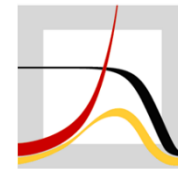




Wittgenstein Centre

FOR DEMOGRAPHY AND
GLOBAL HUMAN CAPITAL



MAX PLANCK INSTITUTE
FOR DEMOGRAPHIC
RESEARCH

Pandemic Babies in Czechia, Austria and Spain –

First evidence on monthly birth trends by age of mother, birth order and selected socio-economic characteristics

Kryštof Zeman and Tomáš Sobotka

*Vienna Institute of Demography / Austrian Academy of Sciences,
Wittgenstein Centre for Demography and Global Human Capital (IIASA, VID/ÖAW, University of Vienna)*

Pandemic Babies conference – Berlin – 13-12-2021

Introduction and Motivation

- ❑ Pandemic
- ❑ Baby-boom or baby-bust?
- ❑ First data (Human Fertility Database / Short-term Fertility Fluctuations) signal sudden decline followed by steady recovery, but only in some regions (esp. Southern Europe)
- ❑ Motivation: we need better understanding of the mechanisms by analysing more detailed data by further demographic and socio-economic characteristics
- ❑ Hypothesis: women with lower socio-economic status (low education, young age, non-married, migrants) will react more instantly to the pandemic
- ❑ Birth order: Likely declines in first births (childless women) and BO3+

Available data

- Background data from HFD / STFF
- Detailed individual data for Spain, 2020 {thanks to INE}
- Detailed individual data for Austria, 2020 {Geburtenbarometer data, thanks to Statistik Austria}
- Detailed tabulations for Czechia, January to September 2021 {thanks to Czech Statistical Office}

In this presentation we present and analyse data by:

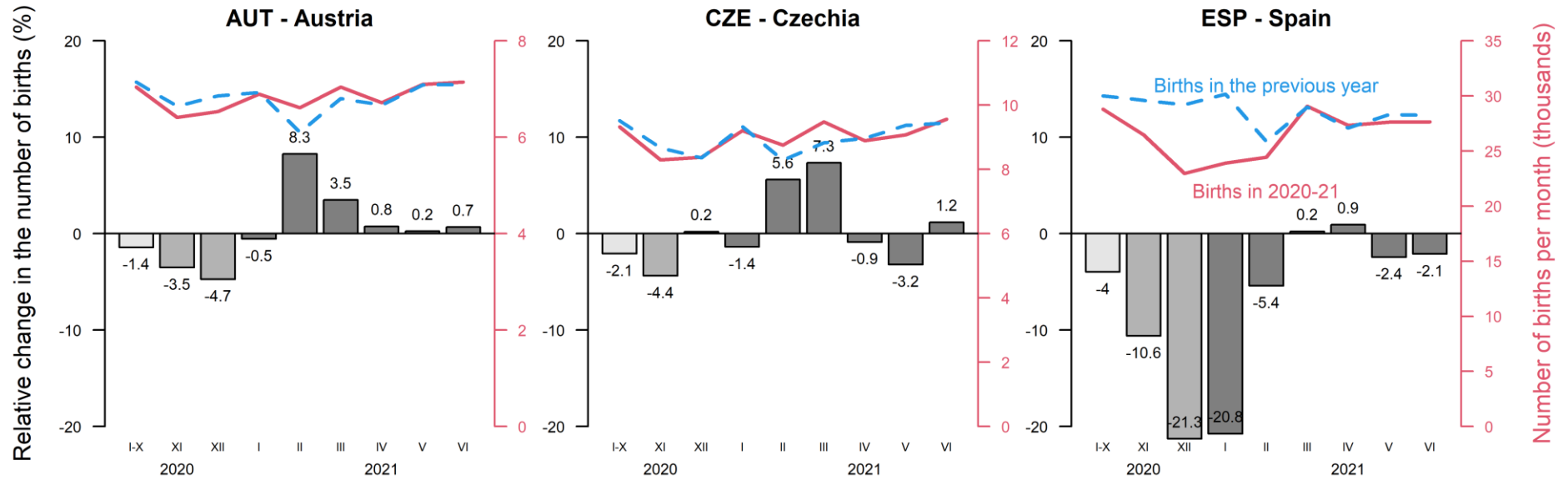
- Birth order (1 / 2 / 3+)
- Age of mother (10y groups)
- Origin (migration background / nationality)
- Education
- Marital status

Methods

- ❑ Monthly totals of live births by given characteristics
- ❑ Comparison to same period/month of previous year
- ❑ Pre-pandemic period: Jan-Oct 2000 / Jan-Oct 1999
- ❑ Pandemic period: Nov 2000 / Nov 1999 and so on...

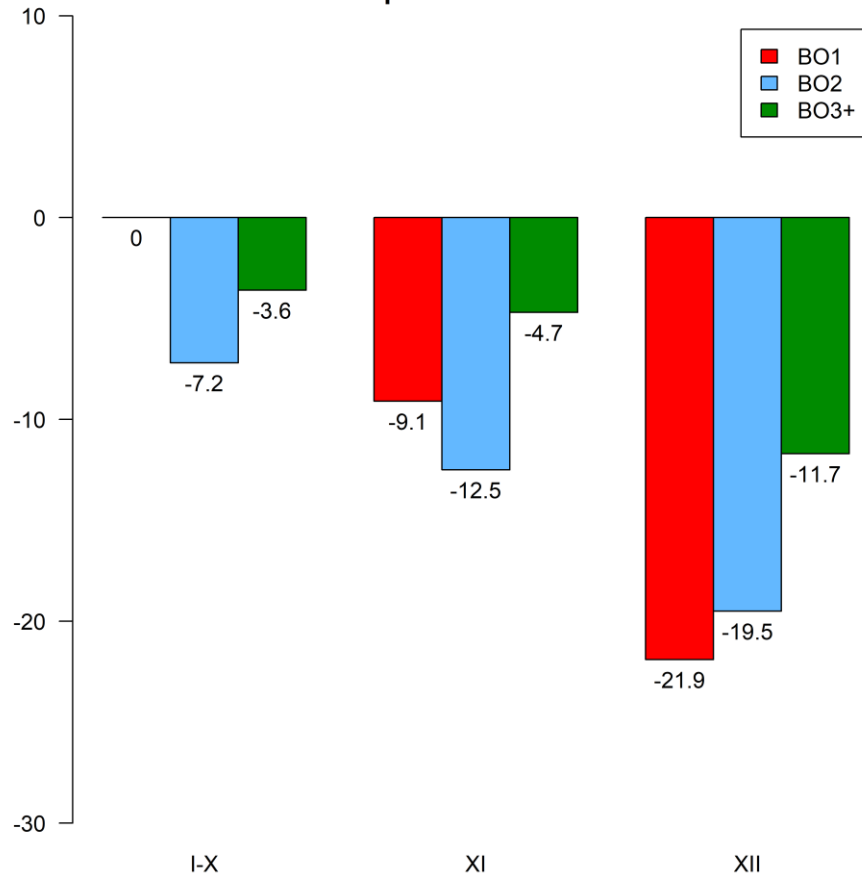
$$RATE_{m,t}^c = \left(\frac{N_{m,t}^c}{N_{m,t-1}^c} - 1 \right) * 100\%$$

Context

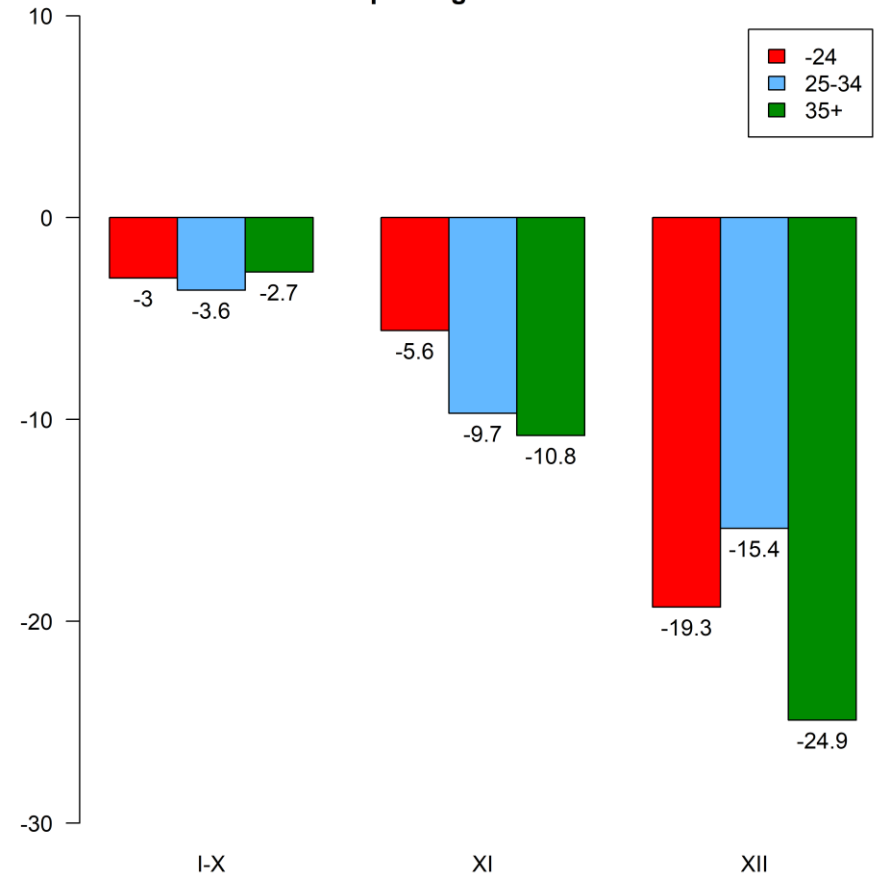


Detailed data – Spain 1

Spain Birth order

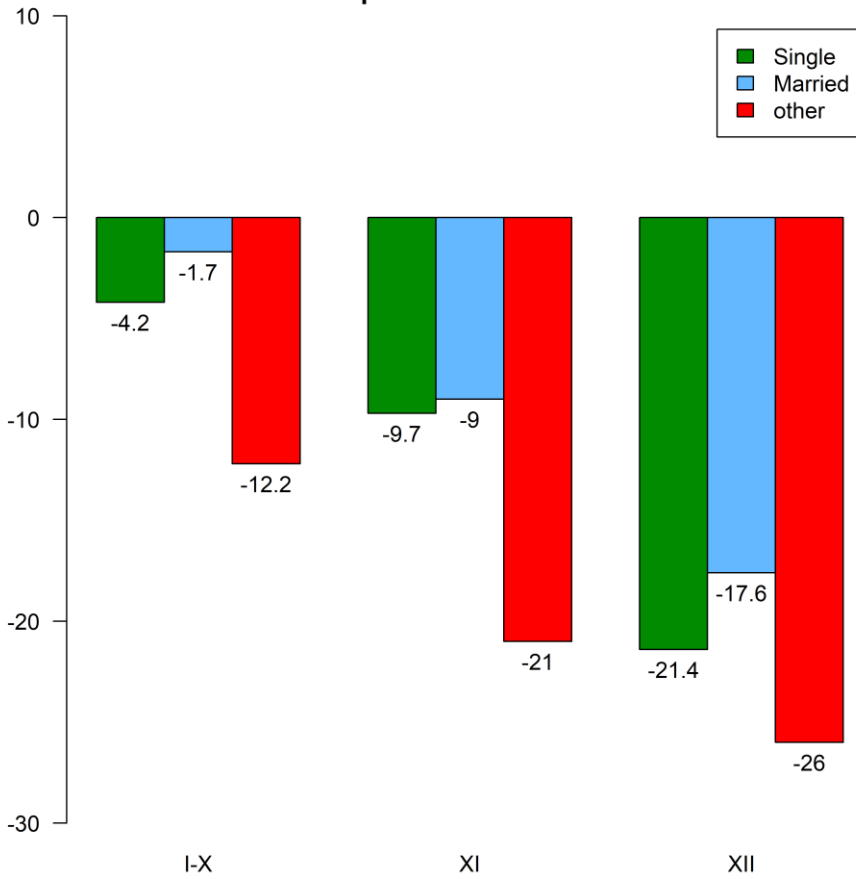


Spain Age of mother

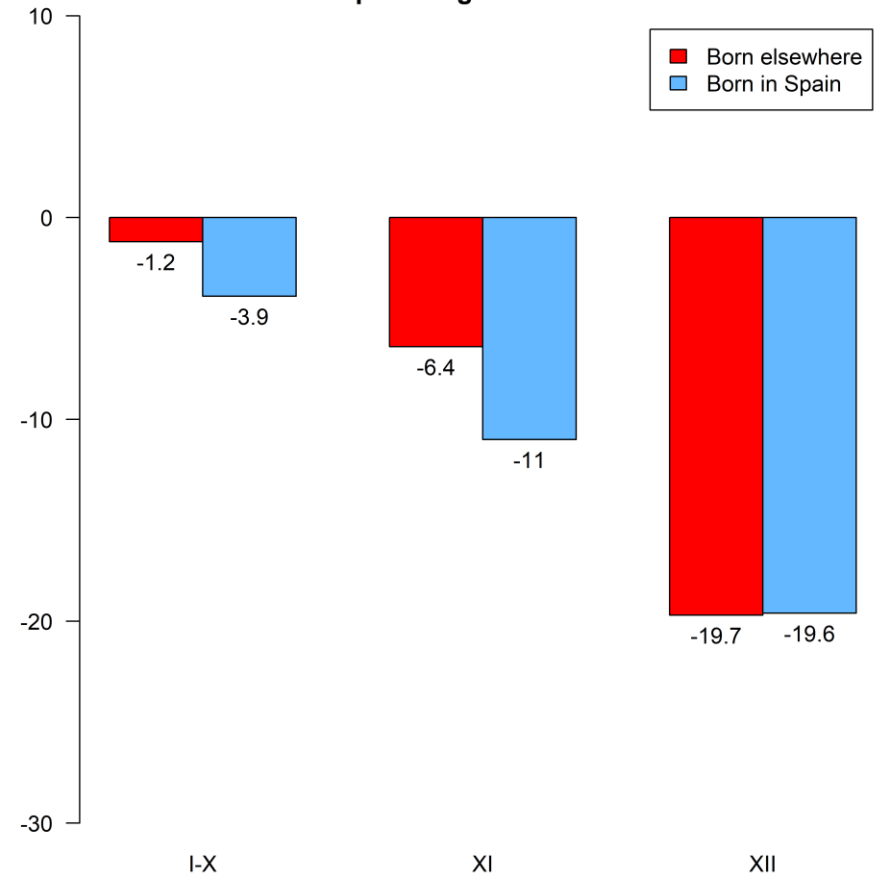


Detailed data – Spain 2

Spain Marital status

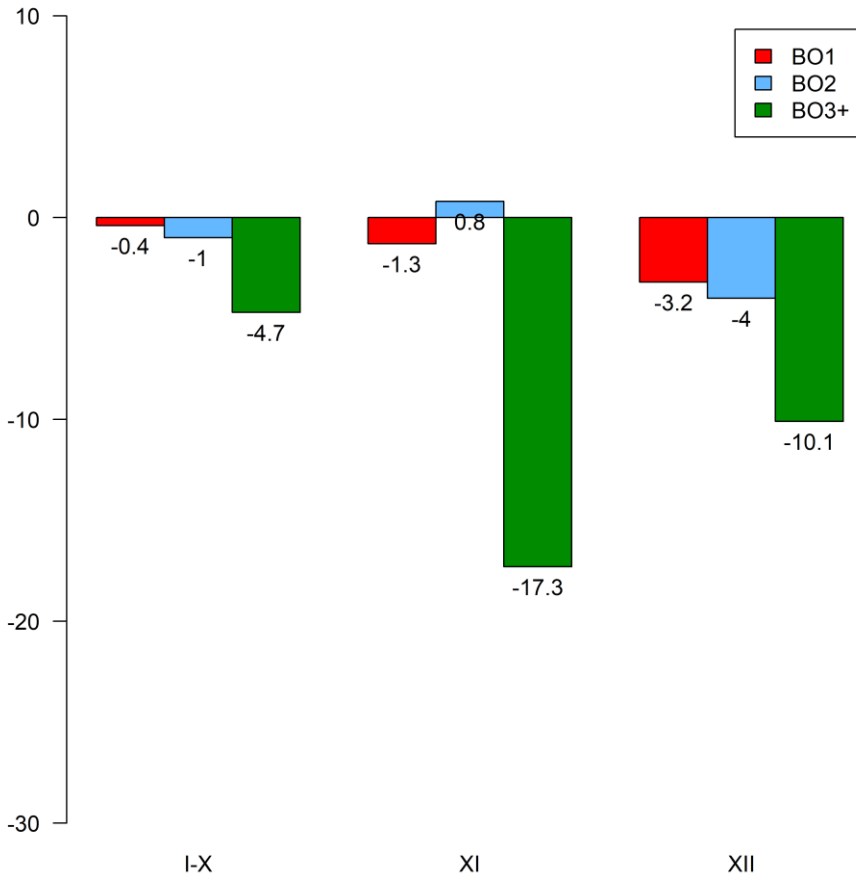


Spain Origin of mother

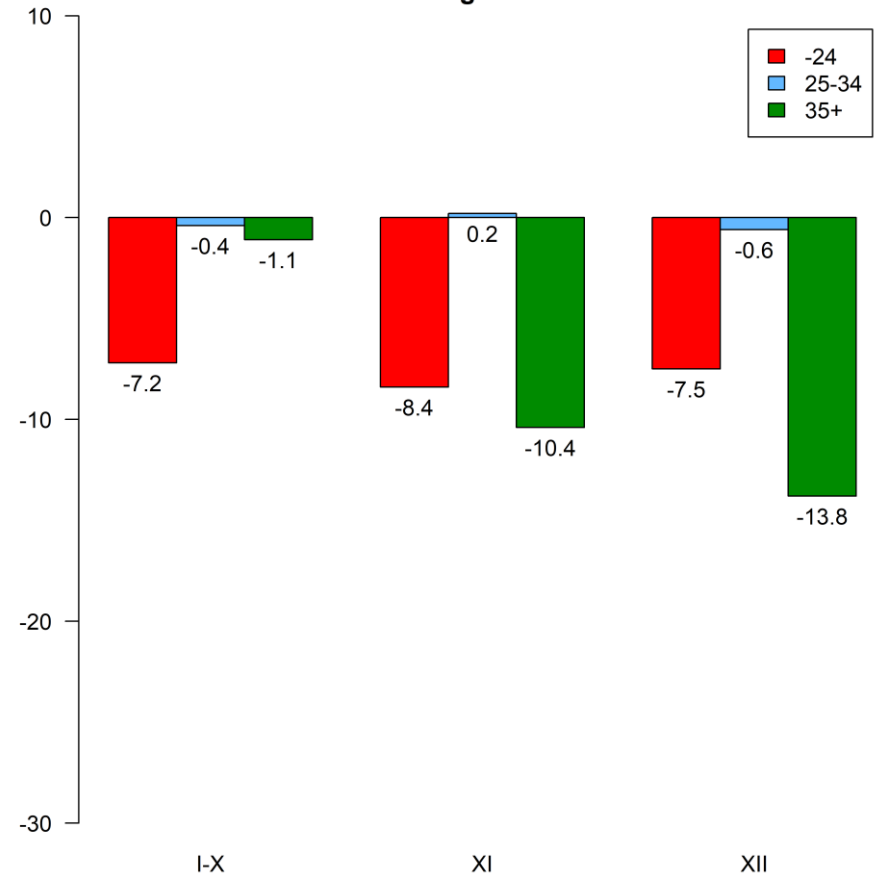


Detailed data – Austria 1

Austria Birth order

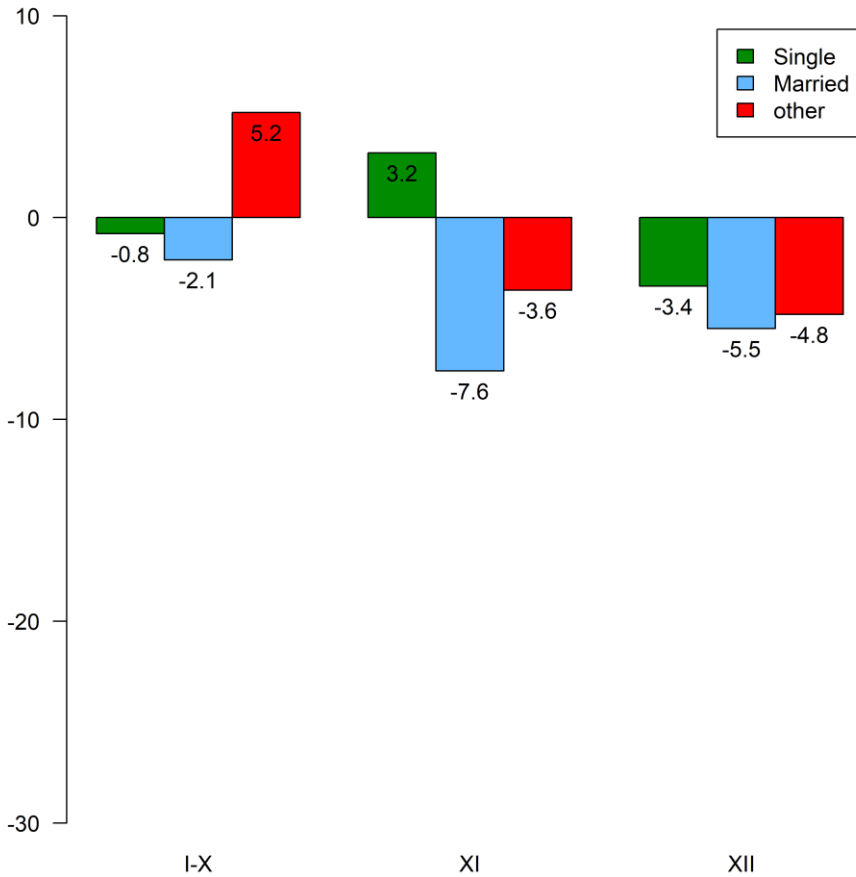


Austria Age of mother

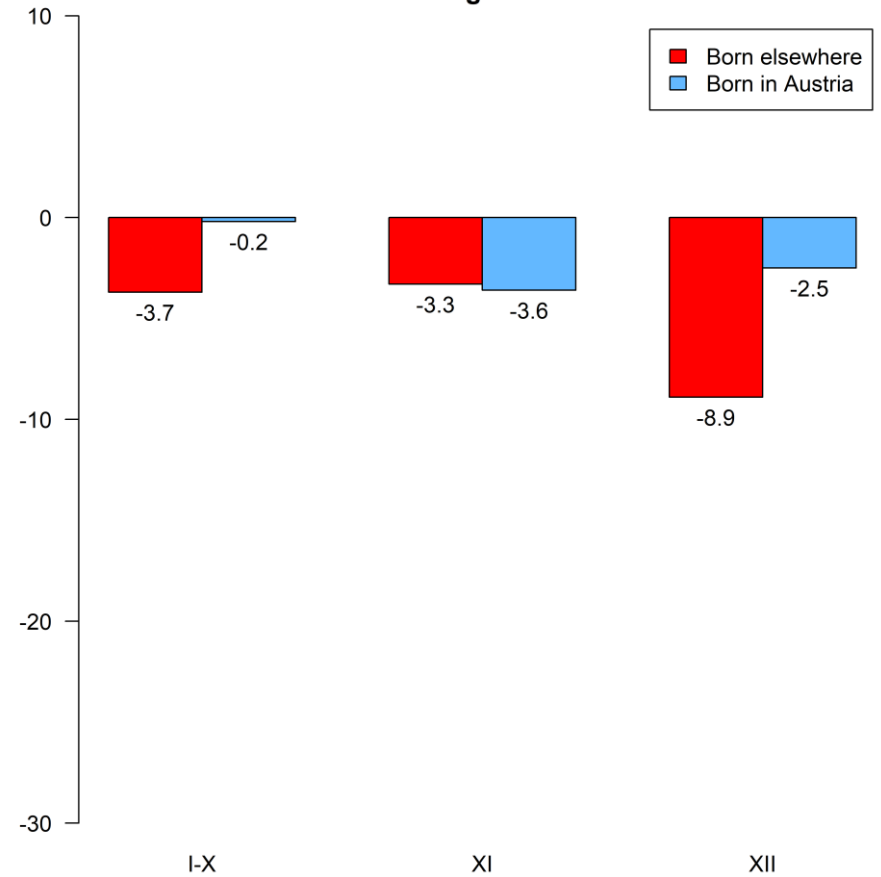


Detailed data – Austria 2

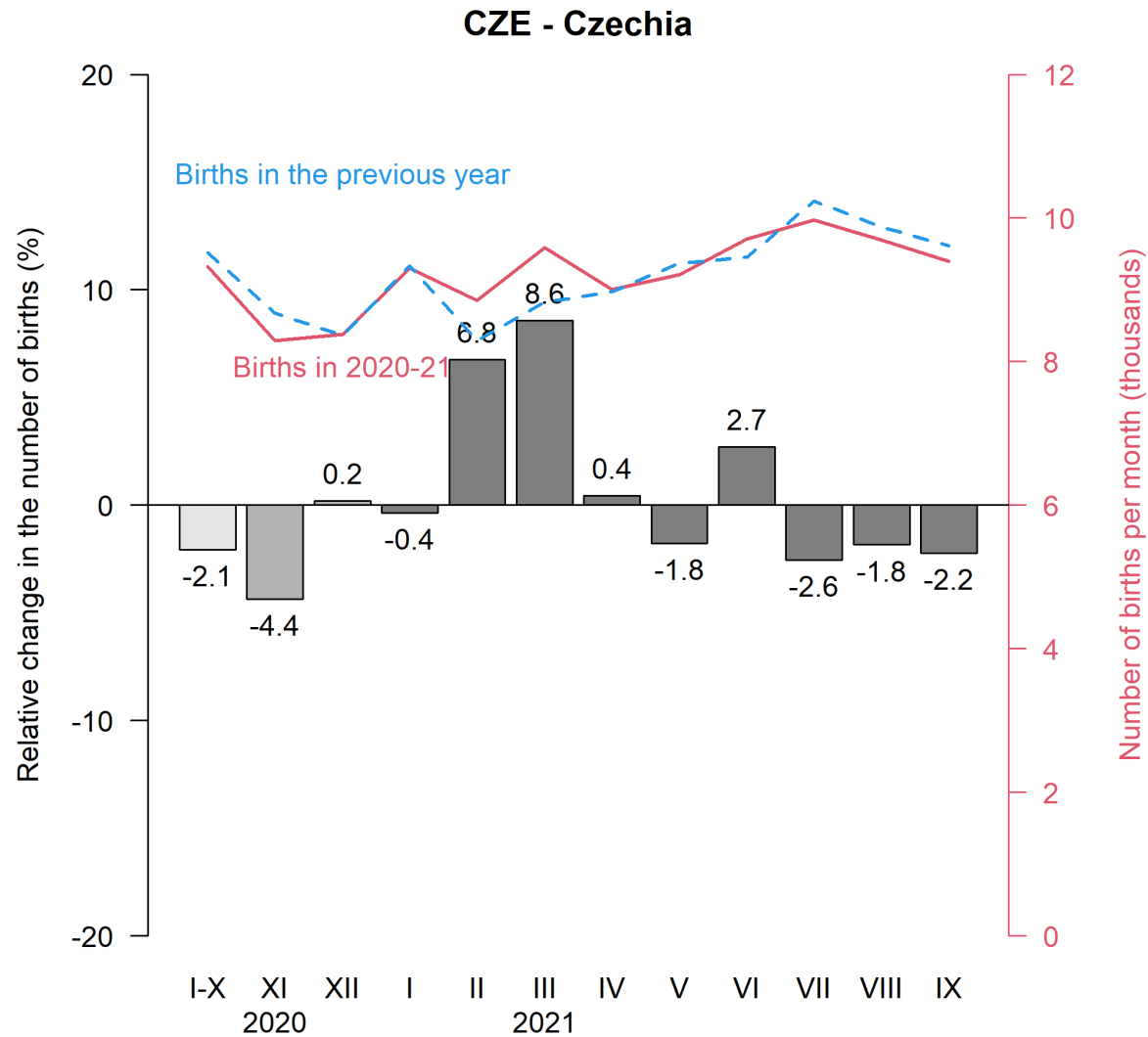
Austria Marital status



Austria Origin of mother

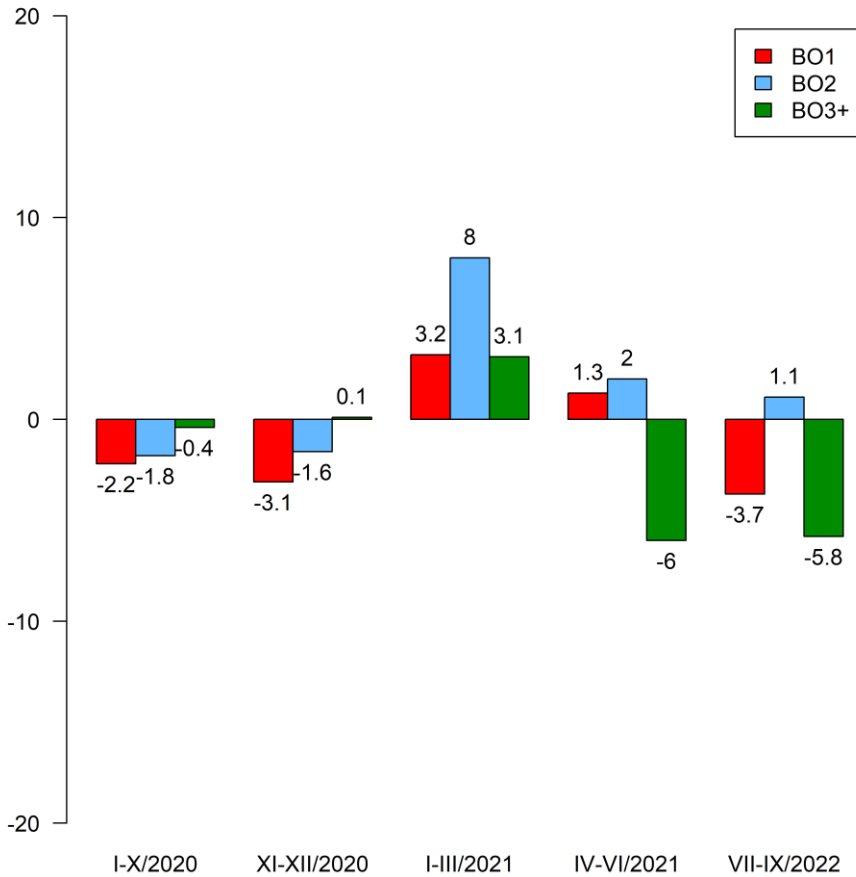


Czechia – more recent data

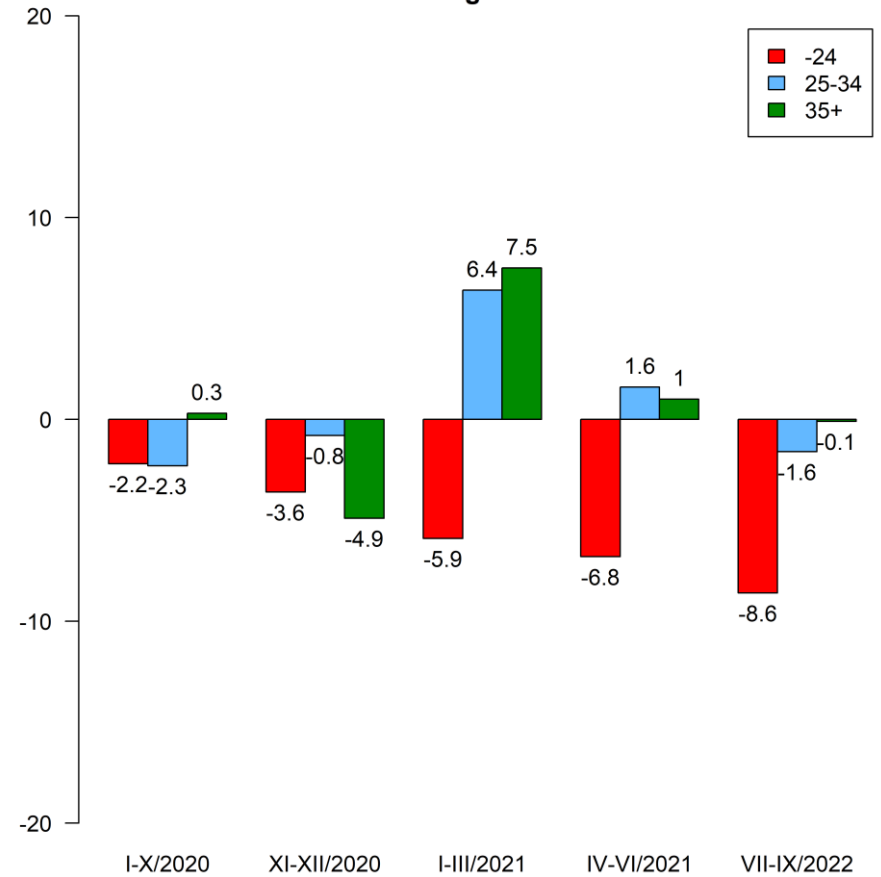


Detailed data – Czechia 1

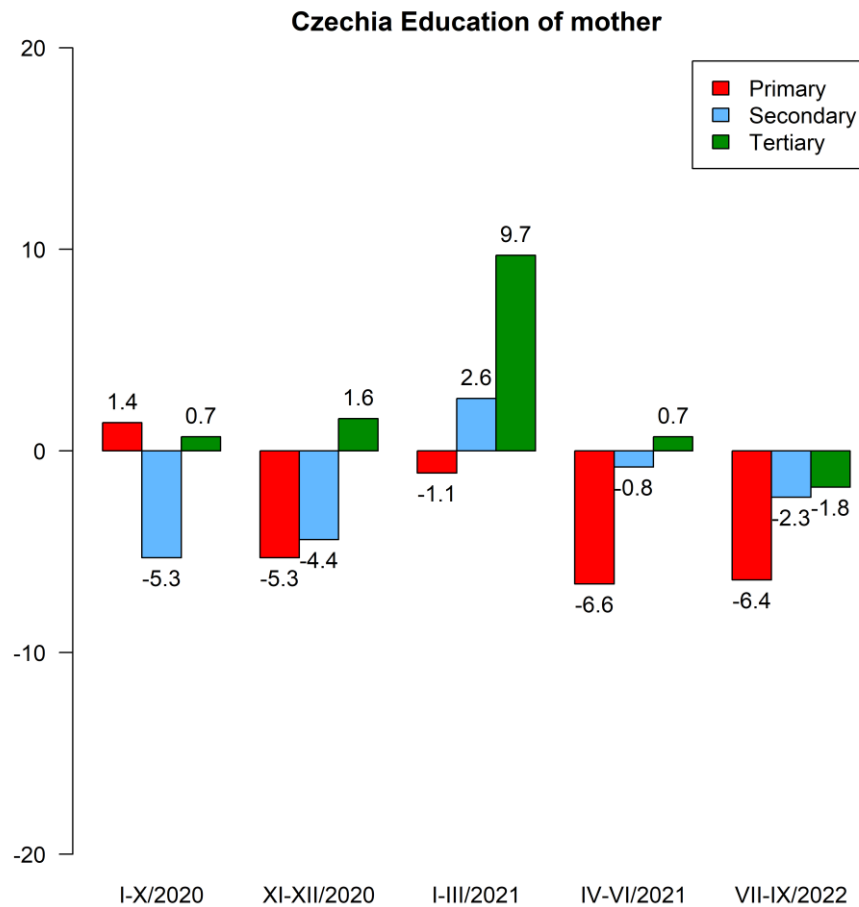
Czechia Birth order



Czechia Age of mother



Detailed data – Czechia 2



Conclusions

- ❑ Groups with more distinct declines in number of births:

| | Spain | Austria | Czechia |
|----------------|-------------|-----------|---------|
| Birth order | 1 & 2 | 3+ | 3+ |
| Age | <25 & 35+ | <25 & 35+ | <25 |
| Marital status | Non-married | no diff. | |
| Origin | no diff. | Migrants | |
| Education | | | Primary |

- ❑ Younger and older age groups react more instantly
- ❑ Birth order: different mechanisms?
- ❑ Lower SES faster decline, but not always
- ❑ OVERALL: MIXED RESULTS, NO DEFINITE CONCLUSIONS
- NEED MORE DATA