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FIRENZE

DiSIA

DIPARTIMENTO DI STATISTICA,
INFORMATICA, APPLICAZIONI
"GIUSEPPE PARENTI"

Narratives of the future shape fertility in uncertain times

Evidence from the COVID-19 pandemic

Giacomo Bazzani, Raffaele Guetto, **Daniele Vignoli**

University of Florence



NARRATIVES →



The Rise of Uncertainty

- The increasing speed, dynamics, and volatility of outcomes of **globalization** – and the exponential rate of **technological change** – make it **increasingly difficult for individuals to predict their future, choose between alternatives, and form strategies** (Giddens 1991; Beck 1992; Blossfeld and Hofmeister 2006; Blossfeld et al. 2006; Kreyenfeld et al 2012)
- The **Great Recession** has renewed the view that globalization is unpredictable and “out of control” (Mills and Blossfeld 2013)
- The **COVID-19 disaster** has created an enormous uncertainty shock (Baker et al 2020)
- This generates an extraordinary level of **economic uncertainty**, which might strongly affect **family life courses**

Do We Understand Economic Uncertainty?

- **Economic uncertainty**: the lack of clarity about future economic prospects (Bloom 2014); i.e. **unknown probability distributions to possible outcomes** (Knight [1921] 2002; Beckert 1996)
- **Uncertainty is about the future**, not about the present or the past
- (Cumulative) employment disadvantage – and its perception – just identify the “**statistical shadow of the past**” and tell us little about **uncertain futures**
- To properly address the effects of economic uncertainty on family dynamics we need to recognize that economic uncertainty is a **forward-looking notion**

Narratives of the Future

- **Uncertainty** needs to be conceptualized and operationalized taking into account that people use **works of imagination**, producing their own **narrative of the future** (Beckert and Bronk 2018; Boyer 2018; Tuckett 2018)
- **Uncertainty is anchored in Narratives:** imagined futures embedded in social elements (Beckert and Bronk 2018)
- **Narrative Framework:** Personal narratives of the future are potent driving forces of reproductive decisions, irrespective of structural constraints and their subjective perception (Vignoli, Bazzani et al. 2020; Vignoli, Guetto et al. 2020)

Aim of the study

- To test whether “net of factors” that operationalize the “statistical shadow of the past”, **young adults postpone fertility because their narrative of the future is uncertain**
- Because of COVID-induced uncertainty, subjective states and narratives of the future – the “**shadow of the future**” – may gain the upper hand over traditional fertility predictors – the “**shadow of the past**”

Italy & COVID-19

- The **first severe case of COVID-19 pandemic** in the Western world
- The **longest complete lockdown** experience (2 months in total)
- At the end of April 2020, Italy had about 25,000 deaths due to COVID-19
- Very **strong role of media**: daily, at 6 p.m., Italians gathered in front of the TV for the official updates on the pandemic
- The TV **announcements of the President Conte** had more than 70% of share



Research questions

- What has happened to childbearing plans during this unexpected source of uncertainty about the future?
- Are fertility intentions discouraged by the pandemic?
- Can the impact of the pandemic be explained by the objective exposure to the virus and its related socioeconomic consequences, or is it better grasped by rising uncertainty about the future, also spread by the media?

Sampling and Data Collection

- **On-line survey** at the premises of the international survey company **Lucid** (high academic reputation for its quality and rigor)
- Combination of **longitudinal survey** (follow-up in the next months) & **experimental approach**
- Total sample: **~4,000 individuals**
- Data collected **during the lockdown**: April 25 – May 1 2020
- We used **quota sampling** on men and women **aged 20-40**
 - Based on data from the Italian national statistical office, we have set **quotas** for **gender, age, and region** (Centre and South) **or province** (North) of residence

Variables – *Shadow of the past*

Past experience and personality traits

- Sociodemographic background, Risk aversion, Education

Status and the objective exposition to Coronavirus

- Direct and indirect **contact with Coronavirus**
- **Media exposure** (TV and Web)
- **Labor market situation** (employment, social class) and transitions to not employment or any smart work following the pandemic

Perceptions

- Sense of **insecurity** regarding own **health**, **labor market situation**, the **diffusion of the pandemics** and the **general political and economic situations**

Variables – *Shadow of the future*

Expectations

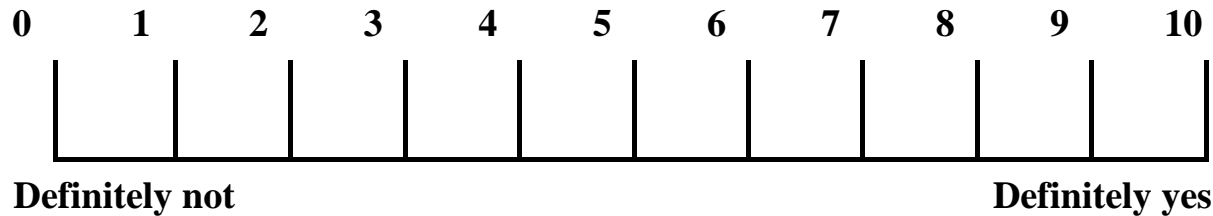
- How long do you think will it take before **your personal situation** comes back to its pre-pandemic condition?
- How long do you think will it take before the **economic and social situation in Italy** comes back to its pre-pandemic condition?

Imaginaries

- How much having a(nother) child would make you happy (0/10)

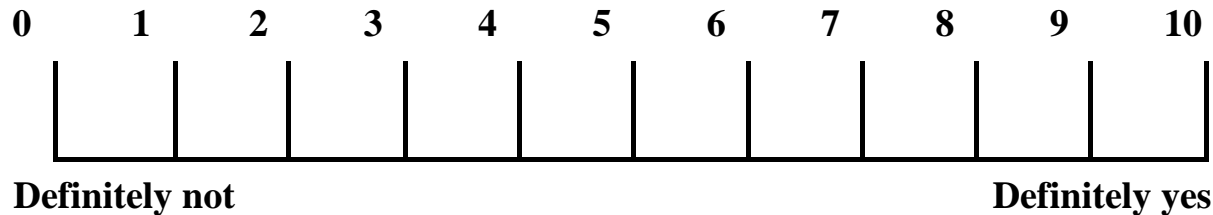
Measuring Change in Fertility Intentions

In January, before the Coronavirus pandemic, were you planning to have a child in the following 3 years?



- I or my partner were expecting

Today, do you plan to have a child in the next 3 anni years?



- I or my partner are expecting

Methods

Change in fertility intentions because of the lockdown

➤ Stepwise OLS regressions:

$$\Delta\text{Fert_int} = \text{Imaginaries} + \text{Expectations} + \text{Perceptions} + \text{Status} + \text{Past} + \text{Fert_int}_{t-1}$$

where $\Delta\text{Fert_int} = \text{Fert_int}_t - \text{Fert_int}_{t-1}$, and $t = \text{Interview}$, $t-1 = \text{January}$

➤ Models are also estimated through **Multinomial logistic regressions** to analyze the probability of **fertility intentions decreasing, increasing or remaining the same** as before the pandemic

Determinants of change in fertility intentions after the pandemic

PERCEPTIONS, EXPECTATIONS, IMAGINARY

PERCEPTIONS

Insecurity about own health	-0.048***	-0.034**
Insecurity about own work	-0.047***	-0.038***
Insecurity about economy	-0.058***	-0.044**
Insecurity about politics	-0.010	-0.010
Insecurity about pandemic	-0.001	-0.009

EXPECTATIONS

Normal in 6m	-0.030
Normal in 12m	-0.118
Normal in 2y	-0.164
Normal in >2y	-0.676***
My life did not change	0.002

IMAGINARIES

Happiness from having a(nother) child	0.179***
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Obs.

3934

3934

R-squared

0.184

0.247

Note: Models control for fertility intentions in January, sex, age, parity, area of residence, risk aversion, status and objective exposition to Coronavirus

Determinants of change in fertility intentions after the pandemic

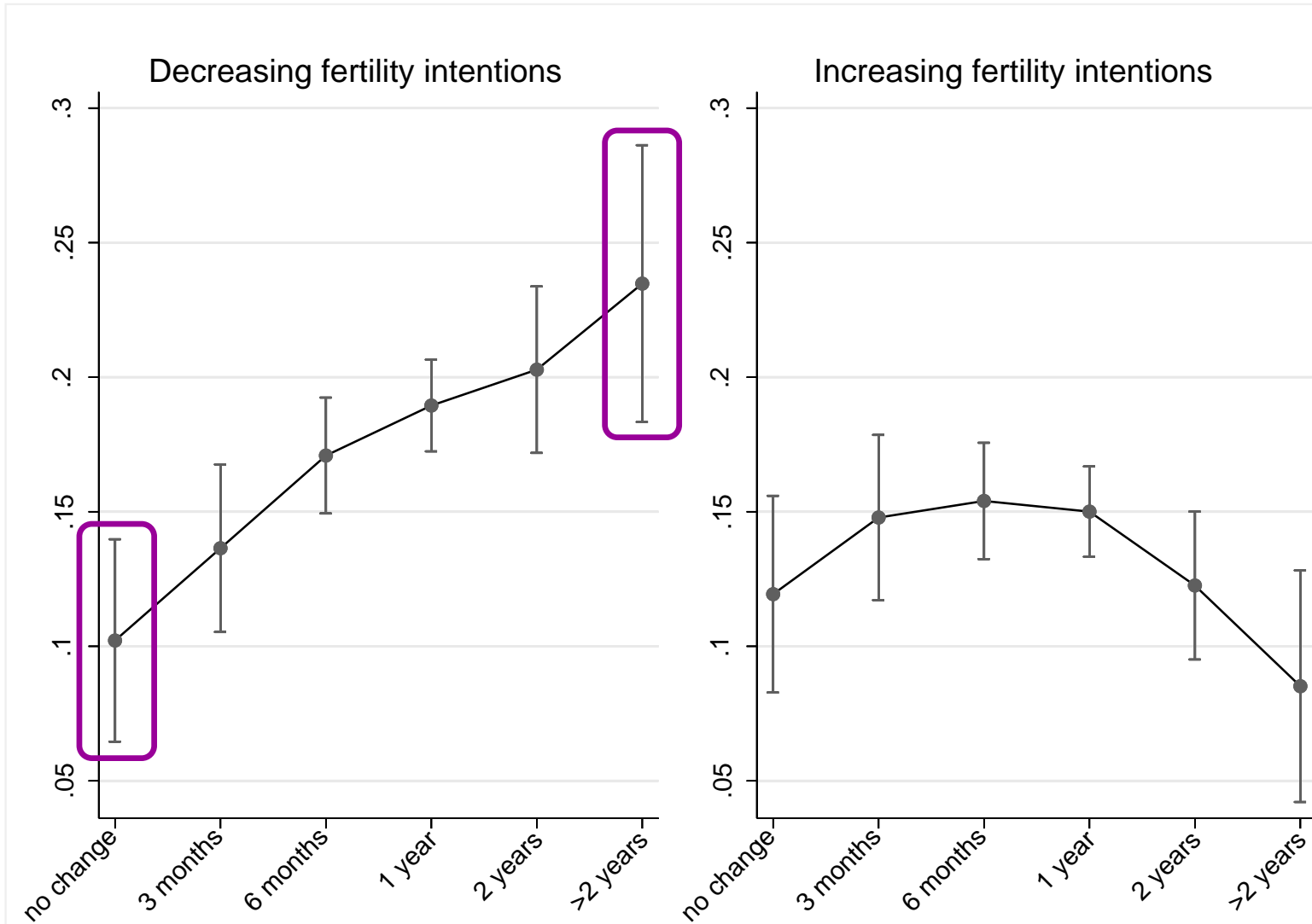
OBJECTIVE STATUS

	M1	M2	M3
Lost job during pandemic	0.004	0.169	0.170
Temporary not working	-0.045	0.084	0.062
Transition to smart work	0.074	0.048	0.094
Permanent-hi class (Jan)	0.015	0.037	0.026
Temporary-lo class (Jan)	-0.257**	-0.168	-0.194*
Temporary-hi class (Jan)	-0.158	-0.066	-0.084
Black job (Jan)	-0.537**	-0.389	-0.356
Self-lo (Jan)	-0.184	-0.098	-0.037
Self-hi (Jan)	-0.396**	-0.303*	-0.281*
Not employed (Jan)	-0.225*	0.005	0.024
Student (Jan)	-0.564***	-0.476***	-0.385***
HH income (€)	0.000*	0.000	0.000
Obs.	3934	3934	3934
R-squared	0.166	0.184	0.247

Note: Models control for fertility intentions in January, sex, age, parity, and area of residence. **M2** adds perceptions, **M3** adds expectations and imaginaries.

Fertility Intentions by Expectations on the Pandemic

Multinomial logistic regression: Predicted probabilities of changing intentions



Experiment: A New Narrative of the Future

- At the end of the survey, we presented to the respondents a **mock news bulletin** concerning the **expected end of the pandemic emergency**
- **Experimental approach:** respondents are randomly assigned to **five different expected durations** before the return to normality
- We then asked them about their **fertility intentions** in the next three years **in light of the expected duration of the emergency**
- And analyzed changes with respect to **previously stated intentions**

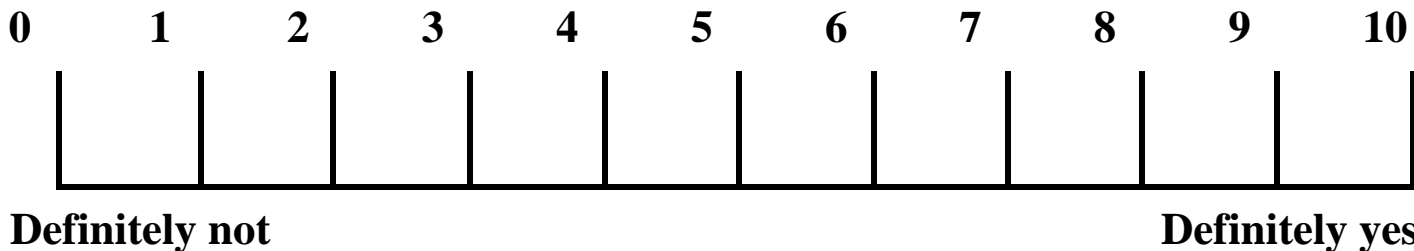
The Treatment

In the next screen we will provide you with up-to-date forecasts concerning the evolution of the Coronavirus pandemic.

Within the last few days there haven't been substantial variations in the number of contagions, hospitalizations, and deaths. The task force composed by leading experts of the Coronavirus pandemic eventually obtained sure predictions about the future of the pandemic in Italy. The experts predict that the Coronavirus pandemic emergency will last **X** before a return to normality

5 randomized scenarios for X: **3 months, 6 months, 12 months, 2 years, more than 2 years**

Considering that the Coronavirus pandemic emergency will last **X**, do you plan to have a child in the next 3 years?



Methods

The causal impact of a new Narrative of the future

➤ OLS regression:

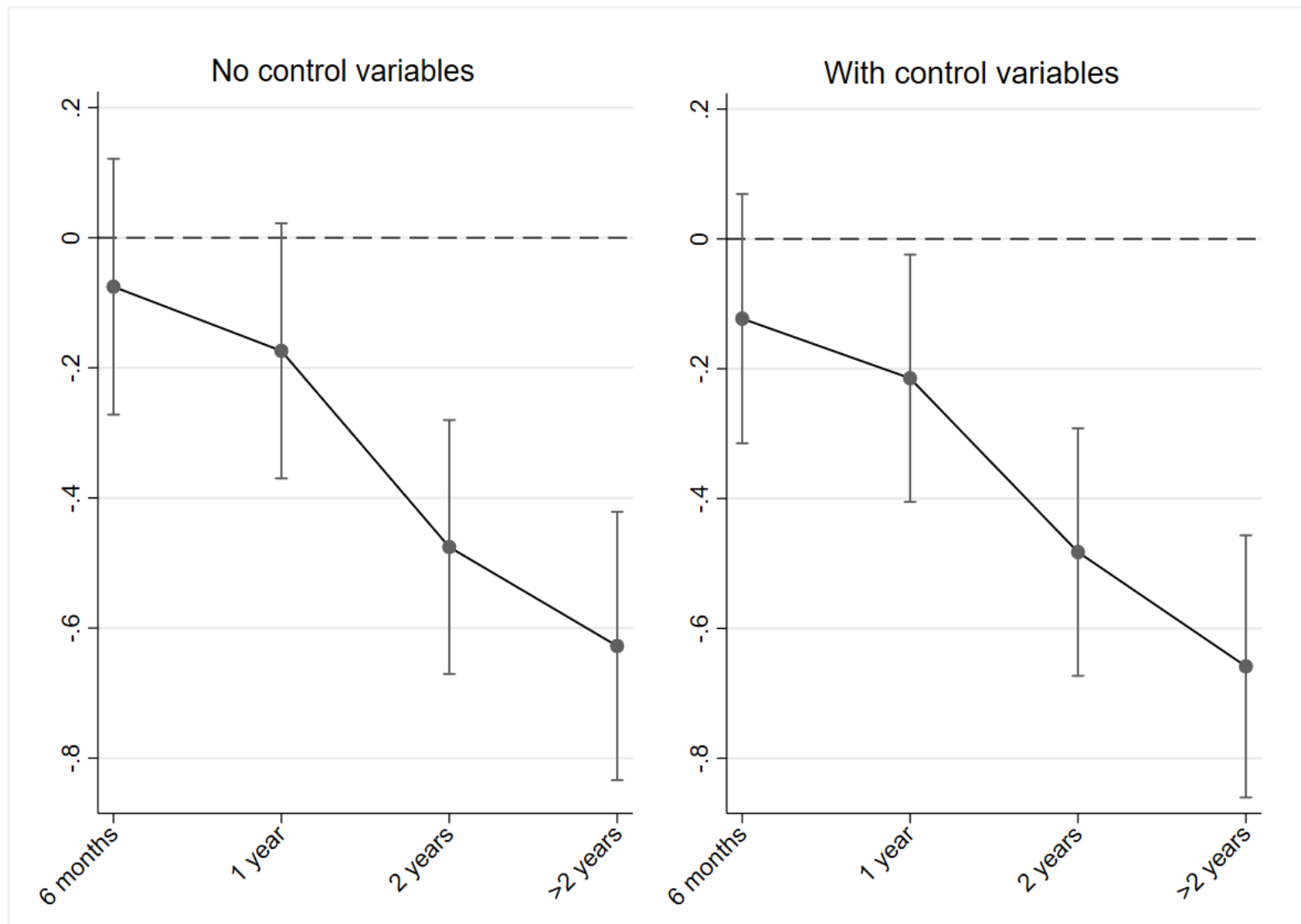
$$\Delta\text{Fert_int} = \text{Treatment} + \text{Recall} + \text{Xb} + \text{Fert_int}_t$$

where $\Delta\text{Fert_int} = \text{Fert_int}_{t+1} - \text{Fert_int}_t$, and $t+1 = \text{Post-treatment}$, $t = \text{Interview}$

➤ Models are also estimated through **Multinomial logistic regressions** to analyze the probability of **fertility intentions decreasing, increasing or remaining the same** as before the treatment

Experiment: The *Causal Impact* of a New Narrative

Change in fertility intentions after the treatment, by different scenarios



Conclusions

- **Shadow of the past:** Objective indicators of individuals' exposure to health and economic consequences played a very limited role in re-shaping individuals' fertility plans during the pandemic
- **Shadow of the future:** Perceptions of insecurity, and especially expectations and imaginaries, came out as crucial moderators of individuals' adaptation to a new context characterized by overwhelming uncertainty

→ We provide evidence of a **causal impact of shared narratives of the future on fertility intentions**

Prospects for Research

- More research is needed to address the role of **personal** and **shared narratives** about economic uncertainty in the study of **family dynamics** in the era of globalization, technological change, and Coronavirus



Daniele Vignoli
University of Florence
www.danielevignoli.com

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