Fertility plans and their realization in an age of insecurity: was the Covid-19 pandemic a unique shock? An analysis of UK data.

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### Introduction

With the outbreak of the coronavirus pandemic, concerns emerged over how the economic and social uncertainty would influence fertility intentions and consequent fertility behaviour. While a temporary peak in fertility, due to couples' greater time spent together, was initially deemed plausible, evidence seemed to suggest a decline in fertility, at least in the short-term, due to economic losses associated with unemployment and to the general feeling of uncertainty (Aassve et al, 2020). Several studies have focused on fertility responses to the pandemic (e.g., Buber-Ennser et al, 2023; Kurowska et al, 2023; Lazzari et al, 2023; Sobotka et al, 2023 – among others). Less scholarly attention, however, has been paid to the extent to which the Covid-19 pandemic represented a unique shock to individuals' childbearing plans, or whether it shared features with other periods – both of crisis (such as the Great Economic Recession) or of greater relative stability.

### Aim of the work and research questions

This study addresses this knowledge gap by comparing women with positive fertility intentions just before the onset of the pandemic to women with similarly positive intentions at different points in time, and by investigating the short-term outcomes of such intentions. Specifically, it poses the following research questions:

- 1) What is the short-term likelihood of maintaining, revising or realising positive fertility intentions? And was that different during the Covid-19 pandemic?
- 2) What are the main demographic and socio-economic factors associated with the likelihood of maintaining, revising or realising positive fertility intentions? And were these different during the Covid-19 pandemic?

### Data and methods

This study uses longitudinal data from two UK nationally representative surveys, the UKHLS Understanding Society and its predecessor, the BHPS. Both surveys repeatedly interview respondents about their fertility intentions, while also tracking their reproductive histories, thus enabling the study of the extent to which fertility intentions are fulfilled, abandoned, or put on hold. The focal interval of interest for this study is the period of the Covid-19 pandemic: women were interviewed between 2018/19 and then surveyed again in September 2021. This 2/3-year interval is then compared to similar short-term periods. Although the question on fertility intentions has not been posed at regular

intervals, it is possible to identify at least two other short-term intervals which are roughly comparable in duration: the period between 1998 and 2001 (using BHPS data), and the period between 2009/10 and 2013/14 (using UKHLS data). Interestingly, while the first period refers to a context of relative socio-economic stability and increasing fertility, the second period relates to times of raised global uncertainty due to the Great Economic Recession.

The analyses focus on the select samples of women who expressed positive fertility intentions respectively in 1998, 2009/10 and 2018-19. These are then followed up or a period of up to 3 years to assess whether their fertility intentions had by then been realised, maintained or revised downward.

The analyses are carried out by means of Multinomial Logistic Regressions on the pooled sample, with the time interval as main control covariate, to estimate the likelihood of the three short-term outcomes of reproductive intentions, and the extent to which it varies in response to different contextual circumstances. Other covariates in the model include demographic characteristics such as parity, women's age and partnership status; and socio-economic factors such as women's education, employment status and household financial circumstances. Interaction terms between demographic and socio-economic factors and the time interval are also included, to investigate whether these factors played a different role during the Covid-19 pandemic as compared to other temporal contexts.

#### **Preliminary findings**

Preliminary analyses have focused on the focal period of interest, i.e., the Covid-19 pandemic. Findings show that the majority of women who expressed positive fertility intentions in 2018-19 put their plans on hold during the uncertain pandemic times, while only 17.7% realised their intentions of having a child and 16.9% abandoned them. Childless women were more likely to put their plans on hold, while women who already had children were more likely to both fulfil their plans or revise them downward. Younger women were more likely to realize, and older women to revise their intentions. Results are also suggestive of women responding in contrasting ways under uncertain economic circumstances. A deterioration in financial situation is associated with a higher likelihood of both realizing and revising fertility intentions. Greater worries however, discouraged fertility plans, while working at home did not seem to encourage them.

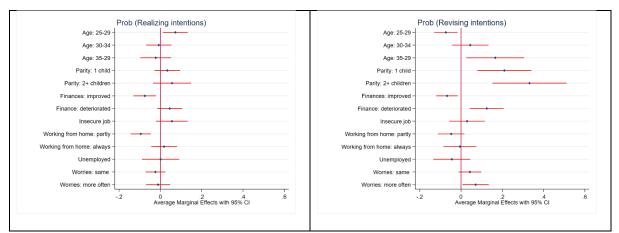


Fig. 1: Multinomial logistic regression. Probability of realizing and of revising fertility intentions. Average marginal effects for selected explanatory variables. Period: 2018/19 to September 2021.

Future analyses to be presented at EPC in June 2024 will assess the extent to which the Covid-19 pandemic, and the uncertainty it caused, represented a unique shock to childbearing plans – likely to continue to influence future fertility trends; whether it was comparable to other times of raised uncertainty, such as that felt during the Great Economic Recession; or whether short-term outcomes of fertility intentions are relatively stable irrespective of contextual circumstances.

# References

- Aassve, A., Cavalli, N., Mencarini, L., Plach, S. and Livi Bacci, M. (2020) The Covid-19 Pandemic and human fertility, *Science*, 369, 6502, 370-371.
- Buber-Ennser, I., Setz, I. and Riederer, B. (2023) Not Even a Pandemic Makes Them Change Their Family Plans: The Impact of COVID-19 on Fertility Intentions in Austria, *Population and Development Review*, <u>https://doi.org/10.1111/padr.12555</u>.
- Kurowska A, Matysiak A, Osiewalska B. Working from Home During Covid-19 Pandemic and Changes to Fertility Intentions Among Parents. *European Journal of Population*, 17;39(1):32. doi: 10.1007/s10680-023-09678-z.
- Lazzari, E., Reimondos, A, Gray, E. (2023) Did the COVID-19 Pandemic Affect Fertility Desires in Australia? Understanding Why People Changed Their Attitudes towards Having a First or Additional Child *Population and Development Review*, <u>https://doi.org/10.1111/padr.12549.</u>
- Sobotka T., Zeman, K. , Jasilioniene, A., Winkler-Dworak, M., Brzozowska, Z., Alustiza-Galarza, A., Németh, L. and Jdanov, D. (2023) Pandemic Roller-Coaster? Birth Trends in Higher-Income Countries During the COVID-19 Pandemic, *Population and Development Review*, <u>https://doi.org/10.1111/padr.12544.</u>