Economic uncertainty and the formation and realization of fertility intentions in Norway

Axel Peter Kristensen¹, University of Oslo
Trude Lappegård, University of Oslo
Lars Dommermuth, Statistics Norway

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Introduction

The aim of this study is to investigate the relationship between economic uncertainty and the formation and realization of fertility intentions in Norway. Research shows that there is a "fertility gap" where people's fertility intentions often exceed their actual number of children (Dommermuth et al., 2015). Norway is a country where there has been a dramatic decrease in fertility over the last fourteen years. The fertility levels have dropped from being among the highest (TFR 1.98 in 2009) to below average in Europe with a TFR of 1.40 in 2023. This drop is puzzling, as the economy and the labor market have been favorable and stable, while the welfare state offers generous family policies for parents with young children. That being said, increased economic uncertainty has been suggested as one possible reason behind the fertility decline, but empirical evidence remains scarce (OECD, 2023). At the individual level, employment and income are fundamental to people's lives, which calls for more knowledge about the underlying mechanisms of the relationship between economic uncertainty and fertility. Such relationship is built on the assumption that when people experiencing economic uncertainty, having children will be avoided or postponed until there is more clarity and the situation is more stable.

When decomposing the decreasing fertility levels in Norway it has been shown that all groups contribute to the decline, but there has been a steeper decline in the transition to parenthood among the youngest age groups. For instance, the mean age at first birth has increased by 2.2 years since the fertility levels started to drop in 2010. In this study we focus on young people's intentions to enter parenthood. We want to investigate to which degree they realize their intentions, and whether this depends on different measures of economic uncertainty. The goal is to find what measure of economic uncertainty matters more for young men and women's fertility intentions and their subsequent entry into parenthood.

We use longitudinal data from the Norwegian Generations and Gender survey (GGS-II), conducted in 2020 and 2024. Fertility intentions are captured in the first wave, while possible birth outcomes are measured in the second wave. We focus on young men and women aged 25-35 years in 2020 that have not started a family yet and examine whether they have entered parenthood in 2024. Regarding economic uncertainty, we distinguish between objective and subjective measures. Examples of observable objective measures can be people's current situation, such as employment situation or economic situation. Subjective measures will in this case be people's perceptions about the future economic situation, either concerning people's individual situation or the situation of the country.

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¹ Corresponding author: a.p.kristensen@sosgeo.uio.no

Theoretical considerations

Research on fertility intentions and the realization of them show that negative intentions more strongly predict absence of birth than positive intentions. Positive intentions are more often not realized (Dommermuth, Klobas & Lappegård 2015). This raises the question of why intentions do not necessarily translate into behavior (Guzzo 2022) and whether and how it relates to economic uncertainty.

Uncertainty comes in different forms. Uncertainty can be measured 'objectively', where we consider individual's employment situation and income. Objective economic uncertainty usually emerges when individuals lack a steady income due to unemployment or they find themselves in an unstable employment situation. Thus, individual employment situation, income, and local or national unemployment rates are well-established objective measures of objective economic uncertainty (van Wijk et al., 2021). For young people, establishing themselves in the labor market and becoming economically stable may be essential for entering parenthood. Numerous studies have shown that economic uncertainty influence people's fertility intentions and behavior (Alderotti et al., 2021; Bernardi et al., 2008; Fiori et al., 2013; Kreyenfeld, 2010, 2016; Kreyenfeld et al., 2012; Lindström, 2024; Vignoli, Mencarini, et al., 2020; Hanappi et al., 2017; Hanappi & Buber-Ennser, 2017). The expected mechanism behind this relationship is that people experiencing economic uncertainty will avoid having children, by either not formulating intentions or postponing the realization of intentions, until their situation is more stable. Thus, we assume that people in an uncertain economic situation are less likely to have positive fertility intentions and entering parenthood than those that are not in such a situation.

However, such objective measures do not necessarily capture people's own perception of their situation, and whether they perceive the overall economic situation to be uncertain or not. Therefore, we also take a second measure of uncertainty into account, where we capture the subjective perception of individuals. As today's world is more connected than ever before, people are more likely to also take events and conditions in other countries than their own into account when making decisions. Following the Narrative Framework, in addition to influence from objective factors, people's fertility decisions will be influenced by their perception of the future (Vignoli, Bazzani, et al., 2020). That is, people will consider a sum of structural constraints based on their current situation and past experiences when contemplating childbearing, in addition to their own subjective narrative of what the future will be like. For people expecting future societal economic decline, this could result in lower fertility intentions - even if they are currently in a safe employment situation and have a steady income. Results from a recent laboratory experiment in Norway using the Narrative Framework demonstrated that perceived economic uncertainty about the future does affect people's fertility intentions (Lappegård et al., 2022). Here, people exposed to a scenario depicting a future with stronger national economic constraints and less security on the job market had lower fertility intentions than others, compared to those who were exposed to a scenario that described the national economic future as more stable or positive.

In this study we capture both whether individuals perceive their own future economic situation as uncertain (future job loss or income decline) and whether they express worries about the future development of the Norwegian economy overall (e.g. increase in unemployment rates, economic crisis). We assume that people that inhibit such subjective uncertainties are less likely to have positive fertility intentions or enter parenthood, when compared to those without such perceptions.

Regarding the impact of objective and subjective uncertainty on fertility intentions and the subsequent transition to parenthood, we suspect that people's subjective perception about their economic situation in the future matters more than their objective current situation. Given the relatively good labor market conditions in Norway, young people may be experiencing economic uncertainty in their early career or at other times, while still having good prospects of becoming firmly established in the labor market

and future income progression. By contrast, others may face a more unstable future, even though their current situation is good. As having children affects people's lives in both the short and long run, we hypothesize that the perception of the future economic situation is more decisive for the childbearing-decision process than the current or past objective economic situation.

Our study also includes a gender perspective contributing to reducing the existing bias in research, which mostly has had and still have a focus on female fertility. Almost thirty years ago it was point out that whereas male fertility behavior was considered to be constant, changing fertility trends were perceived as changes in female behavior (Goldscheider & Kaufman, 1996). Decisions about childbearing influence the lives of both men and women, and childbearing trajectories are quite different between the two genders. Also, in a gender-equal society such as Norway, men are not only expected to take an active part in childrearing but may also face specific challenges in family formation.

Analytical framework

For this study, we use the Norwegian GGS-II which was conducted in November 2020 and in April 2024. The sample for the Norwegian GGS-II was drawn from the population register and the respondents were contacted by email and text messages on their phones. The survey was conducted as an all web-based survey. Our analysis is based on a sub-sample of childless men and women aged 25-34 years.

We use linear regression models to estimate intentions to enter parenthood and realization of such intentions and we will use two measures of fertility. From wave I (2020) we include a question about whether a person *intend to have a child within the next three years [on a five-point scale: definitely yes, probably yes, not sure, probably no, definitely no]*. Using information from wave II (2024) about actual number of children combined with the intention variable from wave I, we created a variable on *fertility realization achievement* of whether a person entered parenthood depending on whether they had a positive intention or a negative intention (and eventually how certain they were in their fertility intention).

In the GGS-II questionnaire, there are several questions that captures economic uncertainty. We will include variables capturing objective economic uncertainty related to both employment, i.e., being permanently employed, temporary employed or jobless. Also, we will include income levels, i.e., total number of individual incomes. Our measures of subjective economic uncertainty relate to future economic situations at the individual level, i.e., the likelihood of losing their job and their economic situation worsening or improving, and at the macro level, i.e., their concerns about an economic crisis and/or increased unemployment rates. We will also control for age, partnership status, and personality traits.

Research contribution

This study contributes to the research field in several ways. It can give new insights into how different aspects of economic uncertainty influence fertility intentions and fertility realization. It can give a better understanding of how the interrelationship between objective and subject measures of uncertainty influence fertility intentions/realization and whether one aspect matters more. Lastly, it can shed new light on why fertility levels in Norway have dropped dramatically over the last decade.

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