

Assisted Reproductive Technology as an Intervention for Falling Birth Rates in Japan

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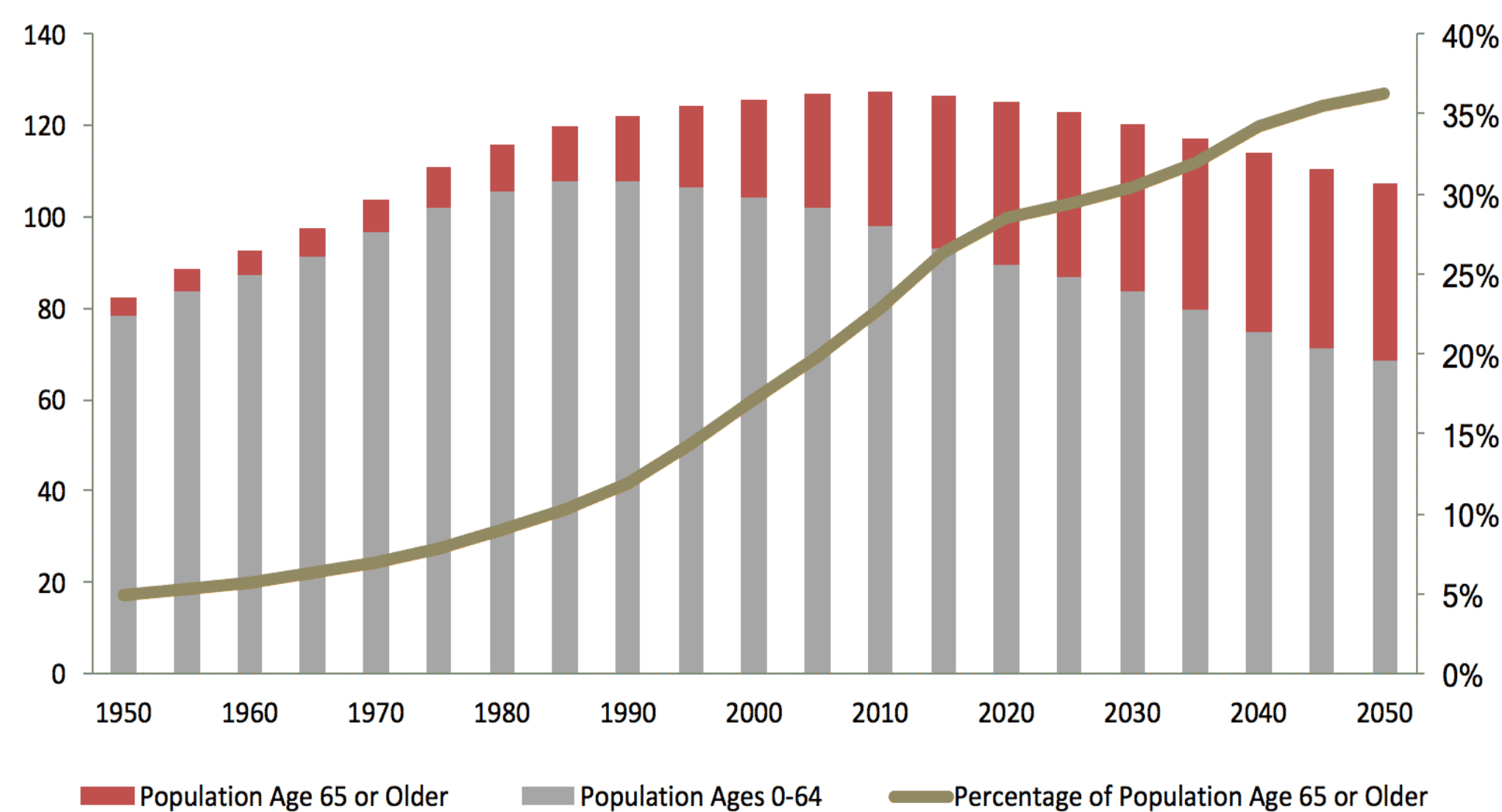
Background

Japan has a rapidly aging population

- Life expectancy: 84.3 years (Global average 73.3)
- ‘Super-aged’ society (Oldest globally)
 - 28.7 % of the population is 65 or older

Japan has a rapidly shrinking population

- Shrinking for 16 years; 7th consecutive year of decline
 - 128.1 million (2010)
 - 122.4 million (2023)
 - Projected 87 million by 2070
- Birth rate: 1.26 (Global average 2.3)
 - 2.1 needed to maintain a stable population
 - Economic burden & declining marriage rate
 - Japan has close to zero net immigration



Economic and Societal Impact

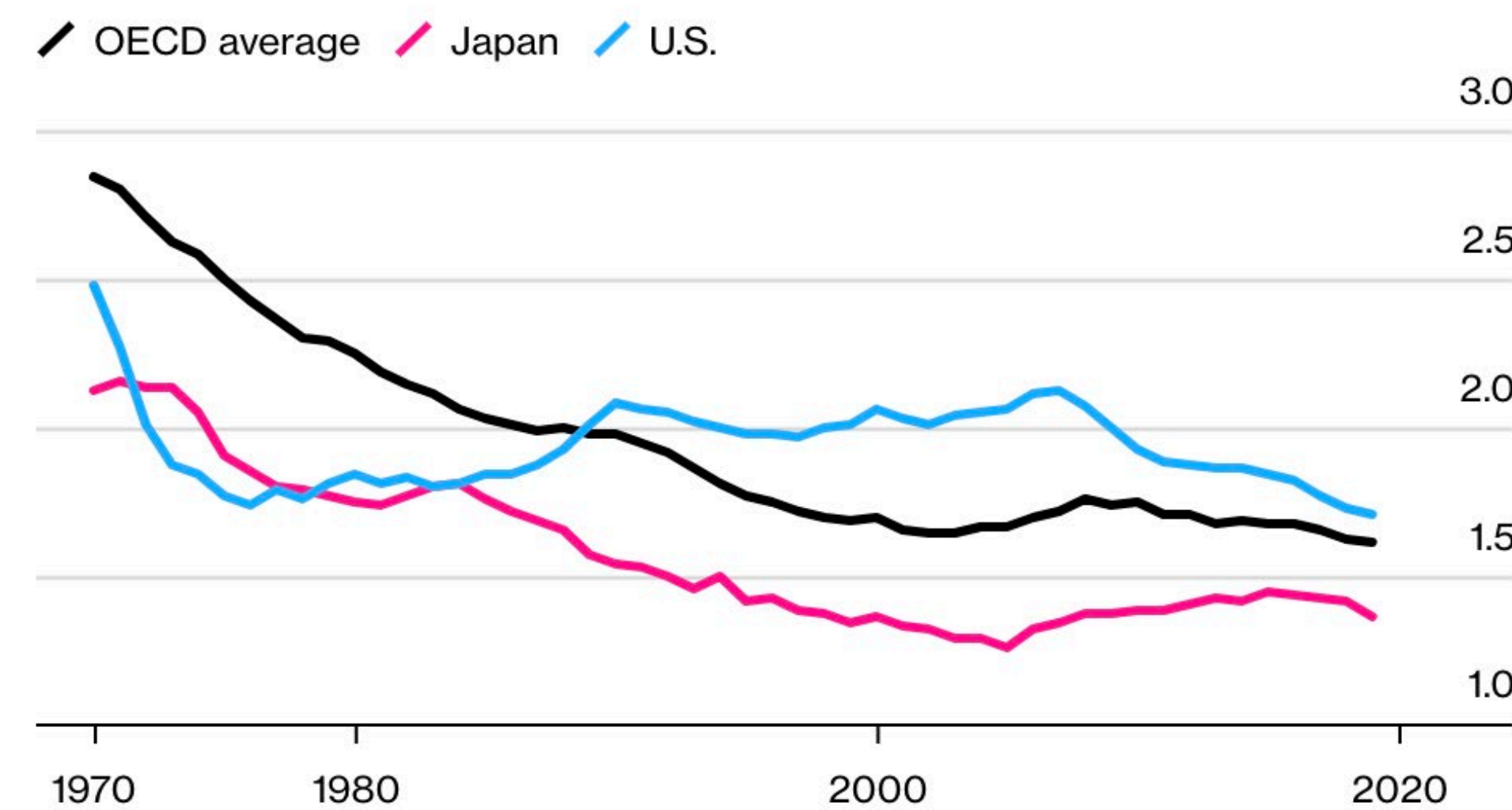
- Labor shortage: As people retire, there are not enough young people to replace them.
- Increased public spending on social services, health care, long-term care, pensions, etc.
- Increased government debt
- Economic crisis
- Depopulation of rural areas

Intervention

“In thinking of the sustainability and inclusiveness of our nation’s economy and society, we place child-rearing support as our most important policy” – Prime Minister Kishida

Fewer Births

Japan has one of the lowest fertility rates in the world



Act No. 76 of 2020

- 3.5 trillion yen (25 billion USD)
 - Enhance child-care services
 - Enhance financial support for child-rearing households
 - Expand and enhance parental leave benefits
 - Improve housing facilities for families with children
 - **Expand national health insurance to cover fertility screening and treatments**
 - Reimburse 70% of the cost of infertility treatment starting April 1, 2022
 - Cost is the biggest barrier to infertility treatment
 - Japan: 500,000 yen per IVF cycle (3,804 USD)
 - USA: 12,400 USD per IVF cycle

Assisted Reproductive Technology (ART) in Japan

- 622 registered ART facilities (2020)
- 60,381 live births conceived through IVF in 2020
 - 1 in 14 (7%) live births in 2019
 - In contrast, 1.6% in the USA

Discussion

This government intervention targets Japan’s declining birth rate with the goal of interrupting the rapid aging/shrinking of its population and subsequent effects on its economy.

As this measure has been implemented relatively recently (April 2022), the long-term effects that this measure may have on the usage of ART services and its impact on total fertility rates in Japan are still unknown.

ART is already prevalent in Japan, with 622 registered facilities (2020) and 1 in 14 (7%) live births being conceived through IVF (2019). This suggests a cultural awareness and acceptance of ART methods such as IVF.

Since cost is the biggest barrier to infertility treatment and a primary reason why women and families are choosing to delay or forgo childbirth, this intervention has the potential for success.

Limitations

- Not targeting the core problem
 - 41.8% of registered ART cycles in Japan are for women in their 40s
 - Natural age-related decline in egg quantity and quality
- IVF limited to legally married heterosexual couples
 - Limit single women, men, and same-sex couples looking to use donor sperm or eggs to conceive
 - Does not provide coverage for egg freezing
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AGE	LIVE BIRTHS PER EGG RETRIEVAL (ALL EMBRYO TRANSFERS)
Under age 35	44.5%
Ages 35-37	32.4%
Ages 38-40	20.2%
Ages 41-42	9.6%
Over age 42	2.9%