

**Comment on
“Demographic
Aging, Fiscal
Reforms and
Macroeconomy
in Japan”**



HARVARD Kennedy School

Presented at the Economic and Social
Research Institute International
Conference on Demographic Change
and Economic Growth

August 3, 2023

Douglas Elmendorf
Harvard Kennedy School

This paper continues and extends an important body of research

Tomoaki Yamada and his co-authors over time have built an impressive overlapping generations model for Japan

They've incorporated a huge array of micro data and aggregate data to capture a great deal of complexity in the economy and government policy

This paper (like its predecessors) is very careful about the details of modeling *and* is ambitious about the economic issues addressed

It is a pleasure to read and discuss this paper

This paper continues and extends an important body of research

Aging in Japan represents a substantial economic challenge and an immense fiscal challenge—and thus a significant political challenge as well

Eliminating the projected fiscal imbalance in Japan would require an increase in the consumption tax rate (if only that tool was used) of roughly 35 percentage points—meaning, additional revenue equal to roughly 20 percent of GDP

Therefore, no single reform to government spending or taxes will fully address the fiscal challenge

This paper continues and extends an important body of research

Tomoaki Yamada's paper and presentation provide an excellent analysis of the Japanese fiscal outlook and the effects of some possible fiscal reforms

I'll direct my comments more broadly—on the economic and fiscal challenges that arise from aging generally and on some key issues regarding alternative fiscal reforms

My comments draw on: Cutler, Poterba, Sheiner, and Summers (*Brookings Papers on Economic Activity*, 1990); Elmendorf and Sheiner (*Journal of Economic Perspectives*, 2000 and 2017); US Congressional Budget Office (analyses of ways to address aging and fiscal imbalance); recent research on causes and implications of low government interest rates

Population aging is a global triumph as well as a challenge

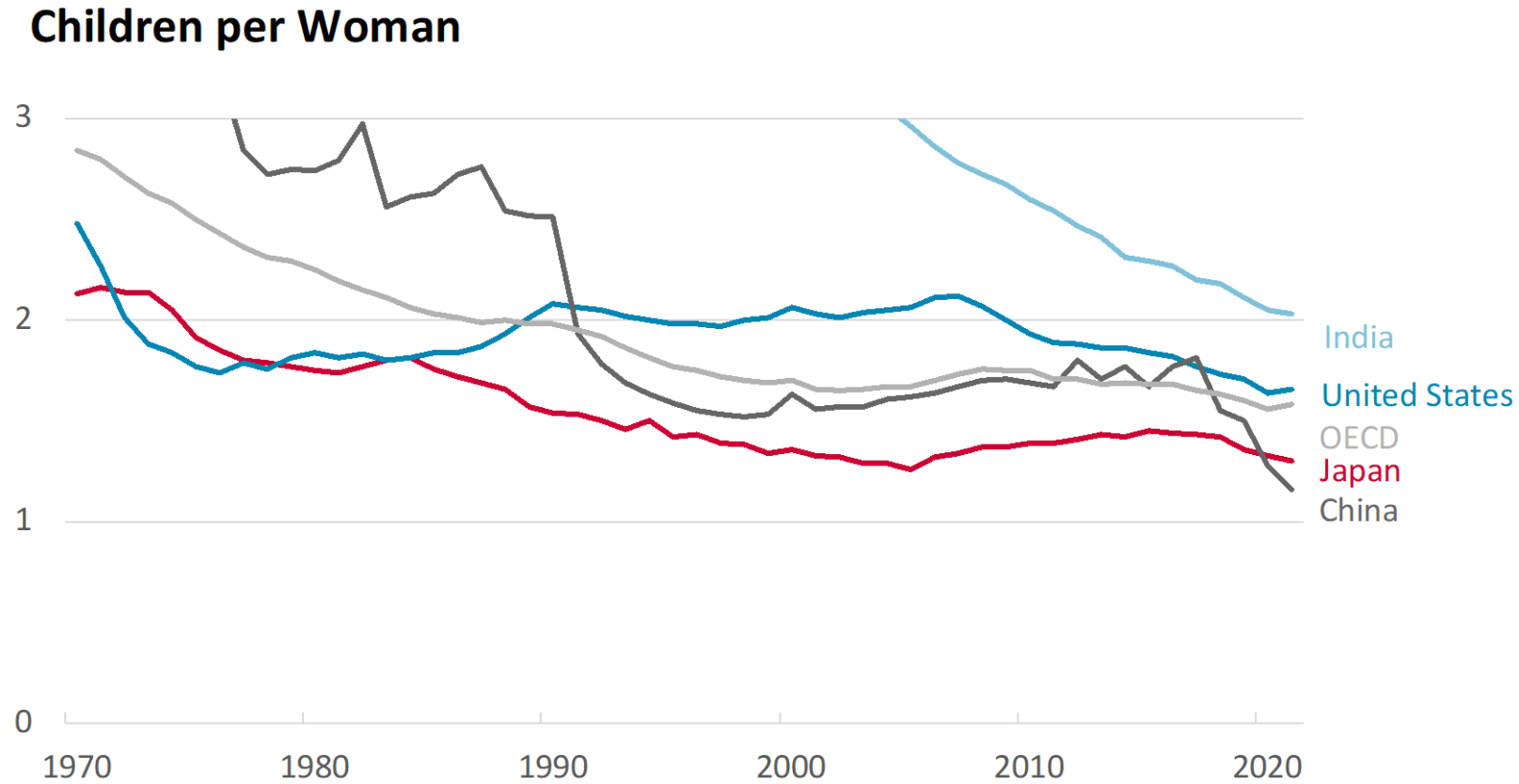
Population aging stems from two sources: **increasing longevity** and **declining fertility**

Increasing longevity is a wonderful medical and social accomplishment

Declining fertility seems to reflect mostly an expansion of individuals' range of choice, which we should celebrate, although it may also reflect aspects of public policy and social structure that discourage child-raising (availability and cost of childcare, availability and cost of housing, flexibility of work arrangements, tax policy)

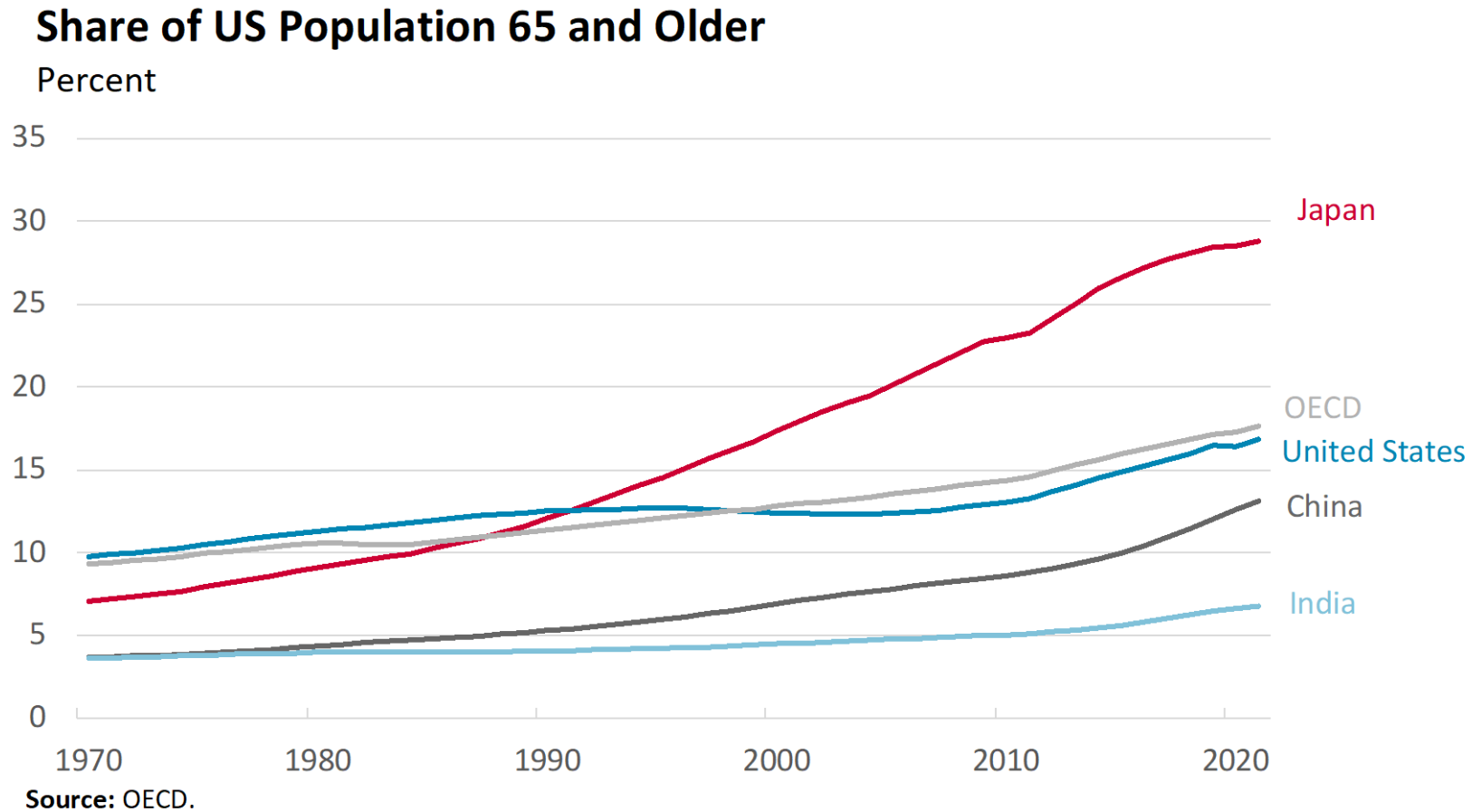
→ Global “baby bust,” with 124 countries now having fertility rates less than the replacement rate of 2.1

Many countries are experiencing “baby busts”



Source: OECD.

Populations are aging in many countries



Population aging is an economic challenge

Discussions of aging and fiscal policy often focus on the rising cost of government programs for older people, and certainly that rising cost is important

But aging would be an economic challenge—and therefore a policy challenge—even if we had no government programs for older people

Population aging is an economic challenge

Key point: Retired people live on the output produced by workers

Increasing longevity → raises dependency ratio, reducing feasible steady-state consumption per person (C)

Declining fertility → raises dependency ratio (because the effect of more retirees tends to be larger than the effect of fewer children), reducing C
→ reduces saving needed to provide capital to new workers, raising C
→ probably reduces productivity and innovation, reducing C

On balance, in many countries, feasible steady-state consumption per person declines

Population aging is an economic challenge

As an economy adjusts, the combination of

Slower growth of the labor force *and*

Greater saving as more households prepare for longer retirements

raises the capital-labor ratio (in a closed economy, or an open economy in an aging world)

→ Raising the marginal product of labor, increasing wages

→ Lowering the marginal product of capital, reducing the return to saving

These changes in factor returns have further effects on behavior and also have distributional effects across and within generations

Policy responses can shift burdens and opportunities but cannot undo all the effects

Population aging is an economic challenge

The global span of population aging today is important, because it makes the situation for our open economies more like that of an aging closed economy:

Slower growth (or decline) in labor forces cannot be offset as readily through greater immigration from other countries

Greater saving cannot be distributed as readily to other countries with less capital per worker

Population aging is a fiscal challenge

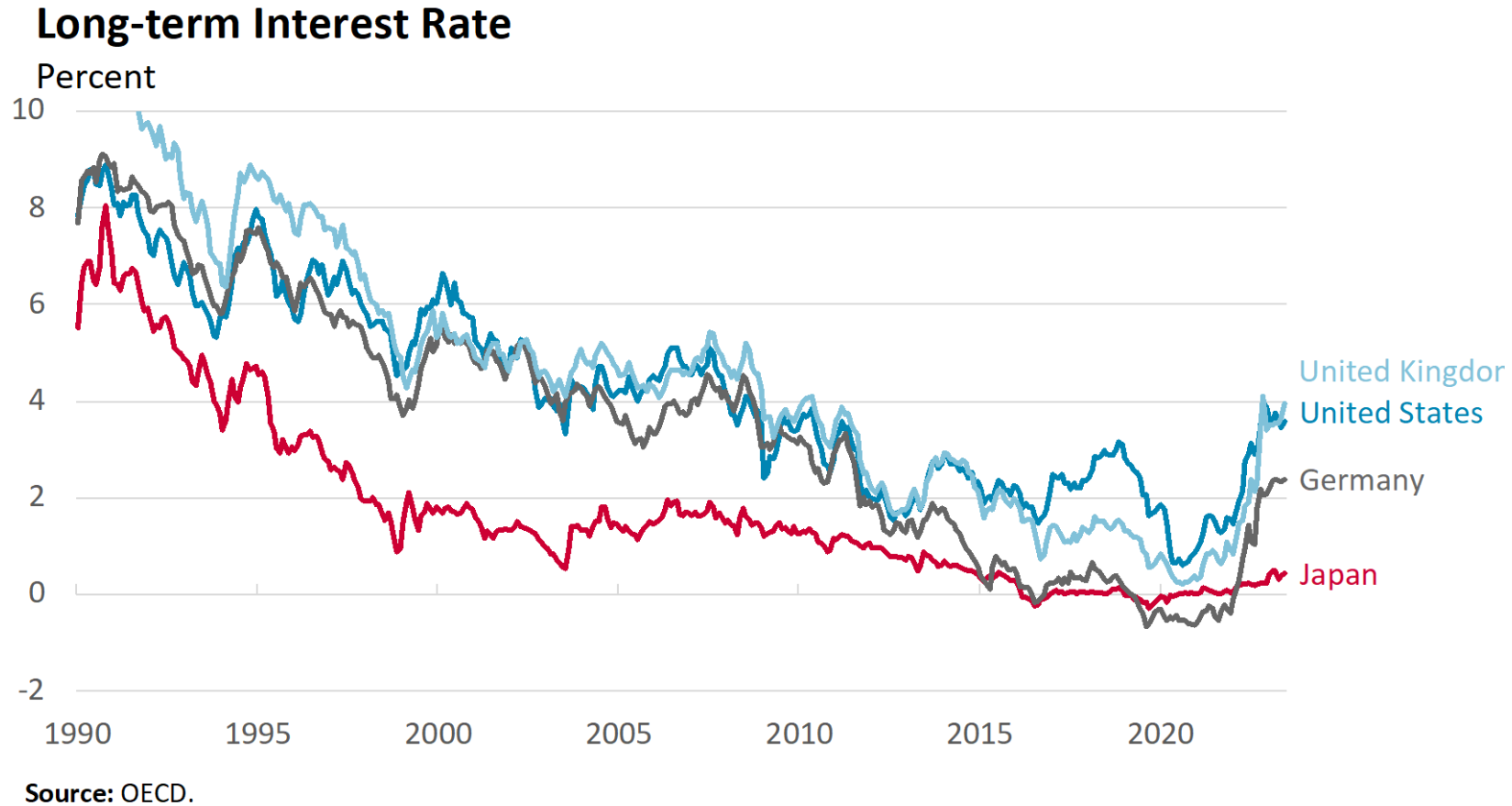
Governments can adjust fiscal balances to influence national saving or address distributional consequences of aging

A large share of spending by governments in advanced economies is for pensions and health care for older people, so fiscal sustainability will require large budget changes

In the US, about half of noninterest spending by the national government is for pensions and health care; aging and rising per-person health spending are on track to boost such spending by ~5% of GDP over the next 30 years (on a base of 12%)

In addition, we have experienced another key change in the backdrop for fiscal policy—a 30-year downtrend in interest rates on government debt in advanced economies

Population aging is a fiscal challenge



Population aging is a fiscal challenge

Most analyses of factors affecting global supply and demand for loanable funds imply that rates will tend to be below their historical levels in the years ahead, which means:

- A slower buildup of government debt for given noninterest deficits
 - Less urgency in addressing fiscal imbalances
- *Probably*, a lower cost to the economy of government borrowing
 - Less urgency in addressing fiscal imbalances
- We should not forget about macroeconomic risk, because that risk is why rates on safer assets can be so low in dynamically efficient economies
- We should be cautious about applying economic models that do not capture the decline in rates

Many policy changes are possible, but all have disadvantages

Different policy changes would have different effects on macroeconomic outcomes, budgetary outcomes, the average well-being of different generations, and the distribution of well-being within generations

Policy changes should be evaluated in the context of other economic conditions, including strong (and appropriate) pressures to make economic gains broadly inclusive

The distributional effects matter for analytic evaluations and for political feasibility

Among the items on the menu of fiscal reforms ...

Many policy changes are possible, but all have disadvantages

Faster changes in fiscal policy would generally be better for younger and unborn generations than for older generations

- *How important is giving people time to plan ahead?*
- *Will younger and unborn generations be better off because of productivity growth or worse off because of climate change and other factors?*

Increases in labor force participation by working-age people would generally increase income for all generations

- *What policy changes might produce this outcome?*
- *What would be the value of lost time for caregiving and leisure?*

Many policy changes are possible, but all have disadvantages

Increases in fertility or productivity would generally increase income for all generations

- *What policy changes might produce these outcomes?*

Delaying eligibility for retirement benefits would have differential effects on people with different longevity

- *Can policy be different for different groups?*

Cutting government spending apart from benefits for older people might appear to increase income for all generations, but ...

- *Would valuable investments in infrastructure, R&D, or young people be reduced?*

Many policy changes are possible, but all have disadvantages

Reductions in benefits would generally increase income for the average person in all younger and unborn generations relative to increases in tax rates

- *Would lower-income people or sicker people in younger and unborn generations be worse off?*
- *Would this break the social contract with older generations? (Has each person “earned” their individual benefits even if the aggregate cost is higher now?)*

Increases in consumption taxes would generally increase income for the average person in all younger and unborn generations relative to increases in income tax rates

- *Would lower-income people in younger and unborn generations be worse off?*

In conclusion

Tomoaki Yamada's excellent paper and presentation show clearly the Japanese fiscal outlook and the effects of some possible fiscal reforms

Population aging is a global triumph, but it poses substantial economic and fiscal challenges—especially in Japan, which is aging very dramatically

Major policy changes are needed, but all have disadvantages

Further careful analysis will be needed, and political decision-making will be very difficult



Thank you



HARVARD Kennedy School