

# My title\*

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## Abstract

This paper is based on Kearney’s paper The Puzzle of Falling US Birth Rates since the Great Recession Between 1980.<sup>1</sup> (Kearney, Levine, and Pardue 2022) During the Great Recession, US birth rate varied between a tight range of roughly 65 to 70 birth per 1000 women between the age of 15 to 44. However, after the Great Recession, the birth rate started to decline significantly, it dropped by nearly 20 percent in 13 years. In this paper, we aim to find out the reason behind the decline, all of the data are collected from the CDC Vital Statistics Births Reports. Our findings can help to understand the reason behind the drop.

## 1 Introduction

The Great Recession has been a world-wide crisis that reconstructed the economy, and was deep, synchronous and global. Canadian GDP dropped by 3.3 percent, US GDP by close to 4 percent, that of the Euro area by 5 percent and that of Japan by more than 8 percent. The impact on international trade has been severe that all G20 countries experienced serious reductions in trade(Michael Hart 2010). Although it is difficult to compare across countries since policy context, society norms and cultural preferences tend to differ, it is never possible to separately consider the effects on each country even after recovery.

In the United States, unemployment rates, mortgage foreclosures, and poverty rates rose while housing values fell, but the extent of these changes varied widely across local areas. Another impact from depressed economic condition is delayed childbearing, and others to hasten it. The fertility rate declined at the national level, dropping from a recent high in 2007 of 69.5 births per 1,000 women aged 15 to 44, to 63.2 for 2012.1 There was, however, great variation by state, age, and ethnicity, with younger and Hispanic women showing disproportionate decreases(Christine Percheski 2017). The significant consequence on fertility rate would make us wonder how severe is America being affected by the great recession. However, by comparing currency devaluations, equity market declines, and rising sovereign bond spreads, the U.S. is the third least affected country(URI DADUSH 2009).

Prior research suggests that stress may be linked to riskier sexual activity. Financial hardship and poverty can negatively affect cognitive function, and shorten the time horizons over which individuals make cost-benefit determinations. Alternatively, fertility may be unaffected by economic conditions if cultural norms related to the context and timing of births are particularly influential. For example, non-marital births are more socially consequential for some racial and ethnic groups, and in some geographic areas. For some individuals, these social norms may outweigh any economic considerations(Christine Percheski 2017). The same consideration of religious belief could also be applied to other countries.

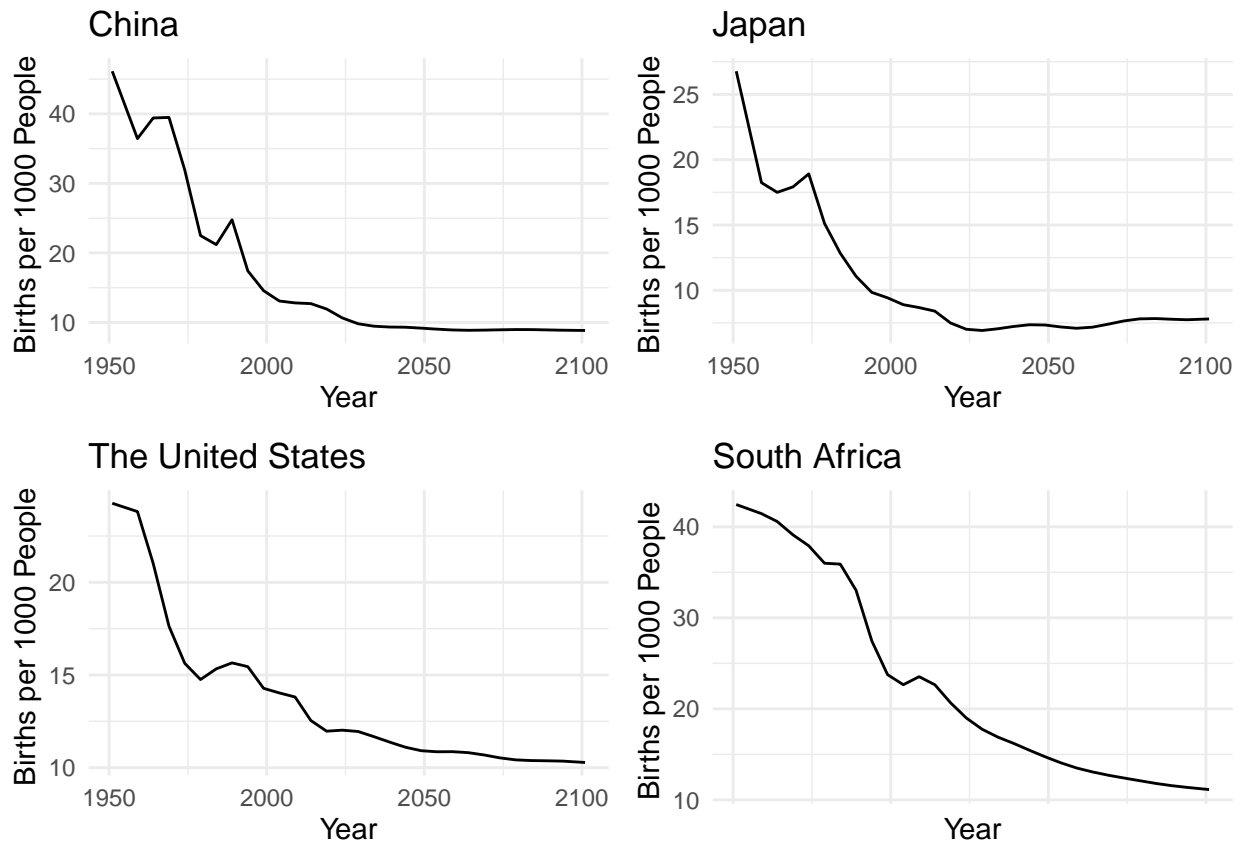
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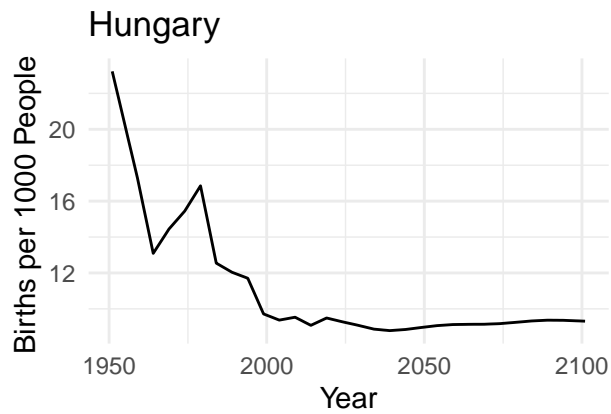
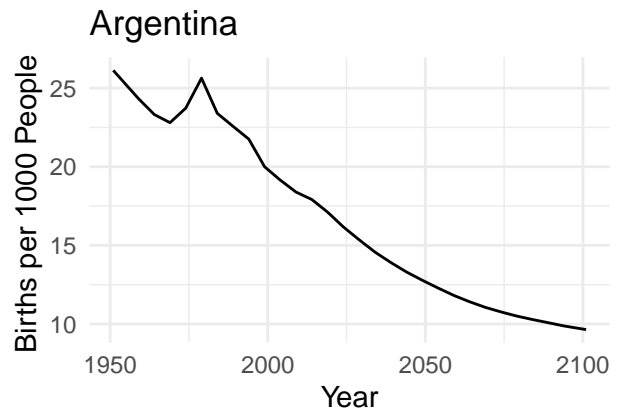
\*Replication available at <https://doi.org/10.48152/ssrp-mbxx-jm47>. Code and data available at <https://github.com/cuilantao/STA304-Paper-2>

<sup>1</sup>Original paper available at: <https://www.aeaweb.org/articles?id=10.1257/app.2.2.95>

## 2 Data

We started our analysis by using R (R Core Team 2020), dplyr(Wickham et al. 2021), tidyverse(Wickham et al. 2019). Graphs are generated using ggpubr(Kassambara 2020) and ggplot2(Wickham 2016).





### 3 Model

### 4 Results

### 5 Discussion

#### 5.1 First discussion point

If my paper were 10 pages, then should be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

#### 5.2 Second discussion point

#### 5.3 Third discussion point

#### 5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

## Appendix

### A Additional details

## References

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