

FROGEE POLICY BRIEF 1

Insights from Latvia

December 2019

Economics of Childbearing and Pronatalist Policies

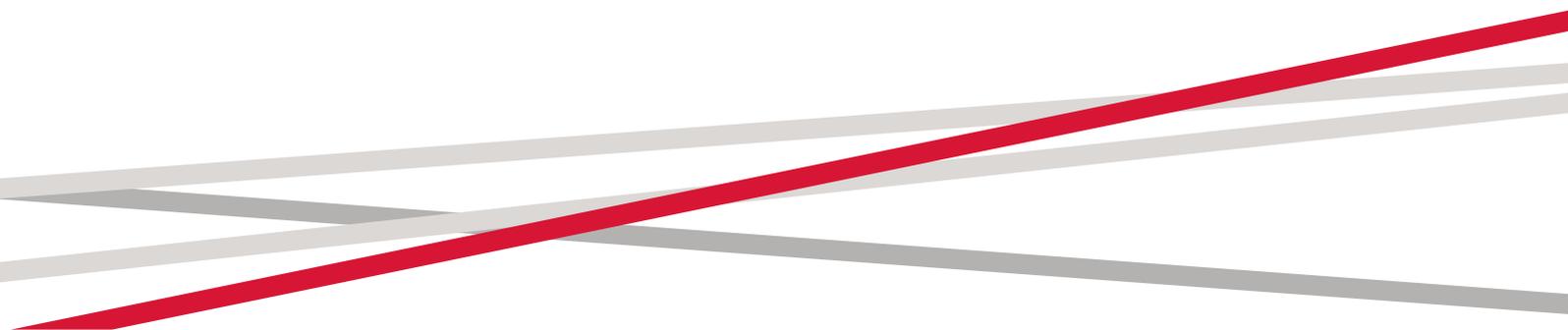
Lev Lvovskiy, BEROC

Fertility enhancing policies in Latvia

Nicolas Gavoille, SSE Riga

Anna Pluta, BICEPS

Anna Zasova, BICEPS



Abstract

Economics of Childbearing and Pronatalist Policies

Page 3 – 6

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.

Fertility enhancing policies in Latvia

Page 6 – 8

Latvia is a country with a relatively low fertility rate. In the late nineties and the first half of the 2000s, a persistently negative net migration ratio and a declining population made the fertility rate a particularly sensitive political issue and Latvia introduced a range of fertility enhancing programs, most of which are available to parents with children nowadays. In this brief, we argue that while these programs are likely to have played an important role in encouraging fertility, the exact impact is hard to identify. The reason is that the government spending on family and children-related measures in recent years had a strong pro-cyclical pattern, which makes it practically impossible to disentangle the effect of the policies from the effect of the economic cycle.



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

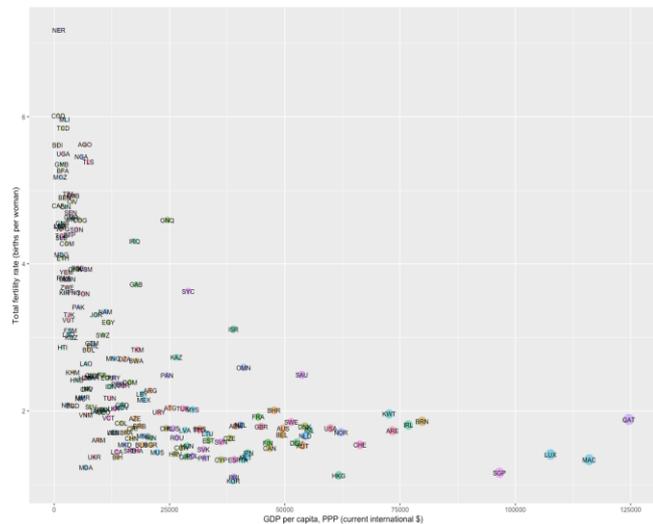
One of the most robust observations regarding fertility is that – in contrast to many other types of expenditures - there is a strong negative association between earnings and number of children (Figure 1). This negative income-fertility relationship has been observed in every developed nation, both 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



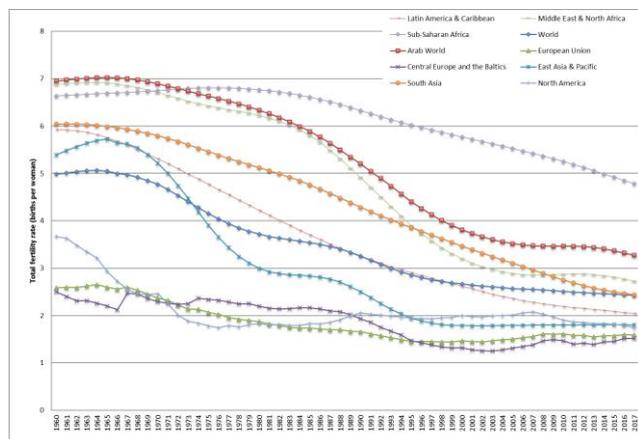
special features of the costs and benefits of having a child and the very nature of the family.

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.

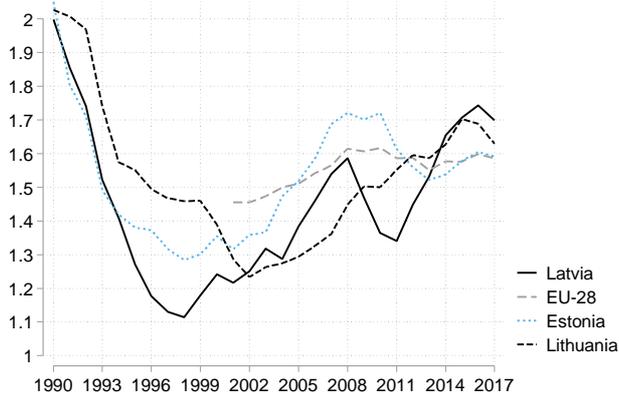
Fertility enhancing policies in Latvia

Fertility rate in Latvia

Latvia is a country with a traditionally relatively low fertility rate. In Soviet years, Latvia had one of the lowest fertility rates across the Soviet Republics. The fertility rate rose considerably above 2 (a rate sufficient to maintain the population size) only in the second half of the 80s, after the introduction of a partly paid 1.5 years long parental leave (Eglīte, 2011). After a sharp fall in the early phase of transition, the fertility rate started to gradually recover in the late 1990s, and then closely followed economic growth (see Figure 1). As we shall see, the increase in fertility also coincides with the introduction of a number of measures aiming at increasing incentives to have (more) children.



Figure 1. Fertility rate in the Baltic states in 1990-2017 and in EU-28 in 2001-2017



Source: Eurostat, Central Statistical Bureau of Latvia.

Note: The fertility rate is the ratio of the number of live births to mothers of age x to the average female population of age x . Fertility rate can be interpreted as the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year, and surviving.

In 2000-2017, the fertility rate in Latvia was remarkably more volatile than in other Baltic states and on average in the EU. During the recession, Latvia experienced by far the sharpest decrease in the fertility rate, even though both Estonia and Lithuania survived a surge in unemployment and a fall in GDP of comparable scale. In Estonia, the fertility rate decreased less and with a time lag, but in Lithuania the fertility rate kept growing throughout the cycle.

Child-related benefits

Because of a negative net migration ratio year after year and a declining population, the fertility rate became a particularly sensitive political issue in the 90s. Most of the programs that are available to parents with children nowadays were hence introduced in late nineties or the first half of the 2000s. These programs can be classified in two groups. First, there are several contributory (i.e.,

dependent on the recipients' social contributions) benefits that are paid to parents of newly born children to replace parents' earnings while they are on parental leave. These benefits represent the main source of the government material support for socially insured parents in the first year of a child's life. Second, there are universal benefits that are paid to parents irrespective of their social contribution history. The most generous of those is discontinued when the child is one and a half years old, but there is a benefit which is paid until the child turns fifteen years old (twenty if the child remains in education and is not married).

Policy effects

There are several reasons why the fertility effects of the policies implemented in Latvia are difficult to identify. First, the rules of the benefits were changed very frequently and there were other policy changes coming into force every year. Second, government spending on family and children-related measures in recent years had a strong pro-cyclical pattern, which makes it practically impossible to disentangle the effect of the policies from the effect of the economic cycle.

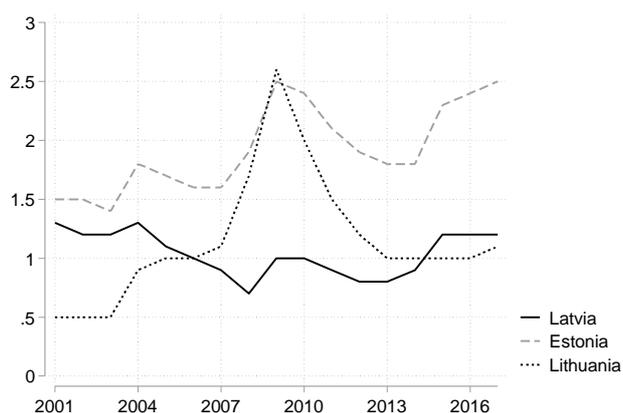
Figure 2 illustrates this point. It shows the ratio of the general government expenditure on family and children-related measures to GDP in the Baltic states. Latvia is clearly different from the other two Baltic countries, where the ratios sharply increased during the crisis of 2008-2009.

When the economy was booming (2005-2007), the benefit rules in Latvia were regularly changed to expand parental support. To cope with growing fiscal pressures during the recession, the Latvian government implemented a number of measures that made parental support less generous. In



addition, many parents who lost their jobs during the recession also lost eligibility for the contributory benefits (unemployed persons are not eligible for these benefits), but those who faced wage cuts also faced corresponding reductions in the size of the contributory benefits. Hence, the more generous parental policies that were introduced in the 90s and 2000s perhaps were important in encouraging fertility, but this effect is hard to identify. Most likely, positive economic perspectives and employment opportunities during the boom years were at least as important in shaping decisions about childbirth.

Figure 2. General government expenditure on family and children-related measures in 2001-2017, % of GDP



Source: Eurostat.

Another factor limiting the effectiveness of the benefit policy is tax evasion and informality, which is highly prevalent in Latvia. First, those employed unofficially are more vulnerable to job loss and are therefore more cautious in making childbirth decisions. Second, the prevalence of unreported earnings affects workers' access to social insurance benefits. There is evidence that it is common for employers and employees to collude and increase social security payments shortly before childbirth by legalizing previously

unreported earnings (Jascisens and Zasova, 2018). Nevertheless, a considerable share of parents is likely to have restricted access to contributory child-related benefits due to the high prevalence of unreported earnings.

References

- Adserà A., 2004. "Changing Fertility Rates in Developed Countries: The Impact of Labour Market Institutions", *Journal of Population Economics*, 17: 17-43.
- Bassi V. and I. Rasul, 2017. "Persuasion: A case study of papal influences on fertility-related beliefs and behavior", *American Economic Journal: Applied Economics*, 9(4): 250-302.
- Beach B. and W.W. Hanlon, 2019. "Censorship, Family Planning, and the Historical Fertility Transition".
- Becker G.S and H. Gregg Lewis, 1973. "Interaction between the Quantity and Quality of Children", *Journal of Political Economy*, 81 (2): S279-S288.
- Becker, G. S. and N. Tomes, 1976., "Child endowments and the quantity and quality of children", *Journal of Political Economy*, 84: S143-S162.
- Björklund A, 2006. "Does Family Policy Affect Fertility? Lessons from Sweden", *Journal of Population Economics*, 19 (1): 3-24.
- d'Addio A.C and M.M d'Ercole, 2005. "Trends and Determinants of Fertility Rates in OECD Countries: The Role of Policies", Paris: Organisation for Economic Co-operation and Development OECD.
- Doepke M. and F. Kindermann, 2016. "Bargaining over babies: Theory, evidence, and policy implications", National Bureau of Economic Research, w22072.
- Eglīte P., 2011. "Dzīkstība un ģimenes politika Latvijā 1990. – 2009. gadā" ("Fertility and Family Policy in Latvia in 1990-2009"), *LZA Vēstis*, Vol 65, Nr 3/4, p. 17-33.
- Ermisch J., (1988). "Econometric Analysis of Birth Rate Dynamics in Britain", *Journal of Human Resources*, 23: 563-76.
- Families and Societies, 2015. "Country-specific case studies on fertility among the descendants of immigrants", Working paper 39.



- Hanushek E.A., 1992. "The trade-off between child quantity and quality", *Journal of Political Economy*, 100 (1): 84-117.
- Jascisens V. and A. Zasova, 2018. "Million Dollar Baby: Should Parental Benefits Depend on Wages When the Payroll Tax Evasion is Present?", Working Paper.
- Jones, L. E., A. Schoonbroodt, M. Tertilt, 2008. "Fertility theories: can they explain the negative fertility-income relationship?", National Bureau of Economic Research, w14266.
- Kalwij A., 2010. "The impact of family policy expenditure on fertility in western Europe", *Demography*, 47 (2): 503-519.
- Li H., J. Zhang, Y. Zhu, 2008. "The quantity-quality trade-off of children in a developing country: Identification using Chinese twins", *Demography*, 45 (1): 223-243.
- Luci-Greulich, A. and O. 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.
- Milligan K., 2005. "Subsidizing the Stork: New Evidence on Tax Incentives and Fertility", *Review of Economics and Statistics*, 87:539-55.
- Olivetti C. and B. Petrongolo, 2017. "The economic consequences of family policies: lessons from a century of legislation in high-income countries", *Journal of Economic Perspectives*, 31.1: 205-30.
- Raute A., 2019. "Can financial incentives reduce the baby gap? Evidence from a reform in maternity leave benefits", *Journal of Public Economics*, 169: 203-222.
- Schoonbroodt A., M. Tertilt, 2014. "Property rights and efficiency in OLG models with endogenous fertility", *Journal of Economic Theory*, 150: 551-582.
- UN Population Facts, 2017.
- Whittington L.A., 1992. "Taxes and the Family: The Impact of the Tax Exemption for Dependents on Marital Fertility", *Demography*, 29: 215-26.
- Whittington L.A, J. Alm, H.E. Peters, 1990. "The Personal Exemption and Fertility in the United States", *American Economic Review*, 80: 545-56.



About the authors

Lev Lvovskiy

Belarusian Economic Research and Outreach Center (BEROC)

Lvovskiy@beroc.by

www.eng.beroc.by

Lev Lvovskiy is a Senior Research Fellow at BEROC. He received his Bachelor's degree from Perm State Technical University in 2010, and obtained his Ph.D. in Economics from the University of Iowa in 2017.

Nicolas Gavoille

Stockholm School of Economics in Riga (SSE Riga)

Nicolas.Gavoille@sseriga.edu

www.sseriga.edu

Nicolas Gavoille is Assistant Professor at the Stockholm School of Economics in Riga since 2015. He holds a PhD in Economics from the University of Rennes 1, France.

Anna Pluta

Baltic International Centre for Economic Policy Studies (BICEPS)

Anna.Pluta@biceps.org

www.biceps.org

Anna Pluta is a doctoral degree candidate at the University of Latvia. She is also a Research Fellow

at the Baltic International Centre for Economic Policy Studies (BICEPS).

Anna Zasova

Baltic International Centre for Economic Policy Studies (BICEPS)

Anna@biceps.org

www.biceps.org

Anna Zasova is a Research Fellow at the Baltic International Centre for Economic Policy Studies (BICEPS). She received her PhD degree in Economics from the University of Latvia.

Acknowledgement

The authors would like to thank Pamela Campa, Michał Myck and Jesper Roine for useful comments and editing, and Kajetan Trzciński for careful proof-reading.

freepolicybriefs.com

The Forum for Research on Eastern Europe and Emerging Economies (FREE) is a network of academic experts on economic issues in Eastern Europe and the former Soviet Union at BEROC (Minsk), BICEPS (Riga), CEFIR/NES (Moscow), CenEA (Szczecin), ISET (Tbilisi), KSE (Kiev) and SITE (Stockholm). In 2019 the FREE Network, with financial support of the Swedish International Development Cooperation Agency (Sida) initiated the Forum for Research on Gender Economics (FROGEE). Publications under the FROGEE initiative contribute to the discussion on gender inequality in the region of Central and Eastern Europe. Opinions expressed in all FREE Network publications are those of the authors; they do not necessarily reflect those of the FREE Network, its research institutes or Sida.

