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Family Policies and Fertility Intentions

across New and Old Welfare Democracies

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Abstract: The debate over how policies influence demographic outcomes continues and questions regarding how fertility may be supported have again become central. Across European countries, there is substantial variation in family policy organization and in the extent to which policies support traditional or earner-carer family arrangements. This study implements multi-level models to analyze variation in fertility intentions according to individual-level characteristics and family policy across 21 European countries. We broaden the analysis to also include men. Both traditional and earner-carer family support generosity is positively related to first birth intentions for men and women, particularly for old welfare democracies. In contrast, traditional family support has a negative association with second birth intentions, whereas earner-carer support maintains its positive relationship also for this parity. Findings are similar for men and women, but the relationship between policy and fertility intentions varies by women's education and particularly for traditional family support.

Introduction

The debate over whether policies influence demographic outcomes continues and, in contexts of very low fertility, questions of how policies may support higher fertility have yet again become central. Comparative macro-level analyses generally support the idea that family policies can influence fertility (Ekert 1986; Blanchet & Ekert-Jaffe 1994; Winegarden & Bracy 1995; Gauthier and Hatzius 1997; Castles 2003; Ferrarini 2006). A growing body of research on single policies within one or a few countries also overwhelmingly suggests that generous family policies increase fertility rates (see Gauthier 2007 for an overview). Few studies, however, have attempted to comprehensively evaluate broader sets of family policies and how they may matter to fertility decision-making at the individual-level across a wide range of countries. Moreover, earlier studies have not sufficiently considered how policies may have been developed with different aims and how they may have different consequences. Therefore, a policy perspective that is multidimensional is needed in the discussion (e.g. Sainsbury 1996; Korpi 2000; Korpi et al. 2010).

This study evaluates if and in what ways family policy structures influence women's and men's intentions to have a child. The pathways through which policies are connected to fertility rates are complex and we limit this paper to focusing on intentions rather than behavior in order to avoid separate factors that support or suppress the link between intentions and actual behavior.[1] A narrower focus on intentions rather than behavior also limits the discussion to whether policies encourage the desire for children, rather than whether they actually increase fertility, which is an important distinction in light of concerns that policy research may be perceived as pro-natalist (Philipov 2009). Intentions are more closely linked to the desires of individual men and women than are behavioral outcomes, which may be intended or unintended.

This research contributes to the debate over whether policies matter to fertility as well as to the methodological and theoretical debate over how to evaluate different family policy orientations. In a recent analysis, Kalwij (2010) uses individual-level data for 16 western European countries and finds that increased expenditure on reconciliation policies appears to encourage childbearing. While expenditure data describe government outlays for broader groups of policies, such data do not capture the institutional content of particular policy elements, such as under which conditions and for how long a benefit may be received; two equal values could either reflect high earnings-replacement/short duration or low flat-rate benefit/long duration. Furthermore, in contrast to data on legislated rights, using expenditure data may also be problematic as it is likely to be directly affected by the particular socio-demographic outcomes we intend to study. Using multidimensional family policy indices, we can quantitatively represent the complexity of a comprehensive set of legislated family policies and compare them across a large number of countries.

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[1] A rich literature on the relationship between intended and realized fertility has been developing (e.g., Quesnel-Vallée & Morgan 2003; Toulemon & Testa 2005; Philipov 2009) and has been facilitated by recent prospective surveys such as the Generations and Gender Program. (http://www.unece.org/pau/ggp/Welcome.html)

The two dimensions of family policy we argue to be the most relevant to desired fertility and intentions—traditional family support and earner-carer family support—reflect another increasingly important debate within fertility research, which is how the level of gender equality or gender equity impacts fertility (see, e.g., Mason & Oppenheim 1997; McDonald 2000; Neyer 2006; Neyer, Lappegård & Vignoli 2011, Mills 2010). Indeed, the implications of family policies for fertility cannot be discussed without addressing the role of gender (in)equality because family policies structure how men and women divide care work and paid work.

In contrast to the vast majority of research on fertility intentions, we analyze both men's and women's fertility intentions. The fairly one-sided focus on women is surprising given evidence that men often have as much influence as women in a couple's fertility decision-making process (Thomson 1997; Thomson & Hoem 1998). We analyze men's fertility intentions in their own right and independently from women, following Greene and Biddlecom's (2000) challenge to demographers to theoretically and empirically establish men's role in the fertility decision process. How gender equality in multiple spheres influences men's fertility intentions has recently been the subject of debate, in which conflicting evidence has emerged suggesting that gender equality can both positively (Puur et al. 2008; Mills 2010; Neyer et al. 2011) and negatively influence men's fertility intentions (Westoff & Higgins 2009), depending on the measure of gender equality implemented (Goldscheider et al. 2010). As an extension to the gender equality debate, we bring men into the debate over how family policies support gender equality and influence intentions; certainly, family policies have the capacity to directly and indirectly affect all members of a household. Along with this empirical contribution toward understanding men's childbearing intentions, we also make an effort to advance our understanding of gendered responses to family policy structures by separating and developing gender-specific mechanisms.

In addition, the majority of the debate thus far has revolved around old European welfare democracies and has rarely sought to integrate new welfare states into research on the relationship between policies and fertility. Considering that new EU member states have had the lowest fertility in Europe since the mid 1990s, this omission may be significant (See Figure 1). The nature of the recent fertility declines in this region have been argued to have distinct characteristics from early EU members as well as from each other (Billingsley 2010), which is notable in light of findings that multiple family regime types are now represented in the formerly Socialist region (Szelewa & Polakowski 2008) due to the shifts in care provision, family support and reconciliation policies that occurred after the fall of the Iron Curtain.

Figure 1. Total fertility rates in new and old welfare democracies
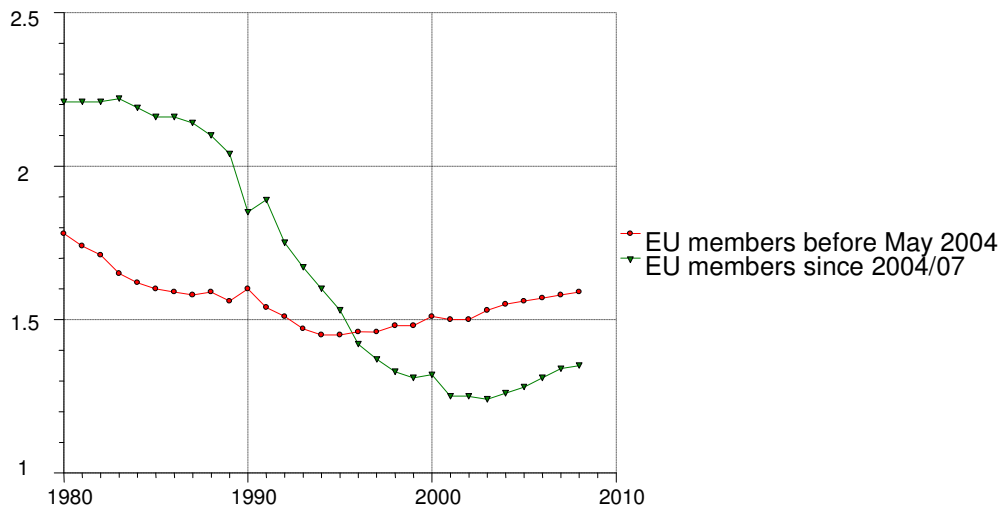
Source: European health for all database, WHO Regional Office for Europe, Copenhagen, Denmark.

This paper uses European Social Survey (ESS) 2004/2005 data to analyze variation in fertility intentions according to national family policy structures. We exploit the vast differences in family policies across the European Union to assess policy-outcome links (Neyer & Andersson 2008), while also observing how the impact varies at the individual level within each country as well. In the next session we discuss how fertility intentions can be linked to family policies. We then outline the dimensions of family policy on which our measures are 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 our conclusions.

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 by 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. More recently, the idea that uncertainty influences fertility decisions has been developed as well. Friedman et al. (1994) claim that women who face uncertainty may opt for childbearing as a strategy to reduce uncertainty. In contrast, Kohler et al. (2002) believe that women postpone childbearing as a rational reaction to economic uncertainty. 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 including norms, attitudes and perceived behavioral control (Ajzen & Fishbein 2005).

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Some antecedents may be more influenced by policy than others; for example, attitudes and perceived costs appear more malleable (Nauck & Klaus 2007), while normative pressures appear more static (Billari et al. 2009).

Reconciliation policies are at heart constructed to minimize opportunity costs, whereas child allowances and home-care leave benefits seek to offset the cost of raising a child under more traditional gendered divisions of labor. Family policies may 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). Synthesizing theory and findings in the literature on family policies, in particular Gauthier's (2007) review of both macro and micro-level analyses and Gauthier and Philipov's (2008) special issue on whether policies have the capacity to encourage higher fertility, we provide a conceptual framework (Figure 2) that demonstrates the pathways from family policies to fertility intentions.[2]

First, family policies are usually not directly aimed at increasing fertility, at least in the public discourse;[3] rather, they aim to compensate the cost of childrearing, 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 have been argued to increase women's capacity to choose whether to stay home with their children as home-makers or return to the labor force.[4] The tools that policy-makers introduced for these interrelated aims vary and often address multiple aims simultaneously. To directly compensate for 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 implementing public child care and support more continuous employment. To encourage labor force participation, earnings-related parental leave (including maternity, paternity and parental leave) and childcare provision aim to increase women's labor force participation. Tools for increasing gender equality are generous earnings-related leave benefits, paternity leave in particular, childcare provision and moving away from marriage subsidies. While this description covers the basic family policy institutions, it is by no means complete; in

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[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 women's labor force participation later, which reduces women's capacity to choose in the future as well as has negative implications for gender equality.

particular, the ways in which family policies are constructed may be the result of additional aims such as reducing income inequality or increasing fairness.[5]

Second, these policy instruments may influence several spheres (Figure 2, column 3) that are relevant to fertility decision-making, such as the household budget, division of care between partners, duration of parental leave and the timing of entering parenthood. Some pathways between the socio-political instruments and the spheres they affect are straightforward, such as the link between direct cost compensation for more traditional gender roles and the household budget. Leave income not only impacts the household budget through compensation given to the parent staying home, but also may influence when family formation begins; for example, earnings-related wage replacement rather than flat-rate benefits may encourage women to establish themselves in the labor force before becoming a parent (Andersson 2000). The duration of leave varies, depending on leave regulation, as well and this has wide-ranging effects, including human capital depreciation (Mincer & Polachek 1974), wages (Ruhm 1998), labor force attachment (Pettit & Hook 2005), career penalties in terms of mobility (Aisenbrey, Evertsson & Grunow 2009) and how care duties are divided among the parents. Supporting women to remain at home beyond leave through home-care allowances may have similar effects. Childcare provision impacts household budgets as well as mothers' labor force participation (Castles 2003) and has also been shown to have an effect on the timing of parenthood (Rindfuss et al. 2007). Marriage subsidies affect household budgets and they may also influence whether women participate in the labor force and the division of care duties.

Figure 2. Conceptual framework of pathways from family policies to fertility intentions
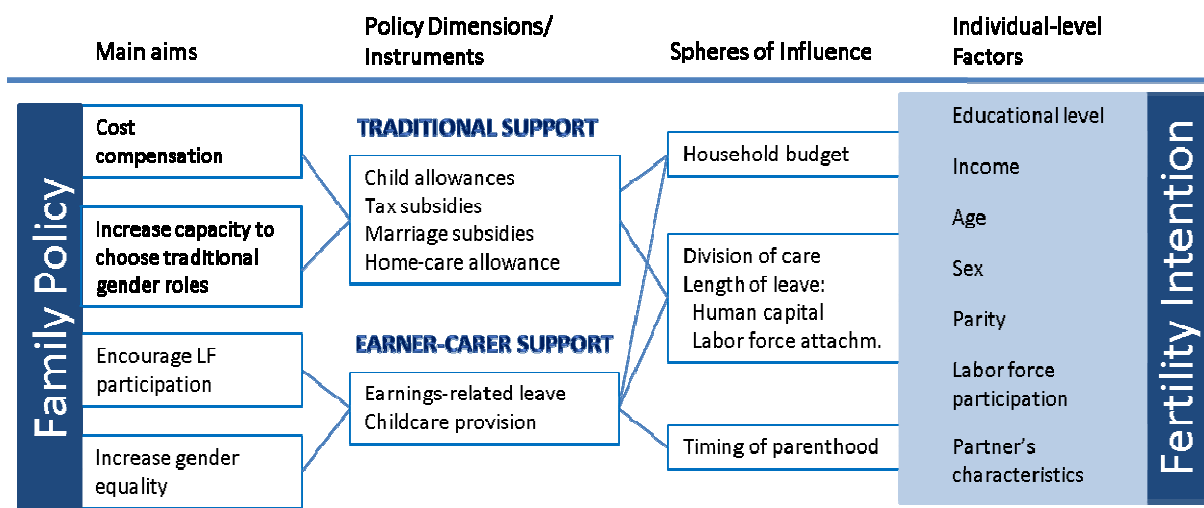
[5] The shift from universal to means-tested benefits in many countries and the speed premium in Swedish parental leave benefits are two examples of how these aims are achieved through various implementations of policies.

In general, we expect a positive relationship between family policy generosity and fertility intentions. Moreover, policies specifically supporting earner-carer families will encourage the desire to have children since these policies support both family and career orientations. This expectation is based on the assumption that single-income households are increasingly less feasible and desirable from a financial perspective and that any difficulties women experience in achieving their labor force goals will suppress desire for children. Whereas the relationship between women's labor force participation and fertility used to be negative, a reversal of this relationship has occurred in the last decades and it is now the countries in which women are better integrated into the labor force that have higher fertility (Brewster & Rindfuss 2000; Castles 2003; Engelhardt, Kögel & Prskawetz 2004; Kögel 2004). This shift has been interpreted by Neyer et al. (2011) as the result of certain countries instituting policies that support women's labor force participation, rather than solely compensate for the cost of childrearing. Earner-carer policies promote gender equality not just in the labor force but also within the household; McDonald (2000) argues that dissonance in how gender equality has evolved over the public and private spheres can suppress fertility.

Although both women and men are affected along these different pathways, we might expect women to be influenced overall to a greater extent because women continue to carry more childrearing responsibilities. Most of the discussion thus far has implicitly revolved around women by focusing on how policies support women's choices around traditional gender roles or a more gender egalitarian distribution of workloads. We see four possible mechanisms by which family policies may also affect men's fertility intentions, depending on whether they support an earner-carer or traditional family structure. First, to the extent that men have a personal preference for being the main breadwinner and shouldering less of the responsibility for caring and domestic work, greater traditional family support should encourage fertility intentions accordingly; this mechanism can be considered the "breadwinner role effect". Second, given the assumption that two incomes are preferred over one, how easily women can combine parenting and working outside the home also likely figures into men's fertility intentions. This second pathway can be considered a "spillover effect" from women's experiences. If generous earner-carer support improves women's experience of combining motherhood and employment, it may also engender greater harmony in the household and reduce the perceived complications of having children for both men and women. Likewise, if women experience difficulty managing family responsibilities while they continue to work due to policies that support motherhood at the expense of continued employment, men's family experiences are less likely to be positive.

A third pathway through which policies affect men's fertility intentions is more direct than the spillover effect. Earner-carer policies place a strong emphasis on fathers' involvement not just to increase gender equality in the labor force and household, but also to foster stronger emotional bonds between children and their father (Rostgaard, 2002). One benefit of this stronger bond may be that men become more comfortable and invested in their role as a carer, making them more interested in children. We call this mechanism the "carer role effect" and research has already confirmed a link between fathers' greater involvement in childrearing through parental leave and higher fertility (Brodmann, Esping-Andersen &

Güell 2007; Duvander & Andersson 2006).[6] The final mechanism through which men's intentions to have a child may be influenced by family policy support type and generosity is through a basic cost assessment; some evidence exists that men's fertility intentions are more negatively influenced by a poor evaluation of economic circumstances (Neyer et al. 2011). The generosity of either type of support may therefore positively influence men's fertility intentions because they compensate for the cost of childrearing. However, the "cost effect" mechanism points to the importance of individual-level factors that can determine both the cost of having a child as well as the level of compensation received. Although the relationship between policy generosity and fertility intentions can be expected to be positive, this mechanism may therefore operate in dramatically different ways depending on individual-level characteristics and in particular for the impact of traditional family support.

To a great extent, the spillover effect and the carer role effect are predicated upon having had the experience of childrearing and, therefore, these expectations are more relevant to men's and women's desire for a second or later child rather than entrance to parenthood. Thus far, we have discussed general pathways that are not individual-specific even though individual-level characteristics such as education, income and attitudes likely moderate the effects 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 useful. Policies are therefore filtered through contextual and individual-level characteristics. Modeling the relationship between family policies and fertility is complex and requires separating policy effects from other determinants of fertility behavior (Gauthier 2007; Neyer & Andersson 2008), as policies likely influence people differently depending on their personal circumstances.[7] The main focus of this study is on the socio-political institutions that are implemented to achieve diverse policy aims. But we also analyze how the tools influence fertility intentions by both controlling for individual characteristics and interacting the policies with individual characteristics. Observing how a set of policies affects people differently within the same national context also may shed more light on the mechanisms through which policies affect fertility intentions.

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[6] A thorough investigation of this specific mechanism, which is not undertaken here, requires careful treatment of selectivity.

[7] Of course, policies do relate not only to fertility intentions of two-parent families but may also affect the possibility of women becoming single parents. While certain aspects of traditional family policies also may support sole parents, their low flat-rate amounts alone are not likely to lift such households out of poverty. Instead earner-carer policies, in particular public childcare, are crucial for the employment and earned income that alleviate poverty of single parent households (Bäckman & Ferrarini 2010).

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 & Semyonov 2006), child poverty risks (Misra, Budig, & Moller, 2007; Bäckman & Ferrarini, 2010), gender 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 1996; 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 & 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, 1999; 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 inherent normative goals of different 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 labor 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.[8] Although family policies in the more recent welfare democracies of Eastern and Southern Europe are not analyzed by Korpi, and generally have been given 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 & 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-dimensional approach thereby also facilitates the measurement of contradictory features of family policies and their relationships to fertility.[9] 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. 2010). 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.

Family policy measures: Data and operationalization

Since we are studying countries with substantial cross-national differences in family policy set-ups, we use institutional family policy indicators that enable a multidimensional analysis based on the ideal-typical policy dimensions developed by Korpi (2000) and later elaborated by Korpi et al. (2010). This family policy data indicates the various levels of legislated social benefits rather than levels of government expenditure. Although comparative studies based on social expenditure have contributed important knowledge on welfare state causes and outcomes, such an approach is likely to be problematic when the content and effects of social policy are in focus. Welfare state expenditure, even for narrowly defined policy areas, cannot be translated into institutional benefit structures (Kühner 2007). Although there are some examples of studies on fertility outcomes that use data on family policy expenditures from OECD (Kalwij 2010), it should be pointed out that such expenditure data often lack comparable information on a sufficiently detailed program level, which for the purpose of our study also hinders a separation of policies with diverse incentive structures. For example, expenditure data on parental leave from the OECD does not enable a full separation of earnings-related parental insurance,

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[8] The concepts of general family support and dual earner support were originally used to label the two policy dimensions. Later Korpi et al. (2010) 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.

[9] 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 & Zippel 2003; Hiilamo & Kangas 2009).

which is based on previous employment, from flat-rate childcare leave benefits that are supportive of more highly gendered divisions of labor.

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 the percent of children under the age of three 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 & Meyers 2003); Bradshaw and Finch (2002); OECD (2009); 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 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 along 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. Greece, Portugal and Spain are found in the bottom left corner of the figure together with the other countries that offer relatively low levels of support along both family policy dimensions. Among the most recently democratized countries, the Czech Republic, Hungary and Poland are positioned in the bottom right 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 Nordic countries by having higher support for traditional family arrangements. 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. It should be noted that in this study we have not had access to data for all countries that permit a separation of full time public daycare for older children that is supportive of dual earner families and corresponding part-time services supportive of more traditional gender divisions of labor. Including such indicators would, in particular, move Denmark closer to the earner-carer cluster.
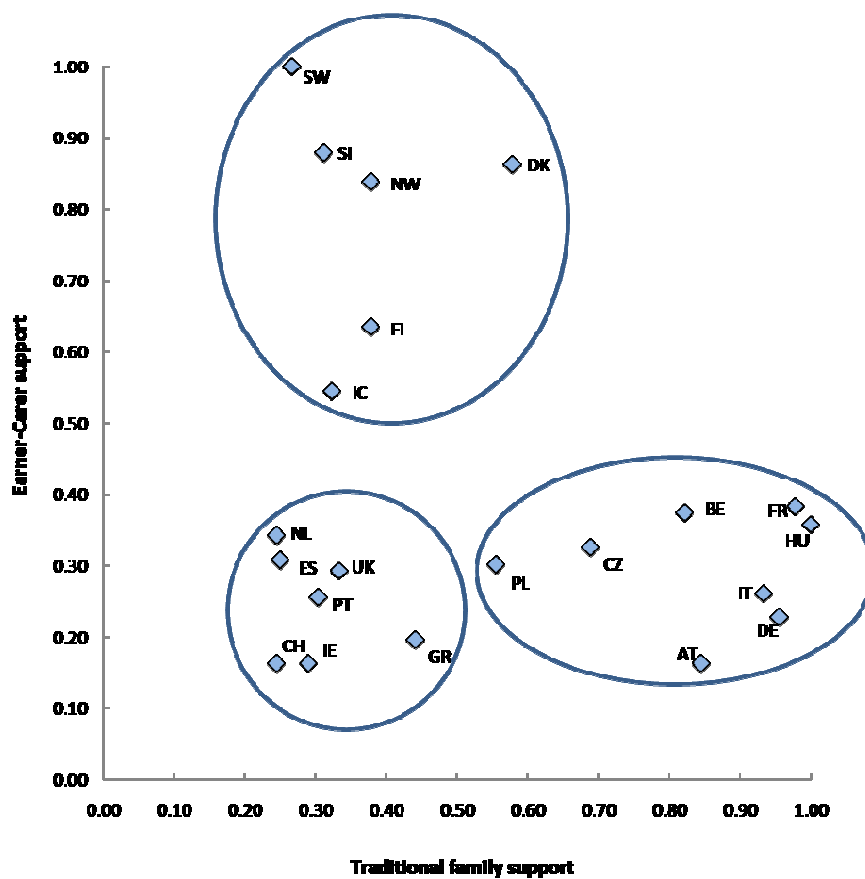

Figure 3. Country location along two dimensions of family policy: traditional family support and earner-carer support

Comparative analysis: Data and Methods

We use the second round of ESS administered in 2004 in this study. This ESS "is an academically-driven social survey designed to chart and explain the interaction between Europe's changing institutions and the attitudes, beliefs and behavior 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 21 countries are included: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Sweden, Slovenia, Spain, Switzerland and United Kingdom. Within each country, approximately 1000-3000 individuals were interviewed.[10]

We limit the sample to women and men who are 18-45 years old, which is the span of years in which most births occur. The dependent variable measures whether the respondent plans to have a child within the next 3 years. The survey allows for five possible answers: definitely not, probably not, probably yes, definitely yes, and does not know. We combine definitely and probably not as well as definitely and probably yes to create a binary response. Nine percent of the sample did not know whether they wanted to have a child in the next three years. Because we are interested in a clear intention to have a child, we combine those respondents who are unsure with those who do not intend to have a child.[11] We have approximately 18000 responses to this question; more than 22% of women and 23% of men intended to have a child within the next three years.

We conduct all analyses of intentions by parity and with a clear time horizon in mind in order to observe the effect of policies at different points in the life course (before and after entering parenthood) as well as take into account the relevance of timing to the importance of each parity birth; because becoming a parent remains mostly universal in Europe, the interest in studying first birth intentions revolves mostly around *when* the birth is intended. We first assess factors that are relevant to the desire to have a first child within three years for individuals with no children, followed by those who have one child and may be considering having a second. Higher parity intentions (parents with two or more children already) are not studied due to the declining significance of these births to fertility levels in low fertility contexts as well as the small number of individuals at these parities. Whether the determinants of fertility intentions will operate similarly for both first and second child intentions is of interest, particularly in regards to the influence of family support generosity. In contrast to childless individuals, parents have lived through the experience of having a child and the complicated choices and experiences surrounding the negotiation of care, leave length and labor market return/success (Brewster & Rindfuss 2000; Stolzenberg & Waite 1977; Neyer et al. 2011) that may make them more or less responsive to family policies.

We use a logistic random-intercept contextual effect model to analyze the intention to have another child in the next three years. Multi-level modeling allows us to separate the residual variance into two components: the individual and country level. This model ensures correct standard errors that otherwise

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[10] In Norway, only around 600 individuals were interviewed.

[11] Sensitivity analyses that excluded these respondents from the analyses yielded results with only minor differences and the main findings were robust.

would be biased by the clustering of observations within countries, while also allowing us to estimate the impact of contextual indicators and how much variance exists at the country level. As such, we present the "rho", which is the proportion of the total variance that is due to the panel-level (i.e., country level) variance component. The closer rho is to zero the lower the importance of the country level variance and the likelihood ratio test tells us whether it is statistically different from zero or whether a multi-level model is not necessary. The first level in the model estimates the individual effects (respondents' characteristics) on fertility intentions and the second level of the model fits the country effects (family policy generosity) and accounts for the intra-country correlation that may not be accounted for by the policy variables. The two regression models that are estimated in this multi-level model are the following.

Level one: $\eta_{ij} = \beta_{0j} + \beta_{qj}\chi_{qij} + r_{ij}$,

where η is the odds of wanting a child for respondent i in country j, β_{0j} is the intercept for country j, β_{qj} are level-1 coefficients, χ_{qij} is a level-1 predictor q for respondent i in country j, and r_{ij} is the level-1 random effect. The intercept represents the average odds of wanting a child in country j, after controlling for all covariates. All level one coefficients are modeled as fixed effects except the intercept, which is modeled as follows.

Level two: $\beta_{0j} = \gamma_{00} + \gamma_{01}W_{1j} + \gamma_{02}W_{2j} + \mu_{qj}$,

Where γ_{00} is the average odds of wanting a child; γ_{01}, γ_{02} are level two coefficients; W_{1j}, W_{2j} are level two predictors (i.e. family policy generosity measures); and μ_{qj} is the level two random effect. Modeling fertility intentions in this way means we can estimate the contribution of family policy measures to the average odds of wanting a child across countries.

The ESS-2 questionnaire provides many pieces of information that may be important to the desire or intention to have another child. For example, using the same data, 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 (2009) 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 are listed in Appendix A: age of respondent, age of the youngest child in the household, whether the respondent is married or co-residing with a partner, educational level, educational level of the partner, and labor force status.

One limitation of the ESS-2 is that although we know how many children live within the household, as well as their age and sex, 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. As in previous

analyses with this data, we use the variable "children within the household" as a proxy for parity with some caution, 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.

The educational attainment information used in this survey is taken from the improved educational file released by ESS in February 2011. The new variable offers comparable educational attainment of the respondents in a five level categorization that is based on ISCED-97 codes. We reduced the number of educational levels to three to maximize our samples within some educational groups. In only eight of our 21 countries was post-secondary education a substantial category and we pooled those individuals with those who completed upper-secondary education.[12] Our three educational attainment levels are lower secondary, upper secondary and tertiary education. Educational attainment of the partners is constructed in the same way. The majority of our sample was in paid employment at the time of the survey. The remaining respondents were classified as being in school, not participating in the labor market (usually listing housework as their main activity), or unemployed.

Family policy indicators are estimated from information gathered on policies for the year 2000, or very near. This is the latest year we have comparable family policy data for all countries, whereas the survey on intentions was administered in 2004. In practice we are therefore 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, which is less likely to change dramatically within a few years than single policy programs. The indexes ranged from 0-100 for both of these policy measures, however, the indicators have been mean standardized. Centering the scores ensures that the estimated intercept is valid. By simultaneously including both policy measures in the models we allow countries to concurrently score on the separate family policy dimensions, thus facilitating the measurement of links between multidimensional facets of policy and fertility outcomes.

A brief discussion on endogeneity of the main relationships in which we are interested is warranted. As mentioned, because our policy measures are based on ideal-type case replacement rates rather than expenditure data, the generosity levels are not inflated by the demographic context of the country. A more serious endogeneity issue arises when considering that countries with low fertility may be the ones that consequently invest more social spending on family policy generosity. Although our policy measures precede our fertility intention data by a few years, this may still be an issue given the relative stability of both overall fertility levels and policies. The effect of this form of endogeneity would suppress our findings or make them weaker. Findings of any significance, substantively or statistically, may therefore be considered to be quite robust.

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[12] The post-secondary educational category corresponds to ISCED level 4, which explicitly excludes tertiary education and can be described as advanced vocational training. Spain had the highest share in this educational group: 11%.

Results

Table 1 shows the estimates for Parity 0 models in which the dependent variable is the intention to have a first child within three years. The first column for men and women shows the odds ratios for only individual level factors and the second column includes the family policy measures. The rho values for the individual models are 3.8 for men and 4.0 for women, which means that about 4 percent of the total variance in fertility intentions can be explained by variance at the country level.[13] The likelihood ratio test for both men and women is highly statistically significant, which means that the panel estimator is better than the pooled estimator and accounting for a multi-level structure is appropriate. Relative to men and women who are 20-25 years old, those who are younger (18-20) and those who are much older (40+) have very low odds of wanting to have a first child in the next three years. The odds ratios increase for 25-30 and 30-35 year old men and women, and are still higher for men and women aged 35-40, although this estimate is not statistically significant for women. Men and women who are not living with a partner have much lower odds of wanting to have a first child in three years. In regards to education, only women who have a university education have a statistically significant higher odds ratio of wanting a first child soon; they are 50% more likely to say they intend to have a child in three years than women with lower secondary education. Likewise, only for men does having a highly educated partner increase the odds of wanting a first child in the next three years. Both men and women who are still studying have much lower odds of first birth intention than those who are working. Unexpectedly, men who are not participating in the labor market have higher odds of first birth intention than men who are working; however, this is a very small—and likely select—group of men.

The second column for men and women displays the effect of the two country-level indicators as well. Including these contextual-level measures does not alter the impact of any individual-level variables in a meaningful way. The associations of both the earner-carer and traditional family support measures are positive for men, but not statistically significant. For women, the generosity of both traditional and earner-carer family support is positively related to first birth intentions within three years; both are statistically significant at the 5% level or lower and the effect size is similar, although traditional family support appears to be slightly stronger. Variance at the country level was reduced significantly by the inclusion of family policy measures; this variance diminished from 3.8% to 2.9% for men and from 4% to 2.2% for women. This is evidence that family policy regimes are related to significant differences in fertility intentions across these countries.

Table 1 about here

Table 2 presents similar models for men and women who have one child and are asked whether they intend to have a second child in the next three years. To account for the impact of birth spacing, we now include in the model the age of the youngest child. Combined with age, this variable captures where individuals are in their fertility careers. As expected, the odds of wanting a second child in the next three

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[13] In similar types of analyses a level-two variation at this level corresponds to a standardized effect size that is considered to be "medium" (Duncan & Raudenbusch 1999).

years decreases over time and the highest odds ratio is for those who have a child 0-3 years old in the house at the time of the survey. Women who already have a first child are likely to stop considering having a child sooner than women who are childless; after age 35, the odds ratios are lower than at age 20-25. The negative impact of not living with a partner on fertility intentions is even stronger for women who have already had a first child than those who are childless. In contrast to the previous sample as well, the positive effect of high education only appears in relation to women's partners. No statistically significant effects of labor market status appear for second birth intentions.

The second column shows results of models in which the family policy measures are once again included. The statistical significance of the effects of the family policy measures diminishes in the Parity 1 models, which may be due to significantly reduced sample sizes. Only the effect of the traditional family support generosity is weakly significant. However, it is worth nothing that the direction of this variable's effect reverses for the sample that already has one child and is considering whether to have a second; for both men and women, traditional family support has a negative association with second birth intentions whereas the association for earner-carer support remains positive.

Table 2 about here

Because these models combine new and old welfare democracies, which are countries with very different contexts, the next table presents the impact of the family policy measures in new and old welfare democracies separately. Not only are old welfare democracies more economically successful, they generally represent contexts of relative economic stability over the last decades. The formerly Communist countries of Czech Republic, Hungary, Poland and Slovenia all underwent tremendous institutional restructuring in the preceding decade. In addition, the latter contexts are characterized by much earlier childbearing. These contextual differences may obscure varying associations within new and old welfare democracies. A priori, we expect a positive impact of earner-carer support in the post-socialist countries; both female labor force participation and fertility were explicitly supported by the former socialist governments, which may have engendered an expectation of state support for reconciling domestic and paid work. Sobotka (2002) coined the term "socialist greenhouse" to portray this earlier environment that encouraged higher birth rates before the transition. However, some research has indicated a trend of retraditionalization (Pascall & Lewis 2004) or refamilialization (Szelewa & Polakowski 2008), in which there has been some retreat of women from the labor market in these countries and the traditionalist male breadwinner model has become more prevalent. 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 in Figure 3, the majority of these new welfare democracies score higher on the traditional family support dimension than on the earner-carer dimension. Only Slovenia appears to have continued jointly supporting female labor force participation and fertility with their family policies. In addition, given that traditional family support is predominantly administered through direct cash payments and is less dependent on an individual's relationship to the labor market, we may see a positive effect of traditional policies due to their relatively unstable labor markets over the last decades.

For brevity, Table 3 presents only the policy effects. The effects of both types of family support are positive, but not statistically significant, for childless men in both new and old welfare democracies. The effects of both policy measures are again positive for childless women in old welfare states, with the strength of the effect being slightly stronger for traditional support. In contrast, both policy effects appear to be negative for childless women in new welfare democracies, but these results are not statistically significant.

Parity 1 models reveal more diverse relationships. First, the effect of traditional family support on second birth intentions is negative once again for both men and women in older welfare states. Earner-carer support retains its positive association in these models, although its statistical significance has diminished somewhat. In contrast, both types of family support in the new welfare democracies are positively related to second birth intentions. Only for men with one child, however, is this relationship statistically significant.

Table 3 about here

We also estimated interaction effects for family policy generosity and educational level.[14] Because there is evidence of a differential effect of family support generosity by new and old welfare states, we do not pool them in further analyses. An insufficient sample size and number of new EU-member states unfortunately leads to unstable interaction effect estimates and we therefore focus the remainder of the analysis on older welfare democracies only. First, neither for childless men nor men with one child did significant interaction effects appear. In contrast, statistically significant interaction effects for women at both parities were evident. Figure 4 presents average predicted probabilities of the interaction between educational level and the two types of policy generosity, separately, which account for both direct and indirect effects; these figures clearly depict both the effect of the policy measures and individual-level predictors. When the effect of an individual-level predictor is estimated at different levels of one measure of family support generosity, the other measure is held at its mean. The probabilities are plotted according to the actual ranges of family support generosity that exist across this sample (traditional: 15-35% of the average production worker's net wage; earner-carer: 10-50% of the average production worker's net wage).

The top panel in Figure 4 shows how the effect of traditional family support varies by women's educational level and the bottom panel show how earner-carer support varies. Three distinct findings emerge from these comparisons. First, in contrast to women with upper secondary or higher education, women with lower secondary education do not appear to be influenced by the generosity of traditional family support. Second, for women with upper secondary or higher education, traditional family support positively influences first birth intentions and negatively influences second birth intentions. Third, the effect of earner-carer support is similarly positive for women of all education levels at both parities; however, the positive effect was stronger for women with tertiary education.

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[14] We also tested for interaction effects between the family policy measures and labor force status, as well as age. These effects were not statistically significant.

Figure 4 about here

Concluding discussion

In this study, we analyzed links between institutional family policy structures and individual level fertility intentions of men and women in 21 old and new welfare democracies. We implement measures of family policies that reflect a multidimensional policy perspective and allow us to simultaneously measure the presence of contradictory features of family policies in single countries. This comprehensive policy focus is complemented by using continuous measures that provide more nuanced differences among countries and is an improvement upon other measures aimed at capturing an entire set of policies. The policy dimensions on which these measures are based indicate to what extent higher gender divisions of labor are sustained (traditional family support) and the degree to which more egalitarian gender divisions of labor are supported (earner-carer support). Focusing not on welfare state expenditures and behavior, but rather on institutional structures that enable and constrain decision-making, we addressed the extent to which desires and preferences of individual men and women are influenced.

Our research therefore forges a connection between two increasingly prominent debates in fertility research: the debate surrounding how gender equality is related to fertility and the debate over how family policies are related to fertility. In addition, we take on several challenges in the literature by analyzing policy packages and fertility desires of individuals instead of outcomes; emphasizing the need for multi-dimensional perspectives when evaluating links between policies and fertility intentions of individuals from diverse backgrounds and at different parities; widening the often one-eyed focus on women to also include men; extending the analysis from old welfare democracies to also include newer ones; and linking institutional level structures to individual level data.

Using nested data and multi-level models allowed us to separate the contribution of country-level determinants from the individual-level determinants of fertility intentions. While national cultures most certainly play a role in determining desires and intentions toward childbearing, our results indicate that accounting for the family policy context significantly reduces the country level variation in fertility intentions. This supports the increasing body of evidence that demonstrates a relationship between family policies and fertility.

We analyze the links between policies and intentions at different parities in consideration of the differential effects of the policy dimensions on work-family reconciliation and the gender-division of labor, which become particularly salient after entering parenthood. Indeed, for the old welfare democracies, we find evidence that the generosity of traditional family support is differentially related to fertility intentions; whereas this type of family support has a positive association with childless women's intentions to have a first child, it is negatively associated with both men's and women's intentions to have a second child in the next three years. In contrast, earner-carer support generosity has a consistently positive association with fertility intentions at both parities, particularly for women.

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Although less statistically significant for the smaller sample of women with only one child and not statistically significant for men, the effect size of earner-carer support generosity is the same for first and second birth intentions.

A comparison of effect sizes between the two types of family support reveals a larger impact of traditional family support than earner-carer support for women's first birth intentions. This may imply that traditional family support encourages desire for a first child *sooner* than the other type of support because childlessness is generally low and the outcome variable is to want a child within 3 years. This difference in timing reflects our expectations because generous earner-carer policies emphasize high replacement rates rather than flat-rate benefits, which encourage women to postpone childbearing until they have established themselves in the labor market.

A few findings are particularly relevant to discussions surrounding equality along the lines of gender and class differentials in the response to family support generosity. On the one hand, results indicate remarkable symmetry among men's and women's responses. Whereas these effects remain constant for men at all educational levels, a more polarized relationship emerged along the lines of socio-economic stratification for women, particularly with respect to traditional family support. Most likely, these differences reflect trade-offs between paid work and care built into different family policies and different costs of children for men and women from divergent socio-economic backgrounds. The discouraging effect of traditional support levels on second parity intentions appears to be driven by women with upper secondary and higher educational levels, whereas the encouraging effect of earner-carer support levels is similarly strong for all women at this parity. However, the effect of higher earner-carer support for childless women is particularly strong for those with tertiary education; this indicates that higher replacement levels lend highly educated women more willing to step out of the labor market for childbearing. Our research contributes to the debate about the ways in which gender egalitarian policies also shape class inequalities and the intersectionalities between socio-economic background and gender (Mandel & Semyonov 2006; Korpi et al. 2010). We show that gender egalitarian policies are related to more similar fertility intentions along the lines of socio-economic status, while family policies supportive of more traditional gender divisions of labor instead are likely to increase differences in such intentions between women from different educational groups. When policy makers choose the latter policy option they must be aware that unintended consequences may involve increased socio-economic differences, as well as lower fertility rates to the extent that the intentions of individuals actually translate into behavior.

We identified four possible pathways through which family policy may influence men's fertility intentions. The negative relationship between traditional family support and men's fertility intentions, related to having a second child, casts doubt on the likelihood that the "breadwinner role effect" mechanism has much explanatory power. Likewise, since an increase in both types of family policy generosity did not uniformly increase the odds of men wanting to have a second child, the "cost effect" mechanism may not best capture how family policy matters to men's fertility intentions. The "spillover effect", however, predicted an indirect positive effect of earner-carer support when women received support as both an earner and a carer and evidence for this relationship emerged. At its core, this

mechanism proposes that "what is good for her is good for him too" and our findings that both policy dimensions operate identically for both woman and men at both parities may yield further support for this mechanism. Likewise, if earner-carer support facilitates greater paternal involvement, this may encourage men in their role as a father; the "carer role effect" also is supported by our findings. These interpretations of our findings are tentative however, and leave further questions to answer. For example, a closer inspection of the differential effects of earner-carer and traditional family support on household income at different stages in the family formation process and different socio-economic groups would more accurately test how the cost of childbearing is compensated and how this influences fertility intentions.

We also emphasized the importance of studying more recent welfare democracies as well as the older ones and this paper is a step in that direction. Although the small sample size may have limited our capacity to find strong results and we were not able to perform interaction analyses, at least one result emerged that indicates similarity in how individuals in new and old welfare states respond to family policy. In Poland, Czech Republic, Hungary and Poland, men appear to respond positively to earner-carer support generosity when they have already had one child. This finding may reflect a continued commitment in these contexts, at least on the part of fathers, to generous state support for mothers remaining in the workforce.

This study aimed to improve our understanding of the links between the aims of different policies, the policy instruments designed to implement these goals and their potential outcomes. To further disentangle causal links between policy structure and individual desires we need comparative longitudinal data on both institutional and individual levels, something that for now has not been obtainable. Nevertheless, a major conclusion to be drawn from our study is that family policy structures matter to individuals living in the advanced welfare states.

Acknowledgements

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Table 1. Regression results from logistic multi-level models of the intention to have a first child in the next three years, all countries

	Men: Parity 0		Women: Parity 0	
		Family Policy		Family Policy
	Individual	Support	Individual	Support
Age: 18-20	0.397 ***	0.394 ***	0.341 ***	0.339 ***
Age: 20-25	1	1	1	1
Age: 25-30	2.262 ***	2.260 ***	2.281 ***	2.284 ***
Age: 30-35	3.180 ***	3.186 ***	2.664 ***	2.690 ***
Age: 35-40	1.942 ***	1.932 ***	1.017	1.022
Age: 40+	0.429 ***	0.429 ***	0.127 ***	0.127 ***
Not living with a partner	0.200 ***	0.200 ***	0.371 ***	0.375 ***
Education: lower secondary	1	1	1	1
Education: upper secondary	0.879	0.863	1.216	1.189
Education: tertiary	1.134	1.120	1.541 **	1.514 **
Partner's Education: lower secondary	1	1	1	1
Partner's Education: upper secondary	1.108	1.105	1.079	1.080
Partner's Education: tertiary	1.549 *	1.544 *	1.270	1.281
Labor force status: paid work	1	1	1	1
Labor force status: in education	0.417 ***	0.415 ***	0.344 ***	0.341 ***
Labor force status: housework	2.703 *	2.650 *	0.914	0.940
Labor force status: unemployed	0.853	0.846	0.887	0.880
Traditional family suppport generosity (centered)		1.009		1.017 **
Earner-carer family suppport generosity (centered)		1.009		1.012 *
Number of obs.	4364	4364	3545	3545
Number of groups	21	21	21	21
Prob > chi2	0.0000	0.0000	0.0000	0.0000
Log likelihood	-1971.23	-1969.18	-1761.89	-1757.42
Likelihood ratio test of rho=0	0.000	0.000	0.000	0.000
Rho	0.038	0.029	0.04	0.022

Notes: +=p<0.10, *=p< 0.05, **=p<0.01, ***=p<0.001

Table 2. Regression results from logistic multi-level models of the intention to have a second child in the next three years, all countries

|	Men: Parity 1		Women: Parity 1	
		Family Policy		Family Policy
	Individual	Support	Individual	Support
Age: 18-20	-	-	0.990	0.985
Age: 20-25	1	1	1	1
Age: 25-30	1.504	1.438	1.640 *	1.659 *
Age: 30-35	1.515	1.478	1.736 *	1.769 *
Age: 35-40	0.781	0.760	0.776	0.789
Age: 40+	0.282 **	0.276 **	0.112 ***	0.114 ***
Not living with a partner	0.236 **	0.238 **	0.279 ***	0.294 ***
Age of youngest child: 0-3 years	1	1	1	1
Age of youngest child: 4-7 years	0.522 **	0.534 **	0.394 ***	0.402 ***
Age of youngest child: 8-10 years	0.255 ***	0.257 ***	0.303 ***	0.303 ***
Age of youngest child: 10+ years	0.132 ***	0.137 ***	0.132 ***	0.135 ***
Education: lower secondary	1	1	1	1
Education: upper secondary	0.949	0.967	0.991	1.018
Education: tertiary	1.545	1.573 +	1.273	1.268
Partner's Education: lower secondary	1	1	1	1
Partner's Education: upper secondary	1.198	1.265	0.947	1.001
Partner's Education: tertiary	1.366	1.384	1.586 *	1.652 *
Labor force status: paid work	1	1	1	1
Labor force status: in education	2.815 +	2.650	0.701	0.662
Labor force status: housework	1.809	1.837	1.130	1.173
Labor force status: unemployed	0.800	0.826	1.180	1.180
Traditional family suppport generosity (centered)		0.984 +		0.987 +
Earner-carer family suppport generosity (centered)		1.005		1.008
Number of obs.	1129	1129	1812	1812
Number of groups	21	21	21	21
Prob > chi2	0.0000	0.0000	0.0000	0.0000
Log likelihood	-549.69	-547.310	-765.55	-763.09
Likelihood ratio test of rho=0	0.009	0.040	0.001	0.011
Rho	0.036	0.024	0.033	0.022

Notes: +=p<0.10, *=p< 0.05, **=p<0.01, ***=p<0.001

Table 3. Truncated regression results from logistic multi-level models of the intention to have a first or second child in the next three years for new and old welfare democracies

	Men: Parity 0		Women: Parity 0	
	Old democracies	New democracies	Old democracies	New democracies
Traditional family suppport generosity (centered)	1.009	1.003	1.015 *	0.985
Earner-carer family suppport generosity (centered)	1.007	1.004	1.012 *	0.985
Number of obs.	3627	737	2937	608
Number of groups	17	4	17	4
Prob > chi2	0.0000	0.0000	0.0000	0.0000
Log likelihood	-1625.27	-327.09	-1464.59	-281.34
Likelihood ratio test of rho=0	0.000	0.061	0.000	0.341
Rho	0.023	0.016	0.017	0.004

	Men: Parity 1		Women: Parity 1	
	Old democracies	New democracies	Old democracies	New democracies
Traditional family suppport generosity (centered)	0.981 *	1.038	0.984 *	1.009
Earner-carer family suppport generosity (centered)	1.007	1.040 *	1.012 +	1.005
Number of obs.	853	276	1459	353
Number of groups	17	4	17	4
Prob > chi2	0.0000	0.0001	0.0000	0.0000
Log likelihood	-418.95	-106.25	-595.39	-147.64
Likelihood ratio test of rho=0	0.083	0.499	0.071	-
Rho	0.023	0.000	0.014	-

Notes: +=p<0.10, *=p< 0.05, **=p<0.01, ***=p<0.001; all models control for age, co-residential partnership, education, partner's education, and labor force status; Parity 1 models also control for the age of the youngest child.

Figure 4. Average predicted probabilities of women's intentions to have a first and second child in the next three years, cross-level interactions of education and family policy support measures

Traditional Family Support Generosity

Earner-Carer Family Support Generosity
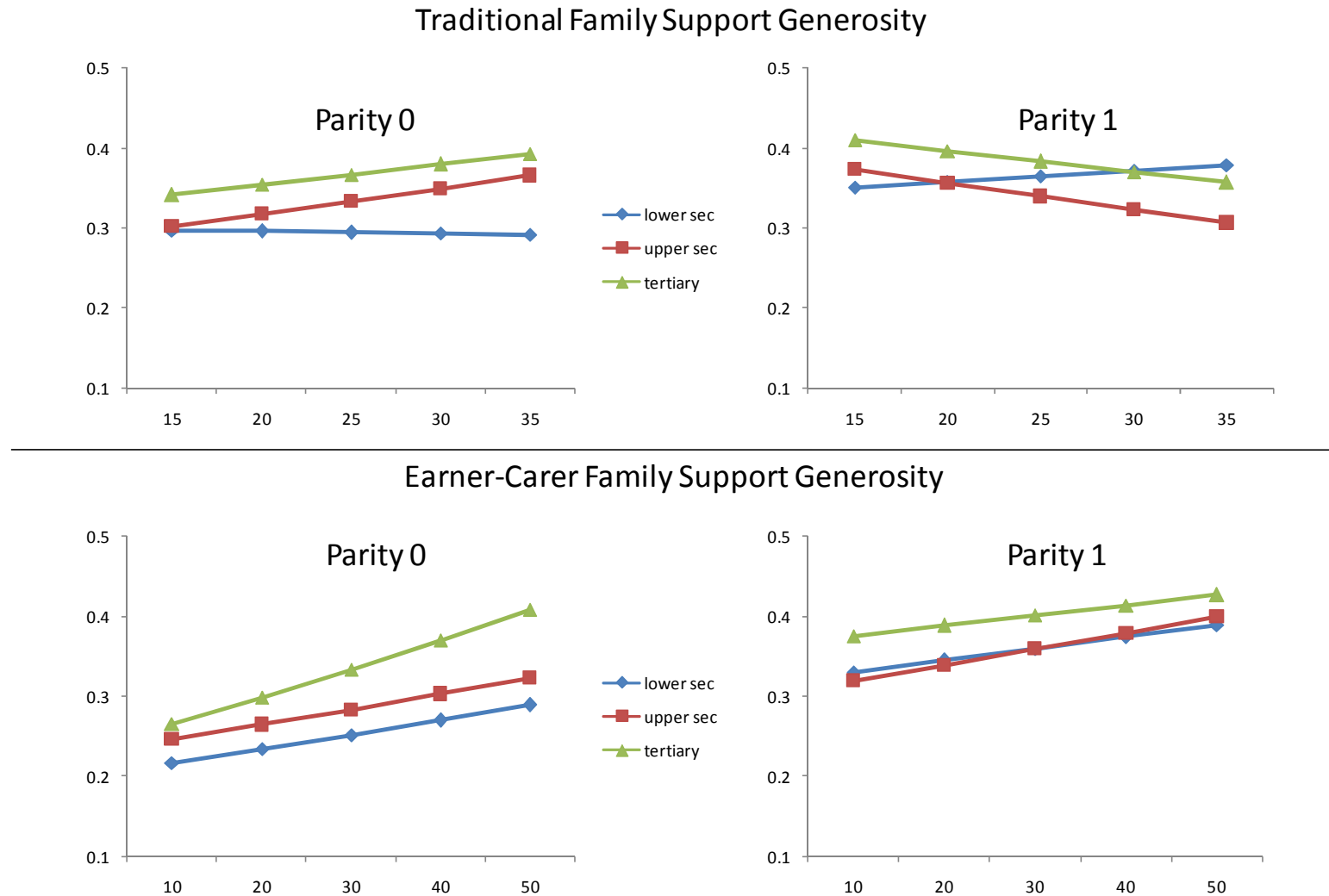
Notes: Models include only old welfare democracies and control for age, co-residential partnership, education, partner's education, and labor force status.

Appendix A. Means, Frequencies and Standard Deviations for Individual and Country Level Variables

	Mean/ Frequency	S.D.
Dependent Variable		
Wants a child within 3 years	0.25	
Independent variables		
Country-level variables		
Traditional family suppport generosity	24.4	12.4
Earner-carer family suppport generosity	24.3	15.3
Individual-level variables		
Age: 18-20	6.1	
Age: 20-25	15.1	
Age: 25-30	15.7	
Age: 30-35	17.7	
Age: 35-40	20.3	
Age: 40+	25.1	
Partner in household (ref=yes)	58.3	
Education: lower secondary	22.7	
Education: upper secondary	50.8	
Education: tertiary	26.5	
Partner's Education: lower secondary	26.1	
Partner's Education: upper secondary	47.1	
Partner's Education: tertiary	26.8	
Labor force status: paid work	65.9	
Labor force status: in education	13.3	
Labor force status: housework	10.4	
Labor force status: unemployed	7.4	
Labor force status: missing	3.0	
Age of youngest child: none	48.8	
Age of youngest child: 0-3 years	16.9	
Age of youngest child: 4-7 years	12.4	
Age of youngest child: 8-10 years	7.5	
Age of youngest child: 10+ years	14.5	
Women	53.1	