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Article

# Home Alone: Exploring Childcare Options to Remove Barriers to Second Childbearing in Belarus

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#### Abstract

This study investigates the relationship between childcare usage and parents' intentions to have a second child in Belarus. Previous research has established that low fertility in Belarus can be primarily explained by falling second birth rates. However, a substantial research gap remains regarding the determinants of the low rate of second childbearing in Belarus. Based on a comprehensive review of hypothesised fertility barriers and family policy options in Belarus, this study leverages data from the Belarusian Generations and Gender Survey (GGS) from 2017 to examine the relationship between formal, informal, and mixed childcare usage and parents' intention to have a second child. The analysis is based on fertile individuals aged 18–45 who have a partner and one biological child under 11 years old (i.e., up to the age at which children leave primary school). The model controls for sex, age, education, respondents' economic wellbeing, the employment status of both partners, and the age of their child. Applying logistic regression, the analysis demonstrates that mixed childcare support increases respondents' intentions to have an additional child. Having a child aged 3–6 years, being below 26 years old and male, are also associated with a higher likelihood of intentions to have a second child. No association was found between economic wellbeing or employment status and second-parity fertility intentions. The results of this study suggest that gender-egalitarian family policy instruments that improve institutional childcare and that incentivise men to participate in childcare could reduce barriers to second childbearing in Belarus.

#### **Keywords**

Belarus; childcare; family policy; fertility decline; one-child families; pronatalism; short-term fertility intentions

#### Issue

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#### 1. Introduction

Countries across Central and Eastern Europe (CEE) experienced a sharp drop in fertility following the transition from communism to capitalism that commenced in 1989–1991 (Frejka & Gietel-Basten, 2016). Prior to the collapse of the Soviet Union, fertility patterns in CEE were characterised by almost universal childbearing, combined with a strong propensity for a two-child family and a low mean age at birth (Frejka, 2008; Philipov, 2002; Sobotka, 2011). The total fertility rate (TFR) in CEE countries declined precipitously during the 1990s, mirroring tendencies observed in previous decades across Western Europe (Frejka & Gietel-Basten, 2016). Several CEE countries entered the group of lowest-low fertility countries, with the TFR in most countries ranging from 1.1–1.4 births per woman in 1999 (Sobotka, 2002). Belarus followed this trend, entering the group of lowest-low fertility countries in 1997 (see Figure 1). Even though a rebound was noticeable after 2006, the TFR of Belarus has consistently remained below targets set by the Belarusian government.

Although the demographic decline in CEE seemingly mirrored that of Western Europe in previous decades, the underlying causal factors are thought to have differed considerably. Goldstein (2007) distinguishes three types of low fertility regimes in Europe: the "no family" regime, which is defined by high childlessness rates; the "late family" regime where delayed family formation represses additional childbirths; and the "small family" regime where families opt for having one child only. Contrary to the "no family" or "late family" regimes that are typical in most Western and Central European countries, the fertility dynamics of Belarus are characterised by the "small family" regime, with a low mean age at first birth combined with low second birth rates (Amialchuk et al., 2014; Frejka & Sobotka, 2008; Ministry of Labour and Social Protection et al., 2011). It is anticipated that the effects of depopulation and population ageing will exert negative consequences in a number of areas including negative economic growth, reduced labour productivity and labour force, ineffective pension schemes, insufficient social welfare and healthcare in terms of both quality and availability, and even financial and staffing gaps in areas of national security (Shakhotko, 2011). Hence, Belarus needs prompt solutions in order to sustain its population size.

Recognising the urgency of determining a solution aimed at countering depopulation, the Government of the Republic of Belarus has assigned high priority to pronatalist demographic policy-making, which has resulted in the emergence of several national strategies and policies including the recent "Nation's Health and Demographic Security in Belarus, 2016–2020" strategy, which set a TFR target of 1.75. The focus of existing strategies and policies concerns the creation of financial incentives for childbearing. However, the latest available data from the Human Fertility Database (HFD), which was reported in 2018, indicated that the TFR in Belarus was at 1.45. Despite the political focus on demographic security and the lack of sufficiently effective policies, a noticeable research gap remains regarding evidence for effective pronatalist family policies. Fertility intentions remain largely understudied despite their significant role in identifying the extent to which family policies could improve the TFR, particularly if the barriers that serve to create the gap between intentions and behaviour were removed. With respect to methodology, with the noticeable exception of Amialchuk et al. (2014), existing research on fertility and fertility intentions in Belarus is limited mainly to descriptive studies (e.g., Artemenko, 2016; Elsukova & Kupchinova, 2018), and no panel data is available on fertility behaviour in Belarus. Moreover, the analysis to date has tended to focus exclusively on examining the financial incentives for childbearing, thus excluding other relevant incentives such as accessible and high-quality childcare (e.g., Amialchuk et al., 2014).

To help fill the existing research gap, this study examines what relationship, if any, exists between institutional and informal childcare support and the short-term intentions of Belarusians to have a second child. Although the degree to which fertility intentions provide a viable predictor of actual fertility behaviour is subject to much debate (e.g., Berrington, 2004; Quesnel-Vallée & Morgan, 2003; Toulemon & Testa, 2005), the study of fertility intentions allows for the determination of the manageable fertility increase margin that pronatalist policies can achieve in the best-case scenario (e.g., Morgan & Taylor, 2006). In keeping with existing research on the intentions-behaviour gap (Balbo & Mills, 2011), this study assumes that fertility intentions act as a proximate antecedent of fertility behaviour and, therefore, factors that exert an effect on intentions will also influence behaviour. It is anticipated that the findings of this study will contribute to the creation of evidence-based family policies in Belarus.



Figure 1. TFRs in selected CEE countries, 1980–2018.

The structure of the study presented herein is as follows: Section 2 discusses the theoretical background of fertility in Belarus, including fertility trends, theories that explain barriers to fertility, family policy options, and related currently-employed instruments and research gaps. Section 3 presents the research question and corresponding hypotheses, as well as the sample, variables and methodology used for the empirical analysis. Section 4 describes the results of the analysis. Section 5, finally, discusses the empirical results and their implications for family policy in Belarus.

# 2. Low Fertility and the Demographics of Decline in Belarus

#### 2.1. Fertility Trends in Belarus

Following the transition away from state socialism in Belarus, the TFR decreased from 2.03 in 1989 to 1.23 in 1996. The country's TFR remained below the "lowest low" threshold of 1.3 between 1996 and 2006. After 2006, it began to recover but continued to remain below the replacement level.

Scholars of fertility generally explain TFR dynamics through "quantum" and "tempo" effects. Bongaarts and Feeney (1998) define the tempo effect as the change in the TFR caused by the adjusted timing of births, and the quantum effect as the change in the TFR that would have been observed in the absence of tempo distortions. As highlighted above, existing research holds that the fertility decline in Belarus can be primarily explained via the quantum rather than the tempo effect since the country experienced a sharp decline in second birth rates accompanied by only the minimal postponement of first births (Amialchuk et al., 2014; Frejka & Sobotka, 2008; Shakhotko, 2011). Indeed, data from the HFD confirms that there was almost no difference between the TFR and the adjusted TFR (adjTFR) in Belarus up to 1997, even as the TFR collapsed (see Figure 2). This implies that the

decline in childbearing up to 1997 occurred primarily due to the reduction in the number of children in families (the quantum effect). Between 1998 and 2016, a moderate tempo effect was observed, with an average difference between the TFR and adjTFR of 0.21 and a slight increase in the mean age at first birth (MAB1) from 23 in 1997 to 25.7 in 2017. The tempo effect faltered in 2011 and, again, after 2016. In brief: The quantum effect accompanied the fertility dynamic of Belarus throughout the observed timeframe, while the tempo effect remained limited in time and scope.

#### 2.2. Hypothesised Barriers to Fertility

According to existing fertility research, explanations for low fertility in Belarus and other CEE countries can be clustered into three theoretical paradigms: the neoclassical economic theory of fertility, the concept of the second demographic transition, and gender equality theory.

The neoclassical economic paradigm is largely rooted in the household production model of the new home economics school (Becker, 1960; Becker & Lewis, 1973), which conceptualises households as economic units that produce outputs such as housework and children, and whose fertility decisions are a result of their expected utilities and disutilities from nth-parity childbearing. New home economics not only considers financial (dis-)utilities such as income and economic certainty, but also the fulfilment of social norms and time investments. Of central importance is the notion that as a population's economic trajectory improves, households prioritise high-quality children—as expressed through separate bedrooms, private schooling, university education, and more time spent on home-based childcaretherefore increasing the cost of childbearing (Becker, 1960). Consequently, as women engage more in paid work to help cover the cost of quality childbearing, the utility of having a higher quantity of children, which was more feasible in the male breadwinner, female



Figure 2. TFR, adjTFR and the mean age at first birth in Belarus, 1980–2018.



homemaker regime, declines, thus lowering fertility rates (Becker, 1981). In addition to the strive toward quality childbearing, neoclassical economic theory holds that household fertility decisions can be influenced by macroeconomic factors such as changes in the GDP and unemployment. In the context of Belarus and other CEE countries, a drop in GDP, increased economic uncertainty and job insecurity, reduced income and living standards, the high cost of childbearing and childrearing, and largely ineffective social protection systems can be identified as barriers to fertility, indicating that the neoclassical paradigm may provide a useful analytical framework (Allison & Ringold, 1996; Basten et al., 2013; Frejka, 2008; Matysiak, 2011; Sobotka, 2011).

The second demographic transition paradigm holds that ideational changes toward postmodern norms and values influence the postponement of a first birth (Lesthaeghe, 2014). Accordingly, lowest-low fertility can be explained by the shift toward "a multitude of living arrangements other than marriage, the disconnection of marriage and procreation, and no stationary population" (Lesthaeghe & Surkyn, 2004, p. 2), which leads to an elevated degree of first-birth postponement (Lesthaeghe, 2010). While research conducted in other CEE countries suggests that value shifts may have taken place over the past decades, the central postponement assumption does not hold true in the Belarusian context given the relatively young mean age at first birth (Amialchuk et al., 2014; Sobotka, 2002), which limits the applicability of the second demographic transition theory in the case of Belarus.

The gender equality paradigm draws attention to the observation that "in the world at large, where women's status is low, fertility is high. But in advanced industrial societies...where fertility is below replacement, this generalisation no longer holds" (Chesnais, 1996). Following the "gender as a structure" framework (Risman & Davis, 2013), three domains of gender equality can be distinguished: institutions (such as social norms, policies and regulations); attitudes and values; and practices. Consequentially, the gender equality paradigm holds that fertility is low when institutions, attitudes and partnership practices are not adapted to the changing economic role of women (Esping-Andersen, 2016; McDonald, 2000). Adaptations to changing economic role of women can be observed in their increased engagement in paid work and the increased engagement of men in unpaid work, i.e., childcare and housework (Siemieńska, 2008). As Never et al. (2013) point out, empirical studies have shown that the engagement of fathers in informal childcare is linked to higher fertility. Three gender role regimes can be derived: the traditionalist "male breadwinner, female homemaker" regime that was common before the second demographic transition, the transitional "dual breadwinner, female homemaker" regime, and the egalitarian "dual breadwinner, dual homemaker" regime that is common in Scandinavian countries. As formulated in Esping-Andersen and Billari's

(2015) "multiple-equilibrium" thesis, higher fertility levels can be expected in two of these regimes: traditionalist and gender-egalitarian. In the context of women's increased economic independence, women who are faced with limited institutional childcare support, the limited division of childcare and housework, unsupportive gender role attitudes and unsupportive parental leave and job protection policies that result in higher female workforce participation elasticity and a greater gender pay gap, are likely to have fewer or no children (Basten et al., 2013; McDonald, 2000; Pastore & Verashchagina, n.d.). As such, the gender equality paradigm challenges the neoclassical "household economic unit" assumption and instead emphasises intra-household bargaining. Belarus, like many other CEE countries, has transitioned away from the traditionalist gender role regime towards the transitional regime, resulting in a double burden for women, which forces many to choose between a career without children or staying at home (Matysiak, 2011). Moreover, economic stagnation in Belarus after the fall of the Soviet Union was matched by poor institutional care facilities for children and elderly people, which contributed to the more elastic participation of the female workforce and the widening of the gender pay gap (Pastore & Verashchagina, n.d.). At the same time, research indicates that sociocultural norms remain largely pronatalist, resulting in many women having only one child at an early age "to satisfy the social norm of becoming a mother, while at the same limiting the inevitable double burden of working full-time and taking care of household tasks" (Amialchuk et al., 2014).

#### 2.3. Pronatalist Family Policy Options

As pointed out by Frejka and Gietel-Basten (2016), family policy has specific implications for a country's fertility even if the underlying intent may not always be fertility-focused. They established four principal family policy models labelled hereinafter as neoclassical, traditionalist, gender-egalitarian, and non-interventionist, of which the first three can be conceptualised as producing pronatalist outcomes. The neoclassical model aims to improve the cost-benefit relationship of childbearing, thereby incentivising increased fertility and family size. Governments that follow the neoclassical model commonly encourage childbearing through financial measures such as birth allowances, child benefits and maternity benefits, or through economic measures such as paid family leave and housing policies. This model of family policy is typically outcome-driven and applied for example by the Russian Federation and Ukraine. The traditionalist model aims to reduce the opportunity cost of mothers staying at home, thereby encouraging traditional household roles involving the male breadwinner. Governments that adhere to the traditionalist model tend to promote taxation models that are advantageous to married couples, as well as to offer generous maternity leave opportunities. This model is

typical for Germany and Slovakia. The gender-egalitarian model aims to promote gender equality in both childcare and employment, thereby encouraging families to overcome the work-home dilemma. Governments that apply gender-egalitarian approaches tend to provide institutional childcare as well as parental benefits for both mothers and fathers. This model is applied in Estonia and Slovenia. These three pronatalist family policy models neoclassical, traditionalist, and gender-egalitarian—can be broadly categorised as responding to the fertility barriers identified by the neoclassical, second demographic transition, and gender equality paradigms.

Pronatalist goals top Belarus' population policy agenda. To this end, the country's family policy instruments mainly follow the neoclassical model since it focuses primarily on financial incentives rather than on resolving the work-home dilemma for women or improving the quality and accessibility of institutional childcare (Frejka & Gietel-Basten, 2016; Pastore & Verashchagina, n.d.). Since 2011, the central pillars of Belarus' family policy have comprised progressive financial incentives aimed at stimulating second childbearing, including the payment of allowances, housing, and tax and credit policies that favour families with children (Council of Ministers of the Republic of Belarus, 2016; Ministry of Labour and Social Protection et al., 2011; Press Service of the President of the Republic of Belarus, 2022). However, child benefits are set at 35% of the average Belarusian wage for the first child and 40% for the second and all subsequent children, and are, thus, comparatively low in value.

In addition, Belarus' family policy also includes a number of less systematic, traditionalist and genderegalitarian policy instruments. The government continues to stipulate that parents take up to three years of paid parental leave. Childcare options are available in many parts of Belarus: Most preschool childcare facilities accommodate children from three to six years old, with some even accepting two-month-old children (Hurava, 2015). School-aged children can receive after-school care for up to six hours following the end of the standard school day. Preschool facilities and schools are funded largely from the national budget and are free of charge except for meals and extracurricular activities such as dancing lessons and foreign language and martial arts courses. Food accounts for approximately one quarter of the total cost of childcare in Belarus. One new policy instrument that is worthy of note concerns the provision of childcare services that are fully financed by the Belarusian government for up to three years in exceptional cases. However, this policy instrument is only accessible to mothers of twins or triplets, parents of a child with a disability, single parents with a disability or parents who both have disabilities. Interestingly, while the proportion of children enrolled in after-school care centres increased slightly from 14.4% in the academic year 2005-2006 to 21.1% in 2016-2017, the coverage

rate of childcare centres for preschool-aged children decreased from 82.5% to 74.8% during the same period according to data available from the National Statistical Committee of the Republic of Belarus (2013, 2017). It should be noted that the data covering after-school care centres does not differentiate by age group, and the data on preschool-aged children covers children aged 1–5. No other childcare policy changes have since been introduced in Belarus.

While Belarus' TFR increased from 1.5 in 2010 to 1.73 in 2015, plausibly in part due to family policy measures, it was not sufficient to cover the reproduction of the Belarusian population (see Figure 2). Moreover, Belarus' TFR dropped once more after 2016 and has since consistently remained below the target TFR of 1.75 published in the current policy document *The Nation's Health and Demographic Security in Belarus, 2016–2020*.

#### 2.4. Research Gaps

Notwithstanding the political importance of family policy in Belarus and the insufficient effectiveness of existing instruments aimed at raising the country's fertility rate and fertility intentions, the explanatory factors thereof and effective policy options remain understudied. Fertility intentions have, to date, not been addressed systematically despite their significant role in identifying the manageable margin of interest that demographic policies are able to influence. With a few exceptions, most of the existing analysis of fertility in Belarus is limited to descriptive statistics. The focus of such studies (e.g., Amialchuk et al., 2014) has, to date, concerned exclusively neoclassical factors such as income and child allowances. Gender-egalitarian factors and corresponding policy options, however, have not yet been analysed in the Belarusian context, even though a growing body of literature suggests that having to choose between children and a career poses a substantial barrier to women's fertility intentions (Cooke, 2004; Mencarini & Tanturri, 2004; Mills et al., 2008).

Childcare is probably the most obvious family policy instrument that has, to date, remained understudied in the Belarusian context. By helping to reduce the burden of unpaid work and allowing mothers to return to work more quickly, childcare can help women counter both homemaking expectations and female workforce participation elasticity, thus increasing household income and reducing the opportunity cost of having children (Esping-Andersen & Billari, 2015; Goldstein et al., 2017). A growing body of evidence suggests that an increase in the availability of childcare may have positive effects on fertility (Del Boca et al., 2003; DiPrete et al., 2003; Greulich et al., 2014). Interestingly, a study on the relationship between childcare and fertility in Russia's similar low-family context indicates that intentions to have a second child are positively associated with the first child attending formal childcare (Levin et al., 2016).

# 3. Research Design

#### 3.1. Research Question

Considering the above-mentioned research gaps, this study aims to answer the following research question: What relationship, if any, exists between institutional and informal childcare support and the short-term intentions of Belarusians to have a second child?

## 3.2. Data and Methodology

I used the representative database of the international Generations and Gender Survey (GGS, 2022; see https:// www.ggp-i.org/data) for the analysis of the association between childcare support and intentions to have a child in the next three years in Belarus. The GGS comprises a quantitative cross-national, large-scale panel survey of a nationally representative sample that covers fertility and relationship histories, household and individual-level data, a wide range of socioeconomic variables and information on well-being, value orientations and attitudes. The first wave of the survey was conducted in Belarus in 2017 employing a nationally representative sample of 9,996 men and women aged 18-79. To date, the first wave of the GGS dataset is the only cross-national survey to have been conducted in Belarus that provides data on childcare and fertility intentions.

Aimed at ensuring that the short-term fertility intentions of the respondents were assessed as realistically as possible, the analysis was based on a sub-sample of respondents aged 18–45 who were in a partnership, had one biological child under 11 years old (i.e., up to the child leaving primary school), and reported being fertile and not pregnant. The final sample contained N = 349. While the final sample size was relatively small, the benefits of obtaining a novel insight into the relationship between childcare and fertility in Belarus outweighed the disadvantage of potentially obtaining beta errors due to the small sample size.

Fifty-three percent of the respondents in the final sample were female. Fifteen percent were aged between 18 and 25, 64% were 26–35 years old, and 21% were older than 35. Forty-five percent of all the respondents had a child under three years old, one-third (36%) had a child of 3–6 years of age, and 19% had a child aged 7–10. Forty-six percent of all the respondents did not use any form of childcare, 16% used institutional childcare only, 24% used informal childcare only, and 14% used mixed childcare.

The analysis involved the use of descriptive statistics to describe potential differences between sociodemographic subgroups regarding their fertility intentions. Additionally, I applied two binominal logistic regression models of the probability of intending to have another child in the next three years, of which the second model included the age of the respondents' first child as an additional independent variable aimed at examining whether the first child's age affected the hypothesised association between fertility intentions and the usage of childcare.

## 3.3. Measurement of the Variables

This subsection describes all the variables applied in the analysis of the subset from the Belarusian GGS database.

## 3.3.1. Dependent Variable

For the variable *short-term fertility intentions*, childbearing intentions were elicited via the following question: Do you intend to have another child during the next three years? The five possible responses were: "definitely not," "probably not," "I am not sure," "probably yes," and "definitely yes." To draw meaningful comparisons between the respondents with and without fertility intentions, I dichotomised the variable by collapsing the two "yes" and the two "no" answers, and by eliminating those respondents who stated "I am not sure" from the analysis.

#### 3.3.2. Independent Variables

The variable *childcare* comprised a four-level categorical: (a) non-usage of childcare; (b) the usage of only regular institutional childcare support comprising crèches, kindergartens, preschool facilities, after-school care and other institutional arrangements; (c) the usage of only regular informal childcare that was defined as help with childcare received over the last 12 months from relatives or friends or other persons for whom caring for children is not their primary occupation; and (d) the usage of mixed childcare, i.e., the respondents reported the usage of both institutional and informal childcare.

# 3.3.3. Control Variables

The *sex* variable was represented by a dummy that took the value 0 if the individual was female and 1 if the respondent was male.

The *age* of the respondents was divided into three categories: (a) 18–25 years old, (b) 26–35, (c) 36–45 years old.

A three-level categorical variable was used for *education*. The lower category comprised those with lower secondary education while the next category combined those who had completed upper secondary education and those with a post-secondary non-tertiary education. The highest and third category comprised those who had completed tertiary education.

In *employment status of both partners*, I distinguished, in general, between employed (respondents who indicated that they were employed, helping a family member on a family farm, engaged in business or self-employed), unemployed (respondents who indicated that they were unemployed, homemakers, or students in school or vocational training), and respondents

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on parental leave (i.e., maternity leave, parental leave or childcare leave). Since I considered the employment status of both partners in the analysis, a total of four categories were defined: (a) both partners are employed; (b) one of the partners is unemployed, the other is employed; (c) one of the partners is employed, the other on parental leave; (d) one of the partners is unemployed, the other is on parental leave. No other combinations of employment status were considered in the dataset.

The monthly *household income* was used to measure the effect of economic factors. This variable was split into three categories: (a) under 600 Belarusian roubles, (b) between 600 and 999 Belarusian roubles, and (c) 1,000 and more than 1,000 Belarusian roubles. According to the National Statistical Committee of the Republic of Belarus (n.d.), the average monthly wage in 2017 was around 800 Belarusian roubles. Since economic constraints comprise the most frequently cited reason for the decline in fertility, and the Belarusian government's current family policy focuses on the payment of regular financial benefits, it was considered crucial that the role of an individual's economic wellbeing and their reproductive behaviour were analysed.

To determine whether the age of the first child was linked to fertility intentions, I also included the *age of the child*. The age categories were defined as (a) under 3 years of age (i.e., the age of crèche attendance and the age range over which a parent can take parental leave); (b) 3–6 years of age (i.e., kindergarten age); and (c) 7–10 years of age (i.e., primary school age).

#### 3.4. Hypotheses

Based on the two theoretical paradigms that apply to the Belarusian context and on their corresponding hypothesised fertility barriers that were discussed above, a range of hypotheses can be applied to the dataset to examine what relationship, if any, exists between institutional and informal childcare support and the short-term intentions of Belarusians to have a second child.

#### 3.4.1. Childcare-Related Hypotheses

H1: Childcare usage is positively associated with short-term intentions to have a second child.

Following Esping-Andersen and Billari's (2015) multiple equilibrium thesis, it was hypothesised that access to childcare contributes to an egalitarian gender-role regime by reducing the childcare workload of women, thus reducing their work-home double burden and the corresponding homemaking expectations, and countering female workforce participation elasticity and the gender pay gap. This was expected to hold true for both institutional and informal childcare.

H1a: Mixed (institutional and informal) childcare usage is more strongly associated with short-term

intentions to have a second child than the usage of only one of the two forms of childcare.

It was hypothesised that mixed childcare usage would be most strongly associated with short-term intentions to have a second child since mixed childcare would lead to opportunity cost reductions. In addition, mixed institutional and informal childcare could serve as a proxy for the adaptation of both institutions and social attitudes towards the changing economic and social roles of women (Esping- Andersen, 2016; McDonald, 2000).

3.4.2. Hypotheses Related to the Control Variables

H2: Being female is negatively associated with short-term intentions to have a second child.

Given Belarus' "dual breadwinner, female homemaker" gender role regime, it can be expected that the increase in childcare and housework is higher for women than for men following the birth of a first child. Therefore, it can also be expected that women bear a substantially larger opportunity cost than men when deciding whether to have a second child (see Matysiak, 2011; Pastore & Verashchagina, n.d.).

H3: A secondary education level is positively associated with short-term intentions to have a second child.

Existing research paints an ambivalent picture concerning the relationship between education and fertility. Although there is evidence that completing secondary education is associated with fertility since it acts to reduce economic uncertainty (Perelli-Harris, 2006), other studies point to a negative relationship between higher education and fertility (e.g., Axinn & Barber, 2001). Van Bavel and Różańska-Putek (2010) point out that the relationship between education and fertility might be contingent on childcare enrolment rates. As a working hypothesis, I expected a positive relationship between medium (upper secondary and post-secondary, non-tertiary) education and fertility.

H4: Living in a partnership where both partners are employed or where one partner is employed and one is on parental leave is positively associated with shortterm intentions to have a second child.

Partners who are both employed, or where one is employed and one is on parental leave, were expected to be less exposed to economic uncertainty, in line with the neoclassical paradigm (Becker, 1960; Frejka, 2008).

H5: Having a higher household income is positively associated with short-term intentions to have a second child.



A higher household income was expected to remove economic barriers to fertility, in line with the neoclassical paradigm. This link is supported by evidence from previous studies in the Belarusian context (e.g., Amialchuk et al., 2014).

H6: Having a child that is between 3 and 6 years old raises the probability of second-child fertility intentions.

It was expected that respondents who have a child of kindergarten age (3–6) would be associated with secondchild fertility intentions, since the reduced need for home-based care would allow women with a child in this age bracket to re-enter employment, thus increasing household income and economic certainty in line with the neoclassical paradigm. Having a child above kindergarten age was not expected to be associated with intentions to have a second child since the biological and economic opportunity cost of having a second child increases over time.

H7: Being 36 or older is negatively associated with short-term intentions to have a second child.

It was expected that respondents who were above 36 years of age were less likely to intend to have a second child due to biological and cultural constraints.

#### 4. Empirical Results

Table 1 displays the results of the descriptive statistics with bivariate correlations between short-term intentions to have a second child and the sociodemographic

	Descriptive statistics	Logistic regression model 1	Logistic regression model 2
	%	OR	OR
Sex			
Female	53.8	1 [Ref.]	1 [Ref.]
Male	66.7*	1.79*	1.89*
Age group (in years)			
18–25	67.3	1 [Ref.]	1 [Ref.]
26–35	67.3	0.82	1.80
36–45	32.4***	0.18***	0.17***
Education			
Low	50.0	1 [Ref.]	1 [Ref.]
Medium	64.8	2.13+	2.20*
High	58.1	1.84	1.92
Employment status			
Both employed	60.6	1 [Ref.]	1 [Ref.]
Employed & unemployed	68.0	1.32	1.34
Employed & on parental leave	59.5	0.84	1.17
Unemployed & on parental leave	36.4	0.30	0.45
Household income			
Low	54.1	1 [Ref.]	1 [Ref.]
Medium	63.5	1.32	1.38
High	59.7	1.16	1.18
Childcare			
No	52.2	1 [Ref.]	1 [Ref.]
Only institutional	63.6	1.55	1.22
Only informal	63.1	1.26	1.35
Mixed	75.5*	2.58*	2.07+
Age of the child (in years)			
0–2	57.6		1 [Ref.]
3–6	69.4		2.12+
7–10	47.8**		1.39
n	349	349	349
Nagelkerke pseudo R2		0.19	0.20

Table 1. Bivariate correlations and odds ratios of intentions to have a second child in the next three years in Belarus.

Note: The values of p(Chi2) for the descriptive statistics are reported next to the final category of variables:  $^{+}p \le 0.1$ ,  $^{*}p \le 0.05$ ,  $^{**}p \le 0.01$ ,  $^{***}p \le 0.001$ .

and economic characteristics of the respondents and the age of their child, as well as the results of the two logistic regression models that examined these relationships as discussed above. 67.3% of respondents in the youngest and middle age groups had short-term intentions to have a second child, against 32.4% of respondents in the highest age group. Furthermore, 66.7% of men had fertility intentions compared to only 53.8% of women. Almost two-thirds of respondents with children aged 3-6 intended to have a second child compared to 57.6% of respondents with a child aged 0–2, and 47.8% of respondents with a child of primary school age. With respect to the main independent variable of childcare usage, 75.5% of respondents who used mixed institutional childcare intended to have a second child. By contrast, 63.6% of respondents used institutional childcare only, 63.1% of respondents used informal childcare only, and 52.2% of respondents used no childcare.

The results obtained from the logistic regression models confirmed the tendencies detected in the descriptive statistics. Firstly, both regression models revealed that mixed childcare is positively associated with second-parity fertility intentions (H1a). However, when considering the age group of the first child in model 2, the statistical significance of this relationship was observed to be weaker. No significant associations were found between the usage of only institutional or only informal childcare and second-parity fertility intentions (H1). Secondly, both models confirmed that being male is positively associated with a higher likelihood of intentions to have a second child (H2). Thirdly, both models found that the odds of having fertility intentions are elevated if a respondent has a medium (upper secondary or post-secondary, non-tertiary) level of education, compared to people with a low level of education (H3). A positive but non-significant correlation between having a high education level and having fertility intentions was observed. Fourthly, no association was found between employment status (H4) or income (H5) and second-parity fertility intentions. Fifthly, model 2 suggested that the odds of intended further childbearing of respondents with a child aged 3-6 were twice as high as those of respondents with a younger child (H6). Sixthly, respondents aged 36 and above were less likely to intend to have a second child (H7).

#### 5. Conclusion

This study examined several potential determinants of short-term fertility intentions concerning persons with one child in Belarus, focusing specifically on childcare. The study determined a positive association between mixed childcare usage and second-parity fertility intentions. This association fits with the gender equality paradigm, which holds that fertility is higher where institutions, attitudes and practices adapt to the changing economic role of women. These results are also in line with Artemenko's (2016) finding that ensuring the availability of institutional childcare is among the "top 4" most in-demand policy measures in terms of stimulating the childbearing willingness, and is consistent with evidence on childcare and second-parity fertility from other countries where the small family regime dominates (e.g., Levin et al., 2016). However, it was unexpected that institutional or informal childcare alone would not be significantly associated with intentions to have a second child. One plausible explanation concerns the fact that institutional childcare alone is not sufficient to cover parents' childcare needs. Additionally, the low sample size may have resulted in beta errors.

The study also found that being female is negatively associated with intending to have a second child. This validates the hypothesis that women in Belarus' transitional "dual breadwinner, female homemaker" regime face a double workload which increases their opportunity cost of having a second child compared to men. While this finding is consistent with empirical analysis on gender equality and fertility (e.g., Esping-Andersen, 2016; Esping-Andersen & Billari, 2015; Pastore & Verashchagina, n.d.), it has not to date formed the subject of an evidence-based academic debate and may merit further investigation.

The study did not determine a significant association between economic wellbeing or employment status and second-parity fertility intentions. This result contradicts both the neoclassical paradigm and the findings of recent empirical studies on fertility in Belarus (e.g., Amialchuk et al., 2014; Artemenko, 2016); however, it is in line with the findings of empirical studies from other "small family" countries such as Russia (Kumo, 2009). Possible explanations for the results of this study comprise the relatively small final sample size of the data and a lack of additional economic variables such as income uncertainty and maternal and child benefits. Further academic research needs to be conducted so as to clarify the effect of neoclassical economic factors on fertility in Belarus, the interplay of gender norms and employment patterns, and the interaction between economic factors and childcare usage.

The other study findings, while noteworthy, are in line with existing research and theoretical expectations. Firstly, the analysis confirmed that a medium level of education, compared to a lower level, is positively associated with second-parity fertility intentions in the Belarusian context. Secondly, the age of the first child plays a significant role in second-parity fertility intentions, in line with both neoclassical assumptions and descriptive data from the HFD, which shows that the mean interval between the first and second childbirth is four years. Thirdly, being aged 36 or older is associated with a lower likelihood of short-term intentions to have a second child, which is consistent with data from the HFD that shows that the mean age at second birth (MAB2) has remained constant at around 29 over the last decade.

As with all studies, this study has its limitations. Firstly, while factors that influence fertility intentions

can be assumed to also influence fertility behaviour, there may be other unobserved factors that explain the intention-behaviour gap (Balbo & Mills, 2011). Secondly, the fertility intentions of the respondents' partners were not assessed in the survey, omitting potentially relevant details on intra-household bargaining. Thirdly, the data allows for an analysis of childcare usage but not of its availability and quality. Fourthly, the cross-sectional study design allows for the analysis of statistical associations but not for causal conclusions on the impact of childcare or other variables on fertility intentions. Fifthly, the relatively low sample size elevates the risk of "false negatives." Sixthly, the data allows for an analysis of fertility determinants but not of the effectiveness of family policy instruments that aim to shape them. Further research will be needed to address these limitations.

The findings of this study have a number of implications for the formulation of effective family policy instruments in Belarus and in other "small family" countries. Most notably, the findings of the study challenge the almost exclusively neoclassical focus of the Belarusian government's pronatalist family policy. The findings that mixed institutional and informal childcare are associated with second-parity fertility intentions, and that being a woman is associated with lower second-parity fertility intentions, point to the dual importance of creating more supportive institutional arrangements and of facilitating a more supportive social environment for working mothers. To this end, policy makers should consider firstly improving the availability and quality of institutional care facilities, and secondly incentivising men to increase their participation in housework and, particularly, in childcare. This could be achieved, for instance, by offering non-transferable, paid parental leave to fathers. This second measure would not only reduce the double burden on women but also help to challenge existing gender norms, attitudes and practices (West & Zimmerman, 1987). This is of essential importance in terms of moving towards a genderegalitarian "dual breadwinner, dual homemaker" gender role regime, which recent research indicates is conducive to increasing fertility rates (Esping-Andersen, 2016; Esping- Andersen & Billari, 2015).

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#### **Conflict of Interests**

The author declares no conflict of interests.

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