

Family Policies in Low Fertility Countries: Evidence and Reflections

ANNE H. GAUTHIER  AND STUART GIETEL-BASTEN 

Family policies, defined as measures designed to support families with children, are part of modern welfare states. They range from punctual measures provided at the birth of a child to measures aimed at making it easier for parents to combine work and family responsibilities. The actual goal of these measures varies largely, being explicitly pronatalist in some cases while embracing a more equalitarian principle in others. Despite the variations in the nature of these policies and their stated goal, they are nonetheless all generally assumed to have a positive effect on fertility. The aim of this paper is threefold. First, the aim is to summarize the main findings from the literature on the impact of family policies on fertility. This is done by adopting a historical perspective, including the review of the early studies in this field of research and by distinguishing different methodologies. Second, the aim is to reflect on these findings, including the role of national context and the framing of policies. Third, the aim is also to reflect on the limited impact of policy interventions on fertility, stressing that their “success” should instead be measured in terms of their ability to support families holistically including their work-life balance.

Introduction

Family policies, defined here as measures designed to support families with children, are part of modern welfare states. They range from punctual measures provided at the birth of a child through to measures aimed at making it easier for parents to combine work and family responsibilities. The actual goal of these measures varies largely. If historically they were aimed at protecting the health of mothers and children, they nowadays mostly embrace

Anne H. Gauthier, Netherlands Interdisciplinary Demographic Institute, NL-2502 AR Den Haag, The Netherlands and Department of Sociology, University of Groningen, 9712 TG Groningen, The Netherlands. E-mail: gauthier@nidi.nl. Stuart A. Gietel-Basten, Division of Social Science, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong SAR, China.

This article is part of PDR's 50th anniversary special issue, **Looking Backward, Looking Forward: Celebrating 50 Years of Population and Development Review**.

equalitarian principles. This includes the reduction of income inequalities and the promotion of gender equality. Only in some cases do family policies embrace explicit pronatalist goals.

Despite the variations in the nature and stated goals of these family policies, they have increasingly been perceived by policymakers and various other stakeholders and commentators as being part of “tool kits” to increase fertility. Sustained and/or rapid expansions in family policies, it is believed by many governments around the world, is a key component to ‘solving’ the so-called “low fertility problem.” But is it the case?

Measuring the impact of family policies on fertility has emerged as a significant field of research in the past decades. From a handful of studies in the 1970s, it nowadays forms a large body of literature. It also forms a heterogeneous body of literature concerning the specific policy and/or country analyzed as well as the methodological approach. Despite this large variation, some main findings regarding the impact of policies on fertility have been emerging—but also some unresolved questions.

The aim of this paper is threefold. First, we review the empirical evidence on the impact of policies on fertility and summarize the main conclusions emerging. In doing so, we draw heavily on recent reviews, but also attempt to bring together different methodological approaches to gauge the consistency (or inconsistency) of findings. We also highlight the contributions of some of the early studies in this field of research. This is important especially since these earlier studies provided the first estimates of the effect size of policies on fertility. Second, the paper reflects on the generalizability of the findings and the possible role of the context of policy interventions. This is crucial because not only have studies focused mostly on distinct subsets of countries, but many have also stressed the cross-national differences in the effect of policies. This suggests an important role of other institutional and contextual factors, as well as the possible role of the framing of policies in terms of goal and ideology. Finally, the aim of the paper is also to revisit the stated goals of policies and to propose other indicators of success.

The structure of the paper is as follows: first, we further set the stage for this paper by examining the nature and aims of family policies and the changing discourses surrounding them. We then review the main findings from the literature regarding the effect of family policies on fertility. We highlight the consistent findings emerging as well as their limitations. We conclude that the direct, immediate impact is relatively modest. Following this observation, we explore why this impact might be so modest, and focus specifically on the possible role of national context in affecting the impact of family policy. This is an under-developed area of research but a very crucial one to better assess the mechanisms by which family policy can impact fertility. In the final section, we then reflect on the findings and renew the debate on whether the increase in fertility is the right measure

of the success of family policies. We argue that full consideration of the other aims of policies, including gender equality, may be appropriate.

Setting the stage: family policies as a mainstream policy tool for low fertility

Family policy is a global term which captures various governmental measures to support families with children. This encompasses a wide range of measures, including various forms of cash transfer for families (and tax relief), work-related measures, childcare provision, as well as measures in other sectors (e.g., housing, education, health) which can also affect the well-being of families. These policies have a long history, starting at the end of the 19th century with the first family allowances (such as widow's and orphan's allowance) and the first maternity leave schemes (Rothman and Wheeler 1981; Finkel 2018; Gauthier 1998). These measures were part of policies to reduce poverty and to protect the health of mothers and children (Thane 2024; Galbraith 2018; Daly 2013; Bock and Thane 1994). They were gradually expanded to all countries in the following decades, and especially after World War II, and came to be a key component of modern welfare states (e.g., Friedman and Rein 2000 for the USA; and Bock and Thane 1994 for Europe).

At the same time, it is important to note that family policies seldom constitute a coherent set of measures. Instead, family policies often encompass an uncoordinated set of measures which come under the responsibility of various ministries (e.g., labor, housing, education, etc). They also tend to pursue different aims, namely increasing the financial well-being of families; the labor market participation of working parents; gender equality, and children's development. In fact, family policies can even pursue contradictory aims, with some measures encouraging the labor force participation of mothers, and others penalizing dual-earner families.

This diversity in the nature and aims of family policies undoubtedly precludes any simple definition and complicates their cross-national comparison. According to Daly (2020, 26), the prevailing literature conceives family policies as “a varied set of measures [that] has been developed for the purposes of supporting families and regulating family life”—often with a tension between these two motivations. They are also usually understood as being associated with families with children. This involves other aspects of family life, for example, care for older persons, but also links to how other aspects of social policy impact on the family, such as housing or education policy. In some countries, people *without* children are a target of policy interventions. These include pro-marriage policies in some countries of Central and Eastern Europe and, more specifically, matchmaking programs in Singapore, Japan, and Korea. Defining, then, what policies we are referring to is an extremely difficult question which we do not have space to adequately

delve into here. However, we can at least state that there are “broader and narrower perspectives on what it is that family policy may aim to do and that family policy is always part of a wider social policy constellation” (Daly 2020, 27).

In some countries, and at various periods of time, family policies have also pursued pronatalist objectives, that is, the promotion of larger families. Historically, this was the case during and immediately after World War II in France and in several Eastern European countries, and more recently in a wider set of countries (Frejka and Gietel-Basten 2016; Huss 1990; Girard 1983; Andersen 2020). Often these pronatalist policies consisted of a single measure (e.g., baby bonus or tax incentive) while in others they consisted of a package of measures, and/or a combination of facilitating and restricting measures: all of them aimed at increasing fertility (Milligan 2005). This pronatalist goal, in turn, was—and continues to be—linked with other demographic considerations. For example, according to the most recent survey of global population policies by the United Nations (UNDESA 2021), responding countries reported that the major underlying reasons for policies to raise fertility were to counter population decline and slow population aging.

In some cases such pronatalist policies may appear harmless, having only indirect effects on fertility, such as the Singapore government's attempts at matchmaking for couples (Sun 2012). Contemporary *direct* demographic interventions are relatively uncommon: in 2019, Iran, the Russian Federation and Serbia, for example, had policies to lower the age at first birth, with a handful of low fertility countries having explicit policies to reduce the spacing between births and/or lower age at marriage (UNDESA 2021). Indeed, according to the UN World Population Policies Report, some countries are implementing direct demographic interventions which may seem at odds with a policy of raising fertility, such as raising the age at marriage/first birth and increasing the spacing between births (e.g., Albania, Armenia, and Georgia; UNDESA 2021).

Other policies go even further. In some countries—most notably Iran—restrictions on accessing sexual and reproductive health services have been imposed as well as limitations on divorce (Ladier-Fouladi 2021). Some stakeholders have even called for taxes on the childless, for example, in Germany (Muller 2018) and China (Gao 2018). Again, while the idea might seem novel, all of these “new” interventions have roots in the “old” family policy, for example, in the link between eugenics and family planning systems. Even a tax on the childless has been seen before in the Soviet Union and post-war Poland and Romania (Haupt 1987). These policies have a long and painful history, which is often intertwined with the worst human instincts, such as eugenics and nationalism.

Historical population and family planning policies have often been found guilty of excesses and the curtailing of rights carried out in the name

of either economic growth or a neo-Malthusian agenda (Rao and Sexton 2014). Lessons from the past show these policies are rarely successful in their ultimate aims of demographic engineering and tend to lead to a slew of unforeseen, unfortunate consequences (David and Wright 1971). Despite this, sexual and reproductive health services are being pushed back in many parts of the contemporary world today. Often, these are justified by the need to “demographically engineer” a response to the apparent “demographic crisis.” For example, the Patriarch of the Russian Orthodox Church recently stated that “The population [of Russia] can be increased as if by waving a magic wand: if we solve this problem and learn how to dissuade women from having abortions, statistics will go up immediately” (Shevchenko 2023).

In reality, many such policies are the result of fears about the consequences of population decline and global changes in family norms. Collectively, these “demographic anxieties” have often become packaged together to what Armitage calls “demographic imaginaries” of a population crisis, to which pronatalism forms a natural response (Gietel-Basten 2023; Armitage 2021). In Poland, Russia, and Hungary, for example, recent pronatalist pronouncements and family policy interventions have been strongly linked to an agenda of implementing conservative family and gender norms as well as pushing back on reproductive health services (Cook, Iarskaia-Smirnova, and Kozlov 2023)—perhaps more about “regulating” than “supporting” family life. In Hungary, and to a certain degree Italy, the family policy push towards higher fertility rates in recent years is driven as much by an antimigrant sentiment and the notion of “replacement” of nationals through differential fertility rates (Walker 2020). This message is nothing new, but there is no doubt that it has found renewed traction in the twenty-first century, not least through the ubiquity of populist politics and the so-called “great replacement theory” (Rose 2022).

Much more common, however, are family policy interventions which appear, at least at first glance, to be primarily designed for the purpose of *supporting* families. This includes policies to support families financially, and those to help them combine work and family responsibilities (which may also aim at increasing gender equality in paid work). Against this backdrop, and especially the widespread concern about the persisting very low levels of fertility, the question of how to address population stagnation/decline and aging through increasing fertility, and specifically about the impact of family policies on fertility, has re-emerged as a major societal and scientific challenge. This is in fact particularly interesting considering that such policies typically do not aim at increasing fertility. From an economic perspective, they can however be expected to increase fertility. This could be the case if they reduce the direct (out-of-pocket) cost of children, and/or if they reduce the indirect cost (i.e., income foregone when mothers need to withdraw from the labor market to take care of children). From this per-

spective, policies that help families financially and/or help them combine work and family responsibility could therefore have an impact on fertility.

In what follows, we review and reflect on what has become a very large field of study. The review is structured around three parts: one which traces the origins of this field of research, one which reviews the findings regarding three specific types of policies: cash transfers, work-related leave schemes, and childcare, and one which reflects on empirical evidence coming from more subjective approaches.¹ This is then followed by a reflection on the role of the national context in influencing the impact of policies on fertility.

The review of the empirical findings

In their recent systematic review of the literature on the impact of policies on fertility, Bergsvik, Fauske, and Hart (2021) mention the close to 20,000 unique hits generated by their search of the literature. This gives a good idea of the size of this field of research. At the same time, what this also makes clear is the impossible task of summarizing, but especially comparing, the results of these various studies. In their case, they applied a predefined set of inclusion and exclusion criteria and restricted their review to studies that used individual-level data and a quasi-experimental design. This resulted in 35 studies.

In our case, we extended the scope of the review in two ways. First, we included a historical dimension by tracing back the early studies of the impact of family policies on fertility. We felt that it was important to do this to provide a more complete picture of this field of research but also to document its methodological developments. Second, and in contrast to the systematic review by Bergsvik, Fauske and Hart (2021), we did not restrict our review to one specific methodological design. Instead, we opted for a more comprehensive approach and included three different categories of studies: (1) country-specific studies using individual-level data, (2) cross-national studies using individual-level data, and (3) cross-national studies using aggregate-level data. Not only does this reflect the scope and diversity of this field of research but it also provides a way of triangulating the results to see the extent to which a consensus (or not) emerges from the various studies. Moreover, to further complete the review, we also added a fourth category which captures the perceived impact of policies. Although this evidence is more subjective, it nicely complements the other types.

The clear drawback of our broader approach is that it would have captured too many studies. To make the task more manageable, we restricted the first category to the two systematic reviews that have been published in recent years. For the other types, we first queried the literature using different search engines, databases, and keywords and then selected studies which appeared to be most relevant and which best illustrated the specific methodological approach. This is not systematic and, moreover, it neglects

hundreds or even thousands of other studies. But in the absence of any centralized repository and any standardized way of reporting findings, this was the only option. We also carried out additional targeted searches to illustrate the impact of specific policies (e.g., tax relief and housing) or specific countries which were not well covered by the other studies.

Finally, to provide some structure to the review, we distinguished three categories of family policies: cash benefits, work-related leave schemes, and childcare. We also considered studies that had attempted to construct a global index of family policies. We also refer in the review to other policies that usually fall outside the scope of family policies but can also have an impact on fertility (e.g., housing).

Earlier studies on the impact of family policies

As mentioned earlier, the introduction of the first family policy measures dates back to the late 19th and early 20th century. The analysis of the impact of these policies on fertility, however, came much later, mainly from the 1970s. These early investigations fell into two categories: those focused on Western European countries, especially the case of France and its extensive set of measures to support families, and the others on Eastern European countries where a mix of pro- and anti-natalist policies had been introduced. In both categories, the aim was to assess the extent to which the introduction of new measures (or the reform of existing ones) had an impact on fertility trends.

The French demographers Girard, Bastide, and Roussel (1976) appear to be among the first to have carried out such an analysis. This was done at the request of the French government which wanted to know the effectiveness of measures implemented to arrest the steep decline in fertility experienced since the mid-1960s. To do so, the authors used a descriptive approach consisting of detailed analyses of the trends in fertility rates (at the aggregate level). Their conclusion was that the policies introduced by the French government were effective in raising fertility, especially when comparing the trends before and after World War II. They reached a similar conclusion when comparing the fertility trends of public- and private-sector employees who benefited from differential levels of financial support over time. Importantly, they also concluded that the financial support for families should be sufficiently large in order to have an impact on fertility.²

Similar descriptive analyses of the impact of policies on fertility, also by French demographers, were subsequently presented at the International Population Conferences: with Festy (1981) at the Manilla conference, and Chesnais (1985) at the Florence conference. They reanalyzed the French case but also extended their analysis to that of other countries. Their conclusion was that the policies most likely had a positive impact on fertility but mainly on the timing of births rather than on the longer term

cohort fertility. Moreover, Chesnais (1985) restated that the policies should be sufficiently generous to have an impact on fertility and added that they should also be visible.

The other group of studies instead focused on Eastern European countries where major changes in policies were analyzed in parallel to those in fertility trends. This includes analyses of the policies in the Czech Republic (Frejka 1980), Hungary (Andorka and Vukovich 1985), and Romania (Teitelbaum 1972) as well as numerous reviews of policies and the demographic situation across the region (e.g., Berent 1980; Festy 1981; Macura 1974; Pressat 1979). The rapid and complex changes in policies, combined with large changes in the socioeconomic composition of the population, and a reliance on period data, made however the assessment of the effectiveness of policies difficult (Demeny 1986). While studies reported that the policies did increase the level of support for some families (excluding here the restriction to abortion laws), the overall assessment of their effect on fertility was mixed. While some concluded that the effect was "short-lived" (David 1982), others concluded that it was "nil or negligible" (Demeny 1986, 350), or inconclusive (Council of Europe 1982).

Around that time, the case of Germany also attracted attention. This was prompted by the introduction of a large package of benefits in East Germany in 1976–1977, and the seemingly resulting divergent trends in fertility observed in East and West Germany. The policies themselves included a longer maternity leave, an extended paid leave for working mothers of two or more children, and a reduction of the number of weekly hours of work also for mothers with two or more children (Buttner and Lutz 1990; Chesnais 1985, 1987; Vining 1984). They were deliberately aimed at increasing fertility. While both Vining (1984) and Chesnais (1987) concluded that the policies most likely had an effect on fertility, Buttner and Lutz (1990) more precisely estimated that they resulted in an increase in the total fertility rate (TFR) of 15 percent (about 0.2 children per woman) and that the effect was strongest on the second and third births.

Following these early studies, the field of research expanded rapidly from the mid-1980s. Importantly, the field also moved away from the earlier descriptive approaches towards a greater diversity in the types of data, research designs, and analytical techniques. This includes the increasing use of micro-level data (e.g., fertility histories) and econometrics techniques to track and capture the impact of policies. Some examples include the analysis of the impact of child benefits on fertility in Britain (Barmby and Cigno 1990; Ermisch 1986), the analysis of the impact of childcare cost on fertility in Britain (Ermisch 1989) and the USA (Blau and Robins 1989), and the impact of tax benefits in the USA (Whittington 1992). In general, these studies concluded a positive effect of policies on fertility but mostly on the timing of births. In addition to country-specific studies, this period also saw the first cross-national analysis by Ekert-Jaffé (1986) in which she analyzed

the impact of cash benefits (family allowances) of eight European countries for the period 1971–83 (using aggregate-level data). She concluded that financial support similar to that of France raised fertility by 0.2 children per woman. She further concluded that this effect could reach 0.5 children per woman if the total cost of children was covered.

These early studies are important for diverse reasons. First, they not only marked the beginning of what would become a large field of research but they also introduced the first methodological approaches to the study of the impact of policies on fertility. Second, they also provided the first estimates of the effect size of policies (around 0.2 children per woman). Third, they also suggested that the family policy measures likely had an impact on the timing of birth, with a less clear impact on cohort fertility. This is an issue which continues to dominate many findings today.

In what follows, we turn to the analysis of the impact of specific types of benefits. The main findings are summarized in Table 1 and which is organized based on the three methodological designs discussed earlier. For each study, we report information on the data used (geographical and time coverage), the fertility indicator, and the main findings (for each type of policy). In the text, we also report some information on the effect size. This effect size is, however, problematic to compare across studies considering that different fertility indicators are used and that the policies are measured in different ways.

Cash benefits

Cash transfers to families are in itself a broad range of measures including universal child or family allowances, means-tested benefits, and tax relief. Some are paid only at the birth of a child, some are paid throughout the childhood years, and many of them vary depending on the number and age of children. In the studies reviewed below, what is often measured is the total expenditures on such cash benefits (expressed per child or as a percentage of the countries' gross domestic product), or the average amount received by families (often expressed as a percentage of the average wage). In recent studies, these cash-related benefits have been labeled as "passive support" (Billingsley, Neyer, and Wesolowski 2022) or as "traditional family support" (Billingsley and Ferrarini 2014).³ These labels reflect the fact that cash transfers for families are meant to support families financially, but—in contrast to other policies (e.g., parental leave)—they are not meant to encourage labor market participation and that they tend to be associated with a traditional gender division of labor (e.g., home care allowance).

Results from the systematic review of Bergsvik, Fauske, and Hart (2021) suggest that cash benefits have a positive effect on fertility. However, they included in their analysis both regular cash benefits (e.g., family allowances) and those provided at the birth of the child

TABLE 1 Summary of selected studies on the effect of policies on fertility

Studies	Design	Countries/ years	Fertility	Cash benefits ^b	Leave schemes ^b	Childcare ^b
Country-specific studies using individual-level data (restricted to systematic reviews)						
Bergsvik, Fauske, Hart (2021) ^a	Systematic review (<i>n</i> = 35 studies)	Mixed (<i>n</i> = 9) (Europe, Canada, USA), 1970–2014	Birth rates, birth probabilities, period measures, and cohort measures	(+) effect in all regions but it is unclear if long term	(+) effect of substantial parental leave expansions; unclear if same across regions (?) unclear effect of paternity quotas	(+) effect of childcare provision (+) effect of reduction in the cost of childcare
Thomas et al. (2022)	Systematic review (<i>n</i> = 11 studies) (23 policy changes)	Mixed (Austria, Canada, Germany, Norway, Spain, Sweden, USA), 1977–2009	Birth rates, probability of having a child	Not included	(.) effect of parental leave in current-child effect studies (+) effect of parental leave in future-child and total effect studies	Not included

...

TABLE 1 (Continued)

Cross-national studies using individual-level data					
	Multilevel	Sixteen European countries, 2004–2009	Completed fertility at age 36–44	(.) effect of family allowances	(.) effect of maternity leave
Baizan, Arpino, and Delclòs (2016)					(+) effect of childcare coverage
Billingsley and Ferrarini (2014) ^c	Multilevel	Twenty-one European countries, 2004	Fertility intention	(+) effect of traditional family support on the first birth (.) effect of traditional family support on the second birth	(+) effect of earner–carer support on the first birth for men and women (+) effect of earner–carer supports the second birth for women only (.) effect of earner–carer support on the third or higher births
Billingsley, Neyer, and Wesolowski (2022) ^d	Multilevel	Twenty European countries and the USA, 1995–2007	Probability of having a child (fertility histories)	(–) effect of passive family support on the first birth (.) effect of passive family support on the second birth	(+) effect of social investment-oriented support on the first birth (.) effect of social investment-oriented support on the second birth

/...

TABLE 1 (Continued)

Cross-national studies using individual-level data				
Brini (2020)	Multilevel	Twenty European countries, 2005–10	Likelihood of having at least one child (vs. childlessness) and total number of children	Not included
				(+) effect of parental leave on having children (.) effect on the total number of children
Harknett, Billari, Medalia (2014)	Multilevel	Twenty European countries, 2004/5 and 2008/9	Fertility intention and fertility histories	(.) effect of duration of paid parental leave Not included
				(+) effect of expenditures on families as a percentage of the GDP on the first birth and higher order intentions (+) effect of expenditures on families as a percentage of the GDP on higher birth orders
Hilgeman and Butts (2009)	Multilevel	Twenty OECD countries (Europe, Australia, USA), 1995–2000	Total number of children ever born 18–45	(.) effect of family leave (duration) (+) effect of childcare enrolment age 0–3
Kalwijn (2010)	Multilevel discrete-time proportional hazard model	Sixteen European countries, 1980–2003	Fertility histories	(+) effect of expenditures on leave benefits on the first birth (+) effect of expenditures on childcare on the first birth
				/...

TABLE 1 (Continued)

Cross-national studies using aggregate data				
Adserà (2004)	Pooled cross-national time series using random-effect model (and fixed)	Twenty-three countries, (Europe, Australia, Japan, New Zealand, USA), 1960–1997	Total fertility rate	Not included
Castle (2003)	Cross-sectional	Twenty countries (Europe, Australia, Japan, New Zealand, USA), 1998	Total fertility rate	(.) effect of family cash benefits (as a percentage of the GDP) (.) effect of family services expenditure (as a percentage of the GDP) (+) effect of net transfers to families (cash and taxes) (–) effect of duration of parental leave (+) effect of cash replacement rates (+) effect of formal childcare for under-3s (–) effect of publicly funded childcare for over-3s
D’Addio and Mira d’Ecole (2005)	Panel data method	Sixteen OECD countries (Europe, Canada, Japan, USA), 1980–1999	Total fertility rate	(–) effect of duration of parental leave (+) effect of cash payments during maternity leave
Jaffe (1986)	Pooled data	Eight European countries, 1971–1983	Total fertility rate	(+) effect of family allowances Not included

/...

TABLE 1 (Continued)

Cross-national studies using aggregate data						
Gauthier and Hatzius (1997)	Pooled data	Twenty-two OECD countries (Europe, Australia, Canada, Japan, New Zealand, USA), 1970–1990	Total fertility rate	(+) effect of cash transfers	(.) effect of duration of leave (.) effect of payment during leave	Not included
Luci-Greulich and Thévenon (2013)	Macro panel (pooled)	Eighteen countries (Europe, Australia, Japan, New Zealand, USA), 1982–2007	Total fertility rate	(+) effect of expenditures on cash benefits per child (+) effect of expenditures on cash benefits per birth around childbirth	(+) effect of paid leave duration	(+) effect of childcare provision
Olivetti and Petrongolo (2017)	Pooled	Thirty countries (Europe, Australia, Japan, Korea Mexico, New Zealand, Turkey, USA) 2010–2014	Total fertility rate	Not included	(+) but very small effect on the duration of parental leave (.) effect of average payment rate	(+) effect of early childhood education and care

/...

TABLE 1 (Continued)

Cross-national studies using aggregate data						
Wesolowski and Ferrarini (2018)	Macro pooled time-series analysis with country fixed effects	Thirty-three countries (Europe, Australia, Canada, Japan New Zealand, USA), 1995–2011	Total fertility rate	(.) effect of traditional family support	(+) effect of earner–carer support	Included in earner–carer support
Zhang et al. (2023)	Fuzzy set	Twenty-one countries (Europe, Australia, Canada, Japan, Korea, USA), 2001–2015	Total fertility rate	(+) effect of public expenditure on family benefits (+) effect of public expenditure remains over the long term but decreases each year (+) effect of public expenditure for both high and low fertility countries	(.) effect of duration of maternity and paternity leave	Not included

^aTheir search of the literature covered a broader geographical coverage. However, the studies that matched their inclusion criteria were restricted to Austria, Belgium, Germany, Canada, Italy, Norway, Spain, Sweden, and the USA.

^b(.) no effect; (+) positive effect; (–) negative effect.

^cIn the study by Billingsley and Ferrarini (2014), traditional family support includes cash and fiscal family and child benefits, while earner–carer support includes parental leave and childcare.

^dIn the study by Billingsley, Neyer, and Wesolowski (2022), passive support includes cash and fiscal child benefits as well as home care allowance, while social investment includes maternity and parental benefits.

(baby bonus). As discussed below, the latter constitutes a very specific case of benefits. Such a positive effect is, however, not corroborated by the other studies: about half of the studies in Table 1 report a positive impact of cash benefits on fertility and the others none. Mixed results are also obtained when using broader measures of financial support (Billingsley and Ferrarini 2014; Billingsley, Neyer, and Wesolowski 2022). The results are also mixed when it comes to the effect of cash benefits by parity: being larger on first births in some studies (e.g., Billingsley and Ferrarini 2014) and on higher order births in others (e.g., Harknett, Billari, and Medalia 2014). There is also a lack of evidence regarding the longer term impact of these cash benefits on cohort fertility (Sobotka, Matysiak, Brzozowska 2019).

Baby-bonuses are another type of cash benefit but a very specific one: they are paid as a one-off transfer at the birth of a child, their amount is usually larger (as compared to the regular family allowances), and they are often more visible, especially if part of an explicit pronatalist policy. In recent decades, such baby bonuses have been introduced in various countries (e.g., Australia, Canada (Quebec), Singapore, and Russia) but in many cases only for a relatively short period of time. Overall, these birth grants have been found to increase fertility but mainly in the short term and mainly through a tempo effect (see Sobotka, Matysiak, and Brzozowska 2019; Gray et al. 2022).

Finally, there are some studies that have focused on the impact of tax relief on fertility. The evidence is here more limited and usually analyzed alongside other types of cash transfers to families. The evidence from both Hungary and Norway suggests that large fiscal support for families has a positive impact on fertility (Hart and Galloway 2023; Spéder, Murinkó, and Oláh 2020).

In terms of magnitude, most studies suggest that the impact of cash benefits on fertility tends to be small (if any). For example, the recent cross-national analysis by Zhang et al. (2023) estimates that a one percentage point increase in public expenditures on family benefits (as a percentage of the GDP) would result in an increase in the TFR of 0.069 children per woman.⁴ In other words, and considering that the spending on family benefits in OECD countries is around 2 percent of the GDP, this means that a doubling of such expenditures would increase fertility by 0.14 children per woman (OECD 2022). One plausible explanation for such a relatively small effect is that these cash benefits are simply too small, as compared to the total cost of children, to make a difference in people's fertility decisions. The evidence is however lacking to conclude how large should the financial help be to make a difference in people's fertility decisions, whether the impact is the same across parity and educational groups, and whether the impact is long term.

Work-related leave schemes

Work-related leave schemes are measures which allow parents to temporarily withdraw from the labor market to take care of their newborn child. This includes leaves immediately before or after childbirth (i.e., maternity and paternity leave) and longer leaves of absence often to be shared between parents (i.e., parental leave). As mentioned earlier, these policies were originally aimed at protecting the health of mothers and children. In more recent years, they have been part of measures to promote gender equality in the labor market—and to some extent also in the private sphere in the sharing of unpaid work between spouses.⁵ These parental leave schemes vary largely across countries in duration and payment and have been subject to numerous changes over time.

In two recent systematic reviews, work-related leave schemes have been found to have a positive impact on fertility (Bergsvik, Fauske, and Hart 2021; Thomas et al. 2022).⁶ In the other types of studies, most also reported a positive effect both in terms of duration of the leave and payment (replacement rates). However, there are also studies that reported no effect of such policies (e.g., Harknett, Billari, Medalia 2014). Where the literature is less clear is regarding the differential effect of leave policies for different population subgroups. For example, there is no clear conclusion regarding the effect of policies by parity and education level. Some studies suggest that the effect appears to be mainly on the first birth (e.g., Brini 2020; Kalwij 2010) as opposed to higher order births, and some suggest that the effect is larger for more highly educated individuals (Baizan, Arpino, and Delclòs 2016).⁷

It is also unclear if the effect of leave policies is similar across regions (Bergsvik, Fauske, and Hart 2021). This is an important point, especially considering that most studies (including those in Table 1) are based on European countries. The evidence is far more limited when it comes to other low fertility regions, especially Asia. Studies have reported a positive effect of parental leave in Japan (Lee, Ogawa, and Matsukura 2009) and Korea (Kim and Parish 2022), but there are also suggestions that this effect may be dampened by broader institutions and social norms such as long working hours and limited workplace support (Boydell et al. 2023; Rindfuss and Choe 2016). There are also suggestions that the impact of parental leave may be influenced by the availability (or not) of adequate childcare provisions, and whether or not such a leave is aiming at increasing gender equality or at keeping mothers longer at home (Sobotka, Matysiak, and Brzozowska 2019; Kocourková 2002).

Finally, while the duration of the leave and the payment received during the leave likely matter, there is limited evidence regarding the potential impact of other dimensions such as the flexibility in the use of the leave and

the targeting of fathers (such as in the daddy's quota, which reserves part of the parental leave exclusively for fathers).⁸

In terms of magnitude, studies suggest that the policies need to be generous to have an effect (Thomas et al. 2022) (although what generous means is not defined). But to illustrate: more than doubling the maternity leave index (number of weeks of leave multiplied by their cash replacement rates) from 12 to 25 weeks is estimated to result in an increase in the TFR by 0.15 children per woman (Adserà 2004). In another study, an increase in paid leave from 10 to 75 weeks would result in an increase in fertility of 0.09 children per woman for the low-educated subgroup and 0.24 for the higher educated one (Baizan, Arpino, and Delclòs 2016).

Childcare

Childcare-related measures have been introduced in most countries since the 1970s in response to the rapid increase in female labor force participation. This trend then accelerated in the 1990s and is nowadays a major component of family policies. Empirically, the impact of such measures is usually captured by the provision of childcare (e.g., proportion of children enrolled in formal childcare) and by its cost. Other elements, including the quality of childcare (e.g., the ratio of staff to children) and its flexibility (e.g., opening hours, possibility of using it part-time) are rarely included in studies.

Results almost consistently suggest a positive impact of childcare on fertility. This appears to be especially the case for the provision of childcare for very young children (under the age of three) (Luci-Greulich and Thévenon 2013). Positive results were also found in a study using an index which combined leave-related schemes and childcare for very young children (Billingsley and Ferrarini 2014). Importantly, what these combined indicators may suggest is the importance of coherence and complementarity across the support for families, in this case, the provision of work-related leave schemes and childcare services.

This impact of childcare services on fertility appears, moreover, to be larger for more highly educated individuals. For example, Baizan, Arpino, and Delclòs (2016) conclude that increasing childcare coverage from 20 to 50 percent results in an increase in completed fertility of 0.2 children for low-educated women and 0.4 for more highly educated ones. The results are, however, less clear regarding the differential impact by parity. For example, Kalwij (2010) reported a positive impact of the expenditures on childcare on the first birth, while Billingsley and Ferrarini (2014) reported a positive impact of their earner-carer support index on the first and second births, but not on the third.

But if most studies report a positive impact of childcare on fertility, the extent to which this impact is the same across countries remains unclear.

While Bergsvik, Fauske, and Hart (2021) report that evidence is lacking for the Anglo-Saxon countries and Southern Europe (in their systematic review), Luci-Greulich and Thévenon (2013) show a strong effect in the Nordic countries, but a nonstatistically significant one for Southern Europe. There is also limited evidence regarding the impact of childcare policies on fertility in East Asia (Hart et al. 2023). While there is some evidence of a positive effect (e.g., Fukai 2017) for Japan), there are also suggestions that the perception of the quality and reliability of childcare services may also impact their actual use (Park et al. 2020, for South Korea).

Other benefits

If cash benefits for families with children, work-related leave schemes, and childcare constitute the traditional core of family policies, other types of benefits can also potentially have an impact on fertility. In a recent “toolkit” report, some of these other benefits were labeled as “complementary policies” (The Economist 2023). This includes broader community and workplace support, housing policies, and dating programs. To this list, one would also add education benefits, especially in countries where regular education is not only expensive and competitive but where parents face additional expenditures by enrolling their children in additional (cram) programs.

The empirical evidence regarding these other types of benefits is much more limited. In fact, in their systematic review, Bergsvik, Fauske, and Hart (2021) indicated that despite their extensive searches no studies on the impact of housing policies matched their selection criteria. At the same time, there is some literature on the relationships between different dimensions of housing and fertility, including housing affordability, cost, size and type, home ownership, and perception of housing stability (e.g., Brauner-Otto 2023; Du, Hui, and Chen 2024; Sobotka, Matysiak, and Brzozowska 2019; Tocchioni et al. 2021; van Wijk 2024). But these do not specifically tackle the impact of housing policies *per se*. An exception is the recent vignette study in China by Wang, Wang, and Shen (2023), which suggests some positive effects of housing policies on fertility. This is a relatively unexplored area of research.

Perceived impact of policies

The empirical evidence regarding the impact of policies on fertility reviewed in the previous sections is all based on “indirect” approaches, that is, descriptive or statistical techniques that assess the correlation between the changes in policies and fertility. A somewhat different approach consists instead of directly asking people about their perceived effect of policies on fertility, or about their own experience.

Such a more “direct” approach is again not new. Already in 1975, a survey was carried out in France to capture the knowledge of the population regarding different demographic trends and to ask respondents about their opinion on various demographic-related topics. One of the questions asked in this survey concerned the perceived effect of policies on fertility. The results revealed a much-divided opinion with half the people responding that there are indeed measures which can influence people to have more children, and the other half responding negatively (Girard, Bastide, and Roussel 1976).

Questions on the perceived impact of policies on fertility were also included in the Population Policy Acceptance Surveys (PPAS) of the early 1990s and 2000s and carried out in 12 European countries. In this survey, respondents were first asked to identify the three family policy measures which they supported most (among a list). They were subsequently asked whether they thought that the introduction of their three preferred policy measures would influence their fertility intention and behavior. The analysis of the data from the second PPAS (carried out in 2003) revealed that between 2 to 35 percent of respondents stated that they would probably decide to have a(nother) child (Fokkema and Esveldt 2008).⁹ In turn, this would result in an estimated increase of the TFR by 0.15 children per woman on average.

Most likely these figures overestimate the impact of policies since they refer to hypothetical situations. Moreover, the association between policies and fertility remains vague since the survey items did not specify what for example “improved” parental leave would or should be nor how much “higher” cash transfers would or should be. Nonetheless, the results are interesting as they confirm some of the “indirect” evidence reviewed in the previous section. What the results also suggest is that what may work best in one country may not necessarily be the case in another one and that this may be related to cross-national differences in peoples’ needs and preferences.

In recent years, some semi-experimental work has also been carried out in an attempt to further capture individuals’ responsiveness to policies. One example is the study by Lui and Cheung (2021), which used a multifactorial vignette design to estimate the effect of policies on fertility decisions. The survey, carried out on a sample of Hong Kong respondents, exposed them to various hypothetical policy scenarios. Results suggest a positive effect of childcare support and housing policy but also highlight the importance of broader “family friendly organizational norms” in strengthening the effect of individual policy measures. Using a similar approach, Guetto, Alderotti, and Vignoli (2023) asked survey respondents in Italy to determine the short-term fertility intentions of hypothetical couples exposed to different family policy packages. Results confirm some of the earlier findings, including the potentially greater impact of childcare than cash benefits

but also reveal the importance of a consistent package of policies. And while these two studies refer to two specific countries, they further support the importance of broader support for families.

Finally, mention should also be made of a very small number of qualitative studies that have explored in greater depth people's perception of fertility obstacles and the possible enabling role of policies. This includes the study by Salles, Rossier, and Brachet (2010) on French and German participants, and that of Brinton et al. (2018) on American, Japanese, Spanish, and Swedish participants. In both studies and in contrast to the semi-experimental work reviewed above, participants in the qualitative studies were not exposed to hypothetical policy scenarios nor asked about their perception of the possible efficacy of policies. However, the participants' own narratives of their obstacles to fertility and their ideals provide some insights on the possible impact of policies. This includes financial considerations (cost of children and cost of childcare), job stability, housing, work-family conflict, and gender equality. The narratives, however, varied across countries, emphasizing the importance of context and match between people's needs and policies.

Summary

The study of the impact of family policies forms nowadays a major field of research—even though in the large majority of cases the policies did not aim at increasing fertility. The findings of these studies vary largely and often provide mixed evidence. However, taken as a whole this body of literature does suggest that family policies may have a positive impact on fertility. This appears to be especially the case for measures that help reconcile work and family responsibilities (leave-related schemes and childcare) and less so for cash-related transfers. This result appears, moreover, to be consistent across methodologies. In contrast, the magnitude of this impact is much more difficult to compare across studies. It, however, tends to be relatively small, around 0.1 to 0.2 children per woman. Variations in the effect of policies on fertility by parity, household income, and national context were also found.

Several of the above studies were focused on the impact of single policies, especially the introduction of a new policy measure or a major change in policies. In reality, one could argue that what matters for people are not single policy measures but rather larger packages of policies. This seems to be supported by studies that have used combined indicators related to work support. Moreover, there is some evidence that suggests that the policy packages need to align with people's needs and preferences.

While the literature on the impact of family policies on fertility is very large, there are also noteworthy limitations including the overrepresentation of some countries and regions (including Western Europe and the

Nordic countries) and the underrepresentation of others (e.g., Southern Europe, East Asia, Latin America).¹⁰ This considerably restricts the possibility to generalize the findings across other contexts. It also leaves open the question of the extent to which other institutional, economic, and social factors may be moderating the impact of policies on fertility.¹¹

Family policies and fertility: Why the limited “success”?

In the previous section, we outlined some of the various types of family policies and explored the extent to which they might interact with fertility outcomes. However, judging the success of these policies is challenging. Above all, it involves defining what “success” means from their goals. As we have discussed earlier, in some cases the goal is very clear: the aim of the family policy interventions is clearly to raise fertility rates. This reductive view of family policy and the link to fertility seems to predominate much of the literature and discussion of this sphere. In turn, it inevitably informs the way we determine the “success” of family policies.

First, there is a methodological challenge in terms of measuring the effect on fertility. The *period* TFR is most used in scientific and policy circles. However, this measure is highly susceptible to fluctuating changes in timing, or *tempo* (Sobotka and Lutz 2009; Sobotka 2004). This means a sharp rise in TFR following a pronatalist intervention could, in fact, reflect couples deciding to have their already desired/intended child earlier than initially planned. This means the intervention has only affected the timing of birth and not the *quantum*, or total number of births (which is, in fact, the usual intent). Furthermore, such a rise in fertility may, in fact, have nothing to do with the intervention: postponed births before the intervention may be recuperated organically at a time coincidental with the policy change. This can occur through processes of education expansion, labor market instability, and changing values and preferences, which, in turn, lead to delayed parenthood and a shift towards childbearing at older ages (Mills et al. 2011; Yoo and Sobotka 2018; Sobotka and Beaujouan 2018). This point has been recently made forcefully in the case of Hungary, where the “the seemingly impressive upturns in the TFR” which have been linked in the media and political narrative to pronatalist policies have, in fact, “been largely fueled by a slowdown in the shift to later parenthood and have not been mirrored in corresponding upturns in cohort fertility or tempo-adjusted period fertility indicators” (Lutz, Sobotka, and Zeman 2024). Such uncertainty and “noise” not only cloud *period* TFRs but also affect how we interpret *cohort* measures as well. This only serves to emphasize the limited direct and immediate impact upon affecting patterns of childbearing which we observed earlier.

The question, therefore, is why have policies which have been designed to shape family formation through spurring childbearing met with such limited direct success?

Much focus has been placed on the direct and indirect costs of childbearing as a reason for low actualized fertility. Against this backdrop, it could be anticipated that interventions which lessen the financial burden of childbearing have a positive impact on raising fertility. This is not, as we have seen, the case. The amount in a baby bonus package can never fully offset the lifetime direct and indirect costs of raising a child (Malak, Rahman, and Yip 2019; Chuard and Chuard-Keller 2021; Sinclair, Boymal, and de Silva 2012). However, the issue is more significant than that. The reason for this is that family formation is the outcome of a complex navigation of social, economic, romantic, biological, and cultural factors. This, in turn, is shaped by a multitude of factors, choices, and attitudes regarding family formation: the cost and nature of education systems, political and economic stability, the fragility of work, working hours and culture, gender roles at home and the workplace, expectations regarding caring for older family members, and so on. Many of these factors are more concentrated for specific groups of people (Ross and Roberts 2017). When we see low fertility as a downstream consequence of these multiple intersecting institutions, the policy response becomes ever more challenging and perhaps denotes the need for wholesale institutional and cultural reform (Gietel-Basten 2019).

It is in this kind of more holistic approach to understanding family formation that it is critical to look more closely at national contexts. Indeed, there are other critical intervening variables at the national level which are often overlooked when trying to map out a simplistic relationship between family policy and fertility. This is linked not only to the “framing” of family policy but also to the history and contemporary context in which they operate at the national level.

Nordic family policy systems are among the most comprehensive in the world, for example. While period TFRs have declined in recent years across the region, the relatively stable, relatively high cohort of TFRs has led the policies in the region to often be seen as a “goal,” or “beacon” for policymakers around the world who wish to see a higher fertility rate. However, these contemporary family policies in the Nordic region (and, to a certain extent, in other historically “higher” fertility settings such as France, the United Kingdom, Ireland, Australia, and New Zealand) are not explicitly pronatalist—even though they did, in the past, often have links to pronatalism, or at least, demographic engineering in response to concerns about national growth, the labor force and so on. Indeed, many of these countries do not have an explicit population policy at all. However, over the course of many decades, these family policies have worked to adapt cultures and attitudes regarding gender roles and support for the family from the state and employers. As such, while these policies might not be prona-

talist in their current intent, their long history, and the cultural milieu in which they operate inevitably lead to such family policies having a fertility-supporting effect (Björklund 2006; Andersson 2008; J. M. Hoem 2005). These policies have gone hand-in-hand with other policies in education, housing, health, and care (for instance), which have served to lower the perceived risks and opportunity costs associated with starting and growing a family (Kalwij 2010). The alignment between these contemporary family policies, other relevant social and economic policies, and aspirations of citizens further enhances the likelihood of supporting both family formation but also (and perhaps more importantly) many other measures of well-being. But, again, the recent collapse in period TFRs in the Nordic region (and in England and Wales, Scotland) demonstrates that the long history of wide-ranging family policy and social support mechanisms is not a complete failsafe when it comes to maintaining steady birth rates (UNPD 2022). Indeed, this is nothing new: the contrast between Sweden's stable cohort TFR and its "rollercoaster" period TFR has long been observed (B. Hoem and Hoem 1996).

Yet, it is not only in the Nordic and "older welfare states" that we see the implementation of more holistic, positive approaches to the family. In 2023, Asia-Pacific Economic Cooperation (APEC), an intergovernmental forum for 21 member economies in the Pacific Rim, published a "Menu of Policy Options" for countries which are concerned about their demographic situation. However, rather than the typical pronatalist narrative, this was rather about building "a rights-based policy approach" to "comprehensively and proactively support family planning and fertility planning" to build "demographic resilience" (APEC 2023, 1). Such a more bottom-up, supportive approach is much more in line with the principles set out in the 1994 International Conference on Population and Development.

Elsewhere, other countries (such as Estonia and Slovenia) have sought to introduce explicitly gender-responsive family policies which aim to shift the narrative away from fertility as an outcome and rather address some of the core inequalities which shape family formation and childcare and domestic work (UNFPA 2022). Moldova, for example, has long faced low fertility rates and high emigration, compounded by limited economic development that hindered the establishment of comprehensive welfare systems (Bodrug-Lungu and Robila 2014). Childcare and domestic responsibilities remain disproportionately shouldered by women, restricting their participation in the labor force (UNFPA 2021b). Previous pronatalist policies largely failed to boost fertility rates, prompting a significant policy shift in recent years. Instead of framing demographic issues through a security lens, Moldova now prioritizes individual rights and choices (UNFPA 2021a).

The new approach focuses on rights-based and gender-transformative family policies aimed at fostering women's economic empowerment and gender equality. This includes advocating for women's rights to work, access

education, and engage in decision-making (UN 2022). Key interventions involve updated childcare laws, enhanced maternity benefits, and a recently extended paternity leave from 56 days to one year. Many private sector companies have adopted these policies, offering well-paid parental leave, care allowances, and antidiscrimination measures for pregnant employees, along with flexible work arrangements and facilities for lactating mothers (UNFPA 2023a).

Despite the TFR remaining relatively flat, the primary goal of these gender-responsive policies is to challenge discriminatory gender norms and redistribute unpaid care work. Success will not solely be measured by TFR but by attitudes toward work-family balance and the realization of fertility intentions (UNFPA 2023b). To assess these impacts, Moldova conducted the Generations and Gender Survey (GGS) in 2020 to explore the complexities of family creation, work-life balance, and fertility desires (UNFPA 2021b). Future GGS rounds will be essential for evaluating how these policies influence fertility intentions and broader social and economic dynamics.

On the other hand, there are many other examples of countries which have implemented large-scale family policy programs, and there has been relatively little overall impact on fertility. In recent years, these have been found to a great extent in East Asia, now home to some of the lowest TFRs on earth (Frejka, Jones, and Sardon 2010; Straughan, Chan, and Jones 2008). These policy interventions cover the wide range outlined above, including baby bonuses, childcare, maternity leave, and so on. It is widely reported, for example, that South Korea has expanded dramatically its family policy program in recent years and has done so largely (at least in the past) as a response to its very low fertility (Lee 2018). For example, news reports suggest that “South Korea’s government budget for tackling the nation’s low birth rate has risen to 2.25 percent of GDP,” rising from 2.1 trillion won (\$1.5 billion) in 2006 to 51.7 trillion won in 2022 (Global 2023). Given that TFR in the country continues to fall to historic lows, it is easily argued that the tremendous expansion of family policy has been a costly waste. This, however, involves multiple misunderstandings. First, again, we must go back to what family policy expenditure means. Of this huge figure cited above, 38 trillion won went towards housing support and purchases, lump-sum home rentals, and public rental loans. In fact, family spending (i.e., benefits exclusively for families and children) at around 1.5 percent is substantially lower than the OECD average. Second, these family policy interventions operate within a culture of long working hours; highly fragile employment; discrimination against women and parents; highly uneven division of domestic and care labor; very high property prices, and so on. As such, unlike the foregoing examples from the Nordics, such family policy interventions are *misaligned* with both broader social and economic policies as well as social and cultural norms. For example, in countries with very uneven gender roles at home, interventions to increase

paternity leave coverage have had mixed results, often in fact lowering further fertility intentions of men (Youngcho Lee 2022; Farré and González 2019). It remains to be seen whether such policies will shape (or be part of the mechanisms to shape) cultural and social norms over the next decades. However, for the time being, these policies are not succeeding in shaping fertility outcomes (as they hoped to do) because they are “stopgap measures which attempt to instrumentalize people’s potential fertility, without showing people a sustainable way out of the various social injustices that they must continue to live with in their day-to-day lives” (Lee 2024).

In other national contexts, meanwhile, the framing of family policy is so overwhelmingly pronatalist and couched in conservative gendered terms (and often ethnonationalist narratives) that it is impossible to disentangle the possible impacts of relatively orthodox family policy interventions. In countries with very strong pronatalist policy frameworks, such as Iran, Hungary, and Russian Federation, it is often the case that family-supporting policies (such as baby bonuses, childcare, and parental leave) can be effectively drowned about by narrative and, in some cases, policies which directly push back against women’s rights, including the right to work (Cook, Iarskaia-Smirnova, and Kozlov 2023; Frejka and Zakharov 2013; Rivkin-Fish 2010; Gietel-Basten et al. 2024a). Again, because these pronatalist family policies are not aligned with the aspirations of young women, they tend not to be successful in their stated aims (Gietel-Basten 2024b).

Recent national history is also important. It is probably no coincidence that some of the East and South Asian countries which are pushing the hardest to increase the fertility rate through (sometimes high-pressure) family policy interventions and propaganda were also pushing a strongly anti-natalist line in the last third of the twentieth century. In fact, antinatalism was being pushed in most of these countries well beyond the point at which fertility fell below the replacement rate (Straughan, Chan, and Jones 2008; Gietel-Basten 2024a). Within the developmentalist paradigm, population dynamics (and hence the family) is, and was, a servant to industrial development and economic growth. In this sense, reducing fertility, and investing heavily in health and education, was development or even economic policy. During this period, relatively little attention was paid to family well-being. Issues such as work-life balance were largely ignored, and childcare arrangements existed primarily to benefit the company rather than the family. The relentless focus on education also contributed to a certain toxicity regarding expected investment in children which largely fell on the shoulders of families. Finally, family and domestic care work within this paradigm was, and is, highly gendered—and continues to be so (Song, Chang, and Sylvian 2013; Raymo et al. 2015).

Policy stability and fiscal sustainability are also a key determinant of “success.” Given that “frequent reforms and reversals of family policies make them unpredictable, unreliable and confusing, potentially hav-

ing a negative impact on fertility even in countries which provide relatively generous support for families" (Sobotka, Matysiak, and Brzozowska 2019, 77), it is, therefore, to be expected that these changing policies and policy schemes cancellations had a negative effect on fertility in that period, even while spending remained relatively high (Aassve, Billari, and Spéder 2006; Spéder 2016).

Policy incompatibility and mistargeting can be key factors in shaping the success of family policies that affect the fertility rate. Again, this goes back to both measurement and definitional issues in the national context. In terms of mistargeting, many pronatalist policies (such as in Hungary, Russia, and Turkey) have a focus on increasing the number of higher order births. However, such policies can ignore that more help is arguably required in the first stages of family formation (i.e., building a strong relationship, getting stable housing and employment, and transitioning to first birth) (Chen, Gietel-Basten, and Yip 2020).

More broadly, such policies can often be out of step with changing directions in attitudes, sentiments, values, and even types of families. There is, no doubt, a changing expectation of what the family is, and should be. In the past, marriage and children might have been considered a "cornerstone" of life; now, it is more of a "capstone" (Cherlin 2004; Coontz 2004), or a means of extended discovery (Bellah 2007). Besides this, there are constantly evolving changes in attitudes towards work, and gender roles. There is also a changing link between marriage and childbearing as well as the growing acceptability of single parenthood, same-sex couples, and other "nontraditional family forms." In a postmodern world, these values are often unique to individuals and families and, therefore, fit awkwardly within a modernist, "one-size fits all" family policy paradigm (Van de Kaa 2001), which may seem very out-of-step with contemporary attitudes and ways of life. Again, it may be the case that policies which seek to *support* rather than *regulate* family life may be more successful in a wide array of outcomes.

Finally, to return to the national context: Does the family policy suite of interventions operate withing a broader system of social support? Do interventions "join up" with other aspects of life? For example, many countries offer flexible parental leave allowing parents to choose a period they plan to stay at home with their small children after childbirth. However, limited public childcare availability and a lack of labor market flexibility might make this choice of limited value (Sobotka, Matysiak, and Brzozowska 2019). During the COVID-19 pandemic, the interaction between nonpharmaceutical interventions and weak welfare support systems meant that containment policies disrupted people's lives and increased their uncertainty more in countries, thus impacting fertility dynamics (Plach et al. 2023). In Hungary, a recent qualitative exercise found respondents engaging with the expanded family policy system were torn between seeking financial security in a volatile labor market and privately absorbing care burdens associated

with larger families. As such, they “weighed the potential rewards of accessing various pronatalist benefits against the costs of reproduction in a policy context characterised by risk and uncertainty” and ended up being “highly selective regarding which benefits they accessed and which they avoided” (Glass and Fodor 2022, 1425). Indeed, marriage rates in Hungary increased steeply (and, indeed, more than the TFRs) when the Hungarian government introduced in July 2019 a new interest-free marriage loan for which only married couples are eligible (and which do not need to be repaid if they have three children). As a result, many cohabiting couples who might otherwise stay unmarried decided to marry, often shortly before the birth of their child.

Conclusions: Whither family policy?

Looking back, we see decades and decades of policy interventions to better support families, from the French Family Code in 1939, to the first-ever parental leave in Sweden in 1974, and numerous policies, programs, and subsidies since. What they all share is an acknowledgment of governmental responsibility in helping parents shoulder the cost of raising children and helping them combine work and family responsibilities. Where the policy interventions differ are in their intent: being targeted at increasing well-being and gender equality in most cases and explicitly increasing fertility in others. A further cross-cutting feature is the extent to which these policies seek to regulate family life, either explicitly or implicitly.

In this paper, we have demonstrated a relatively weak direct link between family policy interventions and quantum changes in fertility in low-fertility settings. To a degree, this means that family policy interventions which are designed explicitly with pronatalist aims are likely to become hostages to fortune. Clearly, the framing of family policy matters (and the timescale) enormously to how successful they are to be judged.

However, as we observed earlier in the paper, raising birth rates is only one component of family policy. As Thévenon argued (2011), we must consider at least five other main aims of policies to support the family: poverty reduction and income maintenance, direct compensation for the economic cost of children, fostering employment, improving gender equality, and support for early childhood development. As we stated at the start of this paper, appraising family policies in toto is beyond the scope of our study. However, there is no doubt that when considering the link between family policies and fertility, we must consider these indirect mechanisms. There is no doubt all of these goals cited by Thévenon (apart from simply raising birth rates) are net positives for (prospective) parents and children. It is also clear that each of these aspects are critical components in the decision to start family formation, and the timing of it.

Indeed, this “indirect” impact can be both direct and more general. Direct impacts can relate to specific interventions that, say, reduce poverty or

improve gender equality. However, as Sobotka, Matysiak, and Brzozowska (2019, 79) observe,

by designing family policies, governments send an important signal that they care about families and their well-being ... This symbolic representation can, in theory, make policies that are relatively small or even symbolic in scale psychologically important and “punching above their weight”.

As Neyer and Andersson (2008, 7) elaborate

[family policies] always act on two levels: on the level of facts and on the level of perception... The potential effect of family policies on actual behavior depends on how a policy is perceived in the minds of people and what it signals with respect to their current and future life course.

It is in signaling support for families to meet their reproductive aspirations in both sentiment and holistic policy intervention that, perhaps, the strongest contribution to fertility comes in and, therefore, where the “older” family policy paradigm might, in fact, be more potent than this more recent tilt towards pronatalism.

It is worth observing, though, that the “new” pronatalist framing of these family policies is rapidly changing. In the Republic of Korea, for example, explicit fertility target rates were removed, with the policies grounded more around supporting families (though the current alarmism over family policy may change this). Around the low fertility world, the narrative is shifting more towards supporting couples to have the number of children they wish for (which is almost always a more relevant number than the TFR). As we observed, in some parts of Eastern Europe, such as Moldova and Bulgaria, the policy paradigm has shifted away from target-based pronatalism towards supporting and investing in families, children, and young people more. Measuring the “success” of these policies, then, requires looking way beyond measures of period TFR: to a vast array of measures of economic and social well-being, but also at fertility intentions and their realization (or not). Such an approach requires investing in high-quality surveys—ideally comparative and longitudinal in nature.

In an era of relatively good access to contraception, having (or not) a child and when to have it has become perhaps an even more complex decision than in the past. It is a decision which requires individuals to weigh their current and future situations and circumstances, in the midst of increasing uncertainty and increasing standards of good parenting (Gauthier and de Jong 2021). In this respect, policies which reduce the direct or indirect cost of children may be expected to be part of the fertility-making decision. Their impact is, however, bound to be limited when being assessed by changes in the TFR of a country. The impact is likely wider when seen in terms of helping parents combine work and family responsibilities, improving gender equality, and creating a favorable environment to raise children. But, these same family policies should

also be viewed in their wider context, including their alignment (or not) with other institutions, norms, and workplace cultures. This calls for a rethinking of how to define family policies and how to measure their impact.

Acknowledgments

The authors would like to thank Anushiya Vanajan and Aisling Connolly for their help in identifying and summarizing the literature and Daniel van Wijk for sharing the literature on housing and fertility. We also thank the reviewers for their feedback on an earlier version of the paper.

Notes

1 What we, however, do not include are health-related policies including those related to fertility treatments.

2 The study did not provide a clear estimate of the magnitude of the impact of policies on fertility. They, however, noted that at the height of the baby boom, the fertility in France exceeded that of its neighbors by 0.2 to 0.3 children per woman.

3 In both studies, the index includes cash and fiscal child benefits as well as home care allowance.

4 In the paper by Zhang et al. (2023), an effect size of 0.069 children per woman was mentioned in the text. However, their table 4 reports instead an effect size of 0.072 (for the fixed effect model).

5 It should, however, be noted that in some countries the longer maternity and parental leave schemes tend instead to encourage women to stay longer at home to take care of the children and thus promote a traditional gender division of labor.

6 In the systematic review by Thomas et al. (2022), the positive effect of leave policies was only found in studies that captured the “future child” effect or “total child” effect, as opposed to those that captured the “current child” effect. This distinction is not made in other studies, and may therefore account—they argue—for their mixed findings. This is something that should be investigated further.

7 This study reported an overall positive but not statistically significant effect of maternity leave on fertility. However, the interaction term with education was statistically significant.

8 Other labor market-related factors may also matter including discrimination in hiring of young women (and in promotion). While we lack systematic information on this, such cases are regularly reported by the press in a wide range of countries.

9 The range reported here corresponds to the minimum and maximum figures across the 12 countries analyzed.

10 In some of the cross-national studies, a wider group of countries are included (e.g., Japan, Korea). However, the assumption is that the effect of the policies is the same across all countries. Some studies do carry out additional analyses by welfare state regimes, but not by geographical region.

11 One should also note other limitations of the literature including measurement issues related to the family policy themselves, notably the use of total expenditures (which while providing an indication of the total effort by governments does not capture the generosity of support for individuals nor specific subgroups) and the omission of policy eligibility at the individual level. Finally, there are also policy areas (e.g., parental leave, childcare) where employer-provided benefits may top up governmental ones. This is also not captured in studies.

References

- Aassve, Arnstein, Francesco C. Billari, and Zsolt Spéder. 2006. "Societal Transition, Policy Changes and Family Formation: Evidence From Hungary." *European Journal of Population* 22 (2): 127–52. <https://doi.org/10.1007/s10680-006-0003-3>.
- Adserà, Alicia. 2004. "Changing Fertility Rates in Developed Countries: The Impact of Labor Market Institutions." *Journal of Population Economics* 17 (1): 17–43. <https://doi.org/10.1007/s00148-003-0145-6>.
- Andersen, Margaret. 2020. "Kinderreicher Familien or Familles Nombreuses? French Pronatalism in Interwar Alsace." *French History* 34 (1): 63–81. <https://doi.org/10.1093/fh/enz066>.
- Andersson, Gunnar. 2008. "A Review of Policies and Practices Related to the 'Highest-Low' Fertility of Sweden." *Vienna Yearbook of Population Research* 2008: 89–102. <https://doi.org/10.1553/populationyearbook2008s89>.
- Andorka, R., and Gy Vukovich. 1985. "The Impact of Population Policy on Fertility in Hungary 1960–80." In *International Population Conference, Florence*, vol. 3, pp. 403–12. Liège: IUSSP.
- APEC. 2023. "APEC Smart Families: Menu of Policy Options for Demographic Resilience." APEC. <https://www.apec.org/publications/2023/10/apec-smart-families-menu-of-policy-options-for-demographic-resilience>.
- Armitage, A. 2021. "From Demographic Security to Demographic Resilience: Towards an Anthropology of Multilateral Policymaking in Eastern Europe." PhD diss., Graduate Institute, Geneva.
- Baizan, Pau, Bruno Arpino, and Carlos Eric Delclòs. 2016. "The Effect of Gender Policies on Fertility: The Moderating Role of Education and Normative Context." *Revue Européenne de Démographie* 32 (1): 1–30. <https://doi.org/10.1007/s13224-016-0270-7>.
- Barmby, T., and A. Cigno. 1990. "A Sequential Probability Model of Fertility Patterns." *Journal of Population Economics* 3: 31–51. <https://doi.org/10.1007/BF00160416>.
- Bellah, R. N. 2007. *Habits of the Heart, With a New Preface: Individualism and Commitment in American Life*. Berkeley: University of California Press.
- Berent, J. 1980. "Fertility Trends and Policies in Eastern Europe in the 1970s." Paper presented at Conference on Social, Economic and Health Aspects of Low Fertility Pan American Health Organization.
- Bergsvik, Janna, Agnes Fauske, and Rannveig Kaldager Hart. 2021. "Can Policies Stall the Fertility Fall? A Systematic Review of the (Quasi-) Experimental Literature." *Population and Development Review* 47 (4): 913–64. <https://doi.org/10.1111/padr.12445>.
- Billingsley, Sunnee, and Tommy Ferrarini. 2014. "Family Policy and Fertility Intentions in 21 European Countries." *Journal of Marriage and Family* 76 (2): 428–45. <https://doi.org/10.1111/jomf.12092>.
- Billingsley, Sunnee, Gerda Neyer, and Katharina Wesolowski. 2022. "Social Investment Policies and Childbearing across 20 Countries: Longitudinal and Micro-Level Analyses." *Revue Européenne de Démographie* 38 (5): 951–74. <https://doi.org/10.1007/s13224-022-00619-w>.
- Björklund, Anders. 2006. "Does Family Policy Affect Fertility? Lessons From Sweden." *Journal of Population Economics* 19 (1): 3–24. <https://doi.org/10.1007/s00148-005-0012-0>.
- Blau, David M., Philip K. Robins. 1989. "Fertility, Employment, and Child-Care Costs." *Demography*, 26 (2): 287–99. <https://doi.org/10.2307/2061526>.
- Bock, G., and P. Thane, eds. 1994. *Maternity and Gender Policies: Women and the Rise of the European Welfare States 1880s–1950s*. Abingdon: Routledge.
- Bodrug-Lungu, Valentina, and Mihaela Robila. 2014. "Family Policies in Moldova." In *Handbook of Family Policies Across the Globe*, 211–22. New York: Springer New York. https://doi.org/10.1007/978-1-4899-7488-3_13.
- Boydell, Victoria, Rintaro Mori, Sadequa Shahrook, and Stuart Gietel-Basten. 2023. "Low Fertility and Fertility Policies in the Asia-Pacific Region." *Global Health & Medicine* 5 (5): 271–77. <https://doi.org/10.35772/ghm.2023.01022>.
- Brauner-Otto, Sarah R. 2023. "Housing and Fertility: A Macro-Level, Multi-Country Investigation, 1993–2017." *Housing Studies* 38 (4): 569–96. <https://doi.org/10.1080/02673037.2021.1897579>.

- Brini, Elisa. 2020. "Childlessness and Low Fertility in Context: Evidence From a Multilevel Analysis on 20 European Countries." *Genus* 76 (1): 6. <https://doi.org/10.1186/s41118-020-00074-7>.
- Brinton, Mary C., Xiana Bueno, Livia Oláh, and Merete Hellum. 2018. "Postindustrial Fertility Ideals, Intentions, and Gender Inequality: A Comparative Qualitative Analysis." *Population and Development Review* 44 (2): 281–309. <https://doi.org/10.1111/padr.12168>.
- Buttner, Thomas, and Wolfgang Lutz. 1990. "Estimating Fertility Responses to Policy Measures in the German Democratic Republic." *Population and Development Review* 16 (3): 539. <https://doi.org/10.2307/1971671>.
- Castles, Francis G. 2003. "The World Turned Upside Down: Below Replacement Fertility, Changing Preferences and Family-Friendly Public Policy in 21 OECD Countries." *Journal of European Social Policy* 13 (3): 209–27. <https://doi.org/10.1177/0958928703013301>.
- Chen, Mengni, Stuart Gietel-Basten, and Paul S. F. Yip. 2020. "Targeting and Mistargeting of Family Policies in High-Income Pacific Asian Societies: A Review of Financial Incentives." *Population Research and Policy Review* 39 (3): 389–413. <https://doi.org/10.1007/s11113-020-09505-1>.
- Cherlin, Andrew J. 2004. "The Deinstitutionalization of American Marriage." *Journal of Marriage and the Family* 66 (4): 848–61. <https://doi.org/10.1111/j.1741-3737.2004.00061.x>.
- Chesnais, J.-C. 1985. "Les Conditions d'Efficacité d'une Politique Nataliste: Examen Théorique et Exemples Historiques." In *International Population Conference Proceedings*, 413–25. Aubervilliers, France: IUSSP.
- Chesnais, J.-C. 1987. "Quand Un Peuple En Devient Deux: Une Allemagne et l'Autre." *Population et Sociétés*, 209.
- Chuard, Caroline, and Patrick Chuard-Keller. 2021. "Baby Bonus in Switzerland: Effects on Fertility, Newborn Health, and Birth-Scheduling." *Health Economics* 30 (9): 2092–2123. <https://doi.org/10.1002/hec.4258>.
- Cook, Linda J., Elena R. Iarskaia-Smirnova, and Vladimir A. Kozlov. 2023. "Trying to Reverse Demographic Decline: Pro-Natalist and Family Policies in Russia, Poland and Hungary." *Social Policy Report* 22 (2): 355–75. <https://doi.org/10.1002/spol.1052>.
- Coontz, Stephanie. 2004. "The World Historical Transformation of Marriage." *Journal of Marriage and the Family* 66 (4): 974–79. <https://doi.org/10.1111/j.1741-3737.2004.00064.x>.
- Council of Europe. 1982. "Conclusions of the European Population Conference Strasbourg, 21–24 September 1982." <https://rm.coe.int/09000016809a000c>
- D'Addio, A., and M. Mira d'Ercole. 2005. "Trends and Determinants of Fertility Rates: The Role of Policies." *OECD Social, Employment and Migration Working Paper No. 27*, OECD Publishing. <https://doi.org/10.1787/880242325663>.
- Daly, Mary. 2013. *Welfare*. 1st ed. Key Concepts Series. Oxford, UK: Polity Press.
- Daly, Mary. 2020. "Conceptualizing and Analyzing Family Policy and How It Is Changing." In *The Palgrave Handbook of Family Policy*, 25–41. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-47226-1_3.
- David H. P. 1982. "Eastern Europe: pronatalist policies and private behavior." *Population Bulletin* 36 (6): 1–49.
- David, H. P., and N. H. Wright. 1971. "Abortion Legislation: The Romanian Experience." *Studies in Family Planning* 2 (10): 205–10. <https://doi.org/10.2307/1965402>.
- Demeny, Paul. 1986. "Pronatalist policies in low-fertility countries: Patterns, performance, and prospects." *Population and Development Review* 12: 335–358.
- Du, Haitao, Eddie Chi-Man Hui, and Lin Chen. 2024. "Perceptions of Housing Stability and Fertility Intentions Among Public Housing Renters in Guangzhou, China." *Cities* 144: 104643. <https://doi.org/10.1016/j.cities.2024.104643>.
- Ekert-Jaffé, Olivia, and Olivia Ekert-Jaffé. 1986. "Effets et Limites Des Aides Financières Aux Familles: Une Expérience et Un Modèle." *Population* 41 (2): 327–46. <https://doi.org/10.2307/1532612>.
- Ermisch, J. 1986. "Impacts of Policy Actions on the Family and Household." *Journal of Public Policy* 6 (3): 297–318. <https://doi.org/10.1017/S0143814x00004049>.
- Ermisch, J.F. 1989. "Purchased Child Care, Optimal Family Size and Mother's Employment Theory and Econometric Analysis." *Journal of Population Economics* 2: 79–102. <https://doi.org/10.1007/BF00522403>.

- Farré, Lúdia, and Libertad González. 2019. "Does Paternity Leave Reduce Fertility?" *Journal of Public Economics* 172 (April): 52–66. <https://doi.org/10.1016/j.jpubeco.2019.04.001>.
- Festy. 1981. "Mesure de l'Efficacité Des Politiques à But Nataliste Dans Les Pays Industrialisés." Paper presented at *International Population Conference*. IUSSP.
- Finkel, Alvin. 2018. *Compassion*. 1st ed. London: Macmillan Education.
- Fokkema, Tineke, and Ingrid Esveldt. 2008. "Motivation to Have Children in Europe." In *European Studies of Population*, 141–55. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-1-4020-8854-3_9.
- Frejka, Tomas. 1980. "Fertility Trends and Policies: Czechoslovakia in the 1970s." *Population and Development Review* 6 (1): 65–93. <https://doi.org/10.2307/1971691>.
- Frejka, Tomas, and Stuart Gietel-Basten. 2016. "Fertility and Family Policies in Central and Eastern Europe After 1990." *Comparative Population Studies* 41 (1): 9–34. <https://doi.org/10.12765/CPoS-2016-01>.
- Frejka, Tomas, Gavin W. Jones, and Jean-Paul Sardon. 2010. "East Asian Childbearing Patterns and Policy Developments." *Population and Development Review* 36 (3): 579–606. <https://doi.org/10.1111/j.1728-4457.2010.00350.x>.
- Frejka, Tomas, and Sergei Zakharov. 2013. "The Apparent Failure of Russia's Pronatalist Family Policies." *Population and Development Review* 39 (4): 635–47. <https://doi.org/10.1111/j.1728-4457.2013.00616.x>.
- Friedman, Barry L., and Martin Rein. 2000. "The Evolution of Family Policy in the United States After World War II." In *Cross Currents: Family Law and Policy in the US and England*, 101–21. New York: Oxford University Press.
- Fukai, Taiyo. 2017. "Childcare Availability and Fertility: Evidence From Municipalities in Japan." *Journal of the Japanese and International Economies* 43 (March): 1–18. <https://doi.org/10.1016/j.jjie.2017.01.002>.
- Galbraith, John Kenneth. 2018. *The Birth of the Welfare State*. Princeton: Princeton University Press.
- Gao, Charlotte. 2018. "To Encourage More Births, Chinese Specialists Propose Birth Fund, Childless Tax." *The Diplomat*. August 17, 2018. <https://thediplomat.com/2018/08/to-encourage-more-births-chinese-specialists-propose-birth-fund-childless-tax/>.
- Gauthier, Anne Helene. 1998. *The State and the Family*. Oxford, UK: Clarendon Press.
- Gauthier, Anne Hélène, and Jan Hatzius. 1997. "Family Benefits and Fertility: An Econometric Analysis." *Population Studies* 51 (3): 295–306. <https://doi.org/10.1080/0032472031000141697>.
- Gauthier, A. H., and P. W. de Jong. 2021. "Costly children: the motivations for parental investment in children in a low fertility context." *Genus* 77 (1): 6. <https://doi.org/10.1186/s41118-020-00111-5>.
- Gietel-Basten, Stuart. 2019. *The "Population Problem" in Pacific Asia*. Oxford: Oxford University Press.
- Gietel-Basten, Stuart. 2023. "Depopulation or Population Decline? Demographic Nightmares and Imaginaries." *Vienna Yearbook of Population Research* 21: 1–1. <https://doi.org/10.1553/populationyearbook2023>.
- Gietel-Basten, Stuart. 2024a. "Asian Family Planning Programs and the Construction of Fertility Preferences." In *Reproduction Policy in the Twenty-First Century: A Comparative Analysis*, edited by H. Zagel. Cheltenham, UK: Edward Elgar.
- Gietel-Basten, Stuart. 2024b. "Contemporary Demographic Challenges and Population Policies." *Bulletin of the World Health Organization* 102 (4): 227–227A. <https://doi.org/10.2471/BLT.23.000049>.
- Gietel-Basten, Stuart, Guillaume Marois, Fatemeh Torabi, and Kambiz Kabiri. 2024. "Reframing Policy Responses to Population Aging in Iran." *Genus* 80 (1): 8. <https://doi.org/10.1186/s41118-024-00111-4>.
- Girard, A. 1983. "Pronatalist Policies in Eastern Europe and France." *Draper Fund Report* 12 (August): 6–7.
- Girard, A., H. Bastide, and L. Roussel. 1976. "Présentation Des Résultats Détaillés d'une Enquete Auprès Du Public Sur l'accueil Réservé à Diverses Sortes de Mesures Susceptibles d'agir Sur La Fécondité."

- Glass, Christy, and Éva Fodor. 2022. "Risk, Reward, and Resistance: Navigating Work and Family under Hungary's New Pronatalism." *Social Politics* 29 (4): 1425–48. <https://doi.org/10.1093/sp/jxab019>.
- KED Global. 2023. "S.Korea's Public Spending on Maternity, Child Care Falls Short of OECD Average - KED Global." Seoul: KED Global. <https://www.kedglobal.com/economy/newsView/ked202304260005>.
- Gray, E., A. Reimondos, E. Lazzari, R. Breunig, R. Steinhauser, J. Zhang, N. Biddle, and M. Gray. 2022. "Impacts on Policies on Fertility Rates." Canberra: Australian National https://population.gov.au/sites/population.gov.au/files/2022-03/ANU_Impacts-of-Policies-on-Fertility-Rates-Full-report.pdf.
- Guetto, R., G. Alderotti, and D. Vignoli. 2023. "Can Policy Reforms Enhance Fertility? An Ex-Ante Evaluation through Factorial Survey Experiments." *Demography* 60 (2): 777–803. <https://doi.org/10.1215/00703370-10301810>.
- Harknett, Kristen, Francesco C. Billari, and Carla Medalia. 2014. "Do Family Support Environments Influence Fertility? Evidence from 20 European Countries." *European Journal of Population* 30 (1): 1–33. <https://doi.org/10.1007/s10680-014-9311-0>.
- Hart, Rannveig, Janna Bergsvik, Agnes Fauske, and Wookun Kim. 2023. "Causal Analysis of Policy Effects on Fertility." *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4608812>.
- Hart, Rannveig Kaldager, and Taryn A. Galloway. 2023. "Universal Transfers, Tax Breaks and Fertility: Evidence From a Regional Reform in Norway." *Population Research and Policy Review* 42 (3): 49. <https://doi.org/10.1007/s11113-023-09706-0>.
- Haupt, A. 1987. "How Romania Tries to Govern Fertility." *Population Today* 15 (2): 3–4. <https://doi.org/10.1007/s13524-017-0617-0>.
- Hilgeman, Christin, and Carter T. Butts. 2009. "Women's employment and fertility: A welfare regime paradox." *Social Science Research* 38 (1): 103–117.
- Hoem, B., and J. M. Hoem. 1996. "Sweden's Family Policies and Roller-Coaster Fertility." *Jinko Mondai Kenkyu [Journal of Population Problems]* 52 (3–4): 1–22.
- Hoem, Jan M. 2005. "Why Does Sweden Have Such High Fertility?" *Demographic Research* 13 (22): 559–72. <https://doi.org/10.4054/DemRes.2005.13.22>.
- Huss, Marie-Monique. 1990. "Pronatalism in the Inter-War Period in France." *Journal of Contemporary History* 25 (1): 39–68. <https://doi.org/10.1177/002200949002500103>.
- Kalwij, Adriaan. 2010. "The Impact of Family Policy Expenditure on Fertility in Western Europe." *Demography* 47 (2): 503–19. <https://doi.org/10.1353/dem.0.0100>.
- Kim, Eun Jung, and Susan L. Parish. 2022. "Family-Supportive Workplace Policies and Benefits and Fertility Intentions in South Korea." *Community, Work & Family* 25 (4): 464–91. <https://doi.org/10.1080/13668803.2021.1914835>.
- Kocourková, Jiřina. 2002. "Leave Arrangements and Childcare Services in Central Europe: Policies and Practices Before and After the Transition." *Community, Work & Family* 5 (3): 301–18. <https://doi.org/10.1080/1366880022000029080>.
- Ladrier-Fouladi, Marie. 2021. "The Islamic Republic of Iran's New Population Policy and Recent Changes in Fertility." *Iranian Studies: Bulletin of the Society for Iranian Cultural and Social Studies* 54 (5–6): 907–30. <https://doi.org/10.1080/00210862.2021.1938924>.
- Lee, D. 2018. "The Evolution of Family Policy in South Korea: From Confucian Familism to Neo-Familism." *Asian Social Work and Policy Review* 12 (1): 46–53. <https://doi.org/10.1111/aswp.12137>.
- Lee, Sang-Hyop, Naohiro Ogawa, and Rikiya Matsukura. 2009. "Is Childcare Leave Effective in Raising Fertility in Japan?" *Asian Population Studies* 5 (3): 349–69. <https://doi.org/10.1080/17441730903277694>.
- Lee, Y. 2024. "Pronatalism Gone Wrong? Cash Rewards, State-Sponsored Dating, and Exemption from Military Conscription." *Journal of Medical Ethics*. Blog posted on March 4, 2024. <https://blogs.bmj.com/medical-ethics/2024/03/04/pronatalism-gone-wrong-cash-rewards-state-sponsored-dating-and-exemption-from-military-conscription/>.
- Lee, Youngcho. 2022. "Is Leave for Fathers Pronatalist? A Mixed-Methods Study of the Impact of Fathers' Uptake of Parental Leave on Couples' Childbearing Intentions in South Korea."

- Population Research and Policy Review* 41 (4): 1471–1500. <https://doi.org/10.1007/s11113-021-09736-2>.
- Luci-Greulich, Angela, and Olivier Thévenon. 2013. “The Impact of Family Policies on Fertility Trends in Developed Countries.” *European Journal of Population = Revue Européenne de Démographie* 29 (4): 387–416. <https://doi.org/10.1007/s10680-013-9283-5>.
- Lui, Lake, and Adam Ka-Lok Cheung. 2021. “Family Policies, Social Norms and Marital Fertility Decisions: A Quasi-Experimental Study.” *International Journal of Social Welfare* 30 (4): 396–409. <https://doi.org/10.1111/ijsw.12456>.
- Lutz, Wolfgang, Tomás Sobotka, and Kryštof Zeman. 2024. “Evaluating Pronatalist Policies with TFR Brings Misleading Conclusions: Examples from Hungary.” *N-IUSSP*. March 4, 2024. <https://www.niussp.org/fertility-and-reproduction/evaluating-pronatalist-policies-with-tfr-brings-misleading-conclusions-examples-fromhungary/>.
- Macura, M. 1974. “Population Policies in Socialist Countries of Europe.” *Population Studies* 28 (3): 369–79. <https://doi.org/10.1080/00324728.1974.10405188>.
- Malak, Natalie, Md Mahbubur Rahman, and Terry A. Yip. 2019. “Baby Bonus, Anyone? Examining Heterogeneous Responses to a pro-Natalist Policy.” *Journal of Population Economics* 32 (4): 1205–46. <https://doi.org/10.1007/s00148-019-00727-3>.
- Milligan, Kevin. 2005. “Subsidizing the Stork: New Evidence on Tax Incentives and Fertility.” *The Review of Economics and Statistics* 87 (3): 539–55. <https://doi.org/10.1162/0034653054638262>.
- Mills, Melinda, Ronald R. Rindfuss, Peter McDonald, Egbert te Velde., and ESHRE Reproduction and Society Task Force. 2011. “Why Do People Postpone Parenthood? Reasons and Social Policy Incentives.” *Human Reproduction Update* 17 (6): 848–60. <https://doi.org/10.1093/humupd/dmr021>.
- Muller, Natalie. 2018. “Childless Germans Should Pay More Tax: Minister.” *Deutsche Welle*, November 9, 2018. <https://www.dw.com/en/german-minister-says-childless-people-should-pay-more-tax/a-46229483>.
- Neyer, Gerda, and Gunnar Andersson. 2008. “Consequences of Family Policies on Childbearing Behavior: Effects or Artifacts?” *Population and Development Review* 34 (4): 699–724. <https://doi.org/10.1111/j.1728-4457.2008.00251.x>.
- OECD. 2022. Public Spending on Family Benefits. OECD Family Database. Paris: OECD.
- Olivetti, Claudia, and Barbara Petrongolo. 2017. “The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries.” *The Journal of Economic Perspectives* 31 (1): 205–30. <https://doi.org/10.1257/jep.2016.120>.
- Park, Jiyoung, Chongwon Park, Eun Kyung Kim, Jinah Lee, Yoojeong Kang, and Young Jun Choi. 2020. “Why Do They Depend on the Private Sector of Childcare in South Korea?: Perspectives of the Selected Working Mothers.” *Children and Youth Services Review* 116 (105106): 105106. <https://doi.org/10.1016/j.childyouth.2020.105106>.
- Plach, Samuel, Arnstein Aassve, Nicolò Cavalli, Letizia Mencarini, and Seth Sanders. 2023. “COVID-19 Policy Interventions and Fertility Dynamics in the Context of Pre-Pandemic Welfare Support.” *Population and Development Review* April. <https://doi.org/10.1111/padr.12557>.
- Pressat, Roland. 1979. “Mesures Natalistes et Relèvement de La Fécondité En Europe de l’Est.” *Population* 34 (3): 533. <https://doi.org/10.2307/1531835>.
- Rao, Mohan, and Sarah Sexton. 2014. *Markets and Malthus*. New Delhi: Sage Publications.
- Raymo, James M., Hyunjoon Park, Yu Xie, and Wei-Jun Jean Yeung. 2015. “Marriage and Family in East Asia: Continuity and Change.” *Annual Review of Sociology* 41 (August): 471–92. <https://doi.org/10.1146/annurev-soc-073014-112328>.
- Rindfuss, Ronald, and Minja Kim Choe. 2016. *Low Fertility, Institutions, and Their Policies Variations Across Industrialized Countries*. Dordrecht: Springer.
- Rivkin-Fish, M. 2010. “Pronatalism, Gender Politics, and the Renewal of Family Support in Russia: Toward a Feminist Anthropology of ‘Maternity Capital’.” *Slavic Review* 69 (3): 701–24. <http://www.jstor.org/stable/25746278>.
- Rose, Steve. 2022. “A Deadly Ideology: How the ‘Great Replacement Theory’ Went Mainstream.” *The Guardian*, June 8, 2022. <https://amp.theguardian.com/world/2022/jun/08/a-deadly-ideology-how-the-great-replacement-theory-went-mainstream>.

- Ross, Loretta, and Lynn Roberts, eds. 2017. *Radical Reproductive Justice*. New York: Feminist Press at The City University of New York.
- Rothman, David J., and Stanton Wheeler, eds. 1981. *Social History and Social Policy*. San Diego: Academic Press.
- Salles, Anne, Clémentine Rossier, and Sara Brachet. 2010. "Understanding the Long Term Effects of Family Policies on Fertility: The Diffusion of Different Family Models in France and Germany." *Demographic Research* 22 (June): 1057–96. <https://doi.org/10.4054/DemRes.2010.22.36>.
- Shevchenko, Vitaly. 2023. "Russian Authorities Crack Down on Abortion Access Amid Demographic Crisis." *BBC*, November 22, 2023. <https://www.bbc.co.uk/news/world-europe-67495969>.
- Sinclair, Sarah, Jonathan Boymal, and Ashton de Silva. 2012. "A Re-Appraisal of the Fertility Response to the Australian Baby Bonus." *The Economic Record* 88 (June): 78–87. <https://doi.org/10.1111/j.1475-4932.2012.00860.x>.
- Sobotka, Tomáš, Anna Matysiak, and Zuzanna Brzozowska. 2019. "Policy Responses to Low Fertility: How Effective Are They?" UNFPA Working Papers. New York: UNFPA. <https://www.unfpa.org/publications/policy-responses-low-fertility-how-effective-are-they>.
- Sobotka, Tomáš. 2004. "Is Lowest-Low Fertility in Europe Explained by the Postponement of Childbearing?" *Population and Development Review* 30 (2): 195–220. <https://doi.org/10.1111/j.1728-4457.2004.00009.x>.
- Sobotka, Tomáš, and Éva Beaujouan. 2018. "Late Motherhood in Low-Fertility Countries: Reproductive Intentions, Trends and Consequences." In *Preventing Age Related Fertility Loss*, edited by Dominic Stoop, 11–29. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-99637-0_2.
- Sobotka, Tomáš, and Wolfgang Lutz. 2009. "Misleading Policy Messages from the Period TFR: Should We Stop Using It?" *Comparative Population Studies* 35 (3): 449–60.
- Song, Yoo-Jean, Kyung-Sup Chang, and Gabriel Sylvian. 2013. "Why Are Developmental Citizens Reluctant to Procreate? Analytical Insights From Shirley Sun's *Population Policy and Reproduction in Singapore* and Takeda Hiroko's *The Political Economy of Reproduction in Japan*." *Inter-Asia Cultural Studies* 14 (3): 481–92. <https://doi.org/10.1080/14649373.2013.834084>.
- Spéder, Zsolt. 2016. "Fertility Decline and the Persistence of Low Fertility in a Changing Policy Environment—A Hungarian Case Study." In *Low Fertility, Institutions, and Their Policies: Variations Across Industrialized Countries*, edited by Ronald R. Rindfuss and Minja Kim Choe, 165–94. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-31324-1_8.
- Spéder, Zsolt, Livia Murinkó, and Livia Sz Oláh. 2020. "Cash Support vs. Tax Incentives: The Differential Impact of Policy Interventions on Third Births in Contemporary Hungary." *Population Studies* 74 (1): 39–54. <https://doi.org/10.1080/00324728.2019.1694334>.
- Straughan, Patricia, Angelique Chan, and Gavin W. Jones, eds. 2008. *Ultra-Low Fertility in Pacific Asia: Trends, Causes and Policy Issues*. London: Routledge.
- Sun, Shirley Hsiao-Li. 2012. *Population Policy and Reproduction in Singapore: Making Future Citizens*. Abingdon, UK: Routledge.
- Teitelbaum, Michael S. 1972. "Fertility Effects of the Abolition of Legal Abortion in Romania." *Population Studies* 26 (3): 405–17. <https://doi.org/10.2307/2173817>.
- Thane, Patricia. 2024. "Poverty and the Rise and Fall of the Welfare State in Britain, 1900 to the Present." *Society* 61: 263–74. <https://doi.org/10.1007/s12115-024-00976-8>.
- The Economist. 2023. *Fertility Policy and Practice: A Toolkit for the Asia-Pacific Region*. London: Economist.
- Thévenon, Olivier. 2011. "Family Policies in OECD Countries: A Comparative Analysis." *Population and Development Review* 37 (1): 57–87. <https://doi.org/10.1111/j.1728-4457.2011.00386.x>.
- Thomas, Jac, Francisco Rowe, Paul Williamson, and Eric S. Lin. 2022. "The Effect of Leave Policies on Increasing Fertility: A Systematic Review." *Humanities & Social Sciences Communications* 9 (1): 262. <https://doi.org/10.1057/s41599-022-01270-w>.
- Tocchioni, Valentina, Ann Berrington, Daniele Vignoli, and Agnese Vitali. 2021. "The Changing Association Between Homeownership and the Transition to Parenthood." *Demography* 58 (5): 1843–65. <https://doi.org/10.1215/00703370-8944142>.

- UN. 2022. "A Moldovan Case Study: Empowering Parents and Caregivers through Gender-Responsive Family Policies." Moldova. 2022. <https://moldova.un.org/en/250916-moldovan-case-study-empowering-parents-and-caregivers-through-gender-responsive-family>.
- UNDESA. 2021. "World Population Policies 2021: Policies Related to Fertility." UN DESA/POP/2021/TR/NO. 1. New York: UNDESA.
- UNFPA. 2021a. "Moldova: A New Demographic Approach." Istanbul: UNFPA EECA. August 19, 2021. <https://eeeca.unfpa.org/en/news/moldova-new-demographic-approach>.
- UNFPA. 2021b. "Generations and Gender: Results of the Largest Demographic Survey in the Republic of Moldova." Chisinau: UNFPA Moldova. November 23, 2021. <https://moldova.unfpa.org/en/events/generations-and-gender-results-largest-demographic-survey-republic-moldova>.
- UNFPA. 2022. "Expanding Choices Gender-Responsive Family Policies for the Private Sector in Western Balkans and Moldova." https://eeeca.unfpa.org/sites/default/files/pub-pdf/public_policies_best_practices_-_sweden_estonia_and_slovenia_.pdf.
- UNFPA. 2023a. "UNFPA and the Chamber of Commerce and Industry Will Cooperate over the Next 5 Years to Expand Family-Friendly Policies in Moldovan Companies." Chisinau: UNFPA Moldova. June 30, 2023. <https://moldova.unfpa.org/en/news/unfpa-and-chamber-commerce-and-industry-will-cooperate-over-next-5-years-expand-family-friendly>.
- UNFPA. 2023b. "Family-Friendly Workplace Policies Help Parents in Moldova Reconcile Work and Family Duties." Istanbul: UNFPA EECA. October 2, 2023. <https://eeeca.unfpa.org/en/news/family-friendly-workplace-policies-help-parents-moldova-reconcile-work-and-family-duties>.
- UNPD. 2022. "World Population Prospects: The 2022 Revision." World Population Prospects: The 2022 Revision. <https://population.un.org/wpp/>.
- Van de Kaa, D. J. 2001. "Postmodern Fertility Preferences: From Changing Value Orientation to New Behavior." *Population and Development Review* 27.
- van Wijk, D. 2024. "House Prices and Fertility: Can the Dutch Housing Crisis Explain the Post-2010 Fertility Decline?" *Population Space* e2787. <https://doi.org/10.1007/s00148-023-00955-5>.
- Vining, Daniel R. 1984. "Family Salaries and the East German Birth Rate: A Comment." *Population and Development Review* 10 (4): 693.
- Walker, Shaun. 2020. "'Baby Machines': Eastern Europe's Answer to Depopulation." *The Guardian*, March 4, 2020. <https://amp.theguardian.com/world/2020/mar/04/baby-bonuses-fit-the-nationalist-agenda-but-do-they-work>.
- Wang, Senhu, Yi Wang, and Yang Shen. 2023. "The Impact of Supportive Housing Policy Scenarios on Marriage and Fertility Intentions: A Vignette Survey Experimental Study in Shanghai, China." *Population Research and Policy Review* 42 (6): 96. <https://doi.org/10.1007/s11113-023-09790-3>.
- Wesolowski, Katharina, and Tommy Ferrarini. 2018. "Family Policies and Fertility: Examining the Link between Family Policy Institutions and Fertility Rates in 33 Countries 1995–2011." *The International Journal of Sociology and Social Policy* 38 (11/12): 1057–70. <https://doi.org/10.1108/IJSSP-03-2018-0056>.
- Whittington, Leslie A. 1992. "Taxes and the Family: The Impact of the Tax Exemption for Dependents on Marital Fertility." *Demography* 29(2): 215–26. <https://doi.org/10.2307/2061728>.
- Yoo, Sam Hyun, and Tomáš Sobotka. 2018. "Ultra-Low Fertility in South Korea: The Role of the Tempo Effect." *Demographic Research* 38 (February): 549–76. <https://doi.org/10.4054/DemRes.2018.38.18>.
- Zhang, Ting-Ting, Xiu-Yun Cai, Xiao-Hui Shi, Wei Zhu, and Shao-Nan Shan. 2023. "The Effect of Family Fertility Support Policies on Fertility, Their Contribution, and Policy Pathways to Fertility Improvement in OECD Countries." *International Journal of Environmental Research and Public Health* 20 (6). <https://doi.org/10.3390/ijerph20064790>.