# *Fertility intentions and economic uncertainty in Norway: Which uncertainty matters?*

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The aim of this paper is to investigate the relationship between economic uncertainty and people's fertility intentions. The point of departure is the somewhat puzzling downward trend in fertility level in Norway as well as in the other Nordic countries, in the years following the financial crisis in 2008 (Comolli et al., 2019). For almost a decade, from 2009 to 2018, the total fertility rate has dropped from 1.98 to 1.56 children per woman in Norway. The timing of the fertility decline indicates a link to the financial crisis in 2008. However, the conditions in the Norwegian labor market have been and still are quite good. Combined with the fact that Norway has relatively generous welfare policies during this time span, simply reducing the falling fertility to a reaction to the economic crisis seems too simple. Globalization, media and new digital technology has brought the world closer together and fertility decisions are now embedded in global economic, political, and cultural uncertainty. Based on this, uncertainty may cross borders and contribute in creating a perception of economic uncertainty, despite a stable national or local economy (Comolli et al., 2019; Comolli & Vignoli, 2019). We ask whether perceived economic uncertainty influence people's fertility intentions and whether certain aspects of economic uncertainty matter more than other aspects. We are especially interested in whether the effect of perceived economic uncertainty varies among people in different work situations and among people with different educational attainment. Using data from a controlled laboratory experiment of 400 Norwegian couples conducted in September 2019, we can shed light upon the relationship between perceived economic uncertainty and people's fertility intentions in a relatively stable economic and financial context, where fertility levels have dropped quite dramatically.

### Background

For long, the Nordic countries have been recognized for their high fertility levels and high female labor market participation, which has been attributed to generous welfare policies

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supporting the reconciliation of employment and family commitment for both men and women (McDonald, 2000). However, with the fertility now having steadily declined over the last decade and reaching historical low levels in several of the Nordic countries, scholars as well as policymakers are puzzled with the development and are questioning what is happening.

A recent study on fertility responses to the business cycles in the Nordic countries, comparing the economic crisis in the 1990s and the 2010s, shows a large heterogeneity between the countries' childbearing development after 1990. Following 2008, the response to the economic crisis was extremely homogenous in the five countries (Comolli et al., 2019). Even though the economy recovered more quickly after 2008 compared with the crisis in the early 1990s, the negative effects on fertility have been more long lasting in the 2010s. The authors raise the question whether uncertainty related to economy or welfare in other countries, as a result of today's world becoming much more interconnected than before, might have contributed in creating a stronger perception of uncertainty among individuals in the Nordic countries (Comolli et al., 2019). A study comparing the effect of different economic factors on childbearing in the years before and after the financial crisis in 2008 in Norway shows that having a job is becoming a more important premise when planning to become parents (Dommermuth & Lappegård, 2017). The study also shows that nowadays, young people spend more time establishing themselves in the labor market before having children. A recent study on the relationship between unemployment and childbearing behavior in Norway shows that both individual unemployment and unemployment rates on municipality level are negatively associated with childbearing, especially for the transition to first birth among young men and women (Kristensen, 2019).

## Theoretical considerations and research questions

Economic uncertainty, seen as the lack of clarity about economic prospects (Bloom, 2014), induces people to postpone major life commitments such as childbearing (Comolli, 2017). In general, economic uncertainty in a society, for example in the form of rising unemployment rates, has previously been shown to correlate with a decline in the fertility level in the country, while there has been observed an upsurge in fertility during economic booms (Comolli, 2017; Goldstein, Kreyenfeld, Jasilioniene, & Karaman Örsal, 2013; Neels, Theunynck, & Wood, 2013; Sobotka, Skirbekk, & Philipov, 2011). At the micro level, the argument behind this mechanism is that having children is seen as a costly and irreversible transition. An individual lacking employment, steady income or experiencing uncertainty may prefer to postpone decisions about having children until the situation is less uncertain (Kreyenfeld, 2016; Kreyenfeld, Andersson, & Pailhé, 2012; Vignoli, Drefahl, & De Santis, 2012; Vignoli, Tocchioni, & Mattei, n.d.).

We argue that, the current economic situation influences people's fertility intentions. In addition to this, their perception of the future economic situation at both individual and the macro level may also influence their fertility intentions. It is argued that people use their own imagination and produce their own individual narrative of the future (Vignoli et al. in press). This means that independent of people's constraints and their subjective perceptions, narratives of the future may influence people's fertility intentions. Using data from a laboratory experiment, we measure the role of different economic narratives on fertility intentions and our research

question is whether future economic narratives influence people's fertility intentions. If one reads the future as being less secure, expecting the economy to slow down, increased unemployment, increased job insecurity and job contracts with more precarious terms, this creates negative economic structural constraints. To capture the impact of such narratives of economic structural constraints, the participants of the laboratory experiment were divided into three groups: the first group was exposed to a negative future economic scenario, the second group to a positive future economic scenario, while the third group was not exposed to any scenario and thus functions as a control group. We expect those exposed to a negative economic scenario.

In addition to the impact future positive or negative economic narratives has on fertility intentions, there might also be other sources of uncertainty that play a key role. Here we focus on two dimensions of perceived economic uncertainty, which might confound the relationship between future economic narratives and fertility intentions.

The first dimension is *the perceived economic individual uncertainty*, meaning your perception of being able to live independently and provide livelihood for oneself and one's family. This is mainly maintained through full-time employment and is crucial for young people's transition to adulthood. To capture the impact of the perceived economic individual uncertainty, we use information on whether the participants in the laboratory experiment think they still have a job in future and how they view their ability to find a similar job if they were to lose their current one.

The second dimension is *the perceived financial individual uncertainty*, meaning your perception of being able to act and capable to choose. As economic resources is not simply a mark of economic status, but an indicator of the power of act (Neyer, Lappegård, & Vignoli, 2013), financial constraint may prevent people to participate and act as they choose independent of having a job or not. To capture the perceived financial individual uncertainty, we use information on how the participants in the laboratory experiment view their future financial situation of their household.

## Data and analytical approach

For this study, we use data from a laboratory experiment of 400 Norwegian couples (800 participant in total) between 20 and 40 years (women), 20-45 years (men), conducted in September 2019. Before the participants answering a questionnaire at a computer, they read a text describing a future economic scenario of Norway as described above. Next, they are asked about their fertility intentions for the next three years on a scale from 0 to 10, where 0 means "definitely not" and 10 "definitely yes". Using linear regression models, we estimate young men, young women's fertility intentions, and the impact of perceived economic uncertainty. We are especially interested in whether the effect of perceived economic uncertainty varies among people in different work situations (working with fixed work contract, temporary work, not working) and among people with different educational attainment. As we have information about partners in the couple, we also control for partners work situation as well as other relevant sociodemographic characteristics such as gender, age, marital status and number of children.

The paper aims to advance the role of narratives of the future as a crucial lens to understand the linkages between economic uncertainty and fertility intentions in contemporary Norway. To this end, we employ an experimental approach that represents an innovation in demographic analyses.

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