding the idea of "choice" has also entered political rhetoric; policies may be argued to increase women's capacity to choose whether they stay home with their children or return to the labor force.[4] The tools introduced for this list of interrelated aims by policy-makers vary and often address multiple purposes at once. To compensate for part of the cost of children, cash transfers or tax subsidies have been introduced, including child and family allowances, tax credits for households with children, and leave income. Home-care allowance policies have been implemented for the purpose of supporting women who prefer to stay home with their children instead of using child care and returning to work. To encourage labor force participation, leave regulation (including maternity, paternity and parental leave) and childcare provision are key factors that influence labor force participation of women. Increased gender equality has been brought about through leave regulation, paternity leave in particular, childcare provision and moving away from marriage subsidies. While this description covers

[2] In this study, we do not take into account housing, health or education policies, which may also play important roles.

[3] One notable exception is the maternity capital benefit given to women who have a second or higher order birth in Russia since 2007 (Zakharov 2008).

[4] These policies have been mostly supported by Conservative politicians and are controversial; the choice to remain at home longer is likely to negatively affect labor force participation later, which reduces choice capacity for women in the future as well as has negative implications for gender equality.

the basic tools, it is by no means complete; in particular, the ways in which the tools are constructed may be the result of additional aims such as reducing income inequality or increasing fairness.[5]

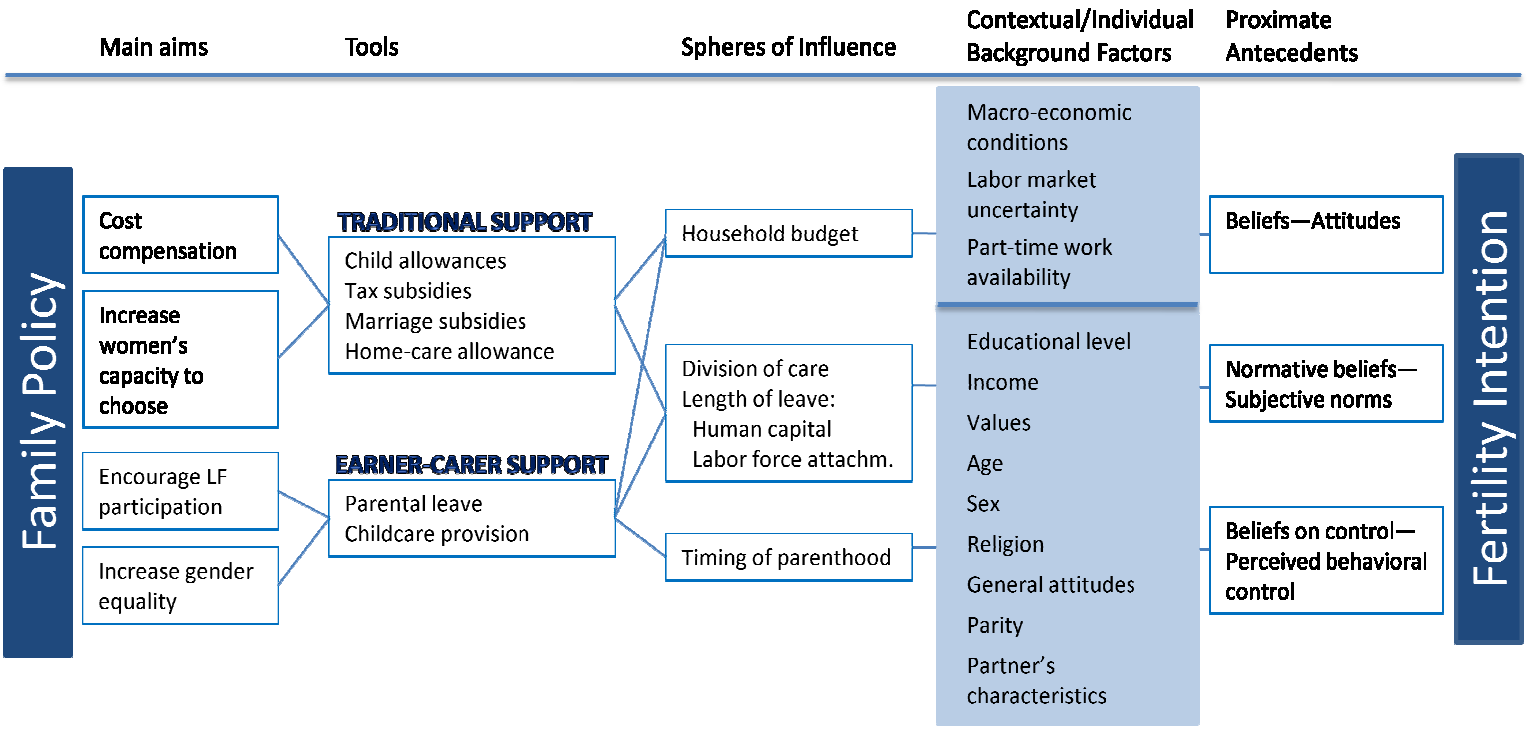
These tools influence various spheres, which generally relate back to the aims of the policies. Some pathways are straightforward, such as the link between cost compensation and the household budget. In other cases, the tools can influence multiple spheres. Leave income influences the household budget through the compensation given to the parent staying home, but also may influence when family formation begins; for example, replacement rates rather than flat-rate benefits may encourage women to establish themselves in the labor force before becoming a parent. The duration of leave varies depending on leave regulation as well and this has wide-ranging effects, including human capital depreciation, labor force attachment and how care duties are divided among the parents. Supporting women to remain at home beyond leave through home-care allowances has similar effects. Childcare provision and its cost impact household budgets as well as mothers' labor force participation. Marriage subsidies may also affect household budgets, whether women participate in the labor force and the division of care duties.

Thus far, we have discussed pathways that operate at the macro-level. Other macro-level factors such as the economic context and characteristics of the labor market are likely to influence how policies affect certain spheres. In addition, individual-level characteristics such as education, income and general attitudes also likely influence the outcomes of policies. For example, a woman with high earnings may not be affected by a policy that offers a flat-rate benefit during leave because of its relatively low value, whereas a woman with low earnings might find it sufficient and more meaningful. The policies we consider are therefore filtered through contextual and individual-level characteristics, which affect how they influence the different spheres. After conditioning by these factors, we argue that policies influence Ajzen and Fishbein's (2005) proximate antecedents: attitudes, subjective norms and perceived behavioral control. These are the final mechanisms leading to the intention to have a child.

Because there are factors operating on at least two levels (macro and micro) that influence fertility intentions, we use multi-level models in this analysis. Gauthier (2007) discusses the complexities involved in modeling the relationship between family policies and fertility and rightly points out the complexity of policy effects from other determinants of fertility behavior; as policies likely influence people differently depending on their personal circumstances as well as contextual factors, we should be able to more clearly see policies at work by interacting factors at these levels. Observing how a set of policies affects people differently within the same national context sheds light on the mechanisms through which policies affect fertility intentions.

Figure 2. Pathways between family policies and fertility intentions

[5] The shift from universal to means-tested benefits in many countries and the speed premium in Sweden are two examples of how these aims are achieved through various implementations of policies.



We focus our study on two stages of this model. The main focus of this study is on the tools that are implemented to achieve policy aims. But we also analyze how the tools influence fertility intentions by both controlling for individual background factors and interacting the tools with background factors. We form hypotheses about how the tools impact fertility intentions across and within the countries on the basis of how they would be expected to affect the spheres of influence.

This paper uses ESS 2004/2005 data to analyze variations in fertility intentions according to family policy indicators. While we are not able to apply a critical juncture approach (Neyer & Andersson 2008) because we do not have adequate longitudinal data, we exploit the vast differences in family policies across the European Union to assess this relationship, while also observing how the impact varies within each country as well. The latter strategy aims to take stock of how important structural differences might influence a policy's impact.

Dimensions of family policy

In the comparative welfare state literature, family policy structures have increasingly been used to explain cross-national variations in various socio-economic and gender based outcomes. Welfare state organization has in this context among other things been related to female employment (Sainsbury 1996; 1999; Mandel and Semyonov 2006), child poverty risks (Misra, Budig, & Moller, 2007; Bäckman & Ferrarini, 2010), gender role norms (Sjöberg 2004) as well as childbearing (Chesnais, 1996; Neyer & Andersson, 2008). To account for such outcomes several attempts have been made to construct typologies of welfare states on the basis of family policy (Lewis 1992; Sainsbury 1994; Siaroff 1994; Korpi

2000). A dominant approach has been to classify welfare states on a continuum depending on the degree of "family-friendliness" or "women-friendliness" of family policy transfers and services (e.g. Gornick, Meyers and Ross 1998; Mandel & Semyonov, 2006). Although useful for descriptive purposes, such uni-dimensional approaches to the analysis of family policy also have limitations in that they do not distinguish between divergent policy orientations, policies that, for example, either may assist mothers in their positions as homemakers and secondary earners or support full and continuous employment of both parents (Sainsbury 1996).

We use a multidimensional approach to family policy, which has been developed here to facilitate analyses of more complex policy structures, not least regarding contradictory features of various policies with regard to their support of paid and unpaid work (Fraser 1994; Sainsbury 1996; Korpi 2000; Lewis 2001). Other researchers have pointed out the fruitfulness of combining such multi-dimensional accounts of welfare states with purely institutional perspectives to enable causal analyses of different types of social policy (Sainsbury 1996; Korpi 2000). Family policy institutions are here viewed as intervening variables mediating between the social, political and economic forces that determine the design of policy, on the one hand, and their potential outcomes, on the other hand. We agree with Neyer and Andersson (2008), therefore, that the complexity of policy structures renders additive policy measures inadequate to assess whether family policy measures support higher fertility. Instead, we use family policy measures that represent the normative goals behind family policies.

Korpi (2000) uses institutional set-ups of family policy taxation, transfers and services to create two policy dimensions that differ in the extent to which traditional family patterns with high gender divisions of labour are sustained or to the extent earner-carer families are supported. On the basis of this multi-dimensional space, different family policy models are discerned in the longstanding welfare democracies. With highly developed support to traditional families and very little earner-carer support, many continental European countries have traditional family policy models. With highly developed support to earner-carer families and less support to traditional family patterns, other welfare states, mainly Nordic ones, have developed earner-carer models. The third family policy model, labeled market-oriented, has relatively low degrees of both types of support, leaving families to reconcile work and care mainly through markets and kin. The latter model has been developed in Anglophone countries, Japan and Switzerland.[6] Although family policies in the more recent welfare democracies of Eastern and Southern Europe are not analyzed by Korpi, and generally have been paid less attention in the comparative welfare state literature, recent analyses indicate that this multi-dimensional perspective can be used to analyze policy outcomes also in this extended welfare state context (Ferrarini and Sjöberg 2010).

A major gain with using the two family policy dimensions outlined above in our study is that countries are not only placed in a box with a regime label but are allowed to vary in degree. This multi-

[6] The concepts of general family support and dual earner support were originally used to label the two policy dimensions. Later Korpi et al. (2009) used the traditional-family support and earner-carer support, where the latter dimension merges the two highly inter-correlated dual-earner and dual-carer policy dimensions.

dimensional approach thereby also facilitates the measurement of contradictory features of family policies and their relationships to fertility.[7] Allowing countries to vary in degree of different policies rather than only by regime label also increases the potential to capture variation between countries that commonly are grouped in the same policy clusters (Korpi et al. 2009). This advantage fits the purpose of this paper, which is not to categorize countries but rather to analyze relationships between family policy dimensions and fertility intentions.

Data and operationalization of family policy measures

Since we are studying countries with substantial cross-national differences in family policy set-ups we use institutional family policy indicators enabling a multidimensional analysis based on the ideal-typical policy dimensions developed by Korpi (2000) and later elaborated by Korpi et al. (2009). The traditional-family dimension is indicated by the yearly post-tax generosity of flat-rate and lump-sum family benefits paid to a family with two adults earning one full average wage where the mother is a home-maker and has two minor children. These benefits include fiscal and cash child benefits: fiscal "marriage subsidies" are most often paid via joint taxation to a main earner with an economically inactive (or less active) spouse and flat rate home care leave allowances as well as lump sum maternity grants are paid in relation to childbirth. Benefits are expressed as a percent of the average wage. The earner-carer dimension is measured by an un-weighted index including the average of two family policy components typically seen as aiding work-family reconciliation: earnings-related parental leave benefit generosity and percent of under-3s in public childcare. The generosity of parental leave benefits is indicated by the yearly post-tax benefits paid to mothers and fathers during the child's first year of life as a percent of the average wage. The typical case used is a dual-earner family with two pre-school children of which one is an infant.

Data on family policy institutions are from several sources: information on the generosity of cash as well as fiscal family benefits are taken from The Social Citizenship Indicator Program (SCIP) (https://dspace.it.su.se/dspace/handle/10102/7) and information on parental leave benefits are from the Parental Leave Benefit Dataset (2009); useful comparative data sources on public daycare and parental leave have been the European Union Eurydice database on education systems and policies in Europe (http://eacea.ec.europa.eu/education/eurydice/eurybase_en.php); the Comparative Family Policy Database (Gornick and Meyers 2003); Bradshaw and Finch (2002); OECD (2007); Nordic Council Social Statistical Committee, NOSOSCO (http://nom-nos-indicators.skl.se/sif/start/). For more recent welfare democracies not included in the above datasets the European Union Mutual Information System on Social Protection MISSOC (http://ec.europa.eu/employment_social/spsi/ Missoc_en.html) and the

[7] During recent years, some countries have gradually developed towards such a model. One example here is Germany, where in 2007 earnings-related parental insurance was introduced into a family policy model otherwise dominated by traditional family support, with joint taxation and less developed full-time day care for the youngest children. Such a model implies a conflict between the motives underlying the family policy of a country, often driven by conflicting political interests (Ferrarini 2003; Morgan and Zippel 2003; Hiilamo and Kangas 2009).

OECD taxing wages have been used to calculate benefit generosities in a similar way as in the comparative data sources.

Figure 3 illustrates the position of countries on the two family policy dimensions. The values on each dimension have been standardized by dividing the level of support with the highest observed value on the particular dimension. The standardized index thereby varies between 0 and 1, where the low value would indicate that a country has a zero value of policy generosity, while unity indicates the highest observed value on a particular dimension. The figure shows a rough clustering of countries as well as important variation within clusters. Among the most recently democratized countries, the Czech Republic, Hungary and Poland are positioned in the top left corner of the figure together with the Continental European countries with highly developed traditional-family support and lower earner-carer support, while Slovenia joins the Nordic countries, with highly developed earner-carer support and low traditional family support. Denmark deviates from the other welfare states with strong earner-carer support. There are several reasons for this; tax-based marriage subsidies in Denmark are fairly high, while fairly low generosity of earnings-related parental leave creates larger room for flat-rate home-care leave allowances. The high level of Danish earner-carer support is mainly explained by the exceptionally high coverage of public daycare for the youngest children. Greece, Portugal and Spain are found in the bottom left corner of the figure together with the other countries with relatively low levels on both family policy dimensions.

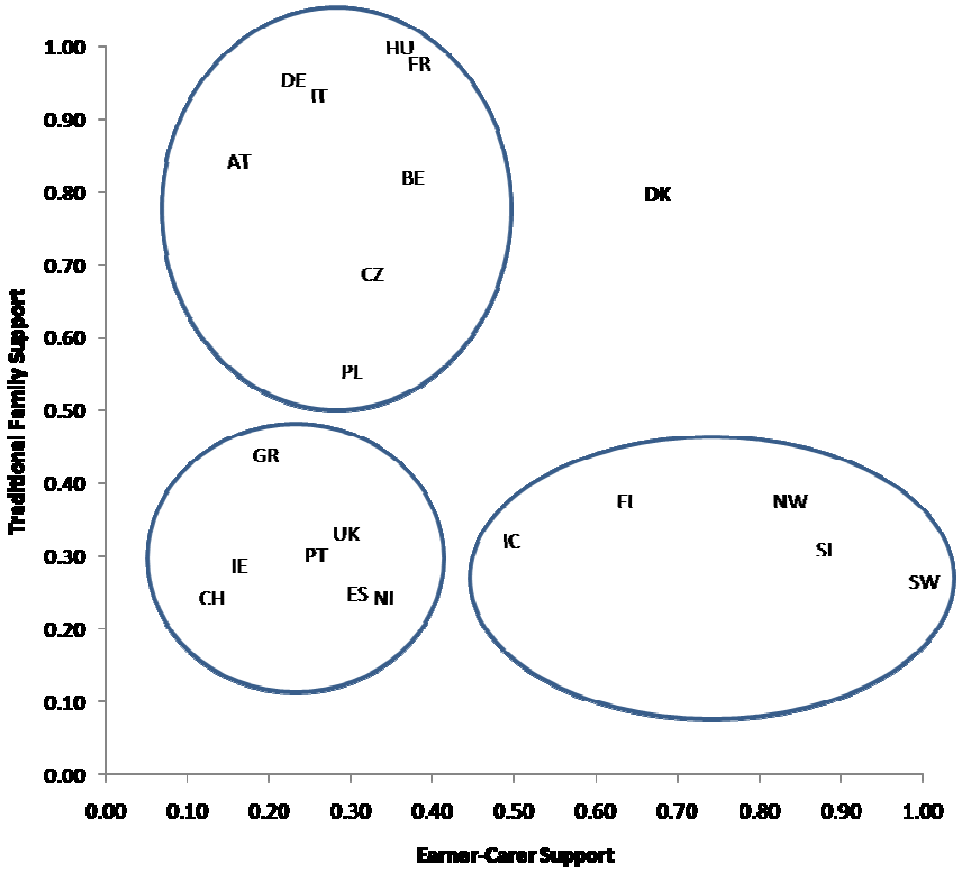


Figure 3. Country location along two dimensions of family policy: traditional family support and earner-carer support

Data and Methods

We use the second round of the European Social Survey (ESS-2), administered in 2004, in this study. This survey "is an academically-driven social survey designed to chart and explain the interaction between Europe's changing institutions and the attitudes, beliefs and behaviour patterns of its diverse populations" (ESS 2010). The main questionnaire is supplemented with specialized modules that are designed to gather information on contemporary and policy-relevant issues. The survey is administered to a random sample that covers the 15+ residential population. It takes place every two years and covers a wide range of European countries. The ESS administration carefully treats the sampling and translation of the questionnaire to be comparable across all countries. In this study the following 20 countries are included: Austria, Belgium, Switzerland, Czech Republic, Denmark, Spain, Finland, France, Germany, Great Britain, Hungary, Iceland, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Sweden, and Slovenia. Within each country, approximately 1000-3000 individuals were interviewed.[8]

[8] Excluding Norway, in which only around 600 individuals were interviewed.

Because we are interested in family policies that aim to smooth the conflict between home and work demands, we focus this study on women, who continue to perform the lion's share of care-giving and homemaking in Europe. We also limit the sample to women who are 18-45 years old, which is the span of years in which most births occur. The dependent variable is whether the respondent plans to have a child within the next 3 years. The survey allows for four possible answers: definitely not, probably not, probably yes and definitely yes. We combine definitely and probably not as well as definitely and probably yes to create a binary response. More than 75% of women did not plan to have a child in the next three years. We have approximately 8700 answers for this question.

To analyze the intention to have another child, which is a dichotomous outcome, we use multi-level logit models. The multilevel models are estimated using GLLAMM[9] programming that was written for STATA (Rabe-Hesketh et al. 2004). GLLAMM allows us to analyze variation at more than one level, which in our case means we can estimate variance in fertility intentions separately within countries and the variance between countries. We are also able to analyze interactions between the levels; how individuals vary in their odds of wanting another child may be the result of how individual characteristics react to a particular context.

The ESS-2 questionnaire provides many pieces of information that may be important to the desire or intention to have another child. For example, Mills et al. (2008) focus on the share of household labor performed by the respondent, which represents the degree of gender equality within a couple's relationship. Vitali et al. (2009) explore Hakim's (2000) notion of individual preferences toward work and home; whereas Billari (2008) predicts fertility intentions with levels of happiness. Since the focus of this analysis is on contextual factors, the key indicators are those representing family policy generosity and childcare coverage at the country level. We explore this relationship both controlling for important individual level factors as well as assessing the effect according to individual characteristics. The following independent variables are defined and their frequencies described: the number of children in the household, age of respondent, age of the youngest child in the household, whether the respondent is married or co-residing with a partner, education, education of the partner, labor force status, the share of household income the respondent contributes, and whether work/family balance is important in choosing a hypothetical job.

With fertility intentions as the dependent variable, it is essential to control for how many children the woman already has, when the last child was born and the age of the woman. One limitation of the ESS-2 is that although it asks more questions about family and fertility than the other rounds of the ESS, it still does not provide adequate information to construct complete fertility histories. We know how many children live within the household, as well as their age and sex; yet, we do not know if any or all are the respondent's biological children, nor do we have complete information about biological children that live outside the household. While this issue has not been discussed in the various studies using this data, we explicitly advocate caution in interpretation of the variable "children within the household" and

[9] GLLAMM is the name for a program written to work with generalized, linear, latent and mixed models.

discussions of parity. Even though the majority of cases are likely straightforward in which the youngest child in the household is the respondent's youngest child and the number of children in the household refers to the parity of the respondent, we treat this issue with care by running sensitivity analyses in which the number of children in the household is replaced with the total number of children within and outside the household. Moreover, we do not attempt to analyze intentions by parity because of this shortcoming, as well as the small sample size in many countries, even though an analysis of parity-specific intentions would increase our insight. Forty-one percent of our sample has no children, 21% has one child, 26% have two children and 12% have more than two children. Of the women with at least one child in the household, 31% had a youngest child under 3 years old, 24% had one 4-7 years old, 15% had one 8-10 years old and 31% had a youngest child over the age of 10.

Within the 18-45 age span of the women in this sample, 6% were under 20, 14% were between 20 and 24, 16% were between 25 and 29, 18% were between 30 and 34, 21% were between 35 and 39 and 26% were between 40 and 45. Another key variable is whether the respondent is in a relationship that is serious enough for family formation or expansion to occur. It is always a possibility that a woman may want to have a child regardless of whether she has a partner, but in general we assume that having a partner is a pre-requisite for intending to have a child in the near future. The majority of respondents (62%) have a partner to which they are married or with which they co-reside. Unfortunately, we do not know whether respondents are in a serious relationship if they are not living with a partner.

Educational attainment of the respondents has been made comparable on the basis of ISCED-97 codes and we consider attainment at three levels: 27% achieved lower secondary education, 41% achieved upper secondary and 32% achieved post-secondary or tertiary education. Unfortunately, around 500 respondents are missing information on educational level, which is therefore included as a separate category. Educational attainment among the partners of respondents is more evenly distributed: 33% achieved lower secondary education, 36% achieved upper secondary and 31% achieved post-secondary or tertiary education.

The majority (58%) of our sample were in paid employment at the time of the survey. Thirteen percent were still in school, 19% were not participating in the labor market and listed housework as their main activity, whereas seven percent claimed they were unemployed and three percent were doing "other". In contrast, 90% of the respondents' partners were in paid employment, only around one percent were in school still or inactive due to housework, whereas 4% were unemployed and 3% were doing "other". Including women who live alone, 17% of all women provided the entire share of household income, 9% contributed a very large share that was over half the total, 17% contributed half the total income, 24% provided under half, and 33% provided none or very little. In regards to whether these women felt that the work/family balance was important to consider when choosing a hypothetical job, only 11% of women claimed this would not matter, while the remaining women were almost evenly split on whether it was important or very important (43% and 45%, respectively).

The indicators at the country level are whether the respondent lives in a new EU member state (Czech Republic, Hungary, Poland, or Slovenia) and family policies measured with traditional support generosity and earner-carer support generosity.

Family policy indicators are from around 2000, which is the latest year we have comparable family policy data for all countries, whereas the survey on intentions was administered in 2004. Therefore, in practice we are measuring the lagged impact of family policy structure on fertility intentions. At the same time, it should also be pointed out that we are measuring the broader stance of family policy toward traditional care-giving arrangements or an earner-carer arrangement and not single policies, which is less likely to change dramatically within a few years.

Analytical Strategy

First, we assess the impact of individual level variables and how much variation at the country level is left unexplained without including the policy measures and vice versa. The policy measure is then introduced to calculate the share of the country level variation that can be absorbed by family policy generosity. Our main expectation is that the indicator measuring earner-carer support will encourage the desire to have a/nother child since these policies support both family and career orientations. This expectation is based on the assumption that women prefer to participate in the labor force and that difficulties reaching labor force goals will suppress their desire to have a/nother child. This assumption may appear to be strong, yet research on labor force participation and fertility leads us to believe it is not unfounded. Whereas the relationship between women's labor force participation and fertility used to be negative, the last decades have shown a reversal of this relationship in which it is the countries in which women are better integrated into the labor force that have higher fertility (Brewster & Rindfuss 2000). Women have increasingly invested in their own human capital, at a higher rate than men now in many countries, and household budgets based on two incomes are increasingly more common (Sørensen & McLanahan 1987; Sweeney 1997). Policies that support women's labor force participation, rather than solely compensate for the cost of child-raising, are therefore likely to have a positive relationship with fertility intentions.

The second part of the analysis focuses on the interaction between educational attainment and the family policy measures. Given that the previous assumption—women expect to participate in the labor force in conjunction with becoming a mother—may be an oversimplification if applied homogenously across the entire population, we estimate how the policy context is mediated by education. Educational attainment represents investment in human capital, which may indicate the strength of women's career orientations. Women with a high level of education should be more responsive to care-earner support than women with low levels of education. Alternatively, women with low levels of education may be more responsive to traditional family support.

The final models aim to tell us more about how these relationships differ between new and old member states. A priori, we expect the impact of earner-carer support to be even stronger in the post-communist countries; both female labor force participation and fertility were explicitly supported by the former socialist governments. Sobotka (2002) coined the term "socialist greenhouse" to portray this artificial environment that encouraged higher birth rates before the transition. Given the legacy of strong support for women to both participate in the labor force and have children, we might expect the impact of earner-carer support to be particularly pronounced in the new member states. However, some research has indicated a trend of retraditionalization (Pascall & Lewis 2004) or refamilialization

(Szelewa & Polakowski 2008), in which women have retreated somewhat from the labor market in these countries and the male breadwinner model has somewhat returned. Whether this is due to limited options in unstable markets, a backlash to previous state policies, or a response to political rhetoric (Szelewa & Polakowski 2008) is unknown. As demonstrated (Figure 3), the majority of post-socialist countries included in this study are indeed located high on the traditional family support dimension and low on the earner-carer dimension. Only Slovenia appears to have continued jointly supporting female labor force participation and fertility with their reformed family policies. In addition, given that traditional support is often received as cash and is independent of an individual's relationship to the labor market, which has been relatively unstable in many cases over the last decades, we may see that these policies are more important in new member countries. If the socialist legacy is still salient, we should expect fewer differences in impact by education in these countries as well.

Results

As we continue to refine the models and conduct sensitivity analyses, this section only displays the first results and we have omitted the description/conclusions for the time being.

Table 1. Multi-level logit estimates of wanting a/nother child for all countries

	Coeff	Odds ratio	P>|z|
Children in household: 0		1	
Children in household: 1	0.35	1.41	0.529
Children in household: 2	-1.75	0.17	0.002
Children in household: 3	-2.49	0.08	0.000
Age: 18-20	-0.92	0.40	0.000
Age: 20-25		1	
Age: 25-30	0.61	1.85	0.000
Age: 30-35	0.67	1.95	0.000
Age: 35-40	-0.18	0.83	0.000
Age: 40+	-2.38	0.09	0.069
Age of youngest child: 0-3 years		1	
Age of youngest child: 4-7 years	-0.82	0.44	0.000
Age of youngest child: 8-10 years	-1.23	0.29	0.000
Age of youngest child: 10+ years	-1.95	0.14	0.000
Education: lower secondary		1	
Education: upper secondary	-0.11	0.90	0.191
Education: post-secondary or tertiary	0.21	1.23	0.016
Partner's Education: lower secondary		1	
Partner's Education: upper secondary	-0.01	0.99	0.932
Partner's Education: post-secondary or tertiary	0.30	1.35	0.003
Labor force status: paid work		1	
Labor force status: in education	-0.90	0.41	0.000
Labor force status: housework	0.19	1.21	0.041
Labor force status: unemployed	-0.03	0.97	0.787
Share of total household income: none or little	-0.21	0.81	0.031
Share of total household income: under half	-0.10	0.90	0.222
Share of total household income: half		1	
Share of total household income: over half or large	-0.07	0.94	0.568
Share of total household income: all	0.21	1.24	0.045
New EU member state (ref= old)	0.12	1.12	0.314
Earner-carer support	0.01	1.01	0.004
Traditional family support	0.00	1.00	0.465

Table 2. Multi-level logit estimates of wanting a/nother child for all countries, interacting education with earner-carer support generosity

	Coeff	Odds ratio	P>|z|
Children in household: 0		1	
Children in household: 1	0.35	1.43	0.522
Children in household: 2	-1.75	0.17	0.002
Children in household: 3	-2.50	0.08	0
Age: 18-20	-0.91	0.40	0
Age: 20-25		1	
Age: 25-30	0.62	1.86	0
Age: 30-35	0.68	1.97	0
Age: 35-40	-0.17	0.84	0.087
Age: 40+	-2.38	0.09	0
Age of youngest child: 0-3 years		1	
Age of youngest child: 4-7 years	-0.83	0.44	0
Age of youngest child: 8-10 years	-1.23	0.29	0
Age of youngest child: 10+ years	-1.96	0.14	0
Partner's Education: lower secondary		1	
Partner's Education: upper secondary	-0.01	0.99	0.877
Partner's Education: post-secondary or tertiary	0.33	1.39	0.001
Labor force status: paid work		1	
Labor force status: in education	-0.90	0.41	0
Labor force status: housework	0.18	1.20	0.054
Labor force status: unemployed	-0.03	0.97	0.797
Share of total household income: none or little	-0.21	0.81	0.027
Share of total household income: under half	-0.11	0.90	0.197
Share of total household income: half		1	
Share of total household income: over half or large	-0.05	0.95	0.648
Share of total household income: all	0.21	1.24	0.044
New EU member state (ref= old)	0.12	1.13	0.31
Earner-carer support	0.01	1.01	0.113
Traditional family support	0.00	1.00	0.536
Lower secondary educ * earner-carer support		1	
Upper secondary educ * earner-carer support	0.00	1.00	0.598
Post-secondary educ * earner-carer support	0.01	1.01	0.046

Table 3. Multi-level logit estimates of wanting a/nother child for all countries, interacting labor force status with earner-carer support generosity

	Coeff	Odds ratio	P>|z|
Children in household: 0		1	
Children in household: 1	0.40	1.49	0.474
Children in household: 2	-1.74	0.17	0.002
Children in household: 3	-2.50	0.08	0.000
Age: 18-20	0.29	1.34	0.000
Age: 20-25		1	
Age: 25-30	0.65	1.92	0.000
Age: 30-35	0.72	2.06	0.000
Age: 35-40	-0.13	0.88	0.193
Age: 40+	-2.38	0.09	0.000
Age of youngest child: 0-3 years		1	
Age of youngest child: 4-7 years	-0.83	0.44	0.000
Age of youngest child: 8-10 years	-1.26	0.28	0.000
Age of youngest child: 10+ years	-1.99	0.14	0.000
Education: lower secondary		1	
Education: upper secondary	-0.13	0.88	0.104
Education: post-secondary or tertiary	0.17	1.19	0.044
Partner's Education: lower secondary		1	
Partner's Education: upper secondary	-0.01	0.99	0.890
Partner's Education: post-secondary or tertiary	0.30	1.34	0.004
Share of total household income: none or little	-0.23	0.80	0.014
Share of total household income: under half	-0.10	0.91	0.231
Share of total household income: half		1	
Share of total household income: over half or large	-0.07	0.93	0.540
Share of total household income: all	0.25	1.29	0.017
New EU member state (ref= old)	0.13	1.14	0.260
Earner-carer support		1	
Traditional family support	0.00	1.00	0.610
In paid work * earner-carer support		1	
In education * earner-carer support	-0.02	0.98	0.000
Housework* earner-carer support	0.01	1.01	0.021
Unemployed earner-carer support	0.00	1.00	0.647

Figure 4. Multi-level logit estimates of wanting a/nother child for new and old member states, separately, by education

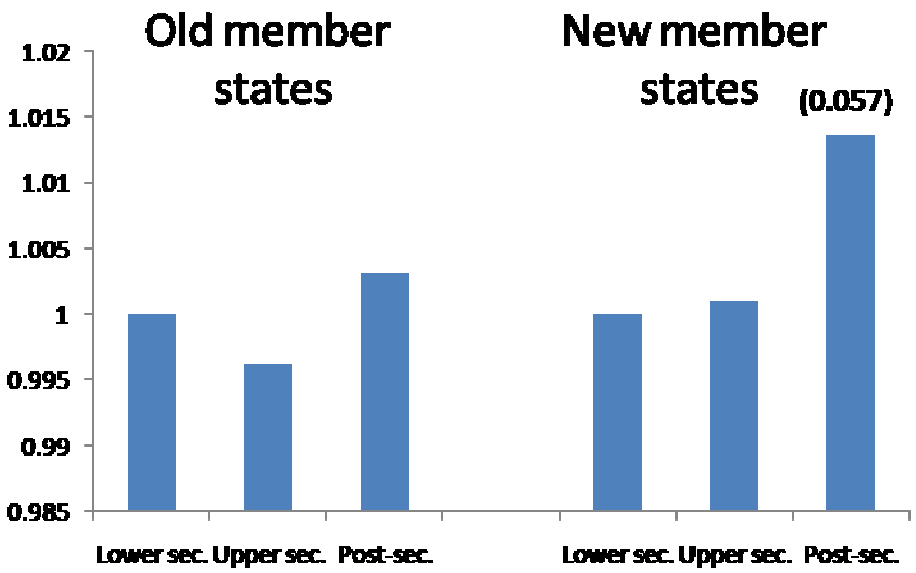


Figure 5. Multi-level logit estimates of wanting a/nother child for new and old member states, separately, by labor force status