

# **FROGEE POLICY BRIEF 1**

## **Insights from Poland**

December, 2019

Economics of Childbearing and Pronatalist Policies

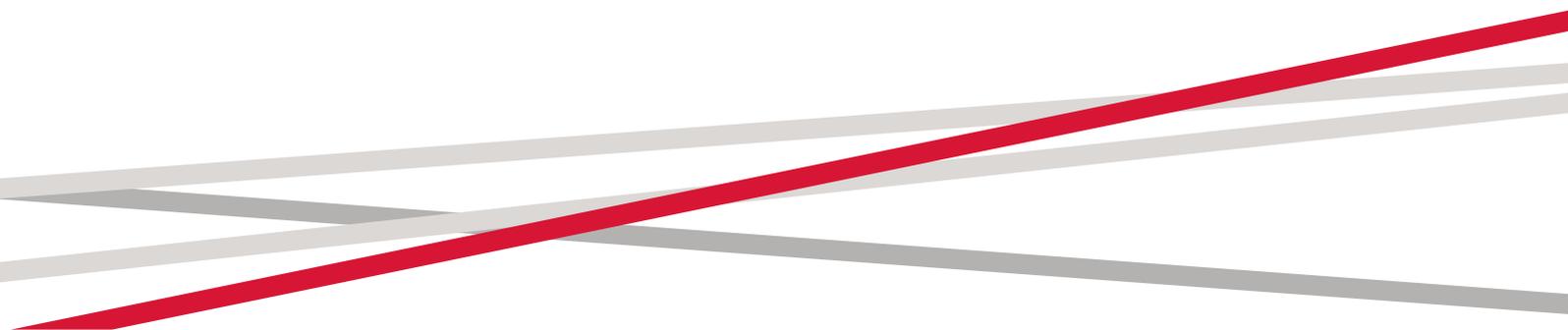
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Family policies in Poland - addressing one of the lowest fertility rates in Europe

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# Abstract

## Economics of Childbearing and Pronatalist Policies

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The brief opens a series of FROGEE Policy Briefs aimed at providing overviews and the popularization of economic research related to gender equality issues. The current brief introduces the general rationale behind fertility decisions and policy interventions. It summarizes the economic literature on the effects of different types of policy interventions on enhancing childbearing. A well-documented phenomenon in developed countries is that fertility declines with income levels and as countries become richer, fertility rates fall over time. This negative fertility-income relationship is mainly due to two distinct trade-offs faced by individuals. The quality-quantity trade-off manifests itself in the tendency of well-off individuals to choose to invest more in a child's quality and therefore forgo quantity. Another trade-off arises from the fact that raising children takes time, which confronts parenthood with people's career opportunities. The brief continues by summarizing economic research on the effectiveness of various pronatalist policies. It appears that the most effective ones are exactly those which aim at the elimination of the discussed trade-offs. In particular, policies which are able to free the time of potential parents or combine parenthood with career, appear to be most promising.

## Family policies in Poland - addressing one of the lowest fertility rates in Europe

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In the last two decades family has been at the center of social policy in Poland. The policy approach prior to 2016 focused on extending parental leave policies, improvements in formal childcare and adjusting employment incentives for parents and addressing gender inequality on the labor market. Family policy has taken a turn under the current government by focusing on a generous new benefit for families with children. Despite numerous generous policies, the fertility rate in Poland is still one of the lowest in Europe. This calls for an appraisal of the entire family-focused package and designing a comprehensive approach that includes policies to address gender imbalances on the labor market, as well as a more equal division of family responsibilities between men and women.



# Economics of Childbearing and Pronatalist Policies

## Introduction to FROGEE policy briefs

FROGEE Policy Briefs is a special series aimed at providing overviews and the popularization of economic research related to gender equality issues. Debates around policies related to gender equality are often highly politicized. We believe that using arguments derived from the most up to date research-based knowledge would help us build a more fruitful discussion of policy proposals and in the end achieve better outcomes. The aim of the briefs is to improve the understanding of research-based arguments and their implications, by covering the key theories and the most important findings in areas of special interest to the current debate. The briefs start with short general overviews of a given theme, which are followed by a presentation of country-specific contexts, specific policy challenges, implemented reforms and a discussion of other policy options.

## Introduction to Economics of Childbearing

We start our series with childbearing, a topic that is tightly related to gender issues and an area with a high degree of public policy intervention. From an economic point of view, there are several potential reasons why public policy interventions concerning fertility may be beneficial for society and why – when left without support – decisions of parents might be suboptimal from the social point of view. In order to better understand these, one must first consider the intuition behind the theoretical economic approach to family relations in general and to fertility decisions in particular, much of which draws on the seminal contributions of Gary Becker (Becker & Lewis 1973; Becker & Tomes 1976).

In Economics, goods are any real objects that satisfy people's needs and typically come at some cost. Becker's approach to the family extends this reasoning to human relations, and presents decisions on partnership, divorce and family formation in the context of 'economic' trade-offs between costs and benefits. Since having children is associated with considerable costs (both in terms of money and time) as well as gains in a number of dimensions, the decision to have a child can be formulated as an economic decision. However, viewed from this perspective, the choice to have children turns out to be special in several dimensions.

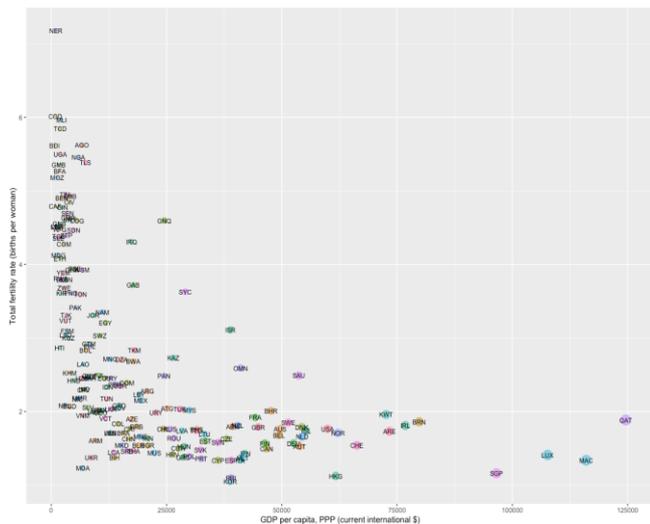
## Negative Income-Fertility Relationship and Low Fertility

One of the most robust observations regarding fertility is that – in contrast to many other types of expenditures – there is a strong negative association between earnings and number of children (Figure 1). This negative income-fertility relationship has been observed in every developed nation, both when examined over time in relation to income growth and when looked at in a cross-country comparisons (see Jones et al. 2011). Figure 2 shows this relationship in a broad macro perspective: historically, as the world's per capita GDP has grown fertility rates have tended to decline.

There are several potential drivers behind the above relationship. Two of the most established explanations are opportunity cost and quality-quantity trade-off, and they relate to several special features of the costs and benefits of having a child and the very nature of the family.

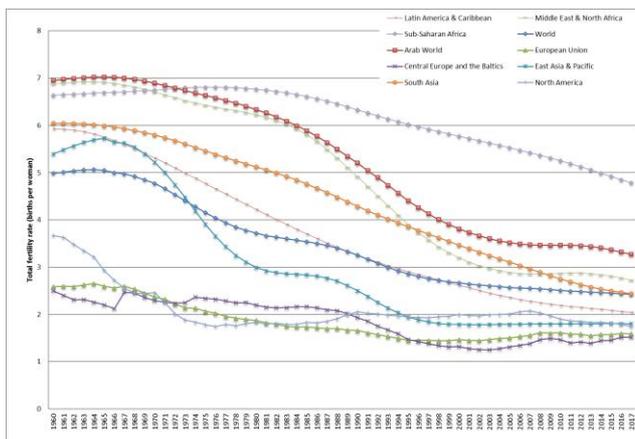
*Figure 1. The relationship between total fertility rate and GDP per capita*





Source: World Bank.

Figure 2. Trends in total fertility rate by region, 1950-2050.



Source: World Bank.

### Money and Time Costs

A rather unique property of family formation is that costs related to childbearing are expressed both in terms of money and time. Because of the latter, high-earning parents face higher opportunity costs of the time necessary to raise a child. This might not only contribute to the aforementioned negative fertility-income relationship, but has also been shown as one of the main reasons behind low fertility in developed countries. One of the most common policies used to increase fertility is money transfers which come in the form of family allowances, baby bonuses or

tax credits. According to the UN Population Facts, at least 96% of developed nations have this type of policy. OECD countries, on average, spend around 4% of their GDP on this kind of assistance and the average effect of such interventions has been estimated to increase the total fertility rate (TFR) by 0.08 – 0.35 (Luci-Greulich & Thevenon 2011). The main reason why one needs to spend a lot of money to gain a relatively small increase in TFR is that low fertility is a «first world» problem, i.e. most of the targeted individuals are not bounded by the monetary costs of a child.

Policies that take the time-cost of children into account promise a higher potential effect in developed countries. For example, Raute (2019) uses German data to find an 18% increase in fertility among women with earnings above the median after the introduction of earnings-dependent paid maternity leave policy.

### Quality — Quantity Trade-off

In economics, the idea that education, health and other factors increase human productivity and potential is conceptualized in a notion of “quality of human capital”. As the return on investment in human capital rises, parents may choose to have fewer children and focus their time and financial ‘investments’ in their quality. Some of the most convincing evidence on the strength of the quality-quantity trade-off was revealed using the data on twin births and on family sizes by Hanushek (1992) and Li et al. (2008).

### Cultural Norms

Relatively recent research on the determinants of fertility has documented the substantial and persistent influence of cultural norms on fertility. This is reflected in the variation of fertility levels within countries among people of similar financial status, but coming from different cultural



backgrounds. For example fertility levels among immigrants in the developed world tend to resemble those in their countries of origin (see, e.g. Beach & Hanlon 2019, Families and Societies 2015), and while cultural norms change and can also be affected by the policy environment (Bassi & Rasul 2017), there tends to be a substantial degree of time-dependence in how norms evolve and adjust.

### Internal Costs and External Benefits

The last special feature of childbearing from an economic perspective is that although most of the costs in terms of time and money related to children are borne by parents, a large portion of future economic gains of an additional person is external to the family and benefits the wider society. When an adult enters the labor force, begins to produce goods and services for other people and pays taxes to the government, his or her parents would not be able to capture any significant portion of these benefits (Schoonbroodt & Tertilt 2014). From an economic perspective this suggests that the social value of children is higher than the private (parental) one. This situation is one of the main arguments for public policy intervention with regard to fertility. Whenever social benefits outweigh private benefits, subsidizing private choices may result in overall welfare improvements.

### Fertility Enhancing Policies: What Works and What Doesn't?

From the perspective of encouraging fertility, there is a wide range of options available to policymakers. On the one hand paid parental leave and subsidized childcare can mitigate the conflict between career and parenthood, while the introduction of paternal leave attempts at balancing out the time out of work between the two parents and at changing their allocation of time to childcare. On the other hand, child-related

money transfers are aimed at reducing financial constraints on families who limit or postpone fertility because of their financial status. In practice it is often hard to measure the effects of particular fertility-enhancing policies due to the lack of data and an absence of specific policy implementation designs, which would allow policy evaluation. However, there is evidence that fertility-enhancing policies can be successful in stimulating fertility. Luci-Greulich & Thevenon (2011) find that the most effective cash transfers are those targeted at the youngest children (aged 0-3), while those that are paid out around the birth appear to be less efficient. A number of studies prove the positive impact of transfers to families with children on fertility rates (d'Addio & d'Ercole 2005, Ermisch 1998, Milligan 2005, Whittington 1992, Whittington et al. 1990). Developments over the recent decades in Sweden are often used as an example of a successful family focused package, although given the multitude of different schemes running at the same time it is difficult to disentangle their specific implications (see Björklund 2006 for the evidence from Swedish policy reforms and Luci-Greulich & Thévenon 2013 for a broader overview of the existing research on fertility-enhancing policies).

Kalwij (2010) and Raute (2019) focus their attention on policies which alleviate career – parenthood trade-offs. Raute (2019) finds especially large effects of the adequate compensation of forgone earnings of high earning women (the author also contributes a comprehensive literature review of studies on the effects of alleviating the opportunity cost of children). Doepke and Kindermann (2016) complement these findings by providing evidence that fertility is especially responsive to policies that specifically reduce the childcare burden for women.



The evidence on the effects on fertility of another popular type of family policy, maternity leave, is less clear. Since most of the developed nations nowadays do have paid maternity leave, it is hard to measure the effect of its availability on the decision to have children. However, different durations of maternity leave across countries and changes in those durations allow economists to draw some conclusions. Although some researchers do find a positive effect of maternity leave duration (Adserà 2004), others fail to support this conclusion using different sources of data and experimental designs (d’Addio and d’Ercole 2005, Olivetti and Petrongolo 2017).

## Concluding Remarks

A better understanding of the economic approach towards family formation and fertility can be helpful in thinking of a re-design of family-focused policy packages. It is beyond the scope of this brief to provide a full overview of the extensive body of economics research on this topic, but the evidence tends to suggest that a set of successful policy tools to encourage fertility is available. The basic concepts presented here can hopefully serve as background to a systematic and evidence-based discussion on public policy in this field. It should be noted that since parenthood is one of the most important choices in the life of many people, it is inherently related to many other individual choices and outcomes. Therefore, any policy aimed at increasing fertility will inevitably affect other important dimensions such as income inequality, taxation, gender equality, health and child development, among others. This means that any public intervention should always carefully consider its potential positive and negative side effects.

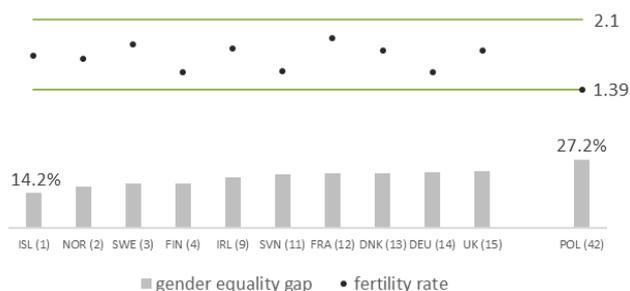
## Family policies in Poland: addressing one of the lowest fertility rates in Europe

### The relationship between fertility and gender equality

Thirty years after the collapse of the communist regime in 1989 Poland is now classified as a “high income” country in World Bank terminology, and its challenges with regard to low fertility could be perceived from the high-income/low-fertility perspective. However, Poland’s fertility drop started well before the country reached that status, and thus the reasons behind it are likely to be much more complex. The country’s fertility rate, which in 1960 stood at the post WWII record high of 2.98, fell to 2.08 at the verge of the transition in 1989, and declined throughout the 1990s hitting the lowest level of 1.25 in 2003. By 2018 it picked up slightly, to the level of 1.39, though still way below the replacement rate of 2.1 children per woman. Several developments contributed to these trends: the rising age of women at their first birth, the falling number of women with more than one child, and an increasing share of childless people. Combined with substantial increases in longevity, these trends imply that Poland is one of the fastest ageing populations in the EU, with an expected old-age dependency ratio of 60.8 in 2050 (United Nations 2017). A number of policies have been implemented to address the balance of work and family life in recent decades and over the last fifteen years subsequent governments have increased the generosity of financial support for families with children. Although Poland's fertility rate increased recently in parallel with these measures, it continues to be among the lowest in Europe.



One of the possible explanations for the lagging fertility rate in Poland might relate to an overall gender imbalance when compared to developed countries which have successfully overturned the negative trends in fertility. Figure 1 below demonstrates that fertility rates in countries such as Iceland, Norway, Sweden and Finland, which are the world leaders in the gender equality ranking, are higher compared to many other European countries, including Poland. This outcome has been linked to the implementation of a broad spectrum of family policies targeted more generally at gender equality, including a strong focus on education in topics covering reproductive health and the consequences of postponing parenthood, in addition to expanding the coverage of formal pre-school childcare (Fahlén 2016; Balbo et al. 2013). In those countries, high fertility rates go hand in hand with some of the highest levels of female labor force participation and low gender pay gaps.



**Figure 1. Gender Equality Gap and Fertility Rate**

Source: World Economic Forum (2018) and World Bank (2017). Data for top 10 higher ranked European countries and Poland (equality rank in parentheses, measured for total of 149 countries).

## Recent shifts in the approach to family policy

Over the past two decades female employment rates in Poland, in particular those among mothers, have been low in comparison with many

developed countries and, while the gender pay gap has recently been reduced, women continue to earn about 7.2% less than men (European Commission 2018). These inequalities prevail despite a long history of better educational outcomes of women compared to men. A number of policy initiatives taken by the previous governments have been aimed at redressing gender inequality. This included the rapid development of institutional childcare, lowering the school starting age from 7 to 6), as well as improvements in the design of the child tax credit and of family benefits to improve labor market incentives for low income parents. A substantial extension of the maternity leave in 2009 (in stages, from 18 weeks up to 26 weeks in 2013), together with the introduction of the 26-week parental leave in 2013, were aimed at facilitating the reconciliation of a professional career and motherhood. Reforms also encouraged fathers to take greater responsibility for childcare by introducing a one-week paternal leave in 2010, which was later extended to two weeks. To further enhance fathers' childcare commitment new regulations enabled parents to split 12 out of the 26 weeks of maternity leave and the entire 26 weeks of the parental leave.

However, recent surveys continue to show that Poles exhibit conventional views towards family, the role of women in society, and their obligations as mothers and careers (Billingsley and Ferrarini 2014). This traditional approach to many social issues may have influenced the results of the elections in 2015. The candidate of the conservative Law and Justice party first won the presidential race in May, and his party then secured the absolute majority in the parliamentary elections in October. Since 2016, a number of policy moves have been implemented in strong contrast to those of previous governments, some



of them directly undermining previous solutions. The government raised the school starting age back to 7 years, and in October 2017 Poland returned to a gender-differentiated retirement age of 60 for women and 65 for men, which since January 2013 had been adjusting towards the universal level of 67.

In July 2019 the government expanded the most generous program of broad financial support for families with children that was initiated in 2016 – the Family 500+ Program. A general universal support of 500 PLN (115 EUR) per month is offered for all children aged below 18 (previously for each second and subsequent child, with a family income threshold determining support for the first child in low income families). After the extension, the total annual cost of the program amounts to about 4% of the GDP, giving Poland the first position in the ranking of the European countries most generously supporting families, alongside Denmark (3,5% GDP), Luxembourg (3,4% GDP) and Germany (3,2% GDP).

The primary goal of the program was to increase fertility, although success in this respect cannot yet be confirmed. The number of births grew initially after its introduction, but then dropped in 2018. While the program has been criticized by experts for its ineffective targeting, its introduction has significantly reduced child poverty and improved the financial conditions of thousands of families (Magda et al. 2019). It must be noted though, that its setup has prioritized simplicity over careful objective-related design, in particular with regard to its labor market effects. The program contains no direct employment incentives, and the initial means-tested part for the first child had strong disincentive effects on the labor market. The recently implemented universal structure does away with the latter, though at a substantial cost in terms of public resources, which could have

been used, perhaps more effectively, to support childcare and reward labor market activity.

The generous direct support to families with children, raising of the school starting age, and gender differentiation of the retirement age, all point towards a greater familialization of care and care responsibilities. In the medium and long run this approach may limit the increases in female labor market participation and contribute to further widening of the gender employment and wage gaps in Poland.

## Conclusion

While the family has been at the center of social policy in Poland and substantial resources have been channeled to assist families with children in the last decade, the fertility rate has not shown any major upward trend. A small increase in the number of births seems somewhat disappointing given that Poland now has one of the most generous parental leave arrangements and spends the highest proportion of GDP on financial support for families with children in the EU. An optimistic view is that the policies will eventually bear their fruits. On the other hand, it may suggest that policies implemented in isolation – rather than forming a comprehensive package – may not bring about the desired fertility outcomes despite their cost and generosity to families. A broader approach to gender equality and career development as well as to equal sharing of family responsibilities between parents may be a necessary condition for the success of other policies assisting families with the cost of raising kids. Examples from Nordic countries suggest a positive relationship between gender equality and fecundity. Building on their experience, and using the resources already committed in Poland to family support, it seems reasonable to design a policy package that could successfully raise the



fertility rate in Poland to the levels observed in many other developed countries.

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