

# Media narratives of the economy and fertility

**Raffaele Guetto**, raffaele.guetto@unifi.it

**Maria Francesca Morabito**, mariafrancesca.morabito@unifi.it

**Daniele Vignoli**, daniele.vignoli@unifi.it

*University of Florence*

**Matthias Vollbracht**, m.vollbracht@mediatenor.com

*Media Tenor International AG*

## Abstract

In this paper, we argue that economic narratives conveyed by the media are crucial for understanding contemporary fertility dynamics net of objective economic constraints. We test such a hypothesis for Italy by combining individual-level data from the 2009 and 2016 releases of the nationally-representative *Family and Social Subjects Surveys* with *Media Tenor* data on the media coverage of the economy derived from the evening newscast of Italian TV channel one. Our findings reveal that both the incidence and tone of news on the state of the economy influence fertility behavior. An increase in the number of negative economic news items inhibits fertility, whereas an increase in positive news items facilitates fertility. The share of economic coverage out of all news has a negative association with fertility, yet this weakens as the average tone of the news improves. Interestingly, when positive news items outnumber negative ones, an increase in the incidence of economic news encourages fertility. These effects are substantially relevant, and statistically significant, net of contextual and individuals' socioeconomic characteristics.

## Introduction

Since 2010, Western Europe has been facing a new winter of fertility levels. Social observers are attributing part of this unexplained fertility decline to the rise of (economic) uncertainty (Sobotka et al. 2011; Comolli et al. 2021). The forces of economic uncertainty have typically been operationalized through objective measures of individuals' labor market situation (Kreyenfeld et al. 2012; Busetta et al. 2019; Vignoli et al. 2020c). A recent meta-analysis of European findings (Alderotti et al. 2021) has clearly shown that employment instability's detrimental impact on fertility—while by no means negligible—may not be of overwhelming importance for addressing current fertility trends. Our thesis is that, in the era of uncertainty, beside individuals' economic situation, actors are influenced in their choices by *socially-constructed narratives of the future*. Based on these narratives, individuals take decisions that may be relatively independent from their actual economic situation and structural constraints (Vignoli et al. 2020a, 2020b). Media-conveyed narratives might play a substantial role in fertility decision-making by shaping perceptions and expectations about future states of the economy. This shaping could well occur through the provision of especially-selected contents, as well as by the framing of information from certain perspectives and tones.

In the present study, we test—for the first time in fertility research—the impact of the economy's media coverage on individuals' fertility behaviors in Italy. The study documents a statistically and substantially significant influence of the economy's media coverage on fertility, controlling for micro- and macro-level indicators of objective economic conditions.

## Background

Communications scholars have long investigated the media's impact on the public. The main framework is the agenda-setting theory (McCombs and Shaw 1972). It postulates that the media's selection of which issues to report, and the salience of their coverage, significantly impacts their perceived relevance to the public.

Despite the observed effects of economic media coverage on individuals' economic perceptions and expectations (Doms and Morin 2004; Boomgaarden et al. 2011; Garz 2012), we have only located a small number of studies on the role of the media on fertility. Most of them discussed the negative impact of the diffusion of mass media on fertility in poor countries (Jensen and Oster 2009; La Ferrara et al. 2012; Billari et al. 2020). Findings reported by Schneider (2015) show that the press coverage of the economy accounts for part of the US's reduction in state-level fertility rates in the years before and during the Great Recession, net of more traditional measures of economic conjuncture. We did not locate, however, any research addressing the effects of media coverage of the economy on fertility behaviors at the individual level. Recent studies assessed the causal impact of media-conveyed narratives of the pandemic (Guetto et al. 2020) and economic uncertainty (Vignoli et al. 2021) on fertility intentions in Italy.

This research focuses on Italy, with the aim to assess the influence of the media coverage of the economy, net of objective indicators of economic conjuncture, on individuals' fertility behavior in the years before, during and after the Great Recession. Indeed, the Great Recession and the Euro crisis saw the public discourse prominently focusing on the state of the economy and the media proposing a simplified and pessimistic narrative of the European economy and society (Cepernich 2012).

## Data description and methodology

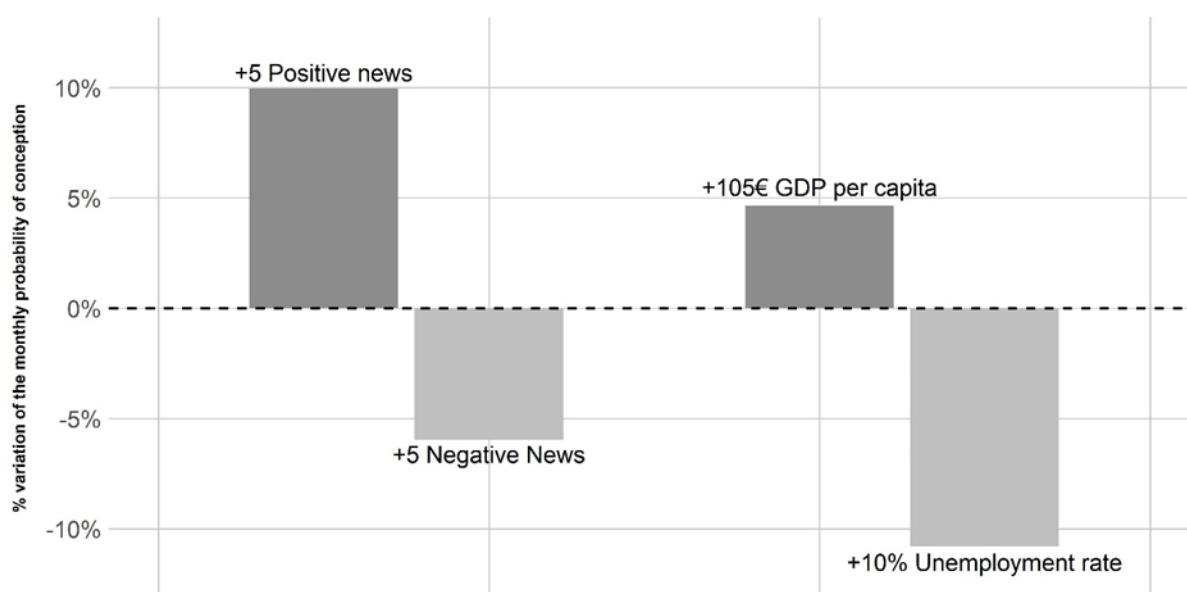
Data on the media coverage of economic news are provided by *Media Tenor International* and consist of the monthly number of economic news reported in the evening edition of *TG1* (the newscast program on the channel *Rai 1*). Each news is given a tone (positive, negative, or no clear) according to codebook instructions, based on both explicit judgments and implicit evaluations reported in the news. Considering that parenthood is a long-term commitment, we have acted under the assumption that the media's economic coverage may have affected individuals' fertility decisions based on information recorded over a sufficiently long period of time. Hence, we constructed moving averages of the monthly amount of economic news reported over the previous 12 months. Individual information is obtained from the 2009 and 2016 releases of the multipurpose survey *Family and Social Subjects*, conducted by ISTAT (the Italian National Statistical Institute), converted as a panel dataset with monthly observations of female respondents aged 15-40. We merged micro- and macro-level variables into a unique dataset that covers the period of January 2007-August 2015, and includes 12,521 women. Out of them, we observe 2,987 conceptions.

Linear Probability Models with Fixed Effects are estimated. The dependent variable is a dummy that assumes value 1 in the month of conception of each child, and 0 otherwise. In addition to media coverage variables, models include a linear time trend, a series of well-established fertility antecedents (age, education, and employment of individuals), a potential mediator of fertility that refers to the union status, and macroeconomic factors traditionally employed in fertility research.

## Results

Firstly, we test the effects of the absolute numbers of negative, positive, and ambiguous news on the state of the economy. Our results reveal that an increase in the number of negative economic news

items inhibits fertility, while an increase in the number of positive news items has a positive (and larger) effect on fertility. The effects of the media's economic coverage are substantially and statistically significant net of the indicators of economic conjuncture included in the model. Figure 1 shows a comparison between the variations in the monthly probability of conception induced, *ceteris paribus*, by comparable changes in the number of economic news items and in the macroeconomic indicators. A one standard deviation increase in the number of positive news stories is associated to an increase in the monthly probability of conception (+9.95% compared to the mean risk observed in the sample) that is almost double the variation induced by a comparable increase in the GDP per capita (+4.67%). Whereas a one standard deviation increase in negative news items determines a reduction in the probability of conception (-5.97%) that is about half of the variation induced by a comparable increase in the unemployment rate (-10.79%).



**Figure 1** Percentage variation of the monthly probability of conception, compared to the mean risk observed in the sample (0.46%), due to one standard deviation increases in the media coverage of the economy and the macroeconomic context.

We test a further specification that includes the percentage of economic features out of all news items, the percentage of positive news stories over positive and negative economic news, and the interaction between the two measures. The fertility-inducing effect of sharing more positive news features relative to negative ones increases as the percentage of economic coverage grows. The percentage of economic news has a negative association with the probability of conception until news items are mostly negative, but it is mitigated as the tone improves. When positive news items outnumber negative ones, an increase in the incidence of economic news encourages fertility.

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