

Economic Uncertainty and Fertility Intentions in Couples: Evidence from a Controlled Laboratory Experiment

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Abstract

This paper posits that in the era of uncertainty people build their “narratives of the future” to act in spite of uncertainty, irrespective of structural constraints and their subjective perception. To advance the role of narratives as a crucial lens to understand the impact of economic uncertainty on fertility intentions in couples, we conducted controlled laboratory experimentation in Italy and Norway (N=800 couples, 1,600 individuals). Couples are randomly assigned to one specific narrative of the future (1/3 positive, 1/3 negative, 1/3 control group), and each respondent is then asked to answer if he/she intends to have a child in the next three years. Preliminary results from Italy (N= 408) highlight a clear negative *causal* impact of the perception of economic uncertainty on fertility intentions.

Introduction and Aim

The increasing speed, dynamics, and volatility of outcomes of globalization, and the new wave of technological change, makes it increasingly difficult for individuals to predict their future and choose between alternatives and strategies. Despite the level of uncertainty experienced by individuals and couples, however, a fertility decision has to be taken in the present.

Empirical demographic tradition operationalized the forces of uncertainty through objective indicators of individuals’ labor market situation, such as holding a temporary contract or being unemployed (Busetta et al. 2019; Mills and Blossfeld 2013; Kreyenfeld et al. 2012; Vignoli et al. 2012, 2019). Nonetheless, their (negative) impact on fertility has been proved not to be of major magnitude (see Alderotti et al. 2019 for a review). Recent advances also consider subjective measures of employment uncertainty (Kreyenfeld 2010; Schneider 2015; Vignoli et al. 2018), and – to a lesser extent – individuals’ idiosyncratic preferences and psychological characteristics. A major shortcoming in such operationalisations of economic uncertainty is their “backwards reasoning”:

Indicators and statistical models consider what already happened in the life course. But future events are not a mere statistical shadow of the past (Bronk and Beckert 2018).

In this paper we argue that economic uncertainty needs rather to be conceptualized and operationalized taking into account that people use works of imagination, producing their own “narrative of the future” – namely, imagined futures embodied in social elements (individuals, organizations, and do forth) and their interactions (Vignoli et al. in press). These personal “narratives of the future” are anchored in existing cultural and institutional frames, as well as public images produced by the media and other powerful opinion formers. Based on socially-constructed perceptions, people build their “narratives of the future” to act in spite of uncertainty, irrespective of structural constraints and their subjective perception (Vignoli et al. in press).

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 adopting a couple perspective. To this end, we conduct controlled laboratory experimentation in order to study how people perceive, and react to, uncertainty in Italy and Norway. Laboratory experimentation allows to study how a sample of young adult individuals make their fertility plans under the exposure to conditions of economic uncertainty, allowing to infer about causation. Societal crisis conditions can hardly be realistically simulated in the laboratory, but related perceptions and emotions can be.

In particular, both members of 800 heterosexual couples (1600 participants) are exposed to a specific narrative of the future as treatments to manipulate their future expectations related to the fertility decision-making process. Couples are randomly assigned to one of the scenarios (1/3 positive, 1/3 negative, 1/3 control group). Each respondent is then asked to envisage him/herself in the given situation and answer if he/she intends to have a child in the next three years, on a scale from 0 (definitely not) to 10 (definitely yes) – (Mynarska & Rytel 2017).

Running a laboratory experiment to assess the impact of economic uncertainty on fertility represents a novelty for fertility intention research. So far, fertility intention research has primarily used surveys, which do not allow the random assignment of respondents to a specific condition. Our study also offers two additional important contributions.

First, the dyadic, couple perspective represents an innovation in experimental studies. Nonetheless, in the interactions and negotiations between parents (to be), gender differences must be explicitly considered (Oppenheimer 1994; Singley and Hynes 2005). We will extend the existing frameworks by testing whether economic uncertainty affects partners in different, perhaps offsetting, ways. This insight is not novel in population studies, but models of fertility behaviour and analyses of relationships between economic uncertainty and fertility tend to focus on either men or women in

isolation. What often remains unclear from contemporary research is whose partner these uncertainties refer to: the man's, the woman's, or both? Which source of economic uncertainty matters most for men and women in couples?

Second, we conduct controlled laboratory experimentation in Italy and Norway. Each study setting represents a different pattern of family formation, influenced by a unique set of historical, cultural, political and economic circumstances. The comparative nature of this research design will highlight similarities across Italy and Norway and draw out country-specific distinctions on the impact of perceived economic uncertainty on fertility plans.

Cross-national controlled laboratory experiments

Controlled laboratory experimentation is usually conducted at computers where subjects are asked to respond to specific instructions and online stimuli. Laboratory experiments take place in a physical location determined by the researcher, and the researcher has a high degree of control over treatments and other experimental conditions. The researcher randomly assigns participants to those conditions, and observes the resulting outcomes. Game theory, risk and decision science, and experimental social psychology have provided most of the theory and methods for this approach (McFadden 2006).

For this study we use data from a laboratory experiment in Italy and Norway (400 couples, i.e. 800 respondents in each country). Both members of the couples participated to the experiment at the same time, but in separate rooms.

All respondents are in a relationship, about half of them have children and they are aged 20 to 40 (women) and 45 (men) years. The sample includes employees with permanent (1/3) and temporary (1/3) contracts, as well as unemployed persons (1/3). The data collection is based on the same standardized questionnaire. The laboratory experiments in Italy and Norway have been conducted in summer and autumn 2019.

The same condition was randomly assigned to each member of the couple: a positive/stable future economic scenario, a negative future economic scenario. The positive/stable treatment consist in reading a short mock newspaper story describing the economic situation of the country for the next three years. It describes a growth in permanent contracts, especially among the youths, an increase in full-time jobs, and a rise in employability. The negative treatment describes a growth in precarious contracts, especially among the youths, an increase of short-time jobs and a rise in unemployment.

Both the positive and the negative scenarios, hence, include three dimensions of economic uncertainty:

- 1) Duration of the contact (juxtaposition between permanent and temporary jobs);
- 2) precariat (whether young people will find or not a stable position over time);
- 3) unemployment (chances to get or to lose a job).

The control group is composed by couples who only answer questions about their fertility intentions, without being exposed to any economic scenario text.

After reading the text, participants were immediately asked to respond to a series of items to measure fertility intentions. These items were derived from the Theory of Planned Behaviour (Ajzen, 1991) applied to fertility research (Ajzen and Koblas, 2013). The text of the economic scenario is repeatedly displayed, and the respondents are asked to envisage themselves in the given scenario while answering these questions.

The pooled dataset resulting from our laboratory experimentation will be used for statistical analyses aimed to evaluate the impact of perceived economic uncertainty on fertility plans. The analysis of experimental data will be done by means comparisons, given that randomization to treatment and control groups automatically controls for potential alternative explanations. In addition, multivariate analyses will be performed when necessary. We will also consider to what extent these effects are moderated by contextual and individual characteristics. In addition to the stratification variables – age, gender, labour market status, and country of residence – the analysis will also account for other key confounders, such as the age and number of previous children, if any.

The level of analysis will be the couple. We will explore whether the same source of uncertainty (duration of the contract, precariat, unemployment) matters for both partners in the same way, or whether there is a gender path in the effect.

First results and next steps

Preliminary results from Italy (N= 408) highlight a clear negative *causal* impact of economic uncertainty on fertility intentions. Respondents randomly assigned to the economic scenario with high uncertainty score lowest on the scale for fertility intentions (4.4), while respondents exposed to the scenario with declining uncertainty score highest (7.2). The control group is situated in-between them (5.3).

By the Autumn 2019 data collection will be completed both in Italy and Norway. The analysis will continue by analysing gender-specific differences within couples in the impact of perceived economic uncertainty on fertility intentions. Gender-specific differences in the impact of the various dimensions of economic uncertainty (duration of contract, precariat, employability) will also be explored. In

addition, the analysis will address degree of accordance between partners' fertility intentions in relation to the narrative of the future they were exposed to.

The comparison between Italy and Norway represents a definite “plus”. It allows us to account for the effect of real-world pre-treatment conditions – such as the actual information and feelings individuals have prior to the experiment – and the characteristics of the institutional setting.

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