REPORT

Working paper: Towards resilient early-stage life courses in Europe: resilience markers and fertility

behaviour

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1.Introduction

In the European Commission foresight report (European Commission, 2020), it is mentioned that resilience became the new compass for the EU Policies. But how we can understand resilience? In the EU it has been defined as: *"the ability not only to withstand and cope with challenges but also to undergo transitions in a sustainable, fair and democratic manner"*. This document shows that, in addition to classical understanding of social policies, it is important to invest in policies which improve the resilience of individuals and make them less vulnerable to potential crises in the future.

The resilience as a construct appeared first in developmental psychology and it was conceptualised as the ability to respond by individuals in an adaptive way to demands and opportunities of the environment. Following Rutter (2012) resilience in social sciences can be defined as a dynamic process encompassing the ability of individuals to endure and successfully adapt to stressful, painful or threatening circumstances or adversities. So, in order to define resilience, one generally needs to describe two components: (i) the presence of a certain risk or adversity, and (ii) the individual or family managing to make a positive adaptation in the face of this challenge. This approach has been proposed in the Chłoń-Domińczak et al. (2024) to describe resilience related to life course fertility of individuals – the concept that can be useful in explaining the observed outcomes at individual (observed fertility behaviour) as well as on meso- and macro level (fertility indicators).

In this paper we use the framework developed in the FutuRes project (Aassve and Bastianelli 2024) and then further expanded in the context of fertility dynamics (Chłoń-Domińczak et al., 2024) defined for a micro-level data. We use Wave 1 of the second round of the Generations and Gender Survey (GGS) data, collected between October 2020 and July 2023, in an attempt to verify whether certain demographic and socioeconomic characteristics of women aged 25-44 years can be considered as risk or protective factors of resilience (or resilience markers) during the COVID-19 crisis, as presented in the theoretical framework. In line with the studies from the field of developmental psychology, we account not only for resilience markers, but also the interactions of such indicators with life-course disturbances (adversities) to fertility in order to investigate the association between negative life-course events and fertility behaviour. Due to limited number of countries and potential endogeneity problems caused by the lack of longitudinal data, logistic regressions applied in this paper constitute an initial exploratory analysis. That is why we analyse many combinations of different kinds of outcome variables, disturbance factors and potential resilience markers. The paper is organised as follows: in the next section we present a short literature review of different approaches used to measure resilience in psychology and social sciences and we propose the operationalisation of this concept in application to Generation and Gender Survey data. In the third section, methods and data are described. The section four presents the results derived from the core econometric models aimed to catch the most relevant determinants of three types of fertility behaviour, followed by an addition of disturbance variables and their interactions with variables considered as resilience markers. In the last section we try to interpret these findings in the context of the literature as well as the proposed conceptualization of resilience and its relation to fertility behaviour.

2. Resilience markers

2.1 Literature review

The multidimensional construct of resilience was first analysed in developmental psychology (Garmezy et al., 1984; Rutter, 1984, 2012). In the early 1980s, the term was conceptualized within an organizational-developmental framework as the ability to respond in an adaptive way to demands and opportunities of the environment (Egeland et al., 1993; Waters & Sroufe, 1983). The individual behavioural responses are directly or indirectly influenced by various environmental factors encompassing environmental risks and protections. Risk factors increase individual's likelihood of maladaptive developmental outcomes, whereas protective factors mitigate the influence of risk factors. Risks might involve stressful family life events or circumstances (i.e. loss of a family member or conflicts), difficult or weak relationships with peers, having low economic status, experience of natural disasters or war (Garmezy et al., 1984; Musick et al., 1987). Protective factors can be classified into three broad categories: individual dispositional attributes, as well as supportive family and community (Yates et al., 2003) characterised with solidarity, cohesion, interpersonal agreement (Losel & Bliesener, 1994). Early works on the subject considered the fact of being relatively unaffected by adversities as protections, while other scholars required from protective factors to have certain direct ameliorative effects (Luthar et al., 2000).

The two aforementioned components of resilience, adversity and positive adaptation (or competence) are operationalised in different ways to measure the directly unobservable construct of resilience. In cross-sectional or longitudinal studies, the measurement of the connection between adversities and adaptation is done using the three most popular groups of methods. Firstly, the person-based (or definition-driven) approach involves situation-specific identification of resilient individuals who face adversities and comparing them with other individuals. Secondly, the multidimensional variable-based (or data-driven) strategy of operationalization identifies resilient groups (classes) of individuals based on latent variable models, including growth mixture models - a combination of the latent growth curve and mixture models. This approach can be based on main effect models or involve the assessment of interaction effects (Cosco et al., 2017; Luthar et al., 2000). Finally, the psychometrically driven methods assume that resilience can be operationalised uniformly with a single rating scale. Despite the fact that this approach was not used in this paper it is worth noticing that several direct measures of resilience have been defined separately for adolescents, adults and older adults (Connor & Davidson, 2003; Friborg et al., 2003; Salisu & Hashim, 2017). Moreover, research design in the studies of resilience is sometimes based on natural experiments, involving twin and adoption studies or longitudinal designs (Rutter et al., 2001). Friborg et al. (2003) validated a scale for measuring protective factors consisting of items from five dimensions: personal competence, social competence, family coherence, social support and personal structure. Within the FutuRes project, Abramowska-Kmon et al. (2024) performed an analysis related to the family coherence dimension and the general family solidarity, using the second round of the GGS data and the same set of countries as in the herein analysis.

With regard to fertility behaviour (and especially its changes during crises), the notion of resilience has been used in many areas at the micro and macro level according to an original resilience framework developed by developmental psychologists. For example, at the macro level, (Salonen et al., 2024) analysed interdependencies of socioeconomic status and childlessness in Finland to show that family formation and childbearing of low-status families suffers the most during economic downturns and does not necessarily recuperate afterwards. At the same time, families with moderate and high socioeconomical status were found to be more resilient to economic factors.

Regarding job uncertainty, Gatta et al., (2022) found perception of resilience to potential job loss to be a powerful factor in explaining fertility intentions in comparison to the model explaining fertility intentions with factors accounting for employment stability. Using specific survey questions, authors identified resilience understood as individual attitudes towards possible future job loss (feeling prepared to take risks or a perception of probability to find job with a similar salary in a short period of time). Employment uncertainty was also found to be also a relevant factor of transition to second child in European countries (Adsera, 2011). The changes in job uncertainty can be also seen as a factor explaining the gap between fertility intentions and realisation (Hanappi et al., 2017)

The analysis of the problem of lack of reproductive health and psychical resilience of women is important in the context of relationships stability and further fertility decisions (Bailey et al., 2017; Peters et al., 2011; Yu et al., 2014). However, to our knowledge, the existing studies are mostly qualitative (based on small samples and semi-structured questionnaires). Another avenue of research is centred on the connection between the opportunity to use assisted reproductive technologies, income and educational attainment inequalities (Goisis et al., 2020; Leung et al., 2013).

Based on the literature, Chłoń-Domińczak et al., (2024) define resilience framework in fertility behaviour using the components proposed by (Rutter, 2012) in complex and systemic way. Resilience framework is described at three levels: macro, meso and micro, as presented in Table 1. This approach assumes that, at each level, one can define disturbances, life course capital and resources explaining resilience, as well as outcomes allowing to measure and distinguish between more and less resilient societies or individuals. Despite the clear enumeration of how to define disturbances, life-course capital and resources, as well as outcome variables, the application of this framework in empirical analysis to explain real phenomena is by no means straightforward. One needs to assume that disturbances to fertility behaviour are exogenous and affect human decisions in a specific way. The empirical analysis of potential influence of the interdependences between disturbances and assumed resilience indicators are possible using data at each level. However, only at the micro level, using the information on individual life-course outcomes of people and longitudinal data can give convincing evidence without doubts regarding the mechanisms behind the econometric modelling.

Table 1. Resilience framework in fertility behaviour

Level	Disturbances	Life-course capital and resources	Outcomes
Macro	Climate change	Comprehensive healthcare, including pre-	Macro-level
	COVID-19 pandemic	natal care and access to ART	fertility trends
	Economic crisis/	Well-developed childcare system	
	Recession	Full-time schools	
	Shift in social norms	Parental leave policies	
	concerning parenthood	Flexibility in terms of time and place to work	
		'Gender egalitarian' polices	
		Work-life balance policies	
Meso	Changes in local labour	Heterogeneous networks	Fertility-related
	markets	Density of the social network	behaviours at
	Changes in local	Social integration	the family and
	governance and policies	Local family policies	societal levels
	Natural disaster at the	Access to childcare	
	local level	Quality of educational institutions	
	Shift in social norms		
	concerning parenthood		
Micro	Job loss	Capital: economic, social, human and	Individual fertility
	Lowered reproductive	institutional: educational attainment, health	behaviour
	capacity	status, household composition, household	
	Income instability	wealth, housing situation	
	Process of		
	individualisation		
	Partnership dissolution		

Source: Chłoń-Domińczak et al., (2024), p.21

2.2 Empirical strategy

In this paper, we follow a theoretical framework proposed by Chłoń-Domińczak et al., (2024) in order to identify resources and life-course capital of people in their early working age (18-49), which enable them to be more resilient than others in terms of avoiding influence of life-course disturbances (negative shocks or adversities) and resilience markers (risk factors of resilience) on individual-level fertility behaviour.

We use international survey data (GGS) to verify to what extent the social and human capital, accumulated in the life course in the form of educational attainment, position on the labour market, stability of relationship and material wealth, allow to counteract potential negative effects of life-course disturbances. Among these disturbances we included: risk of a job loss, income instability, or lowered reproductive capacity due to disability of individuals and past experiences of struggling with health limitations of already born children. The fact that we do not have the longitudinal data (which will be available in the future waves of the GGS) creates some limitations to this analysis. The methods allowing for the causal analysis require usually

longitudinal data enabling the observation of consequences of demographic events during individual life courses.

Following Chłoń-Domińczak et al. (2024), our starting point is the theory of planned behaviour (Ajzen, 1991; Ajzen & Klobas, 2013). We assume that the final outcome, the number of children born to women, can be explained in terms of the decision-making process related to both fertility intentions and final fertility behaviour. Disturbances mentioned above should influence both family-size planning and the realisation of such intensions, that is childbearing.

The impact of each of the disturbances can depend on the life-course stage. Therefore, we analyse the three possible outcome variables that represent various aspects of fertility behaviour. These variables constitute potential factors for the progression of family development (Figure 1). First, we analyse the factors that contribute to having at least one child per women (in other words, avoiding childlessness). Second, we consider only people who have children and separately analyse what are the features of individuals having three or more children. Third, in many cases, women with children have indicated in the survey that they in general intend to have another child. Nevertheless, only a part of them declared an intention to have another child relatively soon – in the next three years. Thus, the aim of the third type of models is the description of the circumstances leading to declaration that having a next child is intended in the near future.

Figure 1. The idea of the operationalisation of the resilience framework at the micro level for the purposes of empirical analyses using GGS.



Source: Authors' own elaboration

We consider two types of explanatory variables. First, we used the common set of core variables important for understanding fertility behaviour even without need for resilience. This set covers demographic features (age, type of relationship/marital status, number of past relationships, subjective health assessment), the human capital and resources collected in the lifetime (educational attainment, ownership of the house), and individual mindset regarding family and fertility (religiosity, trust to other people). Some of these variables can be called resilience markers but without measuring their interactions with events in the life course that negatively influence fertility behaviour one cannot prove it.

The second type of explanatory variables are potential disturbances to fertility behaviour related to health problems (current health of the respondent, already born biological children or problems with getting pregnant in the past) or economic troubles at individual level (risk of job loss, measures of income instability). In theory, these variables should have negative impact on fertility behaviour but different interdependencies between core variables and these shock variables can be also observed.

The interactions between the second type of explanatory variables and resilience markers from the first set of explanatory variables is assumed to be the measurement of resilience. The main aim of the analysis is the detection to what extend the potentially negative impact of disturbances on fertility can be reduced by resilience markers.

3. Method and data

3.1 Method

Three types of dichotomous outcome variables describing various aspects of fertility behaviour and fertility intentions of women were used in the empirical part of this paper. In order to model these variables, we applied the binomial logistic regression assuming binary dependent variable, that is $y_i = 1$ or $y_i = 0$, for i = 1, ..., n. A more detailed description of this kind of modelling can be found, for example, in Greene (2000) or Hosmer et al., (2013).

The probability distribution of the dependent variable y_i is a Bernoulli distribution with the probability density function given by

$$f(y_i) = p_i^{y_i} (1 - p_i)^{1 - y_i}, y_i = 0 \text{ or } 1.$$
 (Eq. 1)

In this distribution, $E(y_i) = p_i$ and $Var(y_i) = p_i (1 - p_i)$.

In general, the probability p_i that $y_i = 1$ is described by function:

$$p_i = F(\mathbf{\beta}\mathbf{x}_i). \tag{Eq. 2}$$

Where $\mathbf{x}_i = [x_{i1}, ..., x_{ik}]^T$ is a vector of explanatory variables and $\boldsymbol{\beta} = [\beta_1, ..., \beta_k]$ is a vector of model parameters to be estimated. In the binomial logistic regression, the function *F* is a cumulative distribution function of logistic distribution, thus:

$$p_i = P(y_i = 1) = F(\boldsymbol{\beta} \mathbf{x}_i) = \frac{\exp(\boldsymbol{\beta} \mathbf{x}_i)}{1 + \exp(\boldsymbol{\beta} \mathbf{x}_i)}.$$
 (Eq. 3)

In practice it is more convenient to present this model as the natural logarithm of the ratio of the probability of $y_i = 1$ to the probability of $y_i = 0$, referred to as a logit of probability:

$$logit(p_i) = ln\left(\frac{P(y_i=1)}{P(y_i=0)}\right) = ln\left(\frac{p_i}{1-p_i}\right) = F^{-1}(p_i) = \beta \mathbf{x}_i$$
(Eq. 4)

where F^{-1} is the inverse function of the probability of success. In such description, the logit of the probability of success is given by the linear combination of explanatory variables:

$$logit(p_i) = \mathbf{\beta} \mathbf{x}_i = \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_k x_{ik}$$
(Eq. 5)

In this paper the explanatory variables are divided into three categories: core variables βx_i^{core}) and variables that contain disturbances and interactions between them and one of the core variables called a resilience indicator (βx_i^{dist}). Thus, for each specification two models are estimated: core model without taking into account disturbances and interactions:

$$logit(p_i) = \beta x_i^{core}$$
(Eq. 6)

and model with disturbance and resilience indicator

$$logit(p_i) = \beta x_i^{core} + \beta x_i^{dist}$$
(Eq. 7)

3.2 Data

This paper uses the data from the Wave 1 of the second round of the Generations and Gender Survey, GGS-II for the five countries with available datasets: Austria, Czechia, Denmark, Finland, and the United Kingdom. The sample was limited to women aged 25-44, so as to focus the analysis of individuals making direct and key decisions regarding fertility, in the childbearing age.

The main advantage of using GGS survey is that it contains a wide range of variables describing the past fertility behaviour of people as well as their future intensions. The main disadvantage of these data is that it is not longitudinal (being the first wave of the GGS-II survey), and thus it was impossible to extract the data on negative events or disturbances and information on resilience markers from the only one time period. Hence, the results of the modelling should be treated in terms of co-occurrence of descriptive variables and final, cumulative outcomes of fertility behaviour. In the future, once the panel data is available, our analytical approach can be further developed, using the longitudinal information.

All three outcome variables were constructed on the basis of the information about the number of children and fertility intensions included in the survey:

- Avoiding childlessness (0 for childless women, 1 for those having at least one biological child);
- Having three or more children if she has at least one (0 for women having one or two children, 1 for those having at least three children);
- Intention to have another child in close future, given that the intention to have a child is already positive (0 for women having an intention to have another child (answers:

probably yes" or "definitely yes") but not in the next three years, 1 for women planning to have another child (answers: probably yes" or "definitely yes") in the next three years).

The information about detailed recoding of the explanatory variables collected in the survey is presented in Table 2. Usually, the initial variables were more extensive than finally used in the models, but recoding was needed for the sake of simplicity of interpretation and to save the number of degrees of freedom of the econometric models.

Table 2. R	ecoding o	of the e	explanatory	variables	used i	in the	core	model	based	on the	informa	tion f	rom
the survey													

Variable in the econometric model	Source variables in GGS survey
Five-year age groups: 25-29, 30-34, 35-39, 40-44 (ref. Group 30-34 years)	Age of persons in the moment of interview calculated from the date of birth and date of the interview
Declared religiosity: four categories: "not religious", "average religious", "very religious", "no answer" (ref. group "average religious"	Question: Regardless of whether you belong to a particular religion, how religious would you say you are? Please express your religiosity on a scale of 0 to 10 where 0 means 'Not at all religious' and 10 means 'Very religious'. Recoding: 0 - "not religious", 1-7 – ""average religious", 8-10 "very religious", missing data – "no answer"
Education attainment of respondent: "primary", "secondary", "tertiary"	Question: What is the highest level of education you have completed?
Partnership status: "single", "partner", "married	Questions: "Do you have a partner at the moment?" and "Are you and your partner legally married?"
Number of partners before current relationship: 0, 1, 2, 3 and more	Grouped information from the detailed question about history of partnerships of the respondent.
Housing status: "own", "rent privately", "other"	Variable- housing status: 1 – "owner", 2 – "tenant or subtenant, paying rent", "accommodation provided for free" and remaining answers grouped to category "other"
Attitude towards other people: can you lean on persons around?: "Yes", "No or other answers"	Question about current loneliness- agree or disagree with the statement: There are plenty of people I can rely on when I have problems. Answers: "Yes", "More or less", "No"

Apart from the baseline model, in this analysis, we also used the variables identifying disturbances experienced by respondents. The variables that explained these disturbances are presented in Table 3.



Table 3. Recoding of the variables used in the models with disturbances and their interactions with resilience variables

Variable in the econometric model - disturbance in the life course:	Source variables in GGS survey
Health problems - limitations in daily activities (dichotomous variable): "Yes" or "No and other answers"	Question: For the past six months at least, to what extent have you been limited because of a health problem in activities people usually do? Answers: "severely limited" and "limited but not severely" recoded to "Yes", other answers: "Not limited", "don't know"
Subjective assessment of job insecurity (dichotomous variable): "Yes" or "No and other answers"	Question: How likely is it that you will lose your job in the next twelve months? Answers "likely" or "very likely" recoded to "Yes", other answers: "unsure", "unlikely", "very unlikely", "don't know"
Difficulties with making ends meet (dichotomous variable): "Yes" or "No and other answers"	Question: "Thinking of your household's total monthly income, is your household able to make ends meet?" Answers "with great difficulty" and "with difficulties" recoded to "Yes", other answers: "with some difficulty", "fairy easily", "easily", "very easily", "don't know"
Expected decline in income (dichotomous variable): "Yes" or "No and other answers"	Question: "Do you think that your financial situation will get better or worse or will be about the same in three years from now?" Answers: "much worse" and "worse" recoded to "Yes", other answers: "neither better nor worse", "better", "much better", "don't know"
Reproductive health problems in the past (dichotomous variable): "Yes" or "No"	Question: "Was there ever a time when you and a partner were trying to get pregnant but did not conceive within at least 12 months?" Answers: "yes", "no"
Child with disability or limitations (dichotomous variable)" Yes", "No"	Summary of the questions about "limitation or disability of all children already born: "For the past six months at least, to what extent has been limited because of a health problem in activities people usually do?" – "severely limited" or "limited" recoded to "Yes", other answers: "not limited", "don't know".

Three kinds of models were estimated on the pooled dataset and separately for each country (Table 4). It should be noted that, in certain countries (Czechia and Denmark), the sample sizes were relatively small.

Focusing on the composition of the sample with regards to the number of children, one can observe that the largest share of respondents are childless women. The highest percentage of childless women (Figure 2) was observed in the survey in Austria and Finland and relatively lower in Czechia, which is in line with the macro indicators for Europe (Kreyenfeld & Konietzka, 2017).



Table 4. Summary of the sample sizes used in the an	alysis
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	Pooled model	Austria	Czechia	Denmark	Finland	UK
Total sample of women (models for childlessness)	11 292	1 943	1 459	1 156	2 462	2 329
Women with at least one child (models of having 3+ children)	6 717	1 094	1 126	580	1 471	1 344
Women who intended to have another child (modelling intension of having child in the next 3 years)	4 070	689	449	394	1 072	720

Figure 2. Number of children for women in the sample



Source: Own elaboration, GGP 2024 data.

The fertility intensions of women who already had one child were relatively similar in all analysed countries with exception of Denmark where the intention to have another child in the next three years was declared relatively more frequently (Figure 3), while at the same time the percentage of women who declared no intention to have another child at all was much lower.

Figure 3. Fertility intentions of women with children by country



Source: Own elaboration, GGP 2024 data.

4. Results

4.1 Avoiding childlessness in the early life course

In order to analyse the interdependencies between disturbances and indicators of resilience, we first estimated the core model without disturbances influencing the fact of having at least one child. The results for pooled dataset (all countries combined) and single countries are reported in Table 5.

The probability of having any children increases with age as a result of the longer probability of exposure to an event such as childbirth and frequent postponement of the decisions about first child to later age. After controlling for this most important variable, all other variables included in the core model appeared to be significant in predicting the fact of having at least one child in contrary to remaining childless.

Naturally, having a child was positively corelated with variables reflecting stabilisation of the relationship and material situation, so as having currently partner or husband and owning a house or a flat. However, it is interesting that only private rental of housing were factors negatively influencing analysed fertility behaviour. "Other" types of housing arrangements, including social support from the state, were not found to negatively affect fertility. It is also noteworthy that the number of previous relationships (before the current one) was also positively related to having at least one child. It can be a result of a tendency to have biological child with each partner or the search for a new partner in case of the lack of success of having a child with a previous partner.

The result of the application of the core model also plainly shows that childlessness was much more frequent among women with tertiary education in all countries. In Austria and Czechia, lower than secondary educational attainment additionally increased the probability of having at least one child, although this relationship was not observed in other countries.

As regards the possible influence of the mindset or values, we found only a few and contradictory evidence on relation between religiosity on avoiding childlessness. A positive relation between having children and religiosity was found in Austria, but a negative relation was found in Czechia. This indicates that religiosity cannot be analysed only as an individual factor but it should also be placed in the context of social and cultural norms that are countryspecific. In addition, some indicators of loneliness were also taken into account. However, all of them appeared to be rather weak predictors of childlessness. For further analysis we have selected a variable measuring an individual approach to trusting other people, measured by a response to the question about the perceived ability to lean on other people. It appeared that in the pooled dataset positive answer to this question was negatively related to childlessness avoidance.

In the pooled model we used dummy variables for countries, to reflect the differences between countries in terms of the childlessness level, suggesting that country-specificity, including social and cultural norms, and public policies, is also a significant factor.



	Do you have at least one biologic child? (rel. NO)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
Age group (ref.	30-34)					1			
25-29	0.388***	0.425***	0.436***	0.329***	0.359***	0.408***			
	(0.341 - 0.440)	(0.308 - 0.586)	(0.291 - 0.653)	(0.253 - 0.430)	(0.232 - 0.555)	(0.312 - 0.533)			
35-39	2.068***	2.451***	2.442***	2.161***	1.860***	1.645***			
	(1.821 - 2.347)	(1.792 - 3.353)	(1.625 - 3.671)	(1.617 - 2.888)	(1.257 - 2.752)	(1.270 - 2.132)			
40-44	2.730***	3.209***	3.453***	3.319***	3.026***	1.831***			
	(2.380 - 3.133)	(2.283 - 4.512)	(2.195 - 5.432)	(2.418 - 4.554)	(1.963 - 4.665)	(1.387 - 2.418)			
Religiosity (ref.	Average religiosity)					Γ			
not religious	0.951	0.754*	1.365*	0.890	0.824	1.147			
	(0.853 - 1.060)	(0.567 - 1.001)	(0.958 - 1.944)	(0.705 - 1.124)	(0.570 - 1.191)	(0.927 - 1.419)			
very	1.072	1.233	0.672*	0.880	1.200	1.041			
religious	(0.927 - 1.241)	(0.879 - 1.729)	(0.430 - 1.050)	(0.593 - 1.305)	(0.802 - 1.796)	(0.759 - 1.427)			
no answer	1.216**	1.049	0.938	1.253	1.163	1.796**			
	(1.008 - 1.468)	(0.672 - 1.636)	(0.541 - 1.626)	(0.845 - 1.859)	(0.590 - 2.291)	(1.147 - 2.812)			
Educational att	ainment (ref. secor	ndary)							
primary	2.239***	3.236***	8.121***	0.700	0.555	1.666			
	(1.728 - 2.902)	(1.782 - 5.878)	(3.817 - 17.28)	(0.364 - 1.347)	(0.179 - 1.724)	(0.772 - 3.598)			
tertiary	0.509***	0.501***	0.506***	0.811*	0.543***	0.391***			
	(0.459 - 0.563)	(0.393 - 0.638)	(0.364 - 0.704)	(0.643 - 1.023)	(0.380 - 0.777)	(0.317 - 0.483)			
Partnership sta	tus (ref. single)								
partner	1.964***	2.334***	2.387***	2.423***	1.674**	1.552***			
	(1.734 - 2.224)	(1.684 - 3.236)	(1.575 - 3.619)	(1.835 - 3.199)	(1.079 - 2.596)	(1.224 - 1.969)			
married	10.81***	14.03***	16.17***	11.70***	10.92***	7.256***			
	(9.382 - 12.45)	(9.758 - 20.18)	(10.06 - 26.00)	(8.552 - 16.02)	(6.809 - 17.50)	(5.516 - 9.545)			
Housing owners	ship (ref. Own)								
rent privately	0.516***	0.441***	0.484***	0.514***	0.326***	0.918			
	(0.463 - 0.574)	(0.340 - 0.570)	(0.340 - 0.689)	(0.410 - 0.644)	(0.229 - 0.462)	(0.723 - 1.165)			
other	1.118	0.751	0.951	0.460***	0.534*	2.492***			
	(0.957 - 1.306)	(0.501 - 1.125)	(0.547 - 1.656)	(0.319 - 0.663)	(0.282 - 1.010)	(1.868 - 3.324)			
Attitude toward	s other persons: ar	nswer to the questi	on: can vou lean or	persons around?	(ref. NO)				
Yes	0.908*	0.846	0.973	1.067	0.976	0.908			
	(0.823 - 1.003)	(0.663 - 1.080)	(0.720 - 1.314)	(0.831 - 1.370)	(0.720 - 1.323)	(0.747 - 1.105)			
Number of prev	ious parnetrships (ref. 0)	((((
1	1.707***	1.699***	1.323	1.624***	1.709***	2.043***			
	(1.523 - 1.913)	(1.275 - 2.265)	(0.913 - 1.918)	(1.269 - 2.077)	(1.189 - 2.457)	(1.608 - 2.594)			
2	1.858***	2.097***	1.295	1.674***	1.868**	2.099***			
	(1 577 - 2 189)	(1 381 - 3 184)	(0 788 - 2 127)	(1 187 - 2 360)	(1 105 - 3 159)	(1 472 - 2 993)			
3 and more	1 675***	1 501	1 178	1 525	2 702***	2 117**			
o and more	(1 202 2 160)	(0.779	(0.547, 2.520)	(0.990, 2.642)	(1 240 5 702)	(1 154 2 005)			
Country/rof Au	(1.293 - 2.109)	(0.778-2.097)	(0.547 - 2.559)	(0.000 - 2.043)	(1.340 - 5.763)	(1.134 - 3.885)			
Czechia	2 066***								
Ozeenia	(1745 - 2445)								
Denmark	1 592***								
Dennark	(1 30/ - 1 910)								
Eipland	(1.004 - 1.019)								
FIIIdilü	0.000								
	(0.751 - 1.050)								
UK	1.365***								
	(1.192 - 1.563)	+100/							

Table 5. Results of the core regression model describing the fact of heaving at least one child by woman (the odds ratios and 95% confidence intervals for the odds ratios)

4.1.1 Educational attainment and disturbance factors to having children

In order to verify the hypotheses about individual resilience to different possible disturbances we have checked the four possible indicators of such resilience and, using estimated models, we verified to what extend they reduce the influence of selected risk or protective factors, as described in the Section 3. In the models explaining childlessness avoidance, we considered four possible disturbances: objective disability (observed currently) measured with a scale of daily-life limitations, self-assessment of job insecurity, currently observed difficulties in making ends meet (subjective financial wellbeing) and self-reported expected decline in income in the next three years.

The first resilience factor was an educational attainment (Table 6). In interaction with educational attainment, the limitations to daily activities were significantly negatively related to having at least one child only in Finland. Subjective assessment of job insecurity was negatively associated with a birth of at least one child in Austria and in the United Kingdom.

However, the disturbance variables related to the assessment of current economic situation were rather positively associated with having at least one childpreviously, suggesting that the causality can be reversed. Namely, having at least one child and already facing the necessity to meet the children needs can affect the assessment of financial situation, especially the assessment about making ends meet.

The interactions between education and disturbances suggest that:

- The possible levelling effect of education was observed only in Finland and the United Kingdom. In Finland women with lower education and disability were lower probability of being childless than other women with disability. In the UK both tertiary education and primary education decreased the likelihood of having at least one child by women with disabilities.
- In the case of income insecurity variables, it appeared that in many countries tertiary education was not a resilience indicator of fertility behaviour, but rather the opposite. In Czechia, Denmark and Finland, women with tertiary education and job insecurity had lower probability of having children. The combination of difficulties in making ends meet together with tertiary education led in Czechia and the United Kingdom to more probable childlessness than only related to tertiary education. In these two countries result was similar if the disturbance variable was pessimistic expectation of future income. This result may indicate that people with tertiary education can face potentially higher income losses due to insecurity, which has a higher impact on their fertility resilience.
- Only in Denmark, both the relationship between expected decline in income and already born children was negative, but the combination of negative expectations and tertiary education had a positive relationship with having at least one child. Thus, tertiary education could have been assumed as resilience factor in the case of expected worsening of financial situation in this country.

Table 6. Parameters of additional variables added to the core model explaining having at least one child and related to shocks in the lifecycle and parameters of their interactions with educational attainment (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST ONE BIOLOGICAL CHILD (ref. NO)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK	
	ŀ	lealth problems	s - limitations of o	daily activity			
Parameter of	0.898	0.759	0.767	0.925	0.459**	1.258	
additional variable in the model	(0.762 - 1.058)	(0.523 - 1.100)	(0.459 - 1.281)	(0.607 - 1.412)	(0.244 - 0.867)	(0.888 - 1.782)	
interaction: yes#	0.956	1.876	0.254	2.673	38.85**	0.154**	
primary education	(0.564 - 1.621)	(0.537 - 6.549)	(0.0446 - 1.452)	(0.700 - 10.22)	(1.827 - 826.2)	(0.0251 - 0.939)	
interaction: yes#	0.985	1.345	1.098	1.073	1.514	0.643*	
tertiary education	(0.791 - 1.226)	(0.757 - 2.391)	(0.565 - 2.132)	(0.636 - 1.811)	(0.719 - 3.185)	(0.410 - 1.008)	
		Subjective as	sessment of job i	nsecurity			
Parameter of	0.691***	0.468**	1.275	1.035	2.213	0.615*	
the model	(0.535 - 0.893)	(0.246 - 0.889)	(0.641 - 2.536)	(0.571 - 1.877)	(0.797 - 6.146)	(0.357 - 1.060)	
Interaction: yes# primary education	2.796**	6.709	1.692	0.161			
	(1.079 - 7 243)	(0.580 - 77 61)	(0.152 - 18 85)	(0.00764 - 3 <i>4</i> 11)			
interaction: yes#	0.854	1.017	0.367**	0.513*	0.210***	1.703	
	(0.618 -	(0.399 -	(0.155 -	(0.254 - 1.039)	(0.0645 -	(0.876 -	
	1.179)	2.594) Difficultie	0.868) s in making ends	meet	0.685)	3.310)	
Parameter of		Difficulties					
additional variable in	2.745***	2.479***	2.751***	1.800**	2.955***	2.894***	
the model	(2.332 - 3.231)	(1.767 - 3.479)	(1.600 - 4.731)	(1.103 - 2.937)	(1.529 - 5.711)	(2.015 - 4.155)	
interaction: yes#	0.730	0.482	0.570	3.479*	1.954	0.175	
	(0.405 - 1.314)	(0.126 - 1.835)	(0.0893 - 3.631)	(0.800 - 15.13)	(0.0627 - 60.85)	(0.0160 - 1.907)	
interaction: yes# tertiary education	0.647***	0.673	0.556*	0.781	0.940	0.684*	
-	(0.521 - 0.804)	(0.394 - 1.150)	(0.278 - 1.111)	(0.424 - 1.438)	(0.415 - 2.127)	(0.442 - 1.058)	
		Expecte	d decline in inco	me			
Parameter of	1.201*	1.004	1.328	0.296*	0.723	1.614**	
the model	(0.988 - 1.460)	(0.699 - 1.444)	(0.633 - 2.783)	(0.0846 - 1.033)	(0.184 - 2.841)	(1.061 - 2.455)	
interaction: yes# primary education	1.645	1.320	0.649	48.99**	-	2.552	
, , , , , , , , , , , , , , , , , , , ,	(0.872 - 3.103)	(0.365 - 4.777)	(0.118 - 3.564)	(2.260 - 1,062)	-	(0.401 - 16.23)	

	HAVING AT LEAST ONE BIOLOGICAL CHILD (ref. NO)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
interaction: yes#	0.805	1.489	0.451*	3.987*	1.685	0.624*			
tertiary education	(0.610 -	(0.813 -	(0.180 -	(0.000 10.00)	(0.336 -	(0.370 -			
	1.061)	2.727)	1.126)	(0.800 - 19.88)	8.438)	1.051)			

4.1.2 Housing status and disturbance factors to having children

The ownership of home can be considered a resilience factor constituting an asset in relationship stabilisation, and the one contributing to financial household stabilisation. Analysis of the models with interactions leads to the following findings:

- In the pooled data model, adding interactions accentuated the negative relationship between disability and fertility, but, on the other hand, it also showed that less stable housing arrangements (ownership of a house being a reference value) could be positively associated with having at least one child.
- In several countries, the housing tenure category "other" (not comprising house ownership, nor private rental) in the question about the housing status can be considered a resilience indicator. In combination with disturbance variables, it was associated with higher probability of having at least one child, probably reflecting the postponement of first childbirth among homeowners (possibly related to gathering of savings for a house or the mortgage repayment) compared to the category "other".

Table 7. Parameters of additional variables added to the core model explaining having at least one child and related to shocks in the lifecycle and parameters of their interactions with home ownership (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST ONE BIOLOGICAL CHILD (ref. NO)									
	Pooled model	Austria	Czechia	Denmark	Finland	UK				
Health problems - limitations of daily activity										
Parameter of additional	0.749***	0.836	0.654**	0.820	0.519***	0.837				
variable in the	(0.642 -	(0.524 -	(0.442 -	(0.578 -	(0.341 -	(0.614 -				
model	0.875)	1.333)	0.970)	1.164)	0.789)	1.142)				
interaction:	1.366***	1.196	1.617	1.505	1.929*	1.295				
yes# rent	(1.088 -	(0.660 -	(0.802 -	(0.905 -	(0.944 -	(0.768 -				
privately	1.716)	2.167)	3.262)	2.502)	3.942)	2.182)				
interaction:	1.440**	0.609	1.147	1.338	1.270	1.256				
yes#other	(1.034 -	(0.223 -	(0.352 -	(0.562 -	(0.333 -	(0.719 -				
	2.006)	1.666)	3.738)	3.184)	4.846)	2.194)				
		Subjective as	ssessment of jo	b insecurity						
Parameter of additional	0.637***	0.693	0.513**	0.688	0.574*	0.845				
variable in the	(0.512 -	(0.313 -	(0.304 -	(0.434 -	(0.302 -	(0.567 -				
model	0.793)	1.533)	0.865)	1.092)	1.092)	1.260)				
	1.121	0.682	2.664**	0.948	1.471	1.250				

	HAVING AT LEAST ONE BIOLOGICAL CHILD (ref. NO)							
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
interaction: yes# rent privately	(0.811 - 1.552)	(0.252 - 1.843)	(1.121 - 6.330)	(0.486 - 1.851)	(0.515 - 4.204)	(0.583 - 2.678)		
interaction: yes#other	0.793	0.408	1.267	0.560	1.565	1.058		
	(0.475 - 1.324)	(0.0667 - 2.498)	(0.300 - 5.345)	(0.187 - 1.680)	(0.128 - 19.12)	(0.431 - 2.595)		
		Difficultie	es in making en	ds meet				
Parameter of additional	1.770***	2.262***	1.579**	1.246	2.263***	1.781***		
variable in the model	(1.494 - 2.097)	(1.422 - 3.599)	(1.028 - 2.426)	(0.727 - 2.136)	(1.311 - 3.907)	(1.331 - 2.384)		
interaction: yes# rent	1.208	0.833	1.469	1.516	1.637	1.481		
privately	(0.961 - 1.519)	(0.470 - 1.478)	(0.715 - 3.018)	(0.787 - 2.921)	(0.733 - 3.656)	(0.900 - 2.436)		
interaction:	2.787***	1.270	3.080	1.300	1.955	2.151**		
yes#otner	(1.979 - 3.926)	(0.500 - 3.222)	(0.802 - 11.83)	(0.481 - 3.511)	(0.287 - 13.33)	(1.152 - 4.017)		
		Expect	ed decline in in	come	,	,		
Parameter of additional	0.949	1.129	0.874	0.400*	1.039	1.211		
variable in the model	(0.783 - 1.151)	(0.722 - 1.764)	(0.520 - 1.468)	(0.140 - 1.141)	(0.428 - 2.524)	(0.879 - 1.669)		
interaction:	1.331*	1.098	0.794	7.275**	1.039	1.052		
yes# rent privatelv	(0.994 - 1 783)	(0.601 - 2.004)	(0.304 - 2.077)	(1.474 - 35 90)	(0.225 - 4 792)	(0.555 - 1 994)		
	1 /70*	0.015	0,800	0 /0/	4 .732)	1 000		
interaction: yes#other	(0.995 - 2.174)	(0.360 - 2.323)	(0.201 - 3.192)	(0.0293 - 8.334)		(0.552 - 1.892)		

4.1.3 Marriage (formal confirmation of relationship) and disturbance factors to having children

Marriage as a formal confirmation of the partners' engagement in current relationship can be considered a resilience variable. However, the findings from the regressions (Table 8) with interactions suggest that after controlling for the positive impact of marriage on having children, the interactions of being married with possible disturbances do not bring such clear conclusions:

- only in Czechia being at the same time married and having disabilities, or having insecure job was negatively associated with childlessness avoidance in comparison to other married couples;
- in the majority of the analysed countries (except for Finland), married women in a difficult financial situation (problems with making ends meet or bad expectations of

future income) were less likely to have at least one child in comparison to others, who also experienced such difficulties. The reason for this empirical finding requires further analysis. It is possible that maried women can perceive their material status differently than non-married women. If they complaint only experiencing severe difficulties than it can be correlated with fewer children they can afford.

Table 8. Parameters of additional variables added to the core model explaining having at least one child and related to shocks in the lifecycle and parameters of their interactions with marriage (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST ONE BIOLOGICAL CHILD (ref. NO)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
Health problems - limitations of daily activity									
Parameter of additional	0.960	0.932	0.926	1.138	0.675*	0.969			
variable in the model	(0.844 - 1.091)	(0.665 - 1.305)	(0.628 - 1.365)	(0.852 - 1.521)	(0.445 - 1.024)	(0.750 - 1.252)			
interaction:yes#	0.772**	0.833	0.563*	0.643	0.891	0.900			
marriage	(0.613 - 0.973)	(0.460 - 1.509)	(0.293 - 1.085)	(0.378 - 1.094)	(0.451 - 1.759)	(0.543 - 1.491)			
Subjective assessment of job insecurity									
Parameter of additional	0.702***	0.572**	0.927	0.601***	0.889	0.868			
variable in the model	(0.584 - 0.845)	(0.329 - 0.994)	(0.569 - 1.509)	(0.410 - 0.881)	(0.489 - 1.618)	(0.595 - 1.266)			
interaction:yes#	0.784	0.746	0.461*	1.184	0.458	1.118			
marriage	(0.567 - 1.085)	(0.294 - 1.897)	(0.202 - 1.052)	(0.594 - 2.362)	(0.170 - 1.238)	(0.563 - 2.219)			
Difficulties in making ends meet									
Parameter of additional	2.540***	2.591***	2.352***	1.571***	3.184***	2.622***			
variable in the model	(2.225 - 2.898)	(1.891 - 3.551)	(1.559 - 3.546)	(1.121 - 2.203)	(1.985 - 5.107)	(2.019 - 3.406)			
interaction:yes# marriage	0.566***	0.495**	0.525*	1.281	0.659	0.547**			
	(0.445 - 0.718)	(0.289 - 0.846)	(0.258 - 1.070)	(0.578 - 2.838)	(0.273 - 1.593)	(0.340 - 0.883)			
		Expect	ed decline in in	come					
Parameter of additional variable in the	1.256***	1.172	1.228	1.133	0.919	1.360**			
model	(1.068 - 1.477)	(0.830 - 1.654)	(0.744 - 2.027)	(0.503 - 2.550)	(0.408 - 2.074)	(1.016 - 1.821)			
interaction:yes#	0.675***	0.990	0.287***	0.146**	1.428	0.711			
marriage	(0.507 - 0.897)	(0.543 - 1.806)	(0.126 - 0.657)	(0.0215 - 0.987)	(0.230 - 8.872)	(0.420 - 1.205)			

Note: p-values: ***1%, ** 5%, *10%



4.1.4 Subjective health assessment and disturbance factors to having children

In the models, the objective health measure, used in this study, was the self-reported scale of limitations in dailylife. We should note that, the subjective perception of health can be different from this more objective measure, and relatively good assessment of health can be perceived as a resilience factor that influences fertility behaviour. Regressions aimed to verify this kind of relationship. Our results show that the interaction between subjective and objective assessment of health (Table 9) did not confirm the impact of self-assessed health on avoiding childlessness in the past (by persons who experience adversities).

Table 9. Parameters of additional variables added to the core model explaining having at least one child and related to shocks in the lifecycle and parameters of their interactions with subjective health assessment (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST ONE BIOLOGICAL CHILD (ref. NO)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK	
	He	ealth problems	- limitations of (daily activity			
Parameter of	1.047	1.028	1.053	1.069	0.639	1.267	
additional variable in the model	(0.848 - 1.292)	(0.547 - 1.932)	(0.517 - 2.144)	(0.689 - 1.657)	(0.306 - 1.335)	(0.876 - 1.834)	
Interaction: yes#	0.919	0.843	0.862	1.297	1.350	0.660	
good health assessment	(0.712 - 1.187)	(0.410 - 1.732)	(0.381 - 1.952)	(0.739 - 2.274)	(0.571 - 3.190)	(0.399 - 1.094)	
		Subjective asse	essment of job i	insecurity			
Parameter of additional variable	0.763*	0.748	1.726	0.633	1.010	0.713	
in the model	(0.570 -	(0.306 -	(0.785 - 2.705)	(0.338 -	(0.370 -	(0.416 -	
	1.020)	1.020)	3.793)	1.100)	2.750)	1.219)	
Interaction:yes#	0.818	0.627	0.322**	1.002	0.604	1.443	
assessment	(0.581 - 1.151)	(0.223 - 1.761)	(0.129 - 0.806)	(0.486 - 2.067)	(0.189 - 1.937)	(0.745 - 2.798)	
		Difficulties	in making ends	meet		· · ·	
Parameter of	2.599***	2.492***	2.342**	1.744**	2.852***	2.296***	
in the model	(2.095 - 3.224)	(1.355 - 4.581)	(1.208 - 4.539)	(1.042 - 2.920)	(1.416 - 5.745)	(1.543 - 3.416)	
interaction:yes# good health assessment	0.840	0.821	0.887	0.986	1.324	1.005	
	(0.660 -	(0.424 -	(0.418 -	(0.530 -	(0.571 -	(0.636 -	
	1.069)	1.588) Exportor	1.884)	1.835)	3.072)	1.588)	
		Lypeciec		ine			
Parameter of additional variable	1.489***	1.601	0.953	0.829	0.789	1.367	
in the model	(1.157 - 1.917)	(0.837 - 3.060)	(0.432 - 2.105)	(0.268 - 2.564)	(0.237 - 2.621)	(0.920 - 2.032)	
	0.692**	0.691	0.781	1.157	1.722	0.874	

interaction:yes#	(0 515	(0.226	10 202	10 249	/0 270	(0 5 2 9
good health assessment	0.931)	1.421)	1.978)	5.388 <i>)</i>	7.826)	1.448)

4.3 Having at least three children

Another approach that we propose to analyse fertility resilience is the focus on women who have three or more children in comparison to those who have one or two. The core model, containing basic, most important variables (Table 10), leads to the conclusion that the probability of having a relatively large number of children increases with age but not monotonically. In certain countries (Austria and Finland), the difference in comparison to the age of 30-34 remains similar for age groups of 35-39 and 40-44 years. It can suggest that the fertility decisions to have relatively large family are frequently made earlier in the life course.

In comparison to the analysis of explaining having at least one child (childlessness avoidance), the variables describing the probability of having three of more children were different. In particular:

- Only marriage remained significantly correlated with relatively large family, and the number of previous relationships is no longer important in explaining probability of having 3+ children (with the exception of the United Kingdom, where three or more past relationships increase the probability of having three or more children).
- The main non-demographic factor, significant in the model, is the mindset of womendeclared high religiosity. This correlate has a strong positive impact on having three or more children. In Austria and the United Kingdom, it remains also a significantly positive parameter for people who preferred not to answer question about religiosity.
- Tertiary education is no longer a factor influencing strongly negatively fertility behaviour , and it remained significantly negative only in the United Kingdom.
- The ownership of home is also (except the United Kingdom) the variable that differentiates respondents with lower and higher number of children.
- The measure of confidence in the provision of help from people around is also not significant.

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
Age group (ref. 30-34)									
25-29	0.521***	0.265**	0.458*	0.426**	0.454	0.788			
	(0.378 - 0.716)	(0.0902 - 0.781)	(0.191 - 1.097)	(0.193 - 0.940)	(0.136 - 1.519)	(0.466 - 1.333)			
35-39	1.793***	1.728**	1.891***	1.989***	2.750***	1.451*			
	(1.495 - 2.151)	(1.084 - 2.756)	(1.175 - 3.044)	(1.324 - 2.987)	(1.484 - 5.095)	(0.986 - 2.137)			
40-44	1.931***	1.437	2.704***	2.212***	2.639***	1.884***			
	(1.609 - 2.318)	(0.888 - 2.327)	(1.703 - 4.291)	(1.481 - 3.305)	(1.414 - 4.926)	(1.274 - 2.786)			
Religiosity (ref. Average religiosity)									
not religious	0.961	0.770	1.054	0.769	0.774	1.254			

Table 10. Results of the core regression model describing the fact of heaving at least three children by woman (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK	
	(0.817 - 1.130)	(0.472 - 1.257)	(0.714 - 1.555)	(0.541 - 1.094)	(0.432 - 1.389)	(0.895 - 1.758)	
very religious	1.802***	1.377	2.329***	1.533*	2.670***	2.442***	
U U	(1.515 - 2.142)	(0.911 - 2.081)	(1.490 - 3.640)	(0.974 - 2.414)	(1.658 - 4.300)	(1.586 - 3.759)	
no answer	1.565***	1.852**	1.560	1.221	0.920	1.684*	
	(1.236 - 1.982)	(1.078 - 3.181)	(0.884 - 2.755)	(0.709 - 2.104)	(0.309 - 2.741)	(0.933 - 3.042)	
Educational	attainment (ref. s	secondary)					
Primary	1.892***	1.382	2.992***	3.454***	-	2.658***	
	(1.451 - 2.466)	(0.737 - 2.594)	(1.776 - 5.039)	(1.437 - 8.302)		(1.338 - 5.282)	
tertiary	0.789***	0.827	0.916	1.047	0.708	0.691**	
	(0.685 - 0.909)	(0.573 - 1.193)	(0.638 - 1.315)	(0.757 - 1.449)	(0.437 - 1.147)	(0.504 - 0.948)	
Partnership	status (ref. single)					
partner	0.777**	0.556*	1.112	1.016	2.317	0.939	
	(0.613 - 0.985)	(0.288 - 1.075)	(0.521 - 2.371)	(0.537 - 1.922)	(0.758 - 7.083)	(0.637 - 1.387)	
married	1.306**	0.967	2.072*	2.098**	4.522***	1.255	
	(1.043 - 1.636)	(0.522 - 1.788)	(1.000 - 4.293)	(1.156 - 3.805)	(1.520 - 13.45)	(0.834 - 1.889)	
Housing owr	nership (ref. Own)						
rent privately	0.866	0.818	0.822	0.827	1.464	1.233	
	(0.728 - 1.030)	(0.550 - 1.217)	(0.490 - 1.380)	(0.561 - 1.219)	(0.789 - 2.715)	(0.807 - 1.884)	
other	1.456***	0.763	0.687	0.635	0.746	2.922***	
	(1.179 - 1.797)	(0.392 - 1.486)	(0.359 - 1.315)	(0.331 - 1.220)	(0.201 - 2.767)	(1.995 - 4.280)	
Attitude towa NO)	ards other persor	n: answer to the qu	estion: can you le	ean on persons a	round? (ref.		
Yes	0.932	1.023	1.107	0.937	0.829	0.842	
	(0.814 - 1.067)	(0.723 - 1.450)	(0.801 - 1.531)	(0.670 - 1.310)	(0.546 - 1.258)	(0.623 - 1.136)	
Number of p	revious parnetrsh	nips (ref. 0)					
1	1.039	1.201	0.870	1.032	1.031	0.897	
	(0.889 - 1.214)	(0.805 - 1.793)	(0.584 - 1.297)	(0.743 - 1.435)	(0.631 - 1.685)	(0.629 - 1.280)	
2	1.005	1.245	0.701	0.971	0.942	1.127	
	(0.797 - 1.266)	(0.671 - 2.311)	(0.387 - 1.268)	(0.599 - 1.574)	(0.426 - 2.082)	(0.683 - 1.859)	
3 and more	1.026	1.355	0.780	0.720	0.639	2.159**	
	(0.719 - 1.465)	(0.539 - 3.405)	(0.306 - 1.988)	(0.290 - 1.789)	(0.215 - 1.906)	(1.019 - 4.575)	
Country (ref.	Austria)						
Czechia	1.115						
	(0.909 - 1.368)						
Denmark	1.359***						
	(1.122 - 1.646)						
Finland	1.748***						
	(1.377 - 2.220)						
UK	1.468***						
	(1.205 - 1.788)						

5.2.1 Educational attainment and disturbance factors to having more than two children

In general, not many disturbance variables have significant relationship with the dichotomous variable of having at least three children in the sample limited only to women who have children (Table 11).

The results suggest that the reported current problems with health or expected decline in income in the future were not significant. With the exception of Finland, the job insecurity was negatively related to the probability of having three or more children, but the parameters were not statistically significant. Finland and Austria were also exceptions in terms of the significance of the relationship between dependent variable and declared negative subjective financial wellbeing (high difficulty to make ends meet). In the rest of the analysed countries, difficulties in making ends meet were in positive relationship with having more than two children. It can be explained by the reversed causality - having children can be the cause of the worse assessment of financial situation.

Limiting the sample to women who already had at least one child allowed to test another two factors that could be disruptive for having more children: (1) the limitations or disability of already born children and (2) possible problems with pregnancy in the past. The latter factor influenced negatively the probability of having at least three children which can reflect a poor reproductive health of women or their partners. On the other hand, having at least one child with disability increased the probability of having a bigger family.

In all regressions, interaction with tertiary education was significant only in the case of lower probability of having three and more children by women who declared both tertiary education and difficulties in making ends meet. Tertiary education of women was also a factor leading to lower probability of having more than two children if one of them had disability.

	HAV	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
	ł	Health problems	- limitations of	daily activity				
Parameter of additional variable in the model	1.059	0.910	1.016	0.666	1.029	1.261		
	(0.849 - 1.320)	(0.529 - 1.567)	(0.553 - 1.866)	(0.346 - 1.282)	(0.435 - 2.429)	(0.833 - 1.907)		
interaction: yes #	1.129	1.250	2.189	0.193	-	0.697		
primary education	(0.663 - 1.924)	(0.335 - 4.659)	(0.772 - 6.202)	(0.0164 - 2.263)	-	(0.178 - 2.736)		
interaction: yes #	0.980	0.813	0.940	1.708	0.807	1.019		
tertiary education	(0.720 - 1.335)	(0.307 - 2.151)	(0.432 - 2.044)	(0.791 - 3.689)	(0.289 - 2.254)	(0.530 - 1.961)		
Subjective assessment of job insecurity								
	0.689*	0.659	0.928	0.426	2.644	0.519		

Table 11. Parameters of additional variables added to the core model explaining having three children or more and related to shocks in the lifecycle and parameters of their interactions with educational attainment (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)							
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
Parameter of additional variable in the model	(0.470 - 1.012)	(0.189 - 2.297)	(0.455 - 1.891)	(0.124 - 1.464)	(0.743 - 9.412)	(0.224 - 1.201)		
interaction: ves#	1.315	0.837	0.897	-	-	2.381		
primary education	(0.566 - 3.052)	(0.0614 - 11.41)	(0.247 - 3.260)	-	-	(0.260 - 21.80)		
interaction: ves#	1.089	0.855	1.323	1.422	0.332	1.154		
tertiary education	(0.658 - 1.803)	(0.121 - 6.043)	(0.511 - 3.424)	(0.357 - 5.672)	(0.0664 - 1.660)	(0.372 - 3.583)		
	,	Difficulties	in making ends	meet	,	I		
Parameter of	1.775***	1.221	2.548***	1.797*	2.007	2.227***		
additional variable in the model	(1.438 - 2.190)	(0.778 - 1.918)	(1.424 - 4.560)	(0.899 - 3.591)	(0.842 - 4.786)	(1.357 - 3.654)		
interaction: yes#	0.622	0.756	1.047	0.233		0.0500**		
primary education	(0.352 - 1 097)	(0.204 - 2 808)	(0.346 - 3 167)	(0.0313 - 1 730)		(0.00448 - 0.558)		
	0.682**	0.425*	0.483*	0.771	0.889	0.952		
interaction: yes#	(0.509 -	(0.179 -	(0.224 -	(0.331 -	(0.315 -			
	0.913)	1.009)	1.041)	1.792)	2.509)	(0.489 - 1.851)		
Expected decline in income								
Parameter of additional variable in	0.981	0.803	1.235	1.905	1.542	1.172		
the model	(0.767 - 1.255)	(0.486 - 1.329)	(0.636 - 2.400)	(0.199 - 18.29)	(0.468 - 5.078)	(0.749 - 1.835)		
interaction: yes#	0.890	0.728	0.911	-	-	0.519		
primary education	(0.485 - 1.633)	(0.163 - 3.247)	(0.286 - 2.903)	-	-	(0.129 - 2.092)		
interaction: yes#	0.725	0.388	0.650	-	-	1.093		
tertiary education	(0.482 - 1.090)	(0.119 - 1.264)	(0.231 - 1.832)	-	-	(0.554 - 2.155)		
	,	Past problem	ns with getting p	regnant				
Parameter of								
additional variable in the model	0.785**	0.877	0.964	0.857	0.390*	0.622*		
	(0.620 - 0.995)	(0.525 - 1.464)	(0.511 - 1.816)	(0.454 - 1.618)	(0.151 - 1.012)	(0.370 - 1.045)		
interaction:yes# primary education	0.712	0.470	0.460	0.981		3.129		
	(0.363 - 1.395)	(0.0822 - 2.693)	(0.131 - 1.617)	(0.0717 - 13.43)		(0.463 - 21.13)		
interaction: yes# tertiary education	1.160	1.310	1.011	1.086	2.038	1.281		
	(0.842 - 1.598)	(0.552 - 3.111)	(0.428 - 2.387)	(0.517 - 2.280)	(0.677 - 6.129)	(0.614 - 2.672)		

	HAV	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
Child with disability or limitations								
Parameter of additional variable in the model	1.924***	1.643*	1.932**	2.727***	1.380	2.222***		
	(1.537 - 2.409)	(0.980 - 2.755)	(1.106 - 3.375)	(1.394 - 5.335)	(0.545 - 3.497)	(1.380 - 3.580)		
interaction: yes#	1.291	1.250	1.262	1.149		3.044		
primary education	(0.736 - 2.264)	(0.321 - 4.868)	(0.464 - 3.437)	(0.141 - 9.402)		(0.296 - 31.31)		
interaction:vos#	0.725**	0.771	0.692	0.366**	0.738	0.973		
interaction:yes# tertiary education	(0.526 - 0.998)	(0.287 - 2.071)	(0.333 - 1.437)	(0.158 - 0.848)	(0.243 - 2.243)	(0.473 - 2.001)		

5.2.2 Housing status and disturbance factors to having more than two children

The variable concerning the home ownership was hardly significant in the core model, but the interactions with the disturbances to fertility for some countries appeared significant. For example, in Austria, health limitations together with the answer "other" in the home ownership was associated with significantly higher probability of having three of more children. In the United Kingdom, the same effect was observed for private rental.

In some countries (excluding the United Kingdom), private rental of place by couples, with information about having children with disability was positively related to the probability of having more children. This may indicate that the ability to afford a private rental is a proxy for parents' wealth status, or their stable income.

Table 12. Parameters of additional variables added to the core model explaining having three children or more and related to shocks in the lifecycle and parameters of their interactions with home ownership (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
Health problems - limitations of daily activity									
Parameter of additional	0.919	0.699	0.941	1.015	0.810	1.111			
variable in the	(0.758 -	(0.383 -	(0.637 -	(0.686 -	(0.472 -	(0.667 -			
model	1.114)	1.276)	1.391)	1.502)	1.393)	1.850)			
interaction:	1.436**	1.671	1.838	0.886	1.396	2.110*			
yes#Tent privately	(1.010 -	(0.692 -	(0.680 -	(0.378 -	(0.412 -	(0.882 -			
privalely	2.041)	4.034)	4.967)	2.078)	4.733)	5.043)			
interaction: limitation#other	1.465*	1.417	3.542*		2.209	0.928			

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)									
	Pooled model	Austria	Czechia	Denmark	Finland	UK				
	(0.959 - 2.237)	(0.233 - 8.636)	(0.894 - 14.04)		(0.143 - 34.12)	(0.460 - 1.870)				
Subjective assessment of job insecurity										
Parameter of additional variable in the model	0.845	0.687	1.190	0.591	1.160	0.726				
	(0.638 - 1.119)	(0.230 - 2.050)	(0.728 - 1.944)	(0.316 - 1.107)	(0.466 - 2.889)	(0.366 - 1.441)				
interaction: yes# rent privately	0.685	0.900	0.469	0.629	1.633	0.508				
	(0.369 - 1.273)	(0.137 - 5.937)	(0.126 - 1.750)	(0.125 - 3.169)	(0.284 - 9.376)	(0.0957 - 2.702)				
interaction: yes#other	0.593		0.662	1.201		0.686				
	(0.273 - 1.286)		(0.134 - 3.275)	(0.113 - 12.72)		(0.204 - 2.304)				
Difficulties in making ends meet										
Parameter of additional variable in the model	1.363***	1.040	1.680***	1.721**	1.484	1.919***				
	(1.136 - 1.635)	(0.647 - 1.670)	(1.141 - 2.473)	(1.033 - 2.869)	(0.850 - 2.589)	(1.242 - 2.964)				
interaction: yes# rent privately	0.987	0.801	1.866	0.720	3.488*	1.267				
	(0.702 - 1.388)	(0.372 - 1.722)	(0.545 - 6.389)	(0.297 - 1.746)	(0.933 - 13.04)	(0.487 - 3.296)				
interaction: yes#other	1.739**	0.893	1.035	0.199	1.349	0.974				
	(1.108 - 2.728)	(0.211 - 3.788)	(0.265 - 4.045)	(0.0215 - 1.835)	(0.0748 - 24.33)	(0.426 - 2.226)				
		Expec	cted decline in i	ncome						
Parameter of additional variable in the model	0.740**	0.535**	0.905	0.570	1.239	1.263				
	(0.578 - 0.948)	(0.304 - 0.943)	(0.538 - 1.520)	(0.0692 - 4.703)	(0.359 - 4.278)	(0.788 - 2.023)				
interaction: yes# rent privately	1.402	1.623	1.931		0.504	1.402				
	(0.895 - 2.198)	(0.659 - 3.999)	(0.543 - 6.862)		(0.0333 - 7.628)	(0.537 - 3.661)				

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
interaction: yes#other	1.607*	1.217	1.813			0.719			
	(0.986 - 2 617)	(0.212 - 7 000)	(0.409 - 8 034)			(0.353 - 1 464)			
Past problems with getting pregnant									
Parameter of									
additional variable in the model	0.912	1.041	0.865	0.955	0.785	0.861			
	(0.758 -	(0.628 -	(0.555 -	(0.660 -	(0.461 -	(0.536 -			
	1.098)	1.724)	1.350)	1.382)	1.336)	1.384)			
interaction: yes# rent privately	0.819	0.708	0.696	0.933	0.506	0.992			
	(0.551 -	(0.292 -	(0.196 -	(0.384 -	(0.130 -	(0.367 -			
	1.215)	1.717)	2.465)	2.268)	1.969)	2.678)			
interaction: yes#other	0.588**	0.647	1.632	0.442		0.566			
	(0.347 -	(0.115 -	(0.382 -	(0.0831 -		(0.243 -			
	0.996)	3.637)	6.968)	2.354)		1.318)			
		Child wi	th disability or li	imitations					
Parameter of additional variable in the model	1.450***	1.183	1.464**	1.281	1.005	2.350***			
	(1.190 -	(0.655 -	(1.011 -	(0.823 -	(0.557 -	(1.362 -			
	1.768)	2.137)	2.120)	1.994)	1.814)	4.053)			
interaction: yes# rent privately	1.553**	1.815	1.965	2.354*	2.033	0.798			
	(1.081 - 2.232)	(0.769 - 4.284)	(0.714 - 5.408)	(0.858 - 6.463)	(0.568 - 7.272)	(0.293 - 2.174)			
interaction: yes#other	1.483*	1.801	1.864	0.691		1.015			
	(0.938 - 2.344)	(0.291 - 11.14)	(0.508 - 6.837)	(0.119 - 4.003)		(0.469 - 2.199)			

5.2.3 Marriage (formal confirmation of relationship) and disturbance factors to having more than two children

As it was shown in the core model, being married with current partner appeared as a strong determinant of having more than three children. However, it plays a rather neutral role in interactions with variables that can potentially disturb fertility (Table 13). The only exception

was the relatively lower probability for married women to have three or more children if these women had at least one child with limitation or disability previously.

Table 13. Parameters of additional variables added to the core model explaining having at least three children and related to shocks in the lifecycle and parameters of their interactions with marriage (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)							
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
		Health problem	s - limitations o	f daily activity				
Parameter of additional variable in the model	1.261*	1.143	1.158	0.980	1.267	1.286		
	(0.993 - 1.602)	(0.571 - 2.289)	(0.602 - 2.228)	(0.511 - 1.881)	(0.501 - 3.206)	(0.858 - 1.927)		
interaction:yes# marriage	0.757*	0.670	0.956	0.909	0.622	0.920		
	(0.560 - 1.024)	(0.281 - 1.597)	(0.446 - 2.046)	(0.423 - 1.955)	(0.213 - 1.812)	(0.484 - 1.749)		
		Subjective as	sessment of job	insecurity				
Parameter of additional variable in the model	0.786	0.220	1.366	0.839	2.005	0.748		
	(0.531 - 1.164)	(0.0280 - 1.721)	(0.609 - 3.061)	(0.309 - 2.279)	(0.587 - 6.848)	(0.365 - 1.532)		
interaction: yes# marriage	0.910	4.167	0.680	0.565	0.504	0.611		
	(0.558 - 1.484)	(0.423 - 41.03)	(0.261 - 1.774)	(0.170 - 1.878)	(0.104 - 2.432)	(0.209 - 1.791)		
		Difficultie	s in making end	ls meet				
Parameter of additional variable in the model	1.864***	1.115	1.810*	1.620	1.355	2.556***		
	(1.446 - 2.402)	(0.583 - 2.134)	(0.901 - 3.634)	(0.813 - 3.229)	(0.528 - 3.477)	(1.472 - 4.439)		
interaction: yes# marriage	0.684**	0.798	0.982	0.829	1.530	0.651		
	(0.506 - 0.925)	(0.368 - 1.733) Expecte	(0.445 - 2.166) ed decline in inc	(0.356 - 1.929) come	(0.514 - 4.560)	(0.324 - 1.311)		

Parameter of additional variable in the model	1.059	0.679	0.933	0.466	0.405	1.220
	(0.799 - 1 405)	(0.322 - 1 435)	(0.417 - 2 092)	(0.0592 -	(0.0464 - 3 534)	(0.793 - 1.878)
interaction: yes# marriage	0.716*	0.918	1.185		4.652	0.900
	(0.495 -	(0.370 -	(0.450 -		(0.349 -	(0.461 -
	1.036)	2.278)	3.121)		61.96)	1.755)
		Past proble	ms with getting	pregnant		
Parameter of additional variable in the model	0.925	1.262	0.897	1.084	0.402	0.788
	(0.700 - 1.222)	(0.600 - 2.654)	(0.401 - 2.009)	(0.564 - 2.082)	(0.125 - 1.289)	(0.479 - 1.296)
interaction:yes# marriage	0.853	0.635	0.946	0.793	1.830	0.862
	(0.610 - 1 192)	(0.263 - 1.534)	(0.373 - 2 397)	(0.374 - 1 683)	(0.509 - 6.579)	(0.422 - 1.761)
	,	Child with	disability or lim	itations	0.0707	
Parameter of additional variable in the model	2.632***	2.650***	2.383***	2.977***	3.090**	2.602***
	(2.049 - 3.381)	(1.361 - 5.161)	(1.241 - 4.578)	(1.473 - 6.016)	(1.176 - 8.115)	(1.631 - 4.149)
interaction:yes# marriage	0.505***	0.435*	0.620	0.370**	0.253**	0.731
	(0.368 - 0.691)	(0.185 - 1.024)	(0.292 - 1.319)	(0.159 - 0.859)	(0.0812 - 0.789)	(0.358 - 1.491)

5.2.4 Subjective health assessment and disturbances and disturbance factors to having more than two children

The results of adding the self-assessment of health to regressions did not bring significant interactions with variables identifying possible disturbances to fertility in the life course. Other results are counterintuitive to the point of reflecting a possible reversed causality (Table 14). For instance, the current positive self-assessment of health is related to relatively lower probability of having more than two children in the case of interactions with subjective financial wellbeing (having a problem to make ends meet). However, it can also reflect the possibly diminishing influence of having more than three children on subjective assessment of women's health.

Table 14. Parameters of additional variables added to the core model explaining having at least three children and related to shocks in the lifecycle and parameters of their interactions with subjective health assessment (the odds ratios and 95% confidence intervals for the odds ratios).

	HAVING AT LEAST THREE CHILDREN (ref. HAVING ONE OR TWO CHILDREN)							
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
		Health problem	s - limitations o	f daily activity				
Parameter of additional variable in the model	1.300*	1.383	1.365	1.735	1.301	0.933		
	(0.961 - 1.759)	(0.493 - 3.881)	(0.606 - 3.076)	(0.883 - 3.410)	(0.455 - 3.723)	(0.555 - 1.567)		
interaction:yes# good health	0.757	0.651	0.769	0.395**	0.618	1.666		
	(0.526 - 1.090)	(0.203 - 2.087)	(0.308 - 1.919)	(0.167 - 0.934)	(0.182 - 2.102)	(0.813 - 3.413)		
	I	Subjective as	sessment of jol	o insecurity	1			
Parameter of additional variable in the model	1.093	1.697	2.114*	0.502	2.570	0.668		
	(0.729 - 1.638)	(0.400 - 7.199)	(0.954 - 4.683)	(0.165 - 1.527)	(0.519 - 12.73)	(0.287 - 1.555)		
interaction:yes# good health	0.560**	0.228	0.353**	1.173	0.416	0.791		
	(0.339 - 0.923)	(0.0349 - 1.495)	(0.134 - 0.930)	(0.325 - 4.238)	(0.0662 - 2.620)	(0.265 - 2.364)		
	I	Difficultie	es in making end	ls meet	1			
Parameter of additional variable in the model	2.725***	4.013**	3.003***	1.227	3.210**	3.605***		
	(1.994 - 3.724)	(1.256 - 12.82)	(1.386 - 6.507)	(0.597 - 2.521)	(1.157 - 8.909)	(1.710 - 7.600)		
interaction:yes# good health	0.447***	0.195***	0.525	1.320	0.497	0.457*		
	(0.318 - 0.630)	(0.0575 - 0.664)	(0.226 - 1.222)	(0.560 - 3.110)	(0.158 - 1.564)	(0.201 - 1.037)		
		Expect	ed decline in ind	come				

Parameter of additional variable in the model	1.033	0.902	1.825	0.790	1.375	0.897
	(0.744 - 1.435)	(0.346 - 2.350)	(0.826 - 4.030)	(0.0916 - 6.814)	(0.425 - 4.448)	(0.538 - 1.495)
interaction:yes# good health	0.769	0.663	0.444*			1.524
	(0.519 - 1.139)	(0.226 - 1.944)	(0.169 - 1.161)			(0.785 - 2.961)
		Past proble	ms with getting	pregnant		
Parameter of additional variable in the model	0.817	1.051	0.747	1.169	0.360*	0.806
	(0.594 - 1.122)	(0.385 - 2.867)	(0.332 - 1.678)	(0.595 - 2.296)	(0.113 - 1.143)	(0.446 - 1.457)
interaction:yes# good health	1.019	0.866	1.193	0.729	2.092	0.841
	(0.708 - 1.465)	(0.289 - 2.589)	(0.471 - 3.022)	(0.337 - 1.578)	(0.586 - 7.468)	(0.399 - 1.775)
		Child with	disability or lim	itations		
Parameter of additional variable in the model	2.181***	3.476**	2.081**	1.551	0.989	2.628***
	(1.634 - 2.910)	(1.345 - 8.981)	(1.029 - 4.209)	(0.757 - 3.180)	(0.321 - 3.050)	(1.532 - 4.508)
interaction:yes# good health	0.709**	0.402*	0.750	0.906	1.158	0.746
	(0.504 - 0.997)	(0.138 - 1.168)	(0.337 - 1.671)	(0.383 - 2.144)	(0.330 - 4.065)	(0.364 - 1.529)

5.3 Intention to have a child soon (in the next three years) among women who intend to have another child

On the one hand, it can be argued that the declared intention to have a child is a variable that cannot be treated in the same way as the already observed number of children. On the other hand, fertility intention to some extent illustrates the assumed process of decision making by individuals (Chłoń-Domińczak et al., 2024, p. 22). Fertility intention variable is also measured at a similar timeperiod as the remaining explanatory variables. The information about the number of children concerns the decisions made in more or less distant past. In order to reduce the potential influence of mechanisms that influence the opinions about intentions to

have another child in the closer or more distant future, the sample was limited to women who declared that they want to have a child and only the determinants of intention to have this child in relatively close time (next three years) were described by the model .

The results of the core set of variables, already used in the previous analyses, are shown in Table 15. We observe that, compared to women aged 30-34, the peak of the intentions to have a child relatively soon takes place at the age of 35-39. Naturally, partnership status matters a lot in such intentions. Especially if preceded by a history of relationships with previous partners. The number of previous partners influences positively the probability of intention to have another child quickly (in the next three years). The housing situation also influences the intention to have another child . Current private rental of a house influences the intention to have another child in a negative way. The women mindset described by the self-assessed religiosity is also important. Deeply religious women intended to have another child soon with relatively higher probability than average, which is consistent with regressions describing the probability of having more than three children.



Table 15. Results of the core regression model describing the intention to have another child in the next three years among women who want to have another child (the odds ratios and 95% confidence intervals for the odds ratios).

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE							
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
Age group (re	ef. 30-34)							
25-29	0.326***	0.290***	0.481**	0.365***	0.333***	0.321***		
	(0.266 - 0.399)	(0.0664)	(0.253 - 0.915)	(0.229 - 0.583)	(0.160 - 0.693)	(0.202 - 0.511)		
35-39	1.827***	1.445	1.321	6.412***	1.927	1.998		
	(1.276 - 2.615)	(0.571)	(0.501 - 3.484)	(1.842 - 22.32)	(0.564 - 6.581)	(0.874 - 4.565)		
40-44	0.911	0.347**	0.783	-	3.566	2.104		
	(0.552 - 1.503)	(0.185)	(0.230 - 2.667)		(0.247 - 51.58)	(0.648 - 6.832)		
Religiosity (r	ef. Average religio	sity)						
not religious	1.047	0.827	1.524	1.028	1.268	1.340		
	(0.862 - 1.272)	(0.194)	(0.787 - 2.953)	(0.671 - 1.577)	(0.647 - 2.483)	(0.868 - 2.068)		
very religious	1.387**	1.551	1.695	0.452**	1.439	1.869*		
	(1.057 - 1.820)	(0.431)	(0.619 - 4.646)	(0.214 - 0.952)	(0.576 - 3.592)	(0.965 - 3.621)		
no answer	1.492**	2.170*	0.955	0.778	0.719	2.982**		
	(1.047 - 2.125)	(0.932)	(0.365 - 2.498)	(0.389 - 1.557)	(0.214 - 2.419)	(1.190 - 7.473)		
Educational	attainment (ref. s	econdary)	Γ	Γ	Γ			
Primary	0.727	0.582	1.205	0.724	-	0.657		
	(0.434 - 1.218)	(0.340)	(0.359 - 4.046)	(0.224 - 2.348)		(0.164 - 2.633)		
tertiary	0.785**	0.719*	1.325	0.866	0.787	0.643*		
	(0.652 - 0.944)	(0.142)	(0.727 - 2.417)	(0.556 - 1.351)	(0.390 - 1.588)	(0.402 - 1.029)		
Partnership	status (ref. single)			Γ	Γ			
partner	3.926***	4.003***	2.905***	5.115***	11.73***	2.700***		
	(3.199 - 4.817)	(1.019)	(1.484 - 5.684)	(3.368 - 7.767)	(4.782 - 28.78)	(1.683 - 4.330)		
married	10.94***	10.83***	7.192***	11.68***	67.48***	10.06***		
	(8.244 - 14.52)	(3.498)	(3.219 - 16.07)	(5.689 - 23.98)	(20.19 - 225.6)	(5.154 - 19.63)		
Housing owr	ership (ref. Own)			Γ	Γ			
rent privately	0.535***	0.724	0.539**	0.548**	0.387***	0.379***		
	(0.441 - 0.650)	(0.168)	(0.300 - 0.969)	(0.342 - 0.879)	(0.211 - 0.712)	(0.244 - 0.589)		
other	0.795	0.847	1.545	0.459**	2.412	0.688		
	(0.597 - 1.058)	(0.275)	(0.489 - 4.886)	(0.236 - 0.895)	(0.435 - 13.37)	(0.367 - 1.289)		
Attitude towa	ards other person	: answer to t	the question: can	you lean on perso	ns around? (ref. N	10)		
Yes	0.977	1.013	0.812	1.022	1.011	1.079		
	(0.812 - 1.176)	(0.217)	(0.464 - 1.419)	(0.629 - 1.659)	(0.531 - 1.925)	(0.724 - 1.610)		
Number of p	revious parnetrsh	ips (ref. 0)		1	1			
1	1.550***	1.589*	2.344**	1.259	2.170**	1.582*		
	(1.251 - 1.920)	(0.398)	(1.115 - 4.929)	(0.784 - 2.022)	(1.093 - 4.310)	(0.945 - 2.649)		
2	1.372*	1.961	1.796	0.697	2.245	1.358		
	(0.975 - 1.931)	(0.841)	(0.708 - 4.552)	(0.352 - 1.383)	(0.644 - 7.827)	(0.597 - 3.089)		
3 and more	2.364**	0.928	-	2.051	5.828	-		
	(1.168 - 4.788)	(0.732)		(0.402 - 10.47)	(0.547 - 62.08)			
Country (ref.	Austria)							
Czechia	1.712***							
	(1.252 - 2.342)							

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)							
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
Denmark	3.583***							
	(2.831 - 4.534)							
Finland	1.145							
	(0.854 - 1.534)							
UK	1.355**							
	(1.057 - 1.737)							

5.3.1 Educational attainment and disturbance factors to the intention of having next child soon

The disturbance variables and the factors that impact the decision regarding the timing of another child are juxtaposed in Table 16. Due to the fact that the respondent's current situation should be instantly connected with his or her decisions about having a child soon, the parameters of the disturbance variables are more intuitive than those in the previous sections. A disability or health limitations negatively influence the intention to have another child soon, as do, in majority of analysed countries, variables related to job insecurity or current problems with making ends meet. The prediction of a lower income in the future has no a significant effect as it can be simply considered in the plan. On the other hand, the problems with getting pregnant were a significant and positive determinant of the intention to have another child soon in disability decreased the probability of having positive intention to have another child soon in all countries except Finland but only in Denmark this impact was significant.

In general, tertiary education seems to counteract the negative impact of shocks in the case of respondent's health problems (disability or limitations of daily activities). It also contributed to a higher probability of positive intention to have a child quickly in the case of job insecurity in Austria.

Table 16. Parameters of additional variables added to the core model explaining intention to have child in the next three years and related to shocks in the lifecycle and parameters of their interactions with educational attainment (the odds ratios and 95% confidence intervals for the odds ratios).

	INTENTION TO	HAVE ANOTHEI	R CHILD IN THE N	NEXT THREE YEARS	(ref. INTENTION T	O HAVE LATER)		
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
Health problems - limitations of daily activity								
Parameter of additional variable in the model	0.552***	0.420**	0.468	1.335	0.858	0.606		
	(0.401 - 0.760)	(0.217 - 0.814)	(0.172 - 1.276)	(0.584 - 3.055)	(0.225 - 3.273)	(0.265 - 1.389)		
Interaction:yes# primary education	1.325	5.608	1.973	0.0326**		2.200		

	INTENTION TO	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
	(0.454 -	(0.316 -	(0.179 -	(0.00186 -		(0.0918 -		
	3.866)	99.41)	21.69)	0.570)		52.72)		
interaction: yes# tertiary education	1.508*	1.435	1.333	0.839	1.196	1.518		
	(0.999 - 2.277)	(0.543 - 3.794)	(0.385 - 4.617)	(0.299 - 2.349)	(0.257 - 5.560)	(0.561 - 4.103)		
		Subjective as	ssessment of iob	insecurity				
Parameter of			,,,,,,,,,-					
additional variable in the model	0.734	0.331**	1.242	5.538	0.938	0.993		
	(0.440 - 1.225)	(0.114 - 0.959)	(0.261 - 5.898)	(0.631 - 48.61)	(0.148 - 5.931)	(0.176 - 5.589)		
interaction:yes # primary education	0.818			0.00889**				
	(0.151 - 4.439)			(0.000181 - 0.437)				
interaction: insecure job# tertiary education	1.410	4.959**	0.323	0.197	1.357	1.037		
	(0.770 - 2.583)	(1.081 - 22.75)	(0.0521 - 2.008)	(0.0205 - 1.896)	(0.170 - 10.85)	(0.161 - 6.659)		
		Difficulti	es in making end	s meet				
Parameter of additional variable in the model	0.782	0.630	1.494	0.334**	0.768	1.447		
	(0.576 - 1.063)	(0.352 - 1.129)	(0.519 - 4.297)	(0.134 - 0.834)	(0.198 - 2.979)	(0.618 - 3.387)		
interaction: yes# primary education	2.182	8.107	1.047	0.781				
	(0.627 - 7.601)	(0.509 - 129.1)	(0.0442 - 24.82)	(0.0366 - 16.66)				
interaction:yes# tertiary education	1.043	1.609	0.498	1.967	0.932	0.570		
	(0.702 - 1.550)	(0.679 - 3.812)	(0.132 - 1.870)	(0.652 - 5.942)	(0.175 - 4.958)	(0.213 - 1.523)		
		Expect	ted decline in inc	ome				
Parameter of additional variable in the model	0.795	0.725	1.203	1.527	0.549	0.785		
	(0.544 - 1.160)	(0.384 - 1.371)	(0.326 - 4.437)	(0.158 - 14.73)	(0.120 - 2.515)	(0.281 - 2.193)		
interaction: yes# primary education	4.693*		0.663			2.651		

	INTENTION TO	NTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK		
	(0.900 -		(0.0366 -			(0.125 -		
	24.46)		12.02)			56.41)		
interaction: yes# tertiary education	1.514	2.233	3.661			0.929		
	(0.888 -	(0.770 -	(0.503 -			(0.271 -		
	2.582)	6.475)	26.66)			3.181)		
		Past proble	ems with getting	pregnant				
Parameter of								
additional variable in the model	1.615**	1.171	0.992	1.189	2.247	3.590**		
	(1.024 - 2.548)	(0.472 - 2.908)	(0.321 - 3.059)	(0.377 - 3.750)	(0.346 - 14.57)	(1.135 - 11.36)		
interaction:yes job# primary education	3.691		1.097					
	(0.697 - 19.55)		(0.0907 - 13.26)					
interaction: yes# tertiary education	1.556	2.222		6.062	1.624	0.780		
	(0.799 - 3.028)	(0.469 - 10.53)		(0.609 - 60.29)	(0.140 - 18.81)	(0.170 - 3.587)		
		Child with	n disability or lim	itations				
Parameter of								
additional variable in the model	0.630	0.610	0.354	0.251*	1.451	1.078		
	(0.315 - 1.260)	(0.114 - 3.270)	(0.102 - 1.221)	(0.0626 - 1.003)	(0.106 - 19.88)	(0.201 - 5.790)		
interaction: yes# primary education	2.777	2.456						
	(0.461 - 16.71)	(0.0943 - 63.94)						
interaction:yes# tertiary education	1.493		1.364		0.325	2.480		
	(0.546 - 4 080)		(0.250 - 7 439)		(0.00882 - 11.97)	(0.164 - 37 47)		

5.3.2 Housing status and disturbance factors to the intention of having a next child soon

The interactions between variables that identify home ownership tenure and disturbances were not significant as determinants of intention to have another child relatively soon (Table 17).

Table 17. Parameters of additional variables added to the core model explaining intention to have child in the next three years and related to shocks in the lifecycle and parameters of their interactions with home ownership (the odds ratios and 95% confidence intervals for the odds ratios).

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
Health problems - limitations of daily activity									
Parameter of additional variable in the model	0.803	0.624	0.727	1.349	0.914	0.721			
	(0.563 - 1.144)	(0.222 - 1.757)	(0.324 - 1.635)	(0.502 - 3.625)	(0.322 - 2.596)	(0.365 - 1.427)			
interaction: yes# rent privately	0.761	0.717	0.491	0.684	1.199	1.443			
	(0.489 - 1.184)	(0.215 - 2.395)	(0.149 - 1.612)	(0.216 - 2.160)	(0.312 - 4.608)	(0.520 - 4.003)			
interaction: yes#other	1.175	1.200		0.847	0.420	0.963			
	(0.615 - 2.245)	(0.246 - 5.844)		(0.166 - 4.323)	(0.0141 - 12.56)	(0.281 - 3.305)			
		Subjective	e assessmentof j	ob insecurity					
Parameter of additional variable in the model	0.845	0.266*	0.542	0.863	1.072	1.450			
	(0.511 - 1.399)	(0.0602 - 1.177)	(0.156 - 1.876)	(0.221 - 3.365)	(0.237 - 4.850)	(0.540 - 3.894)			
interaction: yes# rent privately	1.212	3.571	1.034	1.769	1.166	0.683			
	(0.658 - 2.232)	(0.650 - 19.62)	(0.188 - 5.679)	(0.378 - 8.290)	(0.186 - 7.320)	(0.154 - 3.036)			
interaction: yes#other	0.825		1.336	0.706		0.167**			
	(0.327 - 2.083)		(0.0777 - 22.97)	(0.104 - 4.806)		(0.0283 - 0.981)			
		Difficu	lties in making e	nds meet					

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE								
	Pooled model	Austria	Czechia	Denmark	Finland	UK			
Parameter of additional variable in the model	0.758	0.675	0.924	1.904	0.323	0.707			
	(0.528 - 1.087)	(0.273 - 1.670)	(0.394 - 2.164)	(0.369 - 9.831)	(0.0840 - 1.245)	(0.374 - 1.335)			
interaction: yes# rent privately	1.133	1.486	1.111	0.226*	3.294	1.560			
	(0.735 - 1.746)	(0.530 - 4.165)	(0.317 - 3.891)	(0.0395 - 1.296)	(0.610 - 17.77)	(0.621 - 3.915)			
interaction: yes#other	0.996	0.523	1.512	0.217		2.269			
	(0.522 - 1.900)	(0.111 - 2.454)	(0.108 - 21.19)	(0.0250 - 1.885)		(0.617 - 8.340)			
		Expe	ected decline in	income					
Parameter of additional variable in the model	0.815	0.740	1.784	0.104*	0.242	0.761			
	(0.536 - 1.241)	(0.301 - 1.820)	(0.564 - 5.646)	(0.00755 - 1.424)	(0.0399 - 1.472)	(0.354 - 1.637)			
interaction: yes# rent privately	1.590	1.750	1.199		5.824	1.058			
	(0.896 - 2.820)	(0.563 - 5.440)	(0.197 - 7.288)		(0.375 - 90.52)	(0.286 - 3.910)			
interaction: yes#other	1.140	1.380				1.008			
	(0.545 - 2.386)	(0.327 - 5.823)				(0.227 - 4.481)			
		Past pro	blems with getti	ng pregnant					
Parameter of additional variable in the model	1.397	0.624	1.655	2.176	3.962	3.292*			
	(0.874 - 2.231)	(0.220 - 1.769)	(0.512 - 5.355)	(0.491 - 9.650)	(0.481 - 32.63)	(0.960 - 11.29)			
interaction: yes# rent privately	2.129**	12.44***	1.071	1.070	0.620	0.790			
	(1.071 - 4.231)	(2.193 - 70.50)	(0.159 - 7.211)	(0.156 - 7.358)	(0.0476 - 8.070)	(0.145 - 4.314)			
interaction: yes#other	1.969	1.035				1.274			

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE							
			LA	TER)				
	Pooled	Austria	Czechia	Denmark	Finland	ПК		
	model	///////////////////////////////////////	Ozeoma	Beimark	Tintana			
	(0.699 -	(0.112 -				(0.167 -		
	5.545)	9.567)				9.729)		
		Child w	ith disability or l	imitations				
Parameter of additional variable in the model	0.496**	0.514	0.791	0.121***	0.196	2.199		
	(0.248 -	(0.0543 -	(0.243 -	(0.0283 -	(0.0244 -	(0.237 -		
	0.992)	4.872)	2.580)	0.513)	1.581)	20.40)		
interaction: yes# rent privately	2.264	3.973	0.381			0.299		
	(0.837 -	(0.244 -	(0.0645 -			(0.0171 -		
	6.126)	64.77)	2.250)			5.210)		
interaction: yes#other	3.195		0.388					
	(0.594 -		(0.0230 -					
	17.19)		6.547)					

5.3.3 Marriage (formal confirmation of relationship) and disturbance factors to the intention of having a next child soon

The current partnership status was a powerful variable in explaining the intention to have another child soon. However, marriage itself was a factor that had an impact on this intention with interaction of possible feature which could postpone decision to have another child (Table 18).

For example, in Austria and Czechia, married women with health limitations intended to have another child soon much more frequently than other women with limitations. However, it was not the case in the United Kingdom.

Married women who experienced problems in getting pregnant previously were also more hesitant to declare intention to try to have another child quickly in the majority of the countries, but significant result was observed only in Austria. This result requires further studies but it can happen that formal relationship adds longer time-horizon in decision making. On the other hand, in Czechia married women who experienced unhealthy child born in the past were much more eager to declare intention to have another child soon.

Table 18. Parameters of additional variables added to the core model explaining intention to have child in the next three years and related to shocks in the lifecycle and parameters of their interactions with marriage (the odds ratios and 95% confidence intervals for the odds ratios).

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK	
Health problems - limitations of daily activity							
Parameter of additional variable in the model	0.657***	0.397***	0.418***	0.984	1.030	0.964	
	(0.529 - 0.817)	(0.230 - 0.684)	(0.218 - 0.801)	(0.594 - 1.630)	(0.521 - 2.036)	(0.583 - 1.596)	
interaction:yes# marriage	1.689*	5.849**	5.622**	1.711	0.670	0.345*	
	(0.927 - 3.079)	(1.133 - 30.20)	(1.036 - 30.50)	(0.317 - 9.227)	(0.0939 - 4.775)	(0.103 - 1.157)	
		Subjective a	assessmentof jo	b insecurity			
Parameter of additional variable in the model	0.912	0.877	0.542	1.061	1.267	0.845	
	(0.680 - 1.222)	(0.395 - 1.950)	(0.228 - 1.290)	(0.585 - 1.926)	(0.504 - 3.186)	(0.417 - 1.711)	
interaction:yes# marriage	1.168	0.703	1.384		0.599	1.956	
	(0.488 - 2.799)	(0.111 - 4.433)	(0.128 - 14.96)		(0.0491 - 7.312)	(0.203 - 18.84)	
		Difficult	ies in making en	ds meet			
Parameter of additional variable in the model	0.803**	0.858	0.821	0.458***	0.854	0.939	
	(0.647 - 0.997)	(0.534 - 1.377)	(0.407 - 1.654)	(0.270 - 0.779)	(0.351 - 2.075)	(0.586 - 1.506)	
interaction:yes# marriage	1.118	0.780	2.701		0.401	1.063	
	(0.651 - 1.918)	(0.269 - 2.267) Evpec	(0.484 - 15.08)	come	(0.0489 - 3.282)	(0.306 - 3.695)	

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)					
	Pooled model	Austria	Czechia	Denmark	Finland	UK
Parameter of additional variable in the model	0.937	0.863	1.856	1.905	0.927	0.847
	(0.697 - 1.261)	(0.493 - 1.512)	(0.700 - 4.921)	(0.207 - 17.53)	(0.169 - 5.082)	(0.454 - 1.579)
interaction:yes# marriage	1.621	2.817	1.871		0.104	0.625
	(0.800 - 3.286)	(0.693 - 11.46)	(0.176 - 19.85)		(0.00435 - 2.469)	(0.156 - 2.503)
		Past probl	ems with getting	gpregnant		
Parameter of additional variable in the model	3.736***	5.297***	3.040*	3.706**	3.191	4.295***
	(2.369 - 5.892)	(1.562 - 17.96)	(0.902 - 10.25)	(1.105 - 12.42)	(0.786 - 12.95)	(1.725 - 10.70)
interaction:yes# marriage	0.208***	0.109***	0.231	0.316	0.813	0.300
	(0.107 - 0.404)	(0.0239 - 0.496)	(0.0388 - 1.380)	(0.0431 - 2.315)	(0.0581 - 11.37)	(0.0599 - 1.497)
	,	Child wit	h disability or lir	nitations		
Parameter of additional variable in the model	0.790	0.803	0.271**		1.318	2.190
	(0.430 - 1.452)	(0.178 - 3.632)	(0.0914 - 0.803)		(0.0913 - 19.02)	(0.461 - 10.41)
interaction:yes# marriage	1.155		5.265*		0.421	0.307
	(0.418 - 3.190)		(0.777 - 35.69)		(0.0114 - 15.56)	(0.0209 - 4.503)

5.3.4 Subjective health assessment and disturbance factors to the intention of having the next child soon

The interactions between the self-assessed health and disturbance variables were insignificant in most regressions (Table 19). The exception was the variables related to poor financial situation reported by women in Czechia. If their declarations were combined with good selfassessment of their health, the probability of intention to have another child in the next three years highly increased. Table 19. Parameters of additional variables added to the core model explaining intention to have child in the next three years and related to shocks in the lifecycle and parameters of their interactions with subjective health assessment (the odds ratios and 95% confidence intervals for the odds ratios).

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK	
Health problems - limitations of daily activity							
Parameter of additional	0.787	1.150	1.037	1.085	0.640	0.532	
model	(0.519 - 1.192)	(0.375 - 3.527)	(0.259 - 4.153)	(0.458 - 2.571)	(0.118 - 3.482)	(0.232 - 1.220)	
Interaction:yes# good health asessment	0.917	0.390	0.540	1.048	1.658	2.235	
	(0.566 - 1.487)	(0.112 - 1.365)	(0.113 - 2.571)	(0.358 - 3.066)	(0.248 - 11.07)	(0.776 - 6.434)	
		Subjective a	ssessment of job	oinsecurity			
Parameter of additional	1.013	0.712	0.216*	2.552	2.857	0.934	
variable in the model	(0.575 - 1.787)	(0.157 - 3.218)	(0.0412 - 1.126)	(0.584 - 11.15)	(0.469 - 17.40)	(0.305 - 2.866)	
interaction:yes# good health	0.902	1.205	3.387	0.387	0.330	1.042	
asessment	(0.471 - 1.728)	(0.212 - 6.834)	(0.523 - 21.93)	(0.0776 - 1.925)	(0.0431 - 2.524)	(0.265 - 4.100)	
		Difficulti	es in making end	ls meet			
Parameter of additional	0.698*	0.459	0.383	0.760	1.306	0.983	
model	(0.455 - 1.071)	(0.141 - 1.495)	(0.105 - 1.406)	(0.271 - 2.128)	(0.300 - 5.693)	(0.413 - 2.343)	
interaction:yes# good health	1.235	1.936	3.678*	0.608	0.426	0.963	
asessment	(0.772 - 1.977)	(0.559 - 6.702)	(0.827 - 16.36)	(0.186 - 1.987)	(0.0711 - 2.556)	(0.361 - 2.570)	
Expected decline in income							
Parameter of additional	0.856	0.979	0.579	1.517	0.610	0.911	
variable in the model	(0.500 - 1.466)	(0.284 - 3.375)	(0.137 - 2.446)	(0.143 - 16.06)	(0.0301 - 12.34)	(0.338 - 2.453)	
interaction:yes# good health asessment	1.340	1.168	7.581**		0.885	0.798	
	(0.726 - 2.475)	(0.303 - 4.494)	(1.109 - 51.82)		(0.0279 - 28.04)	(0.240 - 2.658)	
Past problems with getting pregnant							

	INTENTION TO HAVE ANOTHER CHILD IN THE NEXT THREE YEARS (ref. INTENTION TO HAVE LATER)						
	Pooled model	Austria	Czechia	Denmark	Finland	UK	
Parameter of additional	2.746***	6.355	2.675	1.466	6.120	2.010	
model	(1.442 -	(0.646 -	(0.483 -	(0.295 -	(0.623 -	(0.716 -	
model	5.230)	62.57)	14.83)	7.297)	60.13)	5.640)	
interaction:yes# good health asessment	0.720	0.227	0.645	2.284	0.370	2.910	
	(0.343 -	(0.0208 -	(0.0897-	(0.315 -	(0.0254 -	(0.591 -	
	1.510)	2.477)	4.630)	16.58)	5.406)	14.33)	
Child with disability or limitations							
Parameter of							
additional variable in the	0.429**	0.214	0.222*	0.234**	0.348	2.292	
model	(0.191 -	(0.0260 -	(0.0483 -	(0.0594 -	(0.0475 -	(0.252 -	
	0.963)	1.753)	1.024)	0.924)	2.548)	20.87)	

Note: p-values: ***1%, ** 5%, *10%. Interaction between good health assessment and "child disability or limitations" not included because of the small sample.

6. Summary of findings and discussion

The aim of this study was to test the analytical framework of finding the resilience merkers and disturbances used in Chłoń-Domińczak et al. (2024) on the basis of the Generations and Gender data for selected countries. The empirical strategy assumed that various aspects of fertility behaviour were explained by the range of variables and then the resilience was measured by the interactions between variables associated with potentially higher fertility resilience, such as educational level, home ownership, marriage and subjective health assessment, and the variables that were considered potential distraction factors for fertility. The majority of variables used in the core models were significant but their influence on various aspects of fertility behaviour varied.

In the case of explaining of childlessness avoidance by women aged 25-44, the sign of explanatory variables was intuitive – the probability of avoiding childlessness increased with age, current partnership status (partnership and marriage vs being single) and housing situation (own house vs private rental). The housing situation is a factor influencing the timing and probability of transition from childlessness to the first child. The example of the Czech Republic, Kosteleckỳ et al. (2009) showed that higher local housing prices (in relation to local salaries) were associated with both postponing of the first childbirth and lower fertility rate (even though the effect on childbearing timing seemed to be stronger). A significantly lower number of people with no children among private tenants in Austria might also be related to the high affordability of rental housing, with strict regulations of the private rental housing and around 20% of citizens living in low-rent public housing (Sobotka, 2016).

The probability of having a child in all analysed countries was also negatively influenced by the tertiary education. This observation is confirmed by other analyses from the post-COVID-

19 literature. The influence of religiosity on fertility was limited and its direction depended on country (negative influence of atheism in Austria but positive in Czechia).

One noteworthy observation concerned an increased probability of having at least one child for women who were engaged in previous relationships. This is in line with the literature on the impact of re-partnering on fertility behaviour. One study based on the data of about 8,094 Dutch couples found that, for women, unlike men, the likelihood of having children post repartnering is not decreased by the presence of children from prior union (Ivanova et al., 2014). Similar issue was addressed in another large European study by Winkler-Dworak et al. (2015).Using micro-simulation techniques, authors found that re-partnering is associated with increased fertility if separation occurs at earlier family stages. Furthermore, for childless women who enter their first union after the age of 30, the drop in completed fertility (relative to younger women) is even sharper than for childless women who re-partnered after the age of 30, suggesting that relatively late formation of a first union is related to lower fertility intentions (Winkler-Dworak et al., 2021).

Additional point of debate is that higher-order unions are usually of a different character. For instance, one study based on American National Longitudinal Survey of Youth showed that educational and age homogamy is less common for women in higher-order unions (Shafer, 2013). At the same time, other studies, including European ones, indicated that less educationally hypergamous unions are associated with the higher number of children (Nitsche et al., 2018). Re-partnering can be also related to changing housing circumstances (for instance, at later ages, it might be associated with paying off mortgage repayments), which further develops its association with completed fertility. For example, one analysis suggested that after a change of a dwelling, Finnish couples were characterised with elevated fertility (Kulu & Vikat, 2007). Moreover, one has to consider interaction of union dissolution with economic status, since such interaction, if significant, would be connected with selection to repartner of people holding different educational degrees (and thus selection of people with specific family size ideals). Literature shows that such an interaction exists: Comparison of multiple highly developed countries in this respect indicated that higher education is positively associated with the likelihood of divorce in countries, such as Greece, Italy, Poland, and Spain, where the share of married couples among all families is relatively high (Härkönen & Dronkers, 2006). According to Van Bavel et al., (2012) higher dispersion of childbearing might, in general, prelude transition to a positive association between union dissolution and fertility.

Moving on to a quite counterintuitive result about trust in other people being negatively associated with fertility, social trust can be considered a mechanism of coping with uncertainty during crisis. Aassve et al., (2021) found that trust matters less as a factor of fertility in regions where childcare provision is adequate. Nevertheless, even in this study trust was a positive factor of completed fertility. It can be speculated that in our study, the lack of positive association between trust and fertility might be due to not accounting for loneliness, which is a complex factor in itself and can be divided into social and emotional loneliness (Weiss, 1975). The analysis based on a sample of Canadian men and women showed that especially social loneliness (component of an overall loneliness) can be regarded as relatively highly associated with childlessness. Meanwhile, emotional loneliness turned out to be relevant only for widowed women and separated or divorced men (Penning et al., 2022). A construct of trust controlled for in this study might have partially captured the variability of emotional loneliness (perceived lack of close relationships, so the lack of people in one's social network that, in case of problems, one can rely on or trust), being a type of loneliness which is associated with fertility in a more ambiguous way.

Regarding the results from models explaining the fact of having at least three children by woman compared to women with less children - age and fact of being married were strong positive predictors of this behaviour. The other variables suggest that here the more conservative mindset of women was related to higher probability. The number of children from past relationships did not matter but marriage and high religiosity were very important predictors in all analysed countries. The findings on the association between higher-order (3+) births and religiosity seem to be in line with the literature. According to multivariate analyses based on the World Values Survey, the European Values Survey and the American National Survey of Family Growth, importance of religion was found to be positively associated with fertility. Furthermore, church attendance was more strongly related to fertility in the United States and Southern Europe than in the remaining parts of Europe (Freika & Westoff, 2008). A slightly different outcome of Philipov & Berghammer (2007) indicated that participation in religious services is particularly important in describing fertility ideals. With regard to findings concerning higher parities, in their study based on highly accurate national-level population data of the Finnish register, Kolk & Saarela (2024) found that lower number of children among non-religious individuals is pronounced only for third and higher-order births, as compared to people of various religious affiliations. Their findings indicated the role of religious denomination as well: It was significantly more common for Muslim or Orthodox women to have unusually high parities. An earlier study, based on the 1984 Canadian sample of women, confirmed as well that higher religious attendance increases the likelihood of progression to higher-order parities (Krishnan, 1995)

The financial stability measured by the home ownership versus private rental was not significant. This is probably due to the fact that the sufficient level of stability constituted the initial condition to have any children.

Instead, in the United Kingdom the "other" types of housing tenure status were positively correlated with having three or more children. The literature on the association between housing tenure and fertility also shows that dwellers of the publicly owned houses (in our analysis, likely a large part of the group classified as "other") have increased fertility. Moreover, our findings for the United Kingdom and having at least one child are somewhat in line with other studies as well. In their work based on the 1976 British Family Formation Survey (6,589 female respondents), Murphy & Sullivan (1985) found that house renting tenants had a greater average number of live births than homeowners (in our study, higher risk of having at least one child by privately renting tenants was not significant only for the United Kingdom). Moreover, occupants of the public housing had an even higher average number of children, in line with our findings. Analysis of Murphy & Sullivan (1985) indicated as well that the difference between tenants and owners might be attributed to a delayed family formation of the British homeowners. Besides, type of housing (single-family and apartment dwellings) was found to be a relevant factor of fertility irrespective of the housing tenure, with single-family houses providing more family friendly living environment. These two last outcomes indicate that our results for other countries (related to lower fertility of privately renting tenants, as compared to houseowners) might be due to differences in accessibility of moving to the owner-occupation from other housing tenures, as well as not accounting for an underlying dwelling type privately owned houses being probably more often more spacious than rented apartments. Similar results related to single-family houses being more favourable for higher fertility, controlling for the number of years spent in a given type of dwelling, were also obtained for Finland in a more recent study (Kulu & Vikat, 2007).

It should also be mentioned that the impact of education on having three or more children was less clear than in the case of fertility avoidance. Strong, negative influence of tertiary education on this probability was observed only in the United Kingdom. In Czechia and Denmark, having more numerous offspring was positively related to primary education.

The set of core variables was also helpful in explaining the intention to have the next child in the next three years if a woman intended to have a child at all. In some countries, after reaching a peak at the age of 35-39, the probability of making effort to have a child relatively soon was stable or decreased compared to younger groups (for Austria and Czechia). In general, the intention of having a child in a relatively near future is strongly dependent on financial and family stability. The probability of such an intention was higher among women who were married or had partner, did not rent a home or had a history of previous relationships. The tertiary education was significantly related to the postponement of the age of childbirth of intended child only in Austria and the United Kingdom.

The interpretation of the results regarding the disturbance variables and their reduction by the so-called resilience markers, however, requires caution.

First, not all disturbances appeared to have significantly negative impact on fertility behaviour in all parities or countries. For example, disability or health limitation of respondent were usually related to the lower probability of having children at all and intentions to have a child in the near future but the relationship was not present in the model explaining having three or more children. Furthermore, the causality of disturbances related to financial situation was ambiguous. For example, we observed positive relationship between poor subjective financial wellbeing and the number of children. In fact, the latter association might be due to a reversed causality – children and the costly satisfaction of their needs lead to more frequent answers about problems with making ends meet financially. It is noteworthy, however, that the problem was not pronounced if the measure of job insecurity was used. On the other hand, the past disturbances can also make individual fertility decision more complex than described by simple models in this paper. For instance, the fact of having problems with infertility appeared to be a good measure of low reproductive health in the past (explaining lower probability of having three children and more). Nevertheless, in some countries, fecundity problems might also constituted a motivation to have the intended child relatively quick.

Second, the results related to interactions between disturbances and resilience markers were ambiguous. The tertiary education, is associated with better labour market situation of women, does not necessarily lead to increased resilience to fertility-related life-course disturbances. In fact, in the majority of analysed countries, highly educated women were affected by job insecurity more strongly than their less educated counterparts in terms of the probability of having children. Women with tertiary education had also the lower probability of having higherorder children if at least one child had disability or limitations. This may indicate that fertility decisions of highly educated women are affected to a higher extent by the negative effect of potentially higher income loss related to adversities than the positive effect of socioeconomic security (associated with their higher human capital) which could help counteract such adversities. The home ownership as such was not a resilience factor in the majority of countries but in some countries (Czechia and the United Kingdom) the housing status described as "other" - related to affordable rental housing supported by the public policies, can be considered a factor related to higher fertility outcomes in case of difficult financial situation. Marriage was in general associated with higher probability of having more children but, in some cases, stable relationship was also related to postponement of (or resigning from) more than two childbirths if one of the children already born had disability or limitations. The positive subjective assessment of health appeared to be a significant resilience marker only in the case of Czechia.

In conclusion, despite the difficulties in measuring resilience, presented in Chłoń-Domińczak et al. (2024) at the micro level, without using longitudinal data, this paper shows that some resilience mechanisms influencing fertility were detected and are worth exploring in the future in longitudinal studies or the ones using more detailed models.

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