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A research note on the increasing income prerequisites of parenthood. Country-specific or universal in Western Europe?

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A research note on the increasing income prerequisites of parenthood. Country-specific or universal in Western Europe?

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Abstract

Traditional economic theories link male income to higher fertility and female income to increased opportunity costs. However, shifting gender roles and socio-economic changes challenge these assumptions, with evidence suggesting rising income prerequisites of parenthood in high-income countries. This research note examines the role of income in first childbirth for men and women from 2006 to 2020 across 16 Western European countries based on longitudinal data from the European Union Statistics on Income and Living Conditions and discrete-time logistic regressions. Results show that higher income consistently increases the transition to parenthood in all countries, with stronger effects for women. Over time, income has become a stronger predictor of parenthood. Widening fertility differentials across income groups are primarily driven by declining first-birth probabilities among lower-income men and women, supporting the hypothesis of increasing income prerequisites of parenthood. In four countries, the positive income effect for men weakens, which we interpret as a signal of changing gender roles. In one country, widening fertility differentials are driven by increasing fertility among high-income women, consistent with the argument of declining opportunity costs. Overall, findings suggest that the income prerequisites of parenthood have risen in highincome countries, strongly contributing to increasing income inequalities in fertility.

Keywords: Fertility, Income, Gender roles, Opportunity costs, EU-SILC. **JEL Codes:** J13; J16, J22, D31.

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Introduction

Across European countries, the cost of living is rising, particularly in childrearing-related expenses like housing and childcare services (Eurostat 2024), alongside stagnating real wages, especially among younger individuals (OECD 2024). This situation implies an increase in both the direct and indirect costs of childbearing (Vignoli et al. 2022). At the same time, growing employment instability due to labor market deregulation (Blossfeld et al. 2006) and the diffusion of economic uncertainty (Vignoli et al. 2020) contribute to weaken the capacity of male incomes to sustain family formation, accelerating the erosion of the single-earner, male breadwinner family model (Oppenheimer 1997). This state of affairs raises an urgent question: Has income become a stronger determinant of parenthood in Western Europe, and has this trend been similar for men and women? Consequently, have income-based fertility inequalities also increased?

A wealth of literature highlights the critical role of economic resources in family formation. At the micro level, numerous studies report a positive association between male income and fertility (Hopcroft et al. 2024; Kolk 2022). While less research has explicitly focused on the relationship between female income and fertility, emerging evidence suggests a shift: rather than being a barrier, women's earnings are becoming an increasingly influential factor in fertility behavior (Doepke et al. 2023; Hart 2015; van Wijk & Billari 2024; van Wijk 2024). This evidence, however, is limited to a handful of European countries, namely Norway, the Netherlands, Germany, Switzerland, and the UK. Hart (2015) documents a growing association between income and fertility for both men and women in Norway (1995–2010). Van Wijk (2024) finds that higher income has become more closely associated with first births in the Netherlands for both genders. Van Wijk and Billari (2024), while extending their analysis to non-European countries, report an increasing correlation between income and fertility for both men and women in Morway is the networe income and fertility for both men and women in Germany and the UK, but not in Switzerland.

Our study extends this literature by examining how income influences the probability of first childbirth for both men and women across 16 Western European countries. It also explores how this relationship has evolved over time, focusing on the period from 2006 to 2020, during which total fertility rates continued to decline in countries where they were already low, while traditionally high-fertility contexts experienced sharp and unexpected fertility drops (Vignoli et al. 2020; Bloom et al. 2023).

Background

Three interrelated theoretical perspectives help interpret potential shifts in the income–fertility relationship. The first perspective, drawn from the New Home Economics (NHE) framework (Becker 1981), suggests that higher household income facilitates fertility by offsetting the costs of childrearing (the income effect). Historically, female employment increased opportunity costs that resulted in work-family conflicts (the substitution effect). However, structural changes in the labor market and enhanced welfare provisions, such as expanded childcare access, longer parental leave, and increased workplace flexibility, may have reduced these opportunity costs, particularly for highly educated, career-oriented women (Bloom et al. 2023; Doepke et al. 2023), making income effects increasingly more likely also among women.

A second perspective stems from the theories of multiple equilibria (Esping-Andersen & Billari 2015) and the gender revolution (Goldscheider et al. 2015). These theories suggest that evolving norms toward greater gender egalitarianism and increased male involvement in domestic responsibilities are reshaping fertility behavior and, so, the income–fertility nexus. As societies progress toward gender equality, fertility behavior relies less on male income and more on female income.

Last, the increasing income prerequisites perspective (van Wijk & Billari 2024) suggests that rising financial barriers to parenthood have made household income increasingly

critical for parenthood. The ongoing process of individualization – characterized by competing interests and preferences, and an increasing rationalization of fertility decisions – along with higher investments in children, and rising direct and indirect childrearing costs have increased the costs of parenting, making both male and female earnings essential to achieving the economic security (considered) necessary for having children.

Based on these insights and prior empirical findings, we hypothesize that *individuals* with higher incomes, regardless of gender, are more likely to become parents than those with lower incomes in Western Europe (H1). Moreover, given ongoing socioeconomic and structural changes, we hypothesize that the positive association between income and the likelihood of parenthood has strengthened over time, leading to widening fertility differentials between high-and low-income individuals (H2).

While all three perspectives agree that income positively influences the likelihood of parenthood, they differ in their expectations regarding whether men or women primarily drive the increase in income-based fertility differentials over time. We argue that a closer look at the probabilities of first childbirth across income groups and gender over time can help pinpoint the primary mechanism driving potential changes in the income-fertility relationship.

The *declining opportunity costs hypothesis* argues that the increasing positive effect of income on fertility is primarily related to career-family trade-offs declining, especially for career-oriented women. Under this scenario, fertility differentials across income groups would widen, particularly for women, while remaining stable for men. Higher-income women would experience an increased likelihood of having a first childbirth over time, while lower-income women's probability remains stable as they already face lower opportunity costs. Among men, no significant change is expected, as the opportunity costs of childbearing primarily pertain to women. According to this scenario, household income inequalities in fertility would be on the rise, depending on the extent of educational and income homogamy at the couple level. *If*

declining opportunity costs drive the change in the income-fertility relationship, higher-income women increasingly experience a first childbirth over time, while lower-income women and men show little change in their first childbearing probabilities (H3a).

In contrast, the *changing gender roles hypothesis* attributes the increasing positive role of income on fertility to the diffusion of gender-egalitarian norms and greater gender equality. These shifts reduce the dominance of male earnings in household decision-making, making female income increasingly influential. As a result, fertility differentials across income groups would widen for women, with higher-income women experiencing rising first-birth probabilities, while they would narrow for men, as higher-income men lose their fertility advantage. The overall impact on household income inequalities in fertility would depend on the relative strength of these opposing trends. Based on this, we hypothesize that *if changing gender roles are the primary driver, higher-income women will have increasing first-birth probabilities, whereas higher-income men will experience a decline (H3b).*

Finally, the *increasing income prerequisites hypothesis* suggests that increasing income effects on fertility are due to rising financial barriers to parenthood. In this view, fertility differentials between income groups would widen primarily because of declining fertility among lower-income individuals who face difficulties in bearing the increasing childrearing costs, while higher-income individuals would be able to pursue their fertility desires notwithstanding increasing life costs. Holding true this hypothesis, household income inequalities in fertility would be strongly increasing over time. If increasing income prerequisites are at work, individuals with higher incomes, regardless of gender; will be increasingly likely to have a first child, while those with lower incomes will face a declining likelihood (H3c).

Data and Methods

We use panel data from the European Union Statistics on Income and Living Conditions (EU-SILC) survey covering the years 2004 to 2020. EU-SILC is an annual national probability survey of private households, with household members as the observation unit. This data fits our purposes as it provides longitudinal income data that is comparable across multiple European countries¹. The panel follows a four-year rotational design, except in France, Norway, Luxemburg, and Belgium, where a longer panel duration is used (Wirth & Pforr 2022).

EU-SILC does not directly collect fertility histories, but first-time childbirths can be identified using the own-children method, which tracks changes in household composition (for recent applications with EU-SILC data, see Albertini et al. 2024; Nitsche et al. 2018, 2021; Vignoli et al. 2012).

Our key independent variable is total gross individual income, which includes earnings from employment, self-employment, pensions, family allowances, and social benefits. This measure captures all economic resources available to an individual. Like previous studies (van Wijk & Billari 2024), we focus on total rather than labor income and on individual rather than household income, to provide a clearer picture of an individual's financial situation and to capture gender-specific effects more effectively. To address potential endogeneity, income is lagged by two years, meaning that income observed in year t-2 is used to predict first-time childbirth in year t. The own-children method identifies first-time childbirth by detecting a child under one at time t. Using income from t-2 ensures that the income is measured before the individual became pregnant, reducing the risk of reverse causality. To allow for crosscountry comparisons over time, we transform absolute income into quintiles specific to the country-year distribution of individuals aged 18–45. Thus, our focus is on individuals' relative

¹ We used the "eusilcpanel_2020" script by Brost and Wirth to merge EU-SILC data into a cumulative dataset (Brost & Wirth, 2022)

income positions within their country-year rather than absolute income, which varies substantially across countries. This approach aligns with Hart (2016) and van Wijk (2024).

We analyze data from 16 Western European countries with reliable birth data from 2006 to 2020. Each country is observed from a minimum of 8 years to a maximum of 15 years, based on its availability in EU-SILC (see Descriptive Table 1). Our sample includes individuals aged 18–45, regardless of their partnership status. To ensure an appropriate measurement of income and first childbirth, we retain only individuals observed for at least three consecutive years, resulting in a final sample of N=167,754 individuals and 8,792 first childbirths.

We estimate discrete-time logistic models to examine the probability of first childbirth. The observation period ends when individuals experience their first childbirth or turn 45, whichever occurs first. We model age as the process time variable, including both linear and quadratic terms to capture non-linear effects.

The first analysis tests H1 and examines the main effect of income on first childbirth by gender, with separate regressions by gender and country. The second analysis tests whether the income effect on first childbirth has changed over time, in line with H2, incorporating an interaction term between income and period. All analyses control for educational attainment at t-2 (lower secondary or less, upper secondary, tertiary) and employment status at t-2 (employed, unemployed, out of the labor forces – including students). Figures 2 and 3 display results in predicted probabilities which allow to test H3a, H3b, and H3c.

Table 1 Descriptive statistics (Mean or Percentages)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Mean age	29.2	29.3	29.4	29.4	29.4	29.3	29.3	29.2	29.2	29.4	29.4	29.7	29.8	29.8	29.7
First childbirth	3.7	3.5	3.9	3.5	3.2	3.0	2.9	3.2	3.3	3.1	3.0	2.6	2.4	2.4	2.5
Income quintile (t-2)															
1	27.5	34.7	29.2	29.1	29.3	30.1	31.5	31.5	31.6	33.5	34.5	34.8	35.2	33.9	33.7
2	21.9	19.1	20.1	20.1	20.3	20.6	20.7	20.5	20.5	18.6	18.4	17.0	16.9	18.3	18.3
3	18.9	16.8	19.4	19.1	19.1	18.7	17.5	17.9	17.9	17.7	17.5	18.3	17.9	18.5	18.0
4	17.5	16.4	17.5	17.5	17.6	17.1	16.7	17.2	16.9	17.3	16.6	16.5	16.9	16.5	16.7
5	14.3	13.1	13.8	14.2	13.6	13.5	13.6	12.9	13.1	12.9	13.0	13.4	13.1	12.8	13.3
Education (t-2)															
Lower secondary or less	30.5	28.7	29.8	29.4	28.8	29.0	28.8	25.9	25.6	25.4	26.8	23.7	24.0	24.9	23.7
Upper secondary non tertiary	48.7	48.9	46.7	46.1	47.1	47.2	46.2	48.1	47.8	46.9	45.0	47.3	47.2	47.3	46.8
Tertiary	20.8	22.5	23.5	24.5	24.1	23.8	25.0	26.1	26.6	27.7	28.3	29.0	28.8	27.8	29.5
Employment status (t-2)															
Employed	57.7	57.5	58.0	59.0	58.2	54.4	52.7	52.3	51.6	50.3	49.4	50.8	51.2	51.8	53.0
Unemployed	8.6	8.7	8.5	7.7	8.6	11.0	11.4	11.7	12.3	14.4	14.6	14.5	14.6	13.3	11.2
Inactive	33.7	33.8	33.5	33.3	33.2	34.5	35.9	36.0	36.1	35.2	36.0	34.7	34.2	34.9	35.9
AT–Austria	4.2	5.3	4.0	4.0	4.5	5.4	5.6	4.8	4.0	4.2	4.2	3.7	3.5	3.8	4.3
BE–Belgium	3.4	4.1	4.7	4.5	4.4	4.8	4.6	4.6	4.3	4.6	4.8	4.4	3.7	6.3	9.4
CH–Switzerland								2.9	5.0	4.8	5.0	6.0	4.6	5.0	5.3
CY–Cypro		4.2	4.3	4.1	4.3	3.9	5.8	6.4	5.8	5.6	4.6	4.4	4.0	4.7	5.7
EL–Greece			2.8	5.2	6.8	6.3	5.3	5.0	4.5	7.9	9.4	15.6	18.3	14.1	15.5
ES–Spain	11.3	12.3	13.1	14.5	16.7	16.8	13.9	11.9	11.3	12.1	12.1	10.2	9.0	8.4	8.3
FI–Finland	6.9	5.5	5.2	4.9	4.8	4.8	6.4	8.3	7.9	7.8	6.8	6.1	5.7	6.4	7.4
FR–France	13.4	11.2	11.0	11.2	12.9	13.5	14.1	15.1	12.7	11.7	11.3	9.1	8.3	9.3	4.8
IE–Ireland	1.7	1.4	1.6	1.5		1.1	1.8	1.7	1.2	1.9	3.4	3.1	1.6	1.6	2.7
IS–Iceland	2.3	1.8	1.9	1.8	1.9	2.4	2.3	2.3	3.5	1.3	2.0	2.0	1.9		
IT–Italy	26.5	21.7	20.6	20.5	22.9	19.6	17.3	16.6	17.4	17.6	16.6	13.7	14.5	17.5	12.8
LU–Luxemburg	14.2	12.4	12.5	11.0	5.9	6.9	8.2	3.8	3.5	3.6	3.2	3.1	3.5	3.8	5.2
NO–Norway	6.2	5.9	5.2	4.7	1.9	1.7	2.6	4.1	6.0	3.6	3.7	3.4	3.1	3.5	3.9
PT–Portugal	4.9	5.8	5.4	4.0	4.4	5.1	5.5	5.8	5.8	6.2	6.4	8.9	11.5	12.5	11.2
SE–Sweden	5.0	3.9	3.7	4.6	4.8	4.2	3.4	3.2	2.7	2.7	2.9	2.7	2.8	2.9	3.5
UK–United Kingdom		4.4	4.0	3.4	3.7	3.4	3.2	3.6	4.6	4.3	3.6	3.7	4.2		
N	17,065	20,253	20,207	19,959	18,082	17,101	17,507	18,011	19,510	18,744	18,929	20,768	22,116	19,519	15,913

Source: EU-SILC 2004–2020

Results

Figure 1 shows the predicted probability of first childbirth by income quintile for men and women across the European countries considered. For men (upper panel), results clearly show that higher income levels are consistently associated with a greater likelihood of becoming a father across all countries, with the exceptions of Switzerland, Ireland, and Iceland, where no statistically significant differences were observed at the 95% confidence level. This association is particularly pronounced in the United Kingdom, Norway, Finland, Sweden, and Belgium, where fertility differences across income quintiles are wider.

Among women (bottom panel) a similar pattern emerges. In nearly all countries, higher income levels correspond to a higher probability of becoming a mother, except in Switzerland, Greece, Ireland, Iceland and Luxemburg where differences are not statistically significant. As with men, the income gradient appears steeper in Nordic countries (Norway, Finland, and Sweden) as well as in the UK. These findings corroborate H1 which posits that individuals with higher incomes, both men and women, are more likely to have a first child than those with lower incomes across Western European countries, contrary to the gendered pattern predicted by the NHE.



Figure 1 Higher income is associated with a greater likelihood of first childbirth across European Countries.

Notes: Predicted probabilities of first childbirth by income quintiles across 16 European countries. Logistic regressions control for age, age squared, education, and employment status. Country codes: AT=Austria, BE=Belgium, CH=Switzerland, CY=Cyprus, EL=Greece, ES=Spain, FI=Finland, FR=France, IE=Ireland, IS=Iceland, IT=Italy, LU=Luxembourg, NO=Norway, PT=Portugal, SE=Sweden, UK=United Kingdom. Source: EU-SILC 2004–2020.

Figures 2 and 3 illustrate the evolution of income differentials on fertility by reporting the predicted probabilities of first childbirth by income quintiles over time, for men and women respectively.

Figure 2, which focuses on men, shows that the relationship between income and the likelihood of becoming a father has remained rather stable in 3 out of 16 countries, has become more pronounced in 7 out of 16, and has weakened in 4 countries. In Switzerland and Iceland, no income-based differences are observed in any year.

In Italy, Norway, and Portugal the income gradient associated with fatherhood has remained stable over time. In these countries, higher-income men consistently exhibit higher probabilities of becoming fathers than lower-income men, with little indication of widening or narrowing disparities.

In contrast, Austria, Belgium, Cyprus, Sweden, the UK, France, and Luxembourg show increasing polarization, though with varying dynamics. In Austria, the probability of entering fatherhood has increased among men in the highest income quintiles, while remaining stable for those in lower quintiles. A more pronounced polarization is observed in Belgium, Cyprus, Sweden, and the UK, where first-birth probabilities have increased among high-income men but remained stable for middle-income groups or declined for the lowest-income ones. In France and Luxembourg, increasing income inequalities in the transition to parenthood coincide with stable first-birth probabilities among men in the top income quintiles and declining probabilities among lower-income groups.

Conversely, in Finland, Ireland, Greece, and Spain, income-based differences in fatherhood have attenuated over time. By 2020, these countries exhibited a convergence in first-birth probabilities across income quintiles, reflecting a reduction in income differences that were evident in earlier years, mainly due to declining first-birth probabilities among high-income men.

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Hence, while some countries show that the traditional nexus between male income and fertility is weakening, the results highlight the growing importance of income in male fertility behavior in most Western European countries, in line with H2.



Figure 2 Predicted probabilities of first childbirth by income quintiles across European Countries over time – Men

Notes: Logistic regressions control for age, age squared, education, and employment status, and include an income × period interaction. Country codes: AT=Austria, BE=Belgium, CH=Switzerland, CY=Cyprus, EL=Greece, ES=Spain, FI=Finland, FR=France, IE=Ireland, IS=Iceland, IT=Italy, LU=Luxembourg, NO=Norway, PT=Portugal, SE=Sweden, UK=United Kingdom. Source: EU-SILC 2004–2020.

Figure 3 presents results for women, highlighting a stable or widening divide in the probabilities of transitioning to motherhood by income quintiles across the 16 Western European countries considered.

In 11 out of 16 Western European countries, income-based differences have increased. Specifically, in Austria, Belgium, Finland, Ireland, Italy, Luxemburg, Norway, Portugal, Sweden, and the UK, differences in first-birth probabilities between income groups have widened over time for women: in Belgium and Portugal, first-birth probabilities have increased among high-income women, whereas in Luxembourg, Austria, Finland, the UK, Italy, and Norway, rising probabilities among high-income women are coupled with declines among lowincome women. A similar trend is observed in Ireland, statistical uncertainty notwithstanding.

In France and Cyprus differences in first-birth probabilities have remained relatively stable across income groups, with women in higher-income quintiles continuing to exhibit a higher likelihood of becoming mothers compared to those in lower-income quintiles. In Spain, however, a narrowing of income-based differences in women's probability of having a first child is observed, primarily driven by a decline in fertility among high-income women.

In Greece, Switzerland, and Iceland, first-birth probabilities are similar across income groups throughout the entire observed period.

Overall, these results indicate that, in most countries, the influence of income on fertility among women has strengthened, contributing to an expansion of income-based disparities in the likelihood of transition to motherhood, in line with H2.



Figure 3 Predicted probabilities of first childbirth by income quintiles across European Countries over time – Women Notes and source: see Figure 2

One the one hand, the results lend support to the increasing income prerequisites hypothesis because they show that, over time, higher income is becoming increasingly important for having a first child – suggesting that financial resources are becoming more critical in family formation. At the same time, the finding of increasing income effects is more consistent for women (11 out of 16 countries) than for men (7 out of 16 countries), which supports also the changing gender roles hypothesis. Comparing the predicted probabilities of fertility across income groups for both men and women within each country allows for a clearer interpretation of the findings.

Table 2 summarizes the findings from Figures 2 and 3, highlighting that the increase in income-based fertility differentials across most European countries is primarily driven by declining fertility rates among low-income women and men. This supports the hypothesis H3c that income prerequisites of parenthood are increasing. Excluding the uncertain results for Iceland and Switzerland, the data from the remaining fourteen countries strongly align with this scenario in 9 countries. Specifically, in France, Italy, Luxembourg, and Sweden, the effect of income on fertility has increased over time for both men and women. This increase is largely due to both low-income men and low-income women facing progressively lower probabilities of becoming parents. Similarly, in Austria, Norway, and the UK, the rising effect of income on first-birth probabilities is mainly driven by a declining likelihood of motherhood among low-income women. In Cyprus and Belgium, where the effect of income on parenthood also increases over time, the widening fertility gap is not solely or mainly attributed to declining fertility rates among low-income individuals. Instead, it is driven by rising probabilities of parenthood among higher-income groups, suggesting that other dynamics may be influencing these trends.

Table 2 Trends in the Effect of Income on First Childbirth by Gender Across Western EuropeanCountries: Direction of the Effect Over Time and Probability by Income Groups (inParentheses).

Country	Men	Women	Hypothesis
AT	positive effect increasing	positive effect increasing (increase	Increasing Income
	(increase among high- income)	among high-income, decline among low-income)	Prerequisites (H3c)
BE	positive effect increasing	positive effect increasing (increase	Increasing Income
	(increase among high- income)	among high-income)	Prerequisites (H3c)
CH	NS	NS	NS
CY	positive effect increasing (increase among high- income)	Stable (no change)	Increasing Income Prerequisites (H3c)
EL	positive effect diminishing (decline among high- income)	NS	Changing Gender Roles (H3b)
ES	positive effect diminishing (decline among high- income)	positive effect diminishing (decline among high-income)	Changing Gender Roles (not fully)
FI	positive effect diminishing (decline among high- income)	positive effect increasing (increase among high-income, decline among low-income)	Changing Gender Roles (H3b)
FR	positive effect increasing (decline among low-income)	positive effect increasing (decline among low-income)	Increasing Income Prerequisites (H3c)
IE	positive effect diminishing (decline among high- income,)	positive effect increasing (increase among high-income, decline among low-income)	Changing Gender Roles (H3b)
IS	NS	NS	NS
IT	positive effect increasing (slight decline among low- income)	positive effect increasing (decline among low-income)	Increasing Income Prerequisites (H3c)
LU	positive effect increasing (decline among low-income)	positive effect increasing (increase among high-income, decline among low-income)	Increasing Income Prerequisites (H3c)
NO	positive effect diminishing (slight decline among high- income)	positive effect increasing (decline among low-income)	Increasing Income Prerequisites (H3c)
РТ	Stable (no change)	positive effect increasing (increase among high-income)	Declining Opportunity Costs (H3a)
SE	positive effect increasing (increase among high- income, decline among low- income)	positive effect increasing (decline among low-income)	Increasing Income Prerequisites (H3c)
UK	positive effect increasing (increase among high- income)	positive effect increasing (decline among low-income)	Increasing Income Prerequisites (H3c)

The patterns observed in Finland and Ireland are more in line with the hypothesis of changing gender roles (H3b). This framework suggests that the spread of gender egalitarian norms weakens the traditional dominance of male income in reproductive decisions. As a result, the fertility advantage for high-income men decreases, while high-income women are increasingly likely to become mothers. In both Finland and Ireland, we observe a decline in the effect of male income on the probability of having a first child, coupled with an increase in the effect of female income. Data from Greece and Spain also fit this framework to some extent, with a decline in the effect of income on parenthood among men, largely due to high-income men having progressively lower probabilities of becoming fathers over time. However, the lack of significant results for women in Greece, as well as the declining effect of income for women in Spain, suggests these countries do not fully align with the changing gender roles hypothesis.

Portugal stands out as the only country consistent with the declining opportunity costs hypothesis (H3a). In Portugal, the effect of income remains stable for men but increases for women, driven by higher probabilities of first childbirth among women in higher-income brackets. This aligns with the interpretation that improvements in family policies and a reduction in the work-family trade-off have lowered the opportunity costs of parenthood, particularly for women.

Sensitivity Analysis

Increasing income effects on the transition to parenthood might be related to an increasing role of income in mate selection (e.g., Qian 2017), as well as the strengthening importance of income on partnership stability (e.g., Jalovaara 2003; Kalmijn et al. 2007). Although EU-SILC data do not allow for an in-depth exploration of these mechanisms, we conducted a sensitivity test by replicating the analysis on individuals in partnership two years before observation. This test substantially reduced the sample and increased estimation uncertainty, but results confirm

that both male and female income positively influence the transition to parenthood among those in a relationship. Moreover, it confirms that this effect has increased for men in Austria, Belgium, Cyprus, France, Luxembourg, Sweden, and the United Kingdom, and for women in Austria, Belgium, Finland, Luxembourg, and Norway. In other countries, the error around estimates is too high to draw robust conclusions, highlighting the need for further research. Nonetheless, these findings indicate that at least part of the growing influence of income on fertility cannot be solely attributed to the exclusion of low-income individuals from (stable) partnerships.

To further test the hypothesis of increasing income prerequisites of parenthood, we examined the effect of total household income on fertility over time. Specifically, we replaced individual income with total household income (i.e., both individual and partner income quintiles lagged by two years) to assess its effect on transition to parenthood for women and men. Despite the widening confidence intervals, the overall pattern confirmed the positive effect of household income on first births. Moreover, this effect grew stronger over time in nearly all the countries considered. This provides further support to the hypothesis that the income prerequisites of parenthood have increased in Europe.

Conclusion and Discussion

Our study reveals that income plays a positive role in first childbirth probabilities for both men and women, supporting H1. Notably, the effect of income is particularly strong among women in countries with robust welfare systems and comprehensive work-family reconciliation policies, such as the Nordic countries.

Our analysis further indicates that over time, income-based differentials in first childbirth probabilities have widened over time in many countries, in line with H2. Furthermore, our findings corroborate the increasing income prerequisites hypothesis (H3c), indicating that rising financial barriers are making the transition to parenthood increasingly difficult for lower-income groups in France, Italy, Luxembourg, Sweden, Austria, Norway, the UK, Cyprus, and Belgium. In contrast, declining income effects among men are observed in Finland, Ireland, Greece, and Spain, consistent with the changing gender roles hypothesis (H3b). Only in Portugal results are consistent with the declining opportunity costs hypothesis, with results showing increasing first childbirth probabilities among high-income women (H3a). These cross-country differences highlight the contextual variability of the income-fertility nexus, suggesting that a combination of economic factors, social policies, and cultural norms influence the role of financial resources in family formation.

Compared with available evidence from European countries, our findings are consistent with previous studies documenting the increasingly positive association between income and the transition to parenthood. In line with Hart (2015), we find an increasing association between income and fertility for women in Norway. However, in contrast to her findings, we observe a stable association among men. Similarly, Van Wijk and Billari (2024) reported an increasing correlation between income and fertility for both men and women in the UK, a trend that is echoed in our study.

Our study has limitations worth noting. While we implement a two-year lag to address endogeneity, reverse causality remains a concern, as income changes may result from fertility planning rather than the other way around. Additionally, while income is a key variable in our analysis, other more stable measures of economic wellbeing – such as wealth – may play an even more significant role in fertility-decision making.

All considered, results clearly show that the financial stability required to support a family depends on the combined income of both men and women, leaving people in lowerincome groups increasingly disadvantaged in their likelihood of becoming parents in many European countries. Given the broader context of rising economic uncertainty and employment instability, the income prerequisites for parenthood are unlikely to diminish in the near future, further restricting access to parenthood to those with sufficient economic resources.

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