



INSTITUTE  
OF ECONOMIC STUDIES  
Faculty of Social Sciences  
Charles University

# DOES CHILDBIRTH CHANGE THE GENDER GAP IN WELL-BEING BETWEEN PARTNERS?

*Veronika Plachá*

IES Working Paper 28/2024

$$\frac{1!}{(m-1)!} p^{m-1} (1-p)^{n-m} = p \sum_{\ell=0}^{n-1} \frac{\ell+1}{n} \frac{(n-1)!}{(n-1-\ell)! \ell!} p^{\ell} (1-p)^{n-1-\ell} = p \frac{n-1}{n} \sum_{\ell=0}^{n-1} \left[ \frac{\ell}{n-1} + \frac{1}{n-1} \right] \frac{(n-1)!}{(n-1-\ell)! \ell!} p^{\ell} (1-p)^{n-1-\ell} = p^2 \frac{n-1}{n} +$$

Institute of Economic Studies,  
Faculty of Social Sciences,  
Charles University in Prague

[UK FSV – IES]

Opletalova 26  
CZ-110 00, Prague  
E-mail : [ies@fsv.cuni.cz](mailto:ies@fsv.cuni.cz)  
<http://ies.fsv.cuni.cz>

Institut ekonomických studií  
Fakulta sociálních věd  
Univerzita Karlova v Praze

Opletalova 26  
110 00 Praha 1

E-mail : [ies@fsv.cuni.cz](mailto:ies@fsv.cuni.cz)  
<http://ies.fsv.cuni.cz>

**Disclaimer:** The IES Working Papers is an online paper series for works by the faculty and students of the Institute of Economic Studies, Faculty of Social Sciences, Charles University in Prague, Czech Republic. The papers are peer reviewed. The views expressed in documents served by this site do not reflect the views of the IES or any other Charles University Department. They are the sole property of the respective authors. Additional info at: [ies@fsv.cuni.cz](mailto:ies@fsv.cuni.cz)

**Copyright Notice:** Although all documents published by the IES are provided without charge, they are licensed for personal, academic or educational use. All rights are reserved by the authors.

**Citations:** All references to documents served by this site must be appropriately cited.

**Bibliographic information:**

Plachá V. (2024): " Does Childbirth Change the Gender Gap in Well-Being between Partners?" IES Working Papers 28/2024. IES FSV. Charles University.

This paper can be downloaded at: <http://ies.fsv.cuni.cz>

# Does Childbirth Change the Gender Gap in Well-Being between Partners?

Veronika Plachá

Institute of Economic Studies, Charles University, Prague, Czech Republic  
E-mail: 85675870@fsv.cuni.cz

August 2024

## **Abstract:**

This study examines gender disparities beyond pay gaps, focusing on the impact of childbirth on overall well-being. Traditional gender roles, especially in parenting, lead to unequal divisions of labor and affect both partners' well-being, yet the shift in well-being after childbirth remains underexplored. Utilizing data from the 2013 and 2018 EU SILC surveys, the study investigates the well-being gap between mothers and fathers, revealing that childbirth significantly influences parents' subjective well-being. Mothers tend to experience a longer-lasting positive effect, peaking during the newborn stage and gradually diminishing as children grow older, while fathers' wellbeing boost is shorter-lived, typically fading after the child's first year. The findings also indicate that the well-being gap between mothers and fathers has widened over time, especially during the preschool years, underscoring the complex dynamics of well-being among parents.

**JEL:** J13, J16, I31, J12

**Keywords:** Subjective well-being, Gender disparities, Childbirth, Well-being gap

**Acknowledgement:** This output was supported by the NPO "Systemic Risk Institute" number LX22NPO5101, funded by the European Union - Next Generation EU (Ministry of Education, Youth and Sports, NPO: EXCELES).

## Introduction

Gender disparities are increasingly scrutinized in societal progress, extending beyond the gender pay gap to affect employment, leadership, and well-being. While the pay gap illustrates inequality, it is part of a larger issue where traditional gender roles, particularly in parenting, create unequal divisions of labor and impact both partners' well-being. Parenthood can bring both joy and stress, reshaping identities and relationships, but research has yet to fully explore how well-being shifts within partnerships after childbirth.

Recent studies on the impact of childbirth on partners' well-being present mixed results. Some research suggests that both parents experience similar changes in well-being, while other findings indicate that one partner may be more affected. To explore this further, we analyzed data from the EU SILC surveys of 2013 and 2018 to examine how childbirth influences the well-being gap between mothers and fathers.

Ideally, panel data would be used to track individuals over time, allowing for better control of confounding variables like the desire to start a family. However, since this study relies on cross-sectional data, we cannot fully implement the event study methods typically used in longitudinal research on gender wage gaps. Instead, we approximate this approach by comparing the well-being of parents with children of varying ages, assuming this reflects within-family changes over time. To reduce biases, we include a broad range of control variables. Recognizing that cross-sectional data lacks a natural comparison group, we use two alternatives: childless individuals and parents with older children. While these approaches have limitations, they still offer valuable insights into the dynamics of well-being among parents.

Childbirth has a significant impact on parents' subjective well-being (SWB), particularly during the early years of a child's life. For mothers, the positive effects of having a child tend to last longer, peaking during the newborn stage and gradually diminishing as children reach school age, with the effects lasting up to eight years. In contrast, fathers experience a shorter boost in well-being, which typically fades after the child's first year.

Given the lack of a natural control group, comparisons were made between parents of older children and childless individuals. In 2013, mothers reported higher well-being compared to childless women, but by 2018, this trend reversed for mothers with children older than nine. For fathers, the well-being boost from having newborns extended until the child was ten in 2013, but it diminished much earlier by 2018. The well-being gap between mothers and fathers also shifted over time. In 2013, no significant difference was observed, but by 2018, mothers reported higher SWB than fathers from childbirth through the preschool years. This gap did not exist among childless couples, except for those with newborns.

This analysis highlights the differing effects of childbirth on mothers' and fathers' well-being, revealing a widening gap between them. A comparison of data from 2013 and 2018 uncovers temporal shifts, indicating that future research should rely on longitudinal data to better capture these dynamics and mitigate potential biases. Additionally, further studies on childlessness are needed to examine how its impact evolves over time across various social groups.

# 1 Literature Review

The impact of parenthood on subjective well-being is an area of considerable interest within socioeconomic status and life satisfaction research, albeit one that has often been overlooked. When delving into life satisfaction equations, the inclusion of children as explanatory variables typically yields negative or null results, indicating that having children tends to either decrease well-being levels or have no significant effect (Clark (2010)). This phenomenon is further echoed in academic findings, where individuals with children consistently exhibit lower well-being compared to their childless counterparts (Blanchflower (2008)). In contrast, a more optimistic perspective is presented in a recent study by Huppert, which suggests that the impact of having children and being a parent on overall well-being is minimal (Huppert *et al.* (2009)).

## 1.1 Effect of Parenthood on the Gender Wage Gap

One notable impact of children on parents involves the disparities in wages between partners, often referred to as the gender wage gap. This phenomenon can be attributed to career disruptions resulting from parental leave or, more significantly, increased ongoing childrearing responsibilities. These effects are observed not only at the upper echelons of the earnings distribution but also throughout. Typically, mothers, who commonly take maternity leave, experience temporary stagnation in their careers.

Angelov, Johansson, and Lindahl conducted a study comparing the income and pay trajectories of women to those of their male partners before and after becoming parents. Their findings indicate that 15 years following the birth of their first child, the income and pay gaps between men and women had widened by 32 and 10 percentage points, respectively. These disparities are influenced by the counterfactual relative earnings or salaries within the household, as per a collective labor supply model (Angelov *et al.* (2013)).

## 1.2 The Impact of Childbirth on Parental Well-Being

Researchers have extensively explored the intersection of parenthood, parenting, and well-being through two distinct strands of literature. The first strand examines the impact of parenthood and young children on well-being during early to middle adulthood, while the second strand delves into the influence of parenthood and adult children on well-being in middle to late adulthood. Our research is specifically centered on parents of children aged no older than 15 years, placing it within the scope of the first branch of literature mentioned above.

Individuals with children at home often exhibit lower levels of satisfaction compared to their childless counterparts. Moreover, they tend to experience heightened levels of worry, stress, and depression. Despite the growing disparity observed over the past two decades, the differences between parents and non-parents remain relatively minimal. This trend is attributed to economic and time constraints stemming from prevalent societal shifts, such as the increased participation of women in the workforce and the rise in divorce rates and single parenthood. These societal dynamics are anticipated to persist, potentially leading to a declining desire for children and heightened conflict among women regarding the allocation of parental responsibilities.

Research has shown that young adults without children often report higher levels of life satisfaction compared to parents (Nomaguchi & Milkie (2003)). However, McQuillan, Greil, White, and Jacob found that childlessness in early adulthood, particularly for women from low-income families, may be stressful due to thwarted reproductive aspirations (McQuillan *et al.* (2003)). In terms of childlessness in midlife, Koropecjy-Cox, Pienta, and Brown examined cross-sectional data

to assess the well-being of mothers and women in their 50s who were not parents, concluding that childlessness is not associated with worsened emotional outcomes (Koropeckyj-Cox *et al.* (2007)). Conversely, early motherhood is linked to lower levels of well-being among women, primarily due to factors such as marital dissolution and limited socioeconomic resources.

In general, the experience of childlessness varies widely among individuals, much like parenthood, which does not universally impact well-being. Research indicates that, particularly for certain social groups, childlessness has minimal negative effects on psychological well-being and may even correlate with heightened levels of well-being. Social contexts play a significant role in shaping the meaning, experience, and consequences of childlessness, potentially impacting the well-being of specific social cohorts. The decision to embrace childlessness is increasingly regarded as a personal choice, with intentional childlessness becoming more commonplace. However, there are numerous accounts of career-oriented, successful women who delay childbearing until later stages of life, only to encounter feelings of anxiety and depression when it becomes too late (Hewlett (2002)). Given the diversity of individual values, it is challenging to fully capture the various life trajectories leading to childlessness, each of which may have distinct implications for individual well-being. Moreover, the cultural interpretations of childlessness have evolved in recent years, suggesting that the consequences may vary across nations and over time.

### **1.3 Parenthood and the Gap in Well-being**

Parenthood, often seen as a shared journey between partners, can unveil nuanced experiences that differ between mothers and fathers. This phenomenon gives rise to what is known as the "well-being gap" between parents. Despite making the decision to have children together, each parent's encounter with parenthood can vary significantly.

The well-being gap manifests as differences in emotional and psychological experiences between mothers and fathers after the birth of a child. While both partners may share the joys and challenges of raising a child, their individual perceptions and responses to parenthood can diverge.

In their study titled "Motherhood Penalty and Fatherhood Premium? Fertility Effects on Parents in China", Mu and Xie present findings suggesting that mothers tend to report higher subjective well-being compared to fathers. This discrepancy is attributed to the significant time fathers devote to their careers, leaving them with less time for childcare responsibilities. Conversely, mothers express satisfaction in their roles nurturing children and demonstrate stronger social skills (Mu & Xie (2016)).

Despite the shared decision to have children, variations in caregiving responsibilities and individual responses to parenthood can result in differences in well-being between mothers and fathers. Understanding and addressing these differences is essential for promoting the overall well-being of both partners as they navigate the complexities of parenthood together. My contribution to the existing literature entails an examination of the impact of childbirth on the gap in subjective well-being between partners. Specifically, I aim to analyze the disparities in subjective well-being following childbirth between mothers and fathers within comparable family units. This analysis utilizes cross-sectional data from the European Union - Statistics on Income and Living Conditions for the years 2013 and 2018.

## 2 Methodology

In addressing the research question concerning potential differences in the well-being responses of mothers and fathers to fertility, as well as the persistence of these differences over time, employing panel data would be optimal. For example, Clark & Georgellis conducted a study of well-being responses to significant life events, childbirth included, utilizing eighteen waves of the British Household Panel Survey (Clark (2013)). Their approach, often referred to as the event study, also suits our research question as it involves tracking an individual's well-being before and after childbirth. This within-individual analysis deals with potential confounding variables, such as the desire to start a family or attitudes towards parenthood, that otherwise might bias the estimated parenthood effect. However, our dataset comprises only two waves of cross-sectional data, with no possibility to track the same individuals over time. Thus, implementing the event study method is not feasible.

Instead, we adopt an approach akin to the event study analysis, but using cross-sectional data. The crucial assumption is that the well-being of parents with children of different ages observed at a single point in time approximates the within-person (or within-family) evolution of well-being after the birth of a child. The biasing effect of confounding variables, such as the desire to start a family or attitudes towards parenthood, is addressed by the within-family design. Similarly to Angelov et al. (2016), we focus on the within-couple gap. The decision to start a family and have children typically entails mutual agreement between partners. Therefore, by observing both parents within the same nuclear family, we can address the endogeneity stemming from unobservable factors to some extent. Computing within-family differences allows us to control for such family fixed effects.

An inherent limitation of utilizing cross-sectional data is the absence of a natural comparison group. Given the nature of our data, we lack observations of the well-being of future parents before the birth of a child. However, we do have data on individuals who are childless, potentially serving as a control group. Nevertheless, this approach presents its own challenge - we cannot ascertain why certain couples do not have children, whether they plan to have children in the future, have children who have already left the household, or have consciously chosen to remain childless. Consequently, this control group may not accurately approximate well-being before the birth of children. An alternative option is to utilize families with older children as the control group, such as mothers and fathers with the oldest child aged 15. It is anticipated that parents of nearly grown-up children have stabilized levels of subjective well-being. Consequently, comparing the earlier trajectory of parental well-being with this group can provide insights into the post-childbirth evolution of well-being. We intend to employ both control groups in two alternative specifications to examine the disparities between them.

## 2.1 Determinants of subjective well-being

Prior to delving into the within-family analysis, we intend to conduct a preliminary estimation of a simple 'event study' model to assess the impact of childbirth on individual parents' well-being. However, it is crucial to acknowledge that this approach may be susceptible to endogeneity issues, as we are unable to control for individual or family fixed effects. These initial models serve as a starting point, enabling us to identify any notable differences between fathers and mothers and to assess whether the cross-sectional 'event study' yields results consistent with the existing literature. To mitigate endogeneity concerns, we incorporate variables that could potentially influence both the timing of childbearing and individuals' well-being.

### 2.1.1 Model 1: Baseline individual-level model

Our goal is to estimate changes in well-being that are triggered by the birth of the first child. We compare the well-being of parents with children of different ages (or with childless individuals) to imitate the event study approach using the cross-sectional data at our disposal. The following specification is used:

$$well-being_{icg} = \alpha_{cg} + X_{icg}\beta_g + Z_{icg}\delta_g + \sum_{k=0}^K \gamma_{kg}child\_k_{icg} + u_{icg} \quad (1)$$

where  $well - being_{icg}$  is the dependent variable representing life satisfaction of an individual  $i$  of gender  $g$  in region  $c$ ,  $\alpha_{cg}$  is the region-specific intercept, in other words, the region fixed effect. Vector  $X_{icg}$  defines socio-demographic characteristics, vector  $Z_{icg}$  stands for variables related to human capital,  $child\_k_{icg}$  is a dummy equal to one if individual  $i$  as a child in age interval  $k$ , and  $u_{icg}$  is an error term. Coefficients  $\gamma_{kg}$  can be interpreted as the well-being effect of being  $k$ -years after childbirth.

The limit of the sum  $K$  changes with the change in the comparison group. First, only mothers and fathers are considered to observe the progression of their individual well-being trajectories. In this instance, parents with a 14-year-old or 15-year-old child as the oldest comprise the control group. Subsequently, a second approach includes individuals without children, who serve as an alternative control group. Equation (1) is estimated on two distinct samples, with one composed of women ( $g = 1$ ) and the other of men ( $g = 0$ ).

We use 2-year intervals to define children age groups, with  $k = 1$  for children younger than 2 years old and  $k = 7$  for children aged 14 or 15. Therefore, the sum includes each possible distance from the birth of the first child (each possible age of the oldest child) and generates 6 or 7 dummy variables (depending on the comparison group).

This approach allows the estimation of a potentially non-linear relationship between the distance from the birth of a child and parental well-being. The gamma coefficients represent the effect on well-being based on different periods since the birth of the first child, and they are interpreted given the relevant comparison group.



## 2.2 Model 2: Well-being gap model

Subsequently, a model of the within-family well-being gap is constructed. Female respondents are paired with their respective partners, allowing for computation of the well-being gap within each partnership (within-couple differencing). This approach enables partial control for family fixed effects.

For simplicity, we use  $well\_being\_gap_{jc}$  as the dependent variable, which is the difference between  $well\_being\_female_{jc}$  and  $well\_being\_male_{jc}$ .

The following regression model is estimated:

$$well\_being\_gap_{jc} = \alpha_c + X_{jc}\beta + Z_{jc}\delta + \sum_{k=0}^K \gamma_0 child\_k_{jc} + u_{jc} \quad (2)$$

where  $well - being_{jc\_gap}$  is the dependent variable representing the gap in life satisfaction within couple  $j$  in region  $c$ ,  $\alpha_c$  is region-specific intercept, in other words, region fixed effect. Vector  $X_{jc}$  defines socio-demographic characteristics, vector  $Z_{jc}$  stands for variables related to human capital,  $child\_k_{icg}$  is a dummy equal to one if individual  $i$  as a child in age interval  $k$ , and  $u_{jc}$  is an error term.

This regression model is estimated on two samples. In the first sample, all couples are included, with childless couples serving as the comparison group. The second sample comprises only parents, with parents having 14-year-old or 15-year-old children serving as the control group.

## 2.3 Model 3: Extended well-being gap model

In this final model, an extended analysis of the well-being gap is conducted. Similar to Blanchflower & Clark (2021), we include supplementary variables to assess the financial well-being of the household, including factors such as the capability to afford a car, undertake holidays, or maintain regular meat consumption.

The extended model's specification is summarized by the following equation:

$$well\_being\_gap_{jc} = \alpha_c + X_{jc}\beta + Z_{jc}\delta + W_{jc}\sigma + \sum_{k=0}^K \gamma_0 child\_k_{jc} + u_{jc} \quad (3)$$

where  $well - being_{jc\_gap}$  is the dependent variable representing the difference in life satisfaction of females (mothers) and males (fathers),  $\alpha_c$  is region-specific intercept, vector  $X_{jc}$  defines socio-demographic characteristics, vector  $Z_{jc}$  stands for variables related to human capital and vector  $W_{jc}$  is monitoring household financial situation,  $child\_k_{icg}$  is a dummy equal to one if individual  $i$  as a child in age interval  $k$ , and  $u_{jc}$  is an error term. Similarly to the previous case, this regression model is applied to two distinct samples.

## 3 Data and descriptive statistics

### 3.1 Data source

For data collection, the European Union - Statistics on Income and Living Conditions (EU-SILC) serves as the primary source. This initiative gathers timely and comparable cross-sectional and longitudinal data on income, poverty, social exclusion, and living conditions. Data pertaining to social exclusion and housing standards are primarily obtained at the household level, while information on labor, education, and health is sourced from individuals aged 16 and above. Moreover, income variables at a detailed component level are predominantly collected from individuals. Moreover, the EU-SILC survey includes special ad-hoc modules each year, which center around specific themes and include relevant questions. Notably, the survey placed a primary emphasis on well-being in both 2013 and 2018.

The EU-SILC 2013 and 2018 Module on well-being serves as the primary data source, requiring information from all current household members or selected respondents aged 16 and above. This dataset includes life satisfaction scores measured on a scale of 0 to 10, a widely used measure of subjective well-being, as well as personal details, demographic characteristics, socioeconomic indicators, and labor market statistics, including respondent wages. An index variable allows matching respondents with their respective families, facilitating examination of differences in subjective well-being between mothers and fathers following the birth of a child within comparable family units.

Assigning parents to their children is contingent upon children and their parents cohabiting in the same household. Respondents are not asked about the total number of children they have ever had. However, information regarding own children residing in the same household at the time of the interview is recorded. This enables identifying which children belong to the respondent, conditional on children sharing a household with their parents. Information about additional children living in separate households is not captured in SILC.

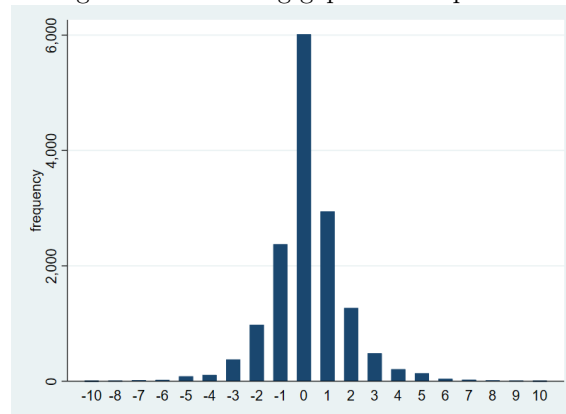
There is a high diversity of ages among children within the sample. It is possible for a parent aged over 60 to have children aged at least 30 residing in the same household, while other 60-year-old parents do not share a household with their children and are thus identified as Childless in the data. To address this issue, we adopt a similar approach as Pertold-Gebicka & Spolcova, restricting the sample to adult participants with children under the age of 15, inclusive, or adults without any residing children (Pertold-Gebicka & Spolcova (2022)). Additionally, the sample is limited to adults below 65 years of age. This decision is motivated by the fact that individuals over 65 years old and parents with children older than 15 may no longer reside with their children in the same household, potentially resulting in an underestimation of the number of children for these people. Furthermore, multigenerational households and households comprising several families present additional challenges. In the case of multifamily households, only one pair of parents is randomly selected for inclusion in the analysis.

### 3.2 Sample description

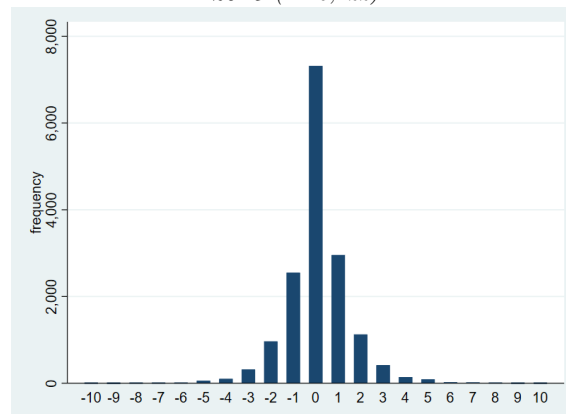
The primary focus of this study is to analyze the gap in subjective well-being between partners and how it evolves with the age of their children. As such, the dependent variable is life satisfaction, a commonly employed measure of subjective well-being. Respondents were asked to assess their overall life satisfaction on an 11-point scale ranging from 0 (not at all satisfied) to 10 (completely satisfied). It's important to note that the aim was not to capture the respondent's current emotional state but to solicit a reflective judgment on their level of satisfaction.

When examining parental well-being individually, differences between mothers and fathers are not particularly significant. In 2013, most mothers reported satisfaction levels in the upper range, with 18% at level 7, 30% at level 8, and 16% at level 9, while only 11% reached the highest level. Similar patterns were observed in 2018. Fathers' well-being levels mirrored those of mothers in both years. However, when analyzing the well-being gap between parents, a notable disparity emerges. In 2013, around 40% of partners reported the same well-being level, while for 35%, the gap differed by at least one scale-point. Approximately 15% experienced a gap of two points, and for 10%, it exceeded two points. Specifically, in 34% of partnerships, mothers reported higher well-being, while for 26%, fathers did. In 2018, the proportion of partners with the same reported well-being levels increased to 45%. Yet, one point differences were observed for 34%, two points for 13%, and at least three points for 8%. In 30% of households, mothers reported higher well-being, while in 25%, fathers did.

Figure 1: Well-being gap between parents



2013 (N:15,122)



2018 (N:16,121)

Moving on to the number of children, in 2013, approximately 43% of households had one child, 45% had two children, and only 10% had three children. Parents with four or more children comprised only 2% of the total. In 2018, similar proportions were observed, with 42% of families having one child, 46% with two children, and 10% with three children. Parents with at least four children accounted for only 2%. To track the period since the birth of the first child, a variable representing the age of the oldest child, denoted as *max\_age\_child*, was created, ranging from 0 to 15 years. Parents with a oldest child aged 16 or older were excluded to focus on households with younger children. In 2013, around 2% had infants (0-year-old), with the remaining ages evenly distributed, each comprising roughly 5 to 7% of the sample. Similarly, in 2018, 2% of parents had newborns, with each age group representing between 4 and 7%.

Other explanatory variables that could influence both the timing of childbearing and individuals' subjective well-being are categorized into three groups. The first group comprises socio-demographic characteristics, including gender, age, health limitations, and marital status, pivotal for understanding perceptions, attitudes, and standards. In 2013, women constituted 56% of the full adult sample, while men comprised 44%, with similar distributions observed in 2018. The median age among parents in 2013 was 37 for mothers and 39 for fathers, increasing slightly to 38 and 41, respectively, in 2018.

Health status was initially considered but later removed due to its potentially spurious correlation with well-being and potential bias. Instead, we focus on health limitations. In 2013, 88% of mothers and 89% of fathers reported no health limitations, increasing marginally in 2018. Marital status, indicated by a dummy variable, showed that in 2013, only 22% of parents were married, with the proportion rising to 85% in 2018. Region of residence was included due to data collection across 32 European countries, categorized into Northern, Southern, Eastern, and Central Europe. These proportions varied between 2013 and 2018, with Southern Europe comprising the largest share.

The second group encompasses variables related to human capital, such as education, self-defined economic status, and total income. Education levels varied, with most mothers having a medium level of education in both years, while fathers' education levels were distributed more evenly. Self-defined economic status distinguished between employed and unemployed individuals, with a higher percentage of employed individuals observed in 2018 compared to 2013. Regarding income, total household income was used to control for income disparities. The data report income in national currency, converted to EUR for our analysis.

Lastly, the third group includes household conditions, such as the number of rooms, financial stability, and material possessions. Variables were selected based on their potential correlation with well-being, with correlations below 0.5 retained to avoid multicollinearity. Overall, while households exhibited a high level of material possession, many struggled to make ends meet, indicating a potential impact on well-being, including that of children, which was not controlled for in the regression analysis.

Complete statistics on 2013 and 2018 samples are presented in Tables 3.1, and 3.2, respectively.

Table 3.1: Descriptive statistics with mean and standard deviation, parents 2013

Variable	Mean	Sd	Variable	Mean	Sd
well-being gap	0.163	1.606	child <sub>01</sub>	0.071	0.257
age <i>mother</i>	36.865	6.368	child <sub>23</sub>	0.116	0.320
age2 <i>mother</i>	1399.586	481.549	child <sub>45</sub>	0.130	0.337
age <i>father</i>	39.762	6.893	child <sub>67</sub>	0.130	0.336
age2 <i>father</i>	1628.515	569.605	child <sub>89</sub>	0.134	0.341
married	0.217	0.412	child <sub>1011</sub>	0.133	0.339
health limitations <i>mother</i>	0.11	0.313	child <sub>1213</sub>	0.136	0.342
health limitations <i>father</i>	0.112	0.315	child <sub>1415</sub>	0.150	0.357
number of children	1.716	0.75			
low education <i>mother</i>	0.042	0.176			
medium education <i>mother</i>	0.555	0.497			
high education <i>mother</i>	0.406	.0491			
low education <i>father</i>	0.042	0.202			
medium education <i>father</i>	0.601	0.49			
high education <i>father</i>	.0349	0.477			
employed <i>mother</i>	0.637	0.481			
employed <i>father</i>	0.885	0.32			
income	42.787	47.31			
Northern Europe	0.071	0.257			
Central Europe	0.275	0.447			
Southern Europe	0.339	0.473			
Eastern Europe	0.315	0.465			
number of rooms	4.064	1.345			
afford holiday	0.638	0.481			
afford meal	0.91	0.286			
afford unexpected	0.62	0.485			
afford telephone	0.993	0.082			
afford TV	0.983	0.128			
afford computer	0.928	0.259			
afford washing machine	0.989	0.102			
afford car	0.906	0.291			
afford ends meet	0.371	0.483			
crime area	0.131	0.337			

N: 15 085

Table 3.2: Descriptive statistics with mean and standard deviation, parents 2018

Variable	Mean	Sd	Variable	Mean	Sd
well-being gap	0.093	1.419	child <sub>01</sub>	0.060	0.237
age <i>mother</i>	38.217	6.468	child <sub>23</sub>	0.103	0.305
age2 <i>mother</i>	1502.339	503.279	child <sub>45</sub>	0.112	0.322
age <i>father</i>	41.219	7.071	child <sub>67</sub>	0.140	0.347
age2 <i>father</i>	1748.997	603.01	child <sub>89</sub>	0.136	0.343
married	0.85	0.357	child <sub>1011</sub>	0.152	0.359
heal limitations <i>mother</i>	0.107	0.309	child <sub>1213</sub>	0.146	0.354
heal limitations <i>father</i>	0.103	0.303	child <sub>1415</sub>	0.145	0.353
number of children	1.723	0.738			
low education <i>mother</i>	0.028	0.166			
medium education <i>mother</i>	0.505	0.5			
high education <i>mother</i>	0.464	0.499			
low education <i>father</i>	0.041	0.197			
medium education <i>father</i>	0.57	0.495			
high education <i>father</i>	0.388	0.487			
employed <i>mother</i>	0.69	0.462			
employed <i>father</i>	0.925	0.263			
income	47.952	48.943			
Nothern Europe	0.071	0.257			
Central Europe	0.256	0.436			
Southern Europe	0.432	0.495			
Eastern Europe	0.241	0.428			
number of rooms	4.033	1.279			
afford holiday	0.741	0.438			
afford meal	0.951	0.217			
afford unexpected	0.7	0.458			
afford telephone	0.994	0.079			
afford TV	0.98	0.138			
afford computer	0.943	0.232			
afford washing machine	0.993	0.084			
afford car	0.927	0.259			
afford ends meet	0.445	0.497			
crime area	0.1	0.3			

N: 14 897

## 4 Results

### 4.1 Determinants of individual subjective well-being

We start the analysis by estimating the baseline well-being model specified in Equation (1). On top of child age dummies this model includes the well-being determinants usually found in the related literature. The regression results are detailed in Tables A.1 (year 2013) and A.2 (year 2018) in the appendix. They are generally in line with the earlier literature. Specifically, in specifications including the whole population (not only parents), we observe a U-shaped relationship between age and subjective well-being and a negative relationship between health problems and subjective well-being. Similarly to other studies, we also find that lower levels of education were associated with lower subjective well-being, as indicated by significant negative coefficients for both low and medium levels of education. Finally, a strong positive relationship is observed between income and subjective well-being.

In our regression analysis, we utilized the region variable as a clustering mechanism to distinguish individuals from various countries. The results reveal notable differences in life satisfaction among adults residing in different regions. Individuals residing in Northern Europe tend to report higher levels of life satisfaction compared to those in Eastern Europe (the comparison group). Women living in Central Europe exhibit lower levels of subjective well-being than their counterparts in Eastern Europe. On the other hand, men show the opposite trend. Additionally, a negative coefficient is observed for adults residing in Southern Europe. This pattern persists across both years of analysis.

These findings are in line with the research conducted by Huppert et al. (2009), which highlights significant variations in depression rates across Europe. Countries such as Norway, Denmark, and Switzerland exhibit lower rates of depression, whereas Hungary, Ukraine, and Portugal experience higher rates. Moreover, numerous surveys suggest a correlation between geographical location and life satisfaction, with individuals in northern regions generally reporting higher levels of life satisfaction.

The main focus of our analysis is on the relationship between children and subjective well-being. Coefficient estimates from equation (1) indicate that the number of children exhibits significance and a positive correlation for both mothers and fathers in 2013. This implies that as the number of children increases, parental subjective well-being tends to rise, no matter whether the sample consists of parents only or also includes Childless individuals. In 2018, while the variable remains positive for both genders, it is statistically significant only for women. A study conducted by Pertold-Gebicka and Spolcova (2022) delved into the causal relationship between the number of children and parental subjective well-being, leveraging twin births as a source of exogenous variation. Their findings indicate that while having an additional child leads to decreased levels of subjective well-being among parents with small children, it results in heightened levels for parents with teenage children.

Children age dummies are included in equation (1) to map the relationship between children and subjective well-being at different distances from childbirth. Their estimates are summarized in the figures below. Each graph plots the estimated coefficients on the vertical axis against the children's age intervals (grouped into two-year categories) on the horizontal axis. Each data point on the graph corresponds to one estimate, encircled by a 95% confidence interval. Statistically significant estimates are highlighted in red for emphasis.

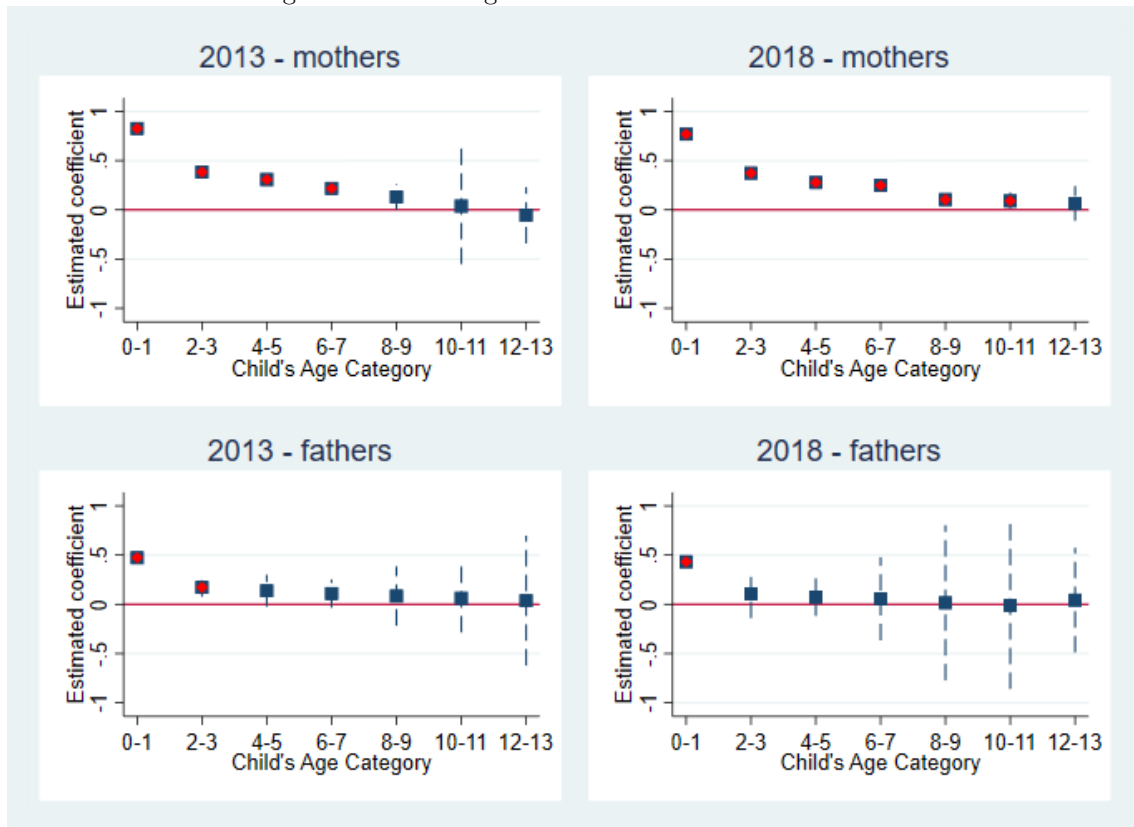
In the 2013 sample of mothers, a notable impact on well-being is observed among those with newborns (the oldest child being less than 2 years old). We can say that mothers embarking on par-

enthood exhibit higher levels of life satisfaction than those with 14 and 15-year-old children. This positive effect on subjective well-being remains significant until the child turns eight, although becomes smaller for older children. This downward trend underscores a consistent elevation in well-being of parents, particularly pronounced among parents with young children, gradually diminishing as children approach school age.

In 2018, a similar developmental pattern emerges, mirroring the trends observed in 2013. Mothers with younger children, spanning from birth to eight years old, tend to report higher subjective well-being compared to mothers with teenage children.

In contrast to mothers, the impact on fathers' well-being is not as enduring. In 2013, we find a notable and positive effect on well-being among fathers with newborns, which persists until their children reach four years of age. Subsequently, well-being levels stabilize, akin to the observed pattern among mothers. Similarly, in 2018, the effect is evident only among fathers with newborns. Beyond this period, the effect remains positive but statistically insignificant.

Figure 2: Well-being coefficients - mothers and fathers



*Note: The figure reports point estimates of child age dummies from regression equation (1) together with 95% confidence interval. The top-left panel shows results for the 2013 sample of mothers, using mothers of 14-15 year-olds as the reference category. The top-right panel illustrates results for the 2018 sample of mothers, with the same reference category. The lower panels display the corresponding results for fathers in 2013 and 2018, with fathers of 14-15 year-olds serving as the reference category in both cases.*



To assess how the choice of the control group influences outcomes, we re-run the baseline model utilizing childless individuals as the control group this time. The results of this exercise are summarized in the figures below.

The 2013 results indicate that mothers with children up to the age of 6 report higher levels of life satisfaction than women without children, with the child effect diminishing as children get older. However, beyond this stage, the observed relationship stabilizes. The pattern observed for 2018 is similar, but shifted downward by about 0.7 units. Consequently, significantly negative coefficients emerge for mothers with children aged eight or older.

For fathers, the impact of children is estimated to be consistently positive and significant for all but the oldest age categories in 2013. This suggests that fathers with children aged zero to thirteen report significantly higher levels of well-being than childless men. Essentially, there is a pattern of elevated well-being for fathers with newborn children, which diminishes somewhat as children approach school age. Similarly like in the case of mothers, also for fathers we observe that the 2018 are shifted downwards. The positive and significant influence is evident only for fathers with infants aged zero to one. Beyond this stage, the effect on well-being settles down and becomes indistinguishable from zero.

Figure 3: Well-being coefficients - women and men



*Note: The figure reports point estimates of child age dummies from regression equation (1) together with 95% confidence interval. The top-left panel presents results for the 2013 sample of all mothers, using childless women as the reference category. The top-right panel shows results for the 2018 sample of mothers, maintaining the same reference category. The lower panels depict the corresponding results for fathers in 2013 and 2018, with childless men serving as the reference category in both instances.*

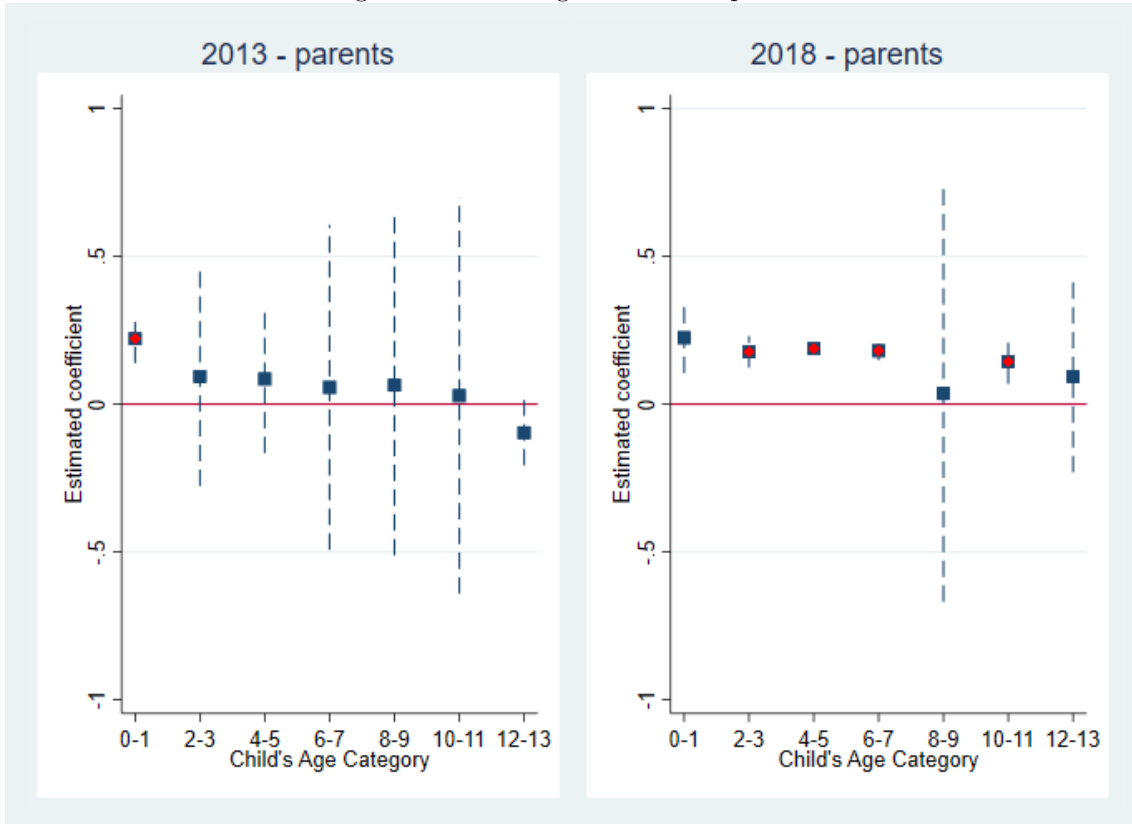
## 4.2 Between partnest gap in subjective well-being

The individual-level analysis summarized in the previous section highlights some evident differences in well-being trajectories between mothers and fathers. These are likely stemming from the distinct roles and responsibilities traditionally assigned to each. For instance, mothers typically spend more time with children, often sacrificing their careers and personal time due to maternity leave and increased caregiving responsibilities. This disparity in parental roles can create a well-being gap between partners.

To examine this potential well-being gap between mothers and fathers, we turn to estimation of equation (2) with the between parents well-being gap as the dependent variable. Full estimation results are reported in first two columns of appendix Tables B.1 and B.2, with key findings illustrated in the Figures below.

The analysis consistently indicates a positive well-being gap between parents, meaning that mothers report higher subjective well-being than fathers. This gap, manifested through the constant, is not observed in the full population of couples, including the childless ones. Each additional child further widens the gap, as indicated by the number of children variable. When it comes to the age of the oldest child, i.e. the distance from the first childbirth, we again observe that mothers consistently report higher levels of life satisfaction than fathers do. This difference is statistically significant for parents of newborns in both analysed years. For parents of older children we only observe statistically significant differences in 2018. This underscores the nuanced and evolving dynamics of parental well-being as children grow.

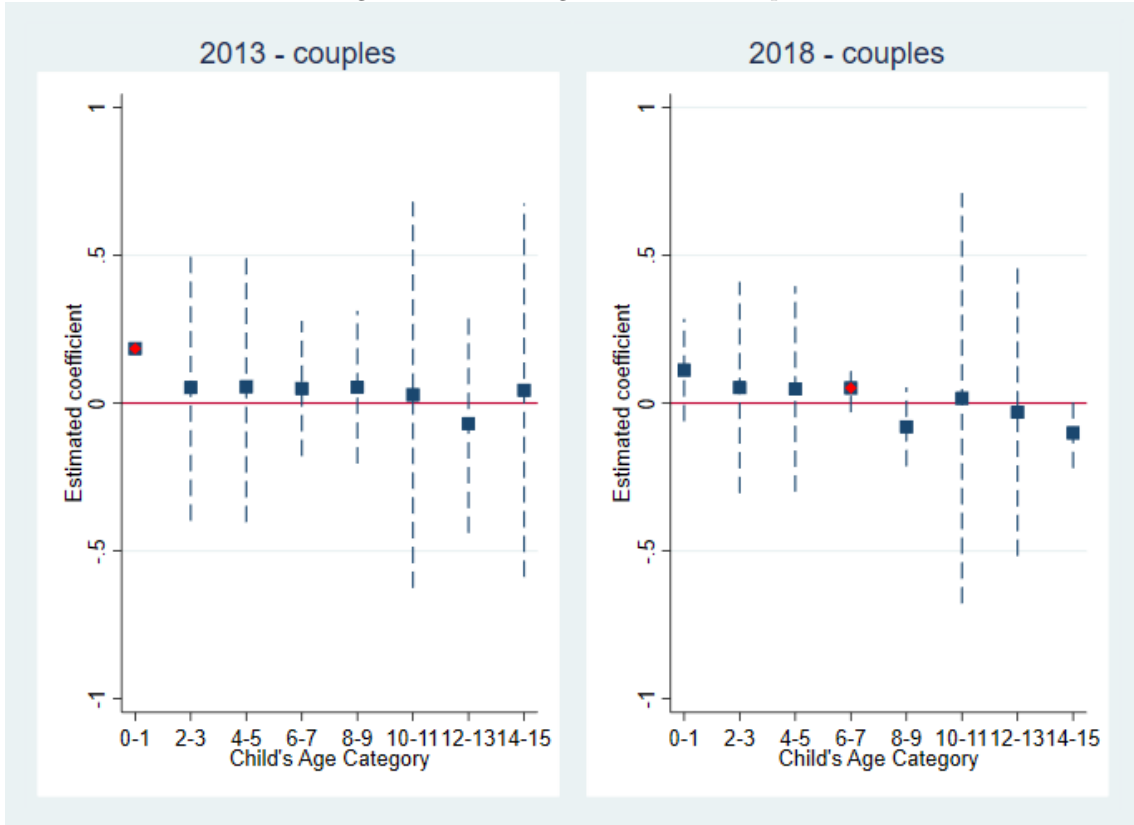
Figure 4: Well-being coefficients - parents



The figure presents point estimates of child age dummies from regression equation (3), along with 95% confidence intervals. The left panel displays results for all parents in 2013, while the right panel shows results for all parents in 2018. In both cases, the control group consists of parents whose oldest children are 14 or 15 years old.

The distance to childbirth pattern in the well-being gap between partners disappears as soon as the control group shifts to childless couples. In 2013, the well-being gap is significant only for parents with newborns, while no statistically significant estimate of child age group is observed in 2018. Still, number of children is positively related to the within partnership well-being gap.

Figure 5: Well-being coefficients - couples



The figure presents point estimates of child age dummies from regression equation (3), along with 95% confidence intervals. The left panel presents results for all parents in 2013, while the right panel shows results for all parents in 2018. In both instances, childless couples serve as the control group.

## Conclusion

This analysis aims to investigate the hypotheses that childbirth affects subjective well-being (SWB) and that this effect differs for mothers and fathers, thereby creating a gap in SWB between parents. Utilizing cross-sectional data from the European Union - Statistics on Income and Living Conditions collected in 2013 and 2018, the analysis capitalizes on the inclusion of the well-being module in these selected years. The akin event study analysis on cross-sectional data approximates the within-partners evolution of well-being post-childbirth by assuming that the well-being of parents with differently aged children observed at one point in time can reflect changes over time.

Multiple regression models were run, starting with a baseline model to ensure consistency with previous literature. The analysis then focused on the relationship between well-being and the age of the oldest child, approximating an event study model. Additionally, a within-family well-being gap model was constructed by matching females to their partners, enabling differentiation within partnerships (marriages). This method allows some control over family fixed effects, thus partially limiting endogeneity.

The effect of childbirth on SWB is most significant for parents with young children, diminishing as children reach school age. For mothers, the positive effect lasts longer, with higher well-being levels reported for mothers with newborns compared to those with teenage children. This effect spans from the child's birth to about eight years of age. For fathers, the positive impact is shorter, lasting only until the child is about one year old.

Due to the lack of a natural control group, additional comparisons were made with parents of 15-year-olds and childless individuals. In 2013, mothers with children reported higher well-being compared to childless women, a trend that reversed in 2018 for mothers with children older than nine. For fathers, the positive effect of having newborns lasted until the child was ten in 2013 but flattened out shortly after childbirth in 2018.

The gap in well-being between mothers and fathers varied between the two years studied. In 2013, no significant trend was observed. However, in 2018, a significant well-being gap emerged from childbirth to preschool age, with mothers reporting higher SWB than fathers. This gap was not observed among childless couples, except for those with newborn babies.

This analysis contributes to understanding how childbirth uniquely affects mothers' and fathers' subjective well-being and estimates the resulting gap between partners. The comparison of data from 2013 and 2018 provides insights into temporal differences.

The complex relationship between well-being and childbirth is influenced by numerous unmeasurable factors. Future research should utilize longitudinal data to control for potentially biasing unobservable individual characteristics, addressing a key limitation of this research paper. Existing research on childlessness, often limited by cross-sectional designs, would benefit from exploring how its effects change over time and across different social groups and cohorts.

## References

- ANGELOV, N., P. JOHANSSON, & E. LINDAHL (2013): “Is the persistent gender gap in income and wages due to unequal family responsibilities?” .
- BLANCHFLOWER, D. (2008): “Happiness economics.” Research Summary **2**: pp. 85–96.
- CLARK, A. E., . G. Y. (2013): “Back to baseline in Britain: adaptation in the British household panel survey.” Economica **80(319)**: pp. 496–512.
- CLARK, A. E. (2010): “Work, jobs, and well-being across the millennium.” International differences in well-being pp. 436–468.
- HEWLETT, S. A. (2002): “Executive women and the myth of having it all.” Harvard business review **80(4)**: pp. 66–73.
- HUPPERT, F. A., N. MARKS, A. CLARK, J. SIEGRIST, A. STUTZER, J. VITTESSØ, & M. WAHRENDORF (2009): “Measuring well-being across Europe: Description of the ESS well-being module and preliminary findings.” Social Indicators Research **91(3)**: pp. 301–315.
- KOROPECKYJ-COX, T., A. M. PIENTA, & T. H. BROWN (2007): “Women of the 1950s and the “normative” life course: The implications of childlessness, fertility timing, and marital status for psychological well-being in late midlife.” The International Journal of Aging and Human Development **64(4)**: pp. 299–330.
- MCQUILLAN, J., A. L. GREIL, L. WHITE, & M. C. JACOB (2003): “Frustrated fertility: Infertility and psychological distress among women.” Journal of Marriage and Family **65(4)**: pp. 1007–1018.
- MU, Z. & Y. XIE (2016): “‘Motherhood penalty’ and ‘fatherhood premium’? Fertility effects on parents in China.” Demographic research **35**: p. 1373.
- NOMAGUCHI, K. M. & M. A. MILKIE (2003): “Costs and rewards of children: The effects of becoming a parent on adults’ lives.” Journal of marriage and family **65(2)**: pp. 356–374.
- PERTOLD-GEBICKA, B. & D. SPOLCOVA (2022): “Family size and subjective well-being in Europe: Do more children make us (un)happy?” The Economic and Social Review **53(2)**: p. 89–136.

## Appendix

### A.1 Sample of all parents, adults 2013

	(1)	(2)	(3)	(4)
	mothers	fathers	women	men
age_f	0.030 (0.570)		0.042 (0.497)	
age2	-0.000 (0.593)	-0.000 (0.769)	-0.001 (0.510)	0.002*** (0.000)
heal_lim	-0.739*** (0.000)	-0.497*** (0.000)	-0.681*** (0.000)	-0.836*** (0.000)
married	-0.005 (0.921)	0.019 (0.694)	0.038 (0.490)	0.060 (0.341)
nokinds	0.156*** (0.000)	0.071* (0.066)	0.108*** (0.001)	0.070** (0.029)
lowEDU	-0.875*** (0.000)	-0.696*** (0.000)	-0.923*** (0.000)	-0.587*** (0.000)
mediumEDU	-0.240*** (0.000)	-0.221*** (0.000)	-0.293*** (0.000)	-0.238*** (0.000)
employed	0.428*** (0.000)	1.234*** (0.000)	0.357*** (0.000)	0.924*** (0.000)
income_EUR	0.007*** (0.000)	0.005*** (0.000)	0.008*** (0.000)	0.006*** (0.000)
nothern_europe	-0.259 (0.419)	0.071 (0.821)	-0.185 (0.550)	0.116 (0.731)
central_europe	-0.240 (0.419)	-0.022 (0.940)	-0.206 (0.473)	0.145 (0.610)
southern_europe	-0.361 (0.166)	-0.272 (0.349)	-0.298 (0.236)	-0.191 (0.512)
child_01	0.826*** (0.000)	0.474*** (0.000)	0.764*** (0.000)	0.475*** (0.000)
child_23	0.384*** (0.001)	0.173* (0.095)	0.378*** (0.008)	0.234*** (0.006)
child_45	0.308*** (0.000)	0.139 (0.163)	0.214** (0.023)	0.226*** (0.000)
child_67	0.218*** (0.001)	0.109 (0.143)	0.134 (0.168)	0.238*** (0.003)

child_89	0.131 (0.130)	0.085 (0.302)	0.127 (0.298)	0.240** (0.011)
child_1011	0.038 (0.590)	0.062 (0.347)	0.033 (0.783)	0.225** (0.013)
child_1213	-0.055 (0.286)	0.038 (0.660)	-0.109 (0.118)	0.192** (0.018)
age_m		-0.002 (0.938)		-0.189*** (0.000)
child_1415			0.000 (.)	0.141 (0.138)
__cons	6.234*** (0.000)	6.278*** (0.000)	6.165*** (0.000)	10.164*** (0.000)
<i>N</i>	30491	23813	14758	68884
<i>R</i> <sup>2</sup>	0.101	0.120	0.101	0.150

*p*-values in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## A.2 Sample of all parents, adults 2018

	(1)	(2)	(3)	(4)
	mothers	fathers	women	men
age_f	0.009 (0.636)		-0.121*** (0.000)	
age2	-0.000 (0.308)	0.000 (0.409)	0.001*** (0.000)	0.002*** (0.000)
heal_lim	-0.773*** (0.000)	-0.646*** (0.000)	-0.946*** (0.000)	-0.940*** (0.000)
married	0.472*** (0.000)	0.190*** (0.001)	0.493*** (0.000)	0.414*** (0.000)
nokinds	0.131** (0.011)	0.043 (0.120)	0.123** (0.024)	0.018 (0.512)
lowEDU	-0.760*** (0.000)	-0.537*** (0.005)	-0.746*** (0.000)	-0.671*** (0.000)
mediumEDU	-0.179** (0.030)	-0.279*** (0.000)	-0.254*** (0.000)	-0.275*** (0.000)
employed	0.399*** (0.000)	1.335*** (0.000)	0.524*** (0.000)	0.886*** (0.000)
income_EUR	0.004*** (0.000)	0.003*** (0.000)	0.005*** (0.000)	0.004*** (0.000)
nothern_europe	-0.053 (0.804)	0.022 (0.929)	0.137 (0.594)	0.185 (0.461)
central_europe	-0.180 (0.403)	-0.035 (0.872)	-0.071 (0.782)	0.051 (0.834)
southern_europe	-0.223 (0.324)	-0.184 (0.472)	-0.100 (0.714)	-0.053 (0.841)
child_01	0.769*** (0.000)	0.433*** (0.000)	0.397*** (0.000)	0.387*** (0.002)
child_23	0.373*** (0.000)	0.108 (0.247)	0.022 (0.642)	0.077 (0.241)
child_45	0.278*** (0.000)	0.074 (0.192)	-0.048 (0.567)	0.084 (0.198)
child_67	0.248*** (0.008)	0.058 (0.422)	-0.055 (0.275)	0.080 (0.260)



child_89	0.104** (0.033)	0.016 (0.789)	-0.159* (0.082)	0.054 (0.348)
child_1011	0.091* (0.084)	-0.010 (0.851)	-0.163** (0.044)	0.042 (0.499)
child_1213	0.065 (0.177)	0.042 (0.532)	-0.183* (0.058)	0.100 (0.163)
age_m		-0.033 (0.232)		-0.168*** (0.000)
child_1415			-0.241** (0.022)	0.028 (0.762)
__cons	6.792*** (0.000)	7.203*** (0.000)	9.533*** (0.000)	10.143*** (0.000)
<i>N</i>	31205	24647	87512	73258
<i>R</i> <sup>2</sup>	0.108	0.113	0.147	0.168

*p*-values in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### A.3 Sample of all parents,adults 2013

	(1)	(2)	(3)	(4)
	<i>parents</i>	<i>couples</i>	<i>parents extended</i>	<i>couples extended</i>
	well-being gap	well-being gap	well-being gap	well-being gap
age_f	-0.035 (0.444)	-0.059** (0.012)	-0.039 (0.400)	-0.056** (0.022)
age2_f	0.000 (0.445)	0.001** (0.011)	0.000 (0.414)	0.001** (0.020)
age_m	-0.000 (0.989)	0.063*** (0.000)	-0.007 (0.810)	0.061*** (0.001)
age2_m	0.000 (0.794)	-0.001*** (0.000)	0.000 (0.623)	-0.001*** (0.001)
married_f	-0.099*** (0.004)	-0.014 (0.368)	-0.095*** (0.003)	-0.013 (0.432)
heal_lim_f	-0.369*** (0.000)	-0.469*** (0.000)	-0.366*** (0.000)	-0.475*** (0.000)
heal_lim_m	0.257*** (0.000)	0.389*** (0.000)	0.262*** (0.000)	0.389*** (0.000)
nokinds	0.064*** (0.005)	0.047** (0.012)	0.075*** (0.002)	0.053*** (0.007)
lowEDU_f	-0.090 (0.483)	-0.116 (0.224)	-0.064 (0.619)	-0.121 (0.173)
mediumEDU_f	-0.022 (0.623)	-0.073* (0.061)	-0.012 (0.763)	-0.071* (0.051)
lowEDU_m	0.172 (0.133)	0.163* (0.084)	0.189 (0.119)	0.168* (0.078)
mediumEDU_m	0.026 (0.421)	0.065*** (0.002)	0.026 (0.392)	0.064*** (0.002)
employed_f	0.143*** (0.000)	0.230*** (0.000)	0.132*** (0.000)	0.223*** (0.000)
employed_m	-0.325*** (0.000)	-0.298*** (0.000)	-0.364*** (0.000)	-0.304*** (0.000)
income_EUR	-0.001 (0.233)	-0.000* (0.075)	-0.001 (0.182)	-0.000 (0.120)
nothern_europe	-0.068 (0.243)	0.037 (0.237)	-0.042 (0.594)	0.044 (0.250)

central_europe	-0.059 (0.426)	-0.036 (0.297)	-0.057 (0.553)	-0.032 (0.432)
southern_europe	-0.033 (0.565)	0.018 (0.583)	-0.037 (0.652)	0.025 (0.541)
child_01	0.221* (0.083)	0.184** (0.019)	0.190 (0.136)	0.191** (0.012)
child_23	0.093 (0.371)	0.053 (0.451)	0.065 (0.546)	0.051 (0.495)
child_45	0.085 (0.251)	0.055 (0.458)	0.067 (0.407)	0.058 (0.444)
child_67	0.057 (0.549)	0.049 (0.229)	0.044 (0.632)	0.055 (0.205)
child_89	0.064 (0.576)	0.054 (0.258)	0.048 (0.683)	0.053 (0.290)
child_1011	0.029 (0.670)	0.028 (0.653)	0.018 (0.796)	0.031 (0.633)
child_1213	-0.097 (0.111)	-0.069 (0.370)	-0.102* (0.097)	-0.066 (0.392)
child_1415		0.043 (0.631)		0.049 (0.583)
numberofrooms			-0.028 (0.315)	-0.015 (0.237)
afford_holiday			0.001 (0.975)	0.048 (0.175)
afford_meal			0.108* (0.098)	0.069 (0.138)
afford_unexpected			0.048 (0.366)	-0.019 (0.628)
afford_telephone			-0.155 (0.291)	0.111 (0.545)
afford_TV			0.183 (0.174)	0.056 (0.654)
afford_computer			-0.065 (0.386)	-0.035 (0.616)
afford_washingmachine			0.090 (0.614)	-0.091 (0.413)

afford_car			0.212**	0.015
			(0.049)	(0.841)
afford_endsmeet			0.018	0.000
			(0.678)	(.)
crimearea			0.036	-0.004
			(0.428)	(0.905)
_cons	0.756*	-0.035	0.727	-0.176
	(0.088)	(0.918)	(0.160)	(0.652)
<hr/>				
<i>N</i>	15055	32189	15024	32078
<i>R</i> <sup>2</sup>	0.017	0.028	0.019	0.028
<hr/>				

*p*-values in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

#### A.4 Sample of all parents,adults 2018

	(1)	(2)	(3)	(4)
	<i>parents</i>	<i>couples</i>	<i>parents extended</i>	<i>couples extended</i>
	well-being gap	well-being gap	well-being gap	well-being gap
age_f	-0.126** (0.046)	-0.061*** (0.001)	-0.050 (0.149)	-0.046*** (0.002)
age2_f	0.002* (0.060)	0.001*** (0.002)	0.001 (0.218)	0.000*** (0.007)
age_m	0.118* (0.051)	0.096*** (0.000)	0.063** (0.035)	0.072*** (0.000)
age2_m	-0.001* (0.081)	-0.001*** (0.000)	-0.001 (0.112)	-0.001*** (0.000)
married_f	0.062 (0.264)	0.039 (0.239)	0.008 (0.886)	0.052 (0.270)
heal_lim_f	-0.336*** (0.000)	-0.530*** (0.000)	-0.268*** (0.000)	-0.445*** (0.000)
heal_lim_m	0.450*** (0.000)	0.532*** (0.000)	0.369*** (0.000)	0.451*** (0.000)
nokinds	0.039** (0.036)	0.040* (0.087)	0.021 (0.264)	0.014 (0.352)
lowEDU_f	0.143 (0.393)	0.022 (0.873)	0.095 (0.623)	0.059 (0.674)
mediumEDU_f	0.077** (0.020)	0.056** (0.021)	0.053 (0.129)	0.033 (0.272)
lowEDU_m	-0.027 (0.887)	0.032 (0.792)	-0.008 (0.970)	-0.042 (0.755)
mediumEDU_m	-0.007 (0.776)	0.030* (0.063)	-0.026 (0.414)	0.004 (0.871)
employed_f	0.120*** (0.003)	0.193*** (0.000)	0.133*** (0.004)	0.163*** (0.000)
employed_m	-0.647*** (0.000)	-0.458*** (0.000)	-0.556*** (0.000)	-0.368*** (0.000)
income_EUR	0.000 (0.398)	0.000 (0.180)	-0.000 (0.450)	0.000 (0.946)
nothern_europe	0.035 (0.522)	0.051 (0.106)	0.009 (0.880)	0.037 (0.300)

central_europe	-0.098*	-0.108***	-0.097	-0.053
	(0.086)	(0.007)	(0.239)	(0.349)
southern_europe	-0.077	-0.044	-0.063	-0.017
	(0.150)	(0.106)	(0.236)	(0.542)
child_01	0.225	0.112	0.242	0.075
	(0.120)	(0.173)	(0.225)	(0.488)
child_23	0.177*	0.053	0.178	0.010
	(0.053)	(0.358)	(0.147)	(0.861)
child_45	0.188***	0.048	0.169*	0.013
	(0.008)	(0.348)	(0.063)	(0.810)
child_67	0.181**	0.051*	0.186*	0.038
	(0.032)	(0.082)	(0.077)	(0.391)
child_89	0.036	-0.080	0.076	-0.047
	(0.704)	(0.134)	(0.492)	(0.305)
child_1011	0.144*	0.016	0.193**	0.055*
	(0.076)	(0.694)	(0.027)	(0.085)
child_1213	0.093	-0.031	0.117	-0.020
	(0.324)	(0.486)	(0.334)	(0.699)
child_1415		-0.101		-0.109
		(0.119)		(0.187)

numberofrooms			0.014	0.002
			(0.138)	(0.824)
afford_holiday			-0.066	-0.041
			(0.315)	(0.361)
afford_meal			-0.121	-0.151**
			(0.122)	(0.028)
afford_unexpected			-0.029	-0.037
			(0.718)	(0.438)
afford_telephone			0.037	-0.005
			(0.786)	(0.948)
afford_TV			0.033	0.055
			(0.758)	(0.589)
afford_computer			-0.008	0.046
			(0.905)	(0.491)
afford_washingmachine			0.059	-0.002
			(0.752)	(0.984)
afford_car			-0.047	-0.048
			(0.664)	(0.382)
afford_endsmeet			0.046*	0.036
			(0.077)	(0.190)
crimearea			0.099	0.117**
			(0.107)	(0.043)
<hr/>				
_cons	0.301	-0.552**	-0.046	-0.241
	(0.660)	(0.011)	(0.947)	(0.310)
<hr/>				
<i>N</i>	16065	33204	14897	30180
<i>R</i> <sup>2</sup>	0.034	0.043	0.032	0.036
<hr/>				

*p*-values in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

# IES Working Paper Series

2024

1. Nino Buliskeria, Jaromir Baxa, Tomáš Šestořád: *Uncertain Trends in Economic Policy Uncertainty*
2. Martina Lušková: *The Effect of Face Masks on Covid Transmission: A Meta-Analysis*
3. Jaromir Baxa, Tomáš Šestořád: *How Different are the Alternative Economic Policy Uncertainty Indices? The Case of European Countries.*
4. Sophie Ghvanidze, Soo K. Kang, Milan Ščasný, Jon Henrich Hanf: *Profiling Cannabis Consumption Motivation and Situations as Casual Leisure*
5. Lorena Skufi, Meri Papavangjeli, Adam Geršl: *Migration, Remittances, and Wage-Inflation Spillovers: The Case of Albania*
6. Katarina Gomoryova: *Female Leadership and Financial Performance: A Meta-Analysis*
7. Fisnik Bajrami: *Macroprudential Policies and Dollarisation: Implications for the Financial System and a Cross-Exchange Rate Regime Analysis*
8. Josef Simpart: *Military Expenditure and Economic Growth: A Meta-Analysis*
9. Anna Alberini, Milan Ščasný: *Climate Change, Large Risks, Small Risks, and the Value per Statistical Life*
10. Josef Bajzík: *Does Shareholder Activism Have a Long-Lasting Impact on Company Value? A Meta-Analysis*
11. Martin Gregor, Beatrice Michaeli: *Board Bias, Information, and Investment Efficiency*
12. Martin Gregor, Beatrice Michaeli: *Board Compensation and Investment Efficiency*
13. Lenka Šlegerová: *The Accessibility of Primary Care and Paediatric Hospitalisations for Ambulatory Care Sensitive Conditions in Czechia*
14. Kseniya Bortnikova, Tomas Havranek, Zuzana Irsova: *Beauty and Professional Success: A Meta-Analysis*
15. Fan Yang, Tomas Havranek, Zuzana Irsova, Jiri Novak: *Where Have All the Alphas Gone? A Meta-Analysis of Hedge Fund Performance*
16. Martina Lušková, Kseniya Bortnikova: *Cost-Effectiveness of Women's Vaccination Against HPV: Results for the Czech Republic*
17. Tersoo David Iorngurum: *Interest Rate Pass-Through Asymmetry: A Meta-Analytical Approach*
18. Inaki Veruete Villegas, Milan Ščasný: *Input-Output Modeling Amidst Crisis: Tracing Natural Gas Pathways in the Czech Republic During the War-Induced Energy Turmoil*
19. Theodor Petřík: *Distribution Strategy Planning: A Comprehensive Probabilistic Approach for Unpredictable Environment*
20. Meri Papavangjeli, Adam Geršl: *Monetary Policy, Macro-Financial Vulnerabilities, and Macroeconomic Outcomes*



21. Attila Sarkany, Lukáš Janásek, Jozef Baruník: *Quantile Preferences in Portfolio Choice: A Q-DRL Approach to Dynamic Diversification*
22. Jiri Kukacka, Erik Zila: *Unraveling Timing Uncertainty of Event-driven Connectedness among Oil-Based Energy Commodities*
23. Samuel Fiifi Eshun, Evžen Kočenda: *Money Talks, Green Walks: Does Financial Inclusion Promote Green Sustainability in Africa?*
24. Mathieu Petit, Karel Janda: *The Optimal Investment Size in the Electricity Sector in EU Countries*
25. Alessandro Chiari: *Do Tax Havens Affect Financial Management? The Case of U.S. Multinational Companies*
26. Lenka Nechvátalová: *Autoencoder Asset Pricing Models and Economic Restrictions – International Evidence*
27. Markéta Malá: *Exploring Foreign Direct Investments and Engagements of Socialist Multinational Enterprises: A Case Study of Skoda Works in the 1970s and 1980s*
28. Veronika Plachá: *Does Childbirth Change the Gender Gap in Well-Being between Partners?*

All papers can be downloaded at: <http://ies.fsv.cuni.cz>

