

Pandemic Babies? The Covid-19 Pandemic and Its Impact on Fertility and Family Dynamics

Rapid changes in birth counts in Brazilian major cities during the Covid-19 pandemic

Everton C. Lima, Camila F. Soares and José H. C. Monteiro da Silva

Context of the study:

- Since March 2020, Brazil is a country that has been heavily affected by this new disease;
- Death records increase as the number of Covid-19 infected got out of control;
- Many studies tried to explain the influence of this illness in the number of deaths and possible reductions in life expectancy;
- Few empirical attempts to comprehend the effects of pandemic on birth counts in Brazil.

Objective of the study:

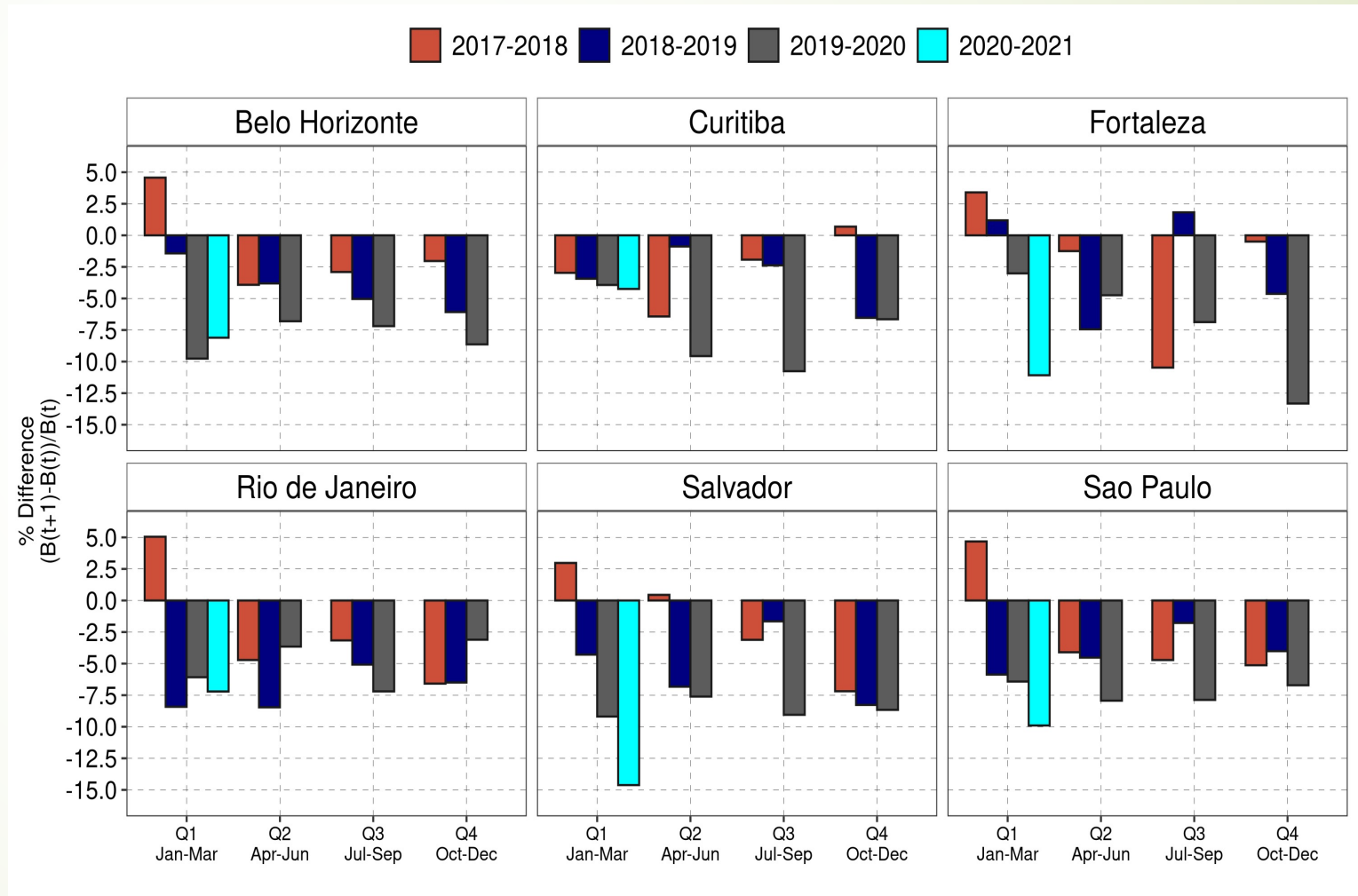
- Investigate whether the pandemic Covid-19 exerts some influence on birth counts of six populated cities of Brazil;
- The analysis evolves the cities of Belo Horizonte, Curitiba, Fortaleza, Salvador, São Paulo and Rio de Janeiro.

Material and Methods

- Data from the Municipal Health Departments;
- Women aged 15-44 years old, we compared monthly births from October-December 2020 and January-March 2021 with the number of newborns in similar months and in years before the pandemic;
- Applied decomposition methods (Das Gupta 1991-93) to understand the effects of the mother's age in the changes in birth counts during the pandemic.

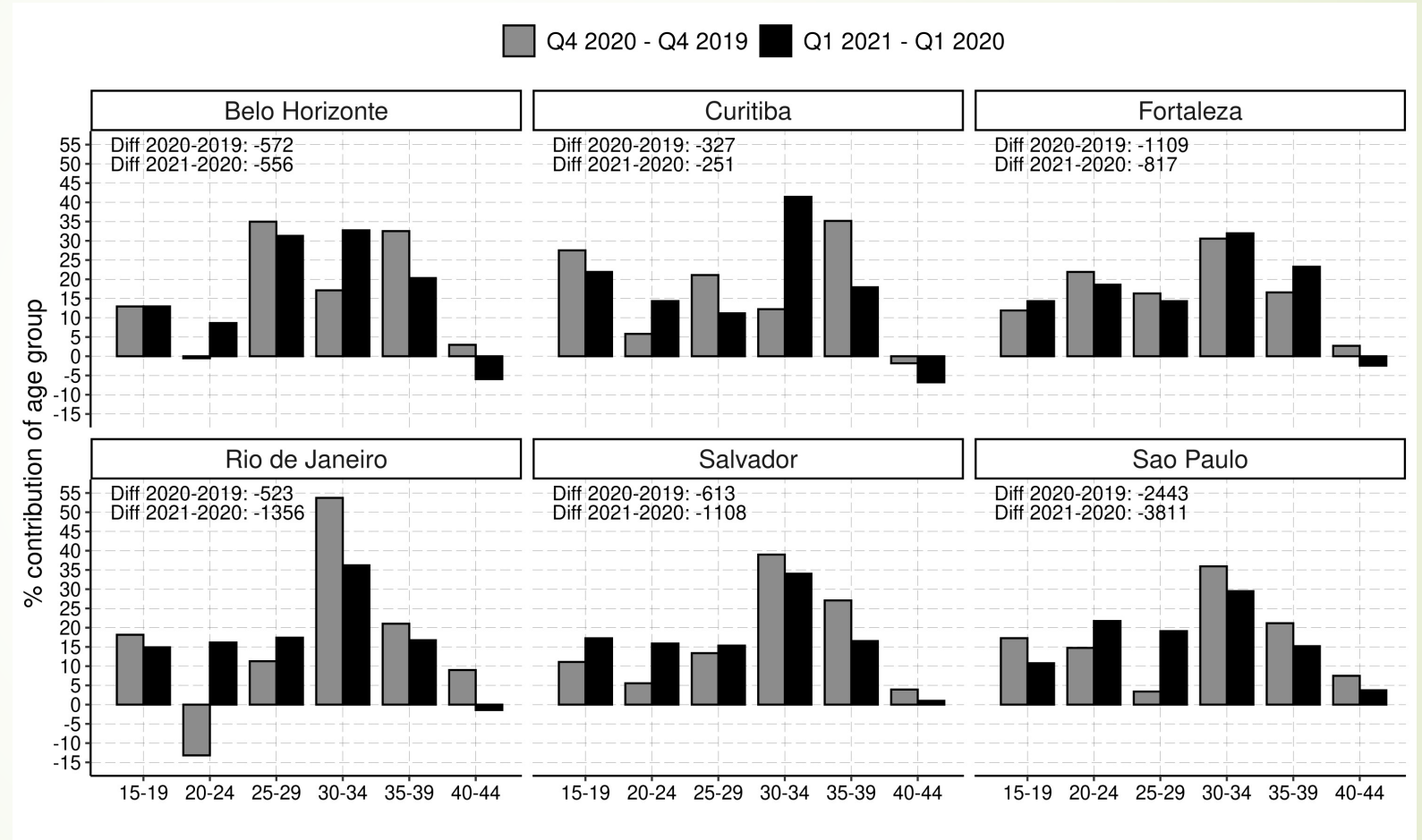
Main Results – During the pandemic

Figure 1. Relative differences in monthly births in six major cities of Brazil. 2017-2021.



Main Results – During the pandemic

Figure 2. Decomposition of absolute differences in total births of mothers aged 15-44 from Q4 2019 to Q4 2020 and Q1 2020 to Q1 2021 by age group contribution in Brazil six major cities.



Discussion

- Northeastern capital cities of **Salvador** and **Fortaleza**, the fertility rates are likely to decline even further and, given the presented decline;
- We may speculate that fertility will probably reach levels close to lowest-low rates in 2021 and in the forthcoming years;
- However, in the cities of **Rio de Janeiro** and **Belo Horizonte** the decline in birth counts have slowed down or even inverted its course;
- In the city of **São Paulo**, the birth counts in 2021 have also speeded its decline process during the COVID-19 crisis;
- Women 30- to 34-year-olds are the ones that are more responsible for these reproductive changes observed;
- IMPORTANT. Not in all places of the country the Covid-19 was associated with faster birth reductions.
- Because of the uncertain scenario that the pandemic brought us, women are more like to postpone the realisation or to give up altogether on their fertility intentions, causing a perhaps temporary baby bust in some cities of Brazil.
- Due to the lack of public access to modern contraceptive methods for low socioeconomic groups, we may also presume that the inequality in fertility levels may be accentuated during the Covid-19 pandemic.

Thank you!