

Comments on “How Japan and the US Can Reduce the Stress of Aging” by C. Goldin

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Motivation

- Dependency ratio (DR) is increasing in JPN
 - Demographic stress

$$\frac{\text{The young (0 - 14 yrs) + The old } (\geq 65 \text{ yrs)}}{\text{Working age population}}$$

- What are the forces that led to the demographic stress in JPN?
 - Fertility?
 - Longevity?
 - Baby boomers of the late 1940s?

Findings

- In terms of increasing demographic stress
 - Fertility is an important factor for increasing demographic stress
 - In particular, decline in the fertility rate after 1975 is important for the demographic stress
 - Longevity does not matter much
- How about the post-WWII baby boom?
 - Not major factor for the demographic stress, either...
 - A sharp contrast with the US case

Author's discussion

- Given that the fertility is a major important factor for demographic stress, the author discusses
 - The low fertility rate in JPN
 - Female labor force participation at old age in US and JPN
 - To reduce demographic stress, increasing labor force participation at old age is probably the best and feasible

Overall impression

- Interesting paper!
 - The impact of baby boomers would not be substantial after their retirement
 - At least regarding **the dependency ratio**
 - Though it may not be the case for the impact on the other economic variables (e.g., social security, fiscal problem, economic growth, etc.)
- I have a few comments on:
 - Comparisons w/ US
 - Low fertility rate in JPN

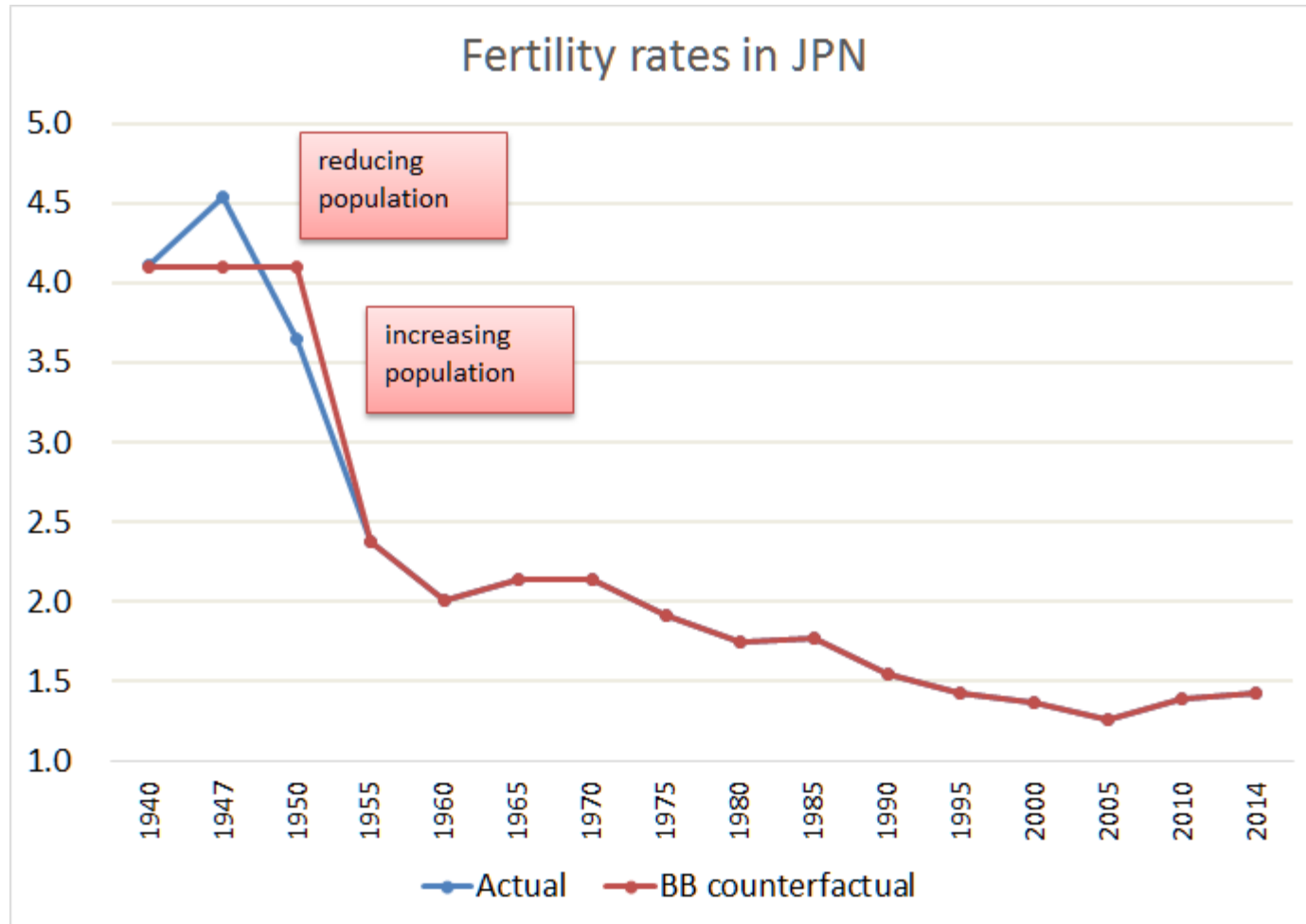
Comment 1: Baby boom counterfactual simulation

- The author provides quantitative comparisons btwn US and JPN
- Interesting comparisons to see impacts of baby boomers
 - The impact of BB on the DR is much weaker in JPN than in US
 - JPN BB is just compensatory change to make up the low level of births
 - In JPN, BB do not matter much b/c DR is very similar to the actual DR
- The finding is important because BB in JPN may not be contributing to the demographic stress

Comment 1 (cont'd): Baby boom counterfactual simulation

- My comment
 - Are comparison results robust to the design of experiments?
- BB counterfactual in US and JPN (Figs. 2D and 3B)
 - In my impression, it would be interesting if looking at more scenarios to strengthen the results in the paper
 - Comparing impacts of BB btwn JPN and US would be difficult
 - JPN: Smooth fertility rate btwn 40s and 50s. Essentially no change in population
 - US: Fertility rates are kept constant at the level in 1946 (until 60s). Reducing # of population
- Is comparison fair?

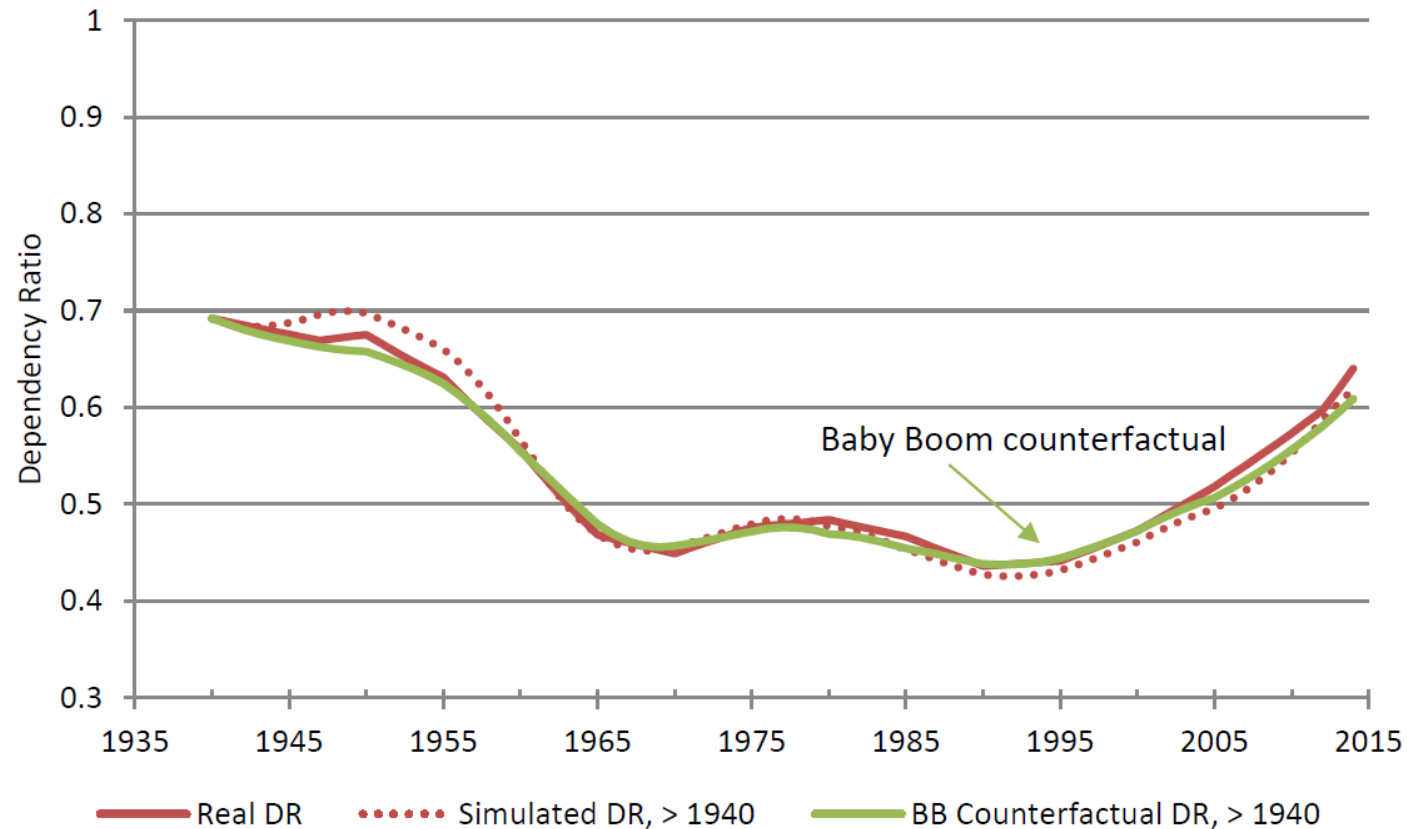
Comment 1 (cont'd): BB counterfactual in JPN



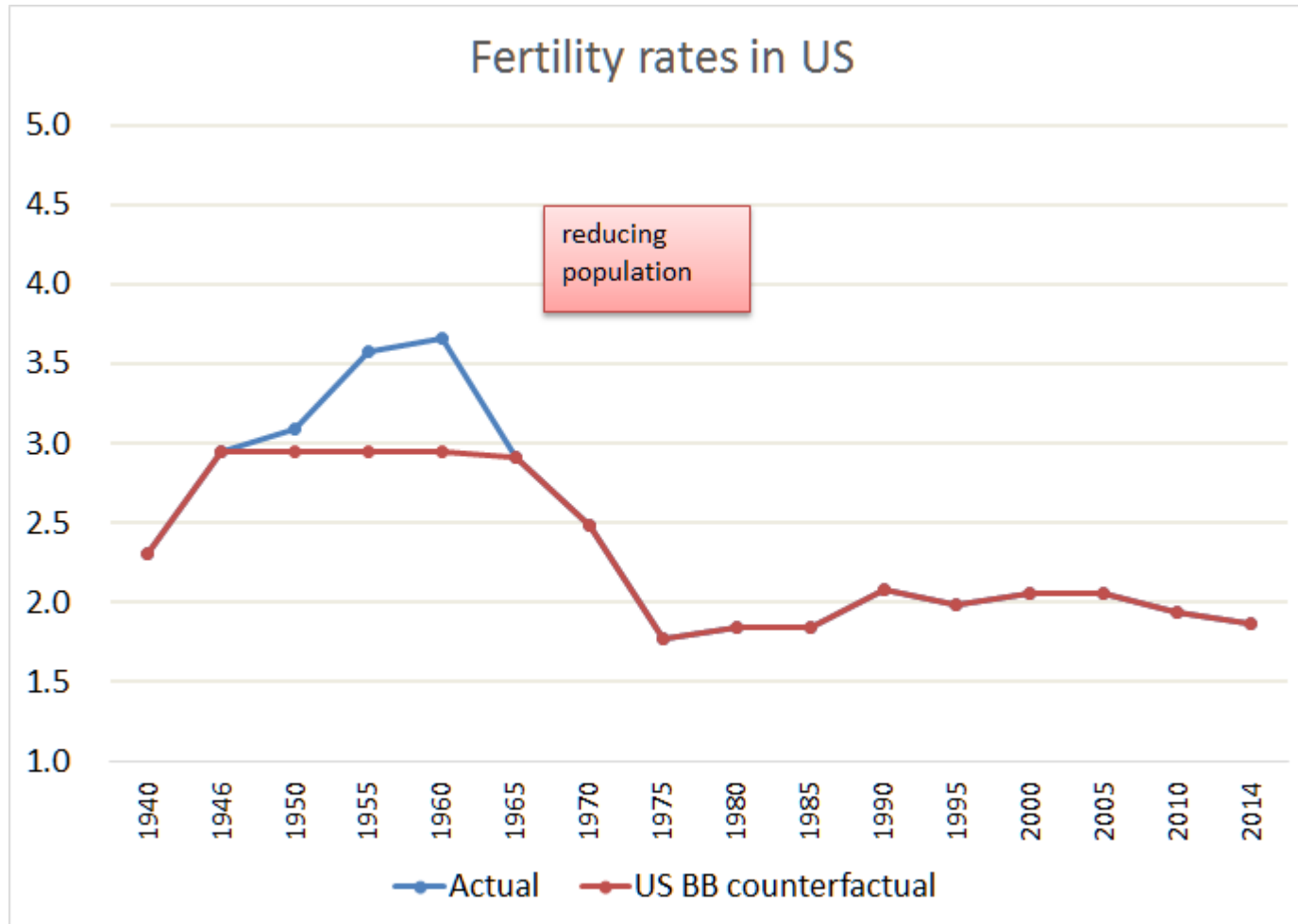
- In comparison to actual FR, this counterfactual FR **does not** substantially reduce population (b/c of smoothing fertility)
- There would be small impacts on the age structure

Comment 1 (cont'd): results for JPN

D. Baby Boom Counterfactual, Japan



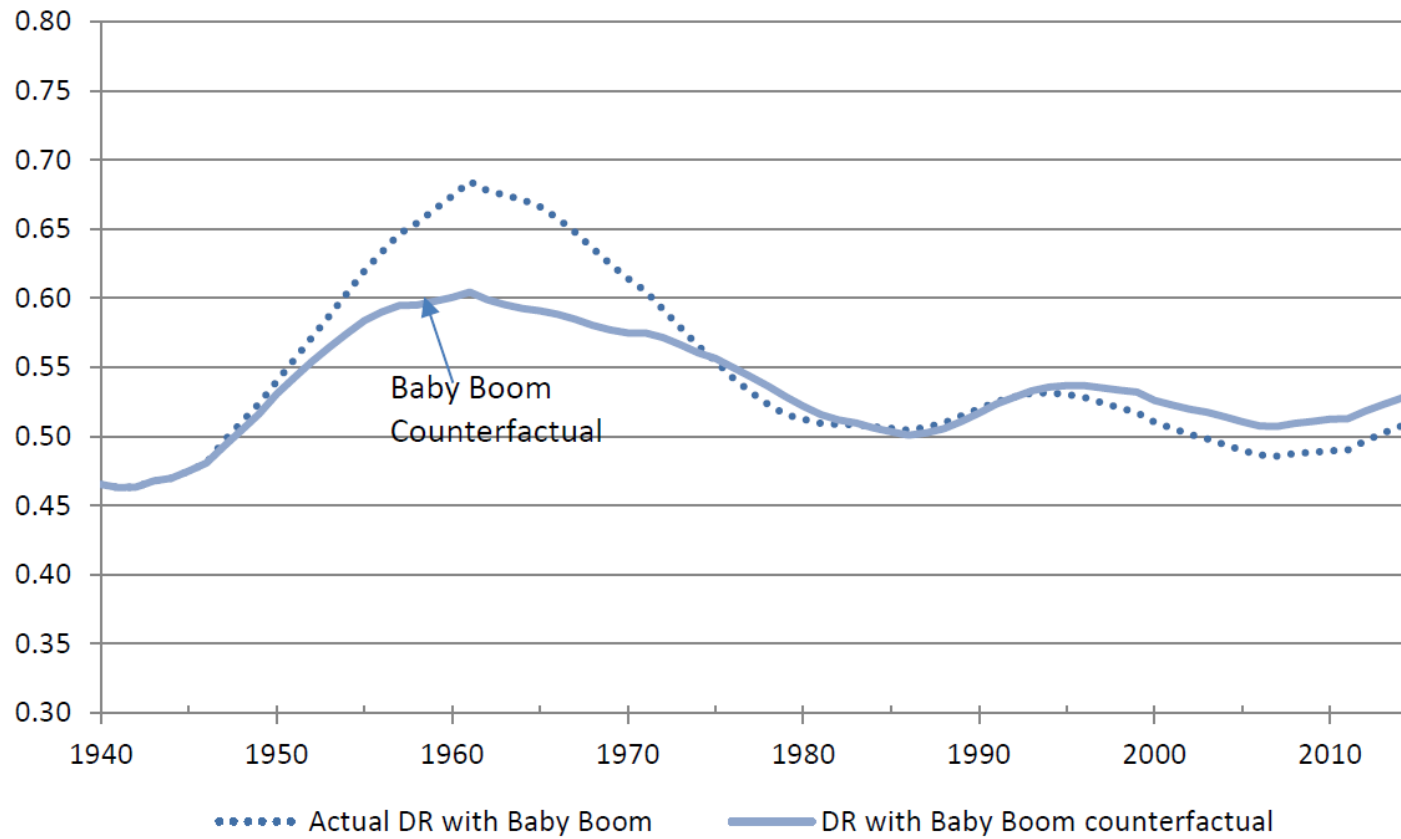
Comment 1 (cont'd): BB counterfactual in US



- In comparison to actual FR, this counterfactual FR **does** reduce population
- There might be large impacts on the age structure

Comment 1 (cont'd): Results for US

B. Baby Boom Counterfactual, US



- The impact of BB might be weaker in the US, if the impact on the age structure is allowed for
- Comparisons are difficult

Comment 1: Summary

- Comparisons of counterfactual simulations under different environments are complicated (at least to me)
- We may not want to emphasize differences between US and JPN
- Comparing a variety of scenarios under the same environment is much easier
- Introducing comparable scenarios (different BB scenarios) would help us understand the impact of BB

Comment 2: Why is the fertility rate low in Japan?

- Why is fertility low in JPN?
- Difficult question to answer...
- In the paper, the author introduces discussion by Feyrer, Sacerdote and Stern (2008, FSS)
- The author may want to discuss more clearly
 - Does the discussion by FSS broadly apply to the Japanese case?
 - Are there something special in the relationship btwn fertility and Japanese female labor participation rate?

Comment 3: Lifecycle of nations

- Where is JPN now in the lifecycle of nations in terms of fertility and female labor force participations?
- The U-shaped relationship in the Japanese **time-series** data?
 - The annual fertility data is available from Vital Statistics
 - Some idea on future fertility?

