



UHERO

THE ECONOMIC RESEARCH ORGANIZATION
AT THE UNIVERSITY OF HAWAII

Forecast Project

Saving, Investment, and Japan's Current Account Balance

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11th Global Meeting of the National Transfer Accounts Network
Dakar and Saly, Senegal, June 20-24, 2016

Japan's persistent surplus

- **Japan's current account in surplus for three decades**

- Support for export-led growth, capital flows to other countries, but exporting unemployment?

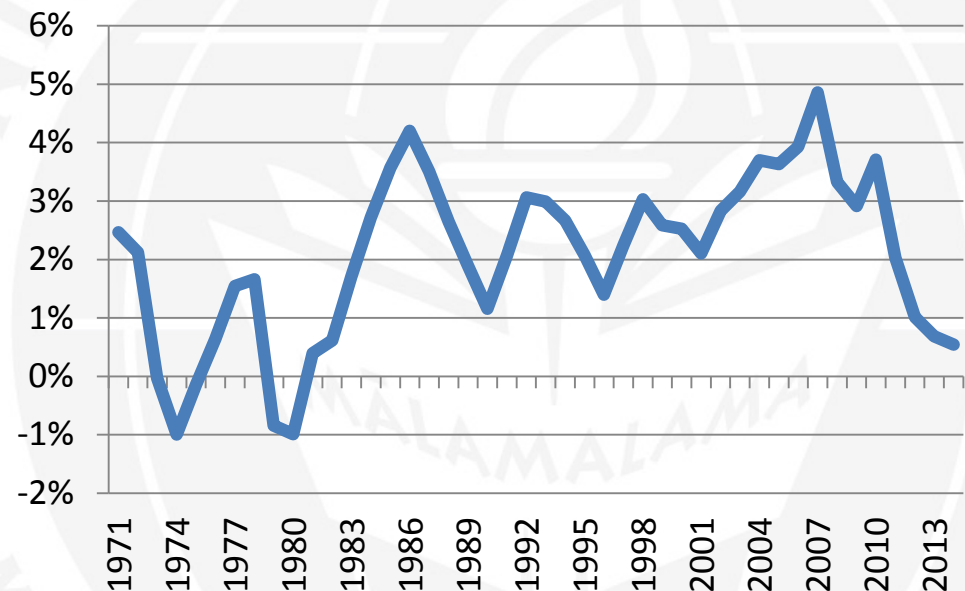
- **Gap has closed recently**

- Special circumstances
- Changes in macro fundamentals that have supported high saving

- **Might current account deficits be the new norm?**

- How will saving change compared with investment?

Japan's Current Account Balance
(Percent of GDP)



Our objective

- **Evaluate Japan's current account from a macroeconomic perspective**
 - Recent adjustment
 - Prospects
 - What are the implications for saving and investment of coming demographic change?
 - Of requirement that public finance be sustainable?
 - Simulations in National Transfer Accounts context
 - Unfinished business: Why we really need a global perspective

The macro perspective on the current account

- **Trade perspective**

- $CA = X - M + NFI + NTR$

- **A macro perspective: Saving and investment**

- $CA = CF = S - I$

- National saving includes private saving and the government budget surplus

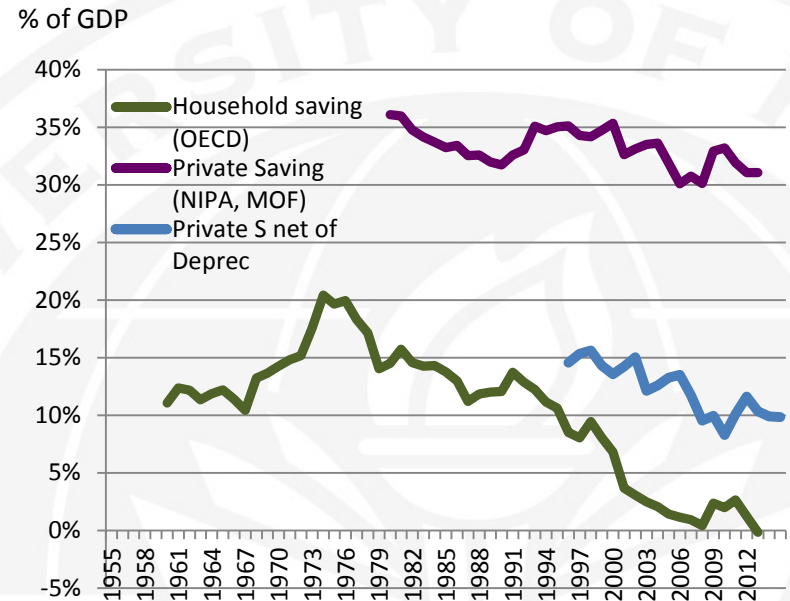
Japan's changing saving and investment

- **Personal saving has trended lower**

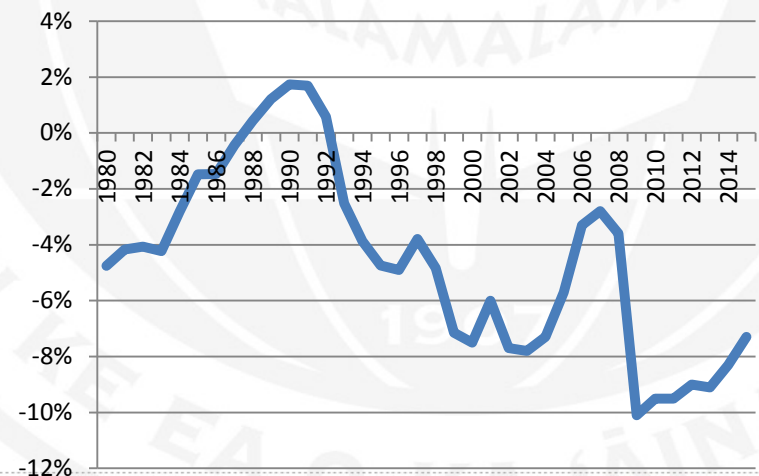
- *Life-cycle* saving supported high rates in the past

- **Government budget has deteriorated**

- From surpluses in 1980s to deficits of 9–10% of GDP



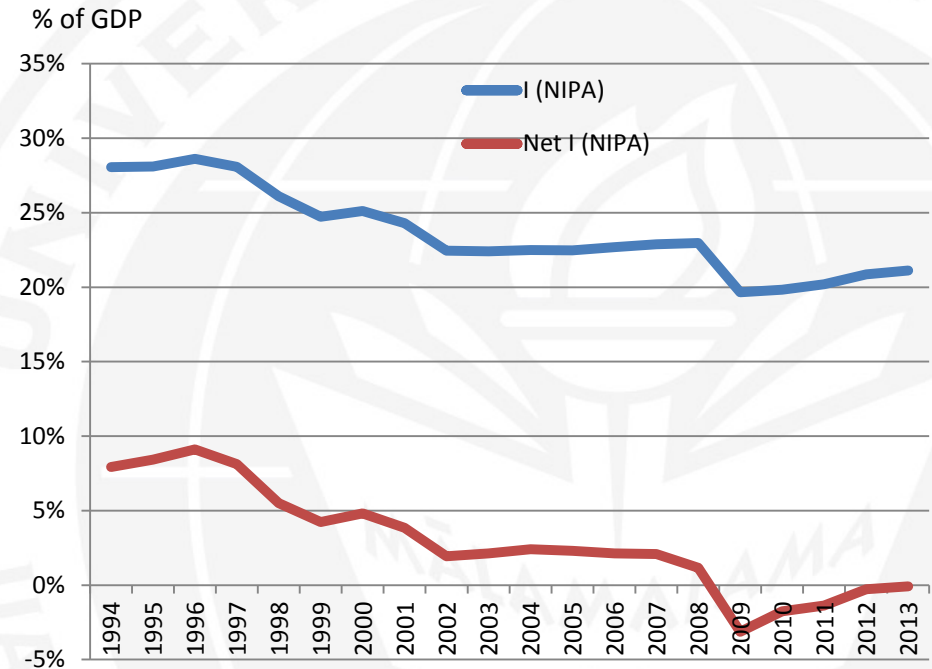
Govt Budget Surplus



Japan's changing saving and investment

■ Investment has also fallen

- Lower productivity growth, flattening labor force, and slowing growth



Japan's changing saving and investment

■ Note

- There are important demographic stories
- Cyclical factors can explain a portion of both
- And there have been special factors
 - Post-Fukushima energy imports
 - Competitiveness and outsourcing?

Current account prospects

- **Aging population will reduce life-cycle saving needs**
 - But people could retire later; female labor force participation could rise, fertility could recover
 - Government transfer cuts could affect behavior
 - Not all saving is life-cycle related
- **Shrinking labor force will reduce investment**
 - But incentives for labor-saving investments
- **Government budget will have to improve**
 - Otherwise debt will balloon to 400% of GDP by 2040
 - Growing fiscal burden of population aging will make this very difficult
- **No consensus in the literature on the net effect on the current account**

Projecting drivers of the current account

An NTA structure for projecting S, I and the CA

■ Private saving

- Individuals at each age receive labor income, private asset income, public and private transfer inflows, and net transfers from abroad
- They pay taxes and allocate disposable income across consumption, saving, and outward transfers
- Ratios of consumption and saving by age are fixed; transfers vary with age structure
- Aggregate private saving evolves along with age structure

■ Public saving

- Given policy, taxes and public transfers change with demography, with implications for government's budget balance and debt position
- We assume changes in tax and spending profiles needed to create a sustainable fiscal path

■ Investment

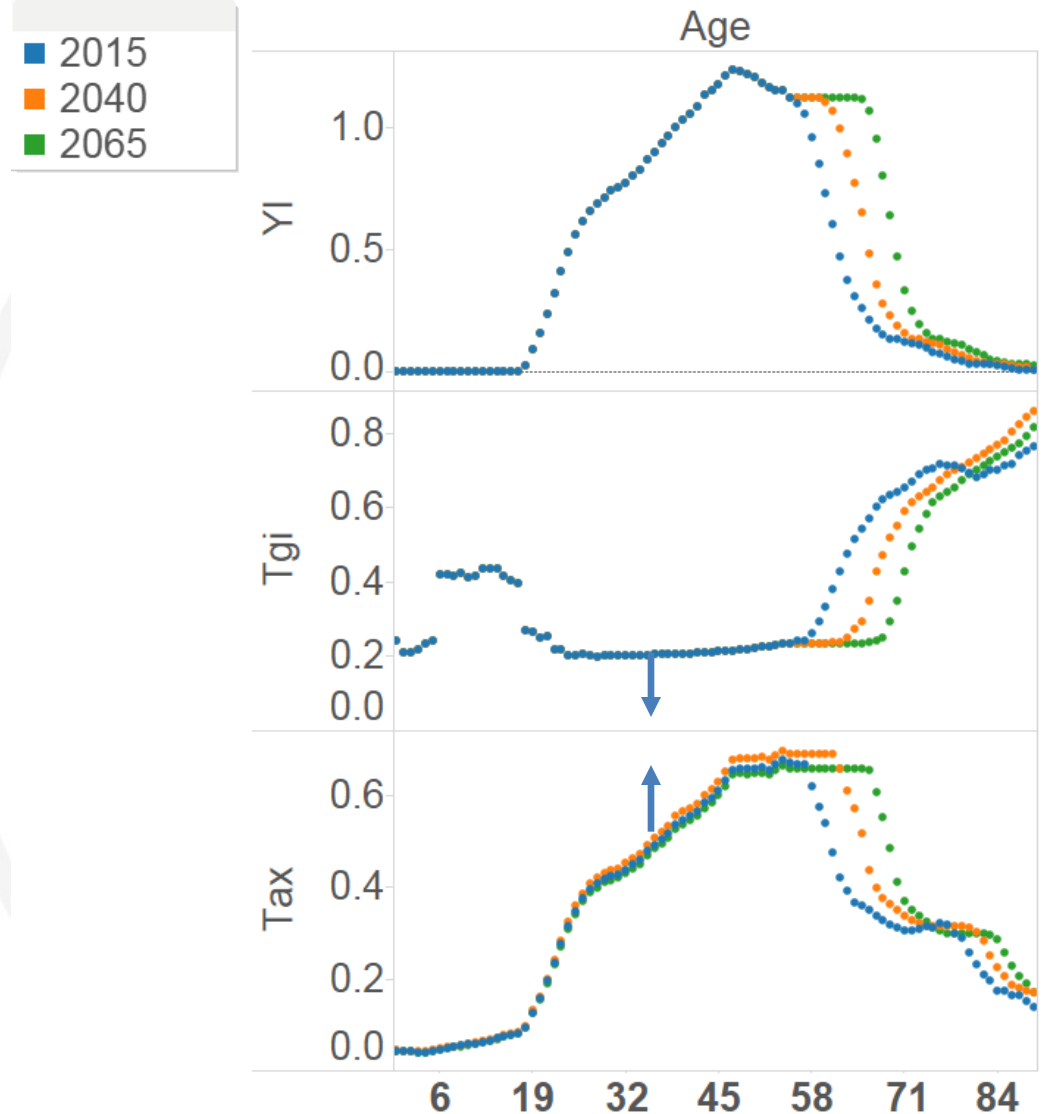
- Output changes with effective labor force and exogenous productivity growth (no feedback from investment and capital formation)
- Net investment as needed to maintain fixed capital/output ratio

Alternative scenarios

- **Japan's harsh fiscal reality will require big policy changes**
- **We simulate two paths**
 - *Status quo scenario.* Normalized age profiles of public transfer inflows and taxes are held fixed at their initial year values
 - *Survival-linked scenario (life-cycle reform).* Normalized age profiles of labor income, public transfer inflows, and taxes are indexed on age-specific survival rates as a proxy for life expectancy and health
- **In both cases, we restrict net debt/GDP ratio to 125% and size of government to 45% of GDP**
 - Public transfers are reduced at each age and taxes are raised to meet these constraints

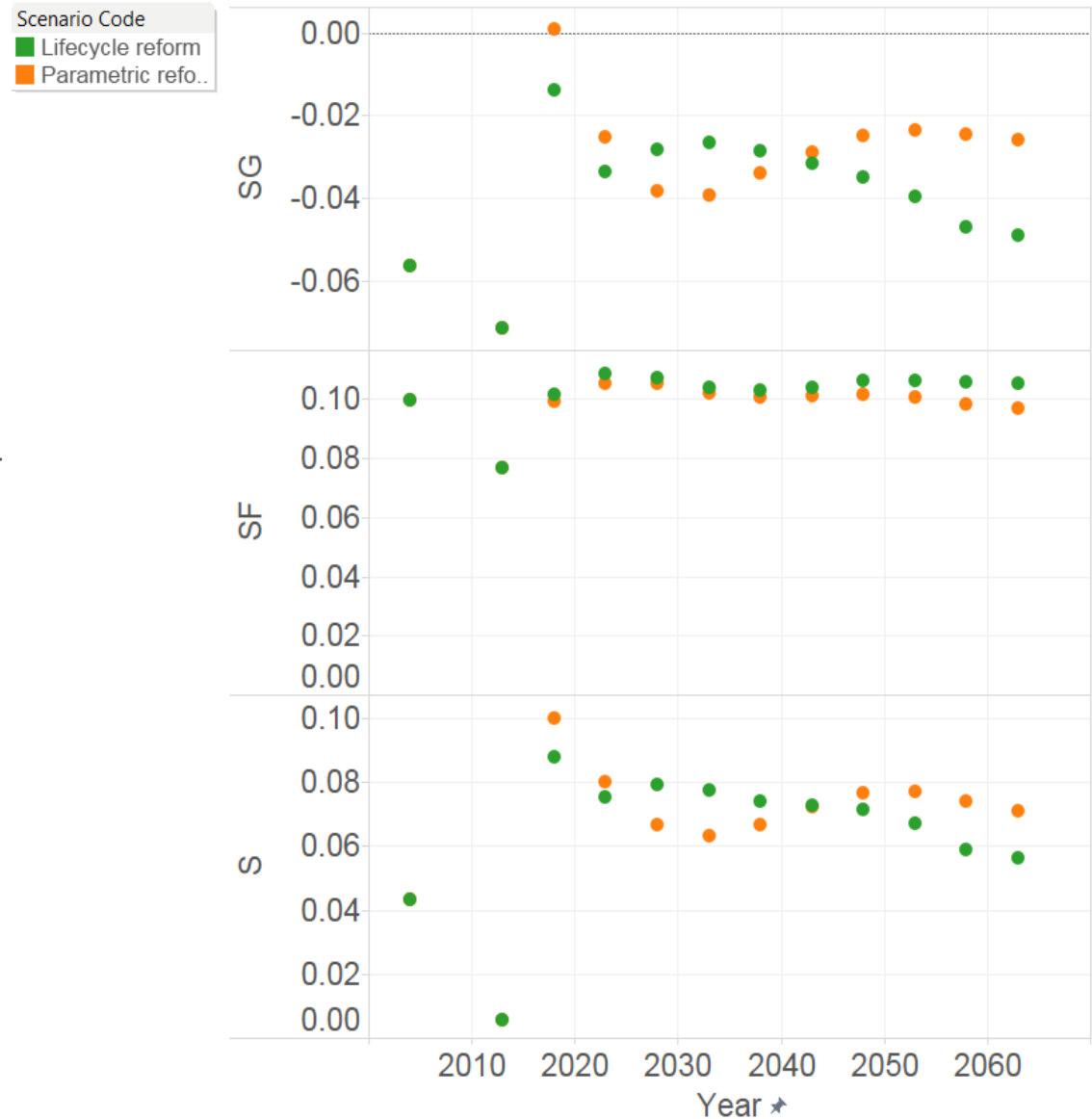
Survival-linked reform

- Survival-linked scenario pushes “retirement age” out by about ten years over the century
- Raises labor income and taxes for older residents
- And reduces their transfer inflows
- In each case transfers get pushed down and taxes up as fiscal constraints bind



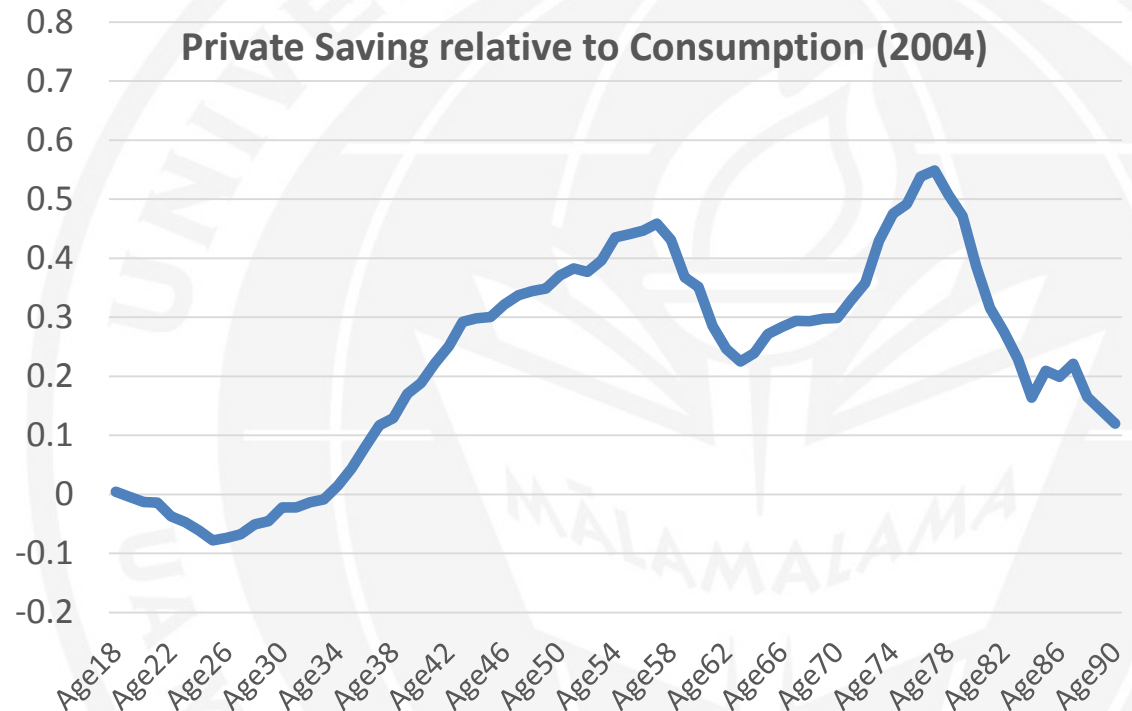
The saving rate remains high

- **Public dissaving is reduced rapidly under fiscal constraint**
 - Required adjustments are smaller in survival-linked case
- **Private saving rate remains in the 10% range**
- **There is no marked downward trend in national saving**



Saving does not decline monotonically with age

- **Econometric studies often predict savings will turn sharply negative as old-age dependency rises**
- **But Japanese saving remains high in retirement**
- **A life-cycle based alternative NTA projection has some savings decline, although not a turn to negative**



Current account surpluses widen and persist

- **So national saving jumps and remains high**
- **Investment declines**
 - Less in the survival-linked case because effective LF decline is smaller
- **Current account surpluses actually widen in the near term and remain positive**

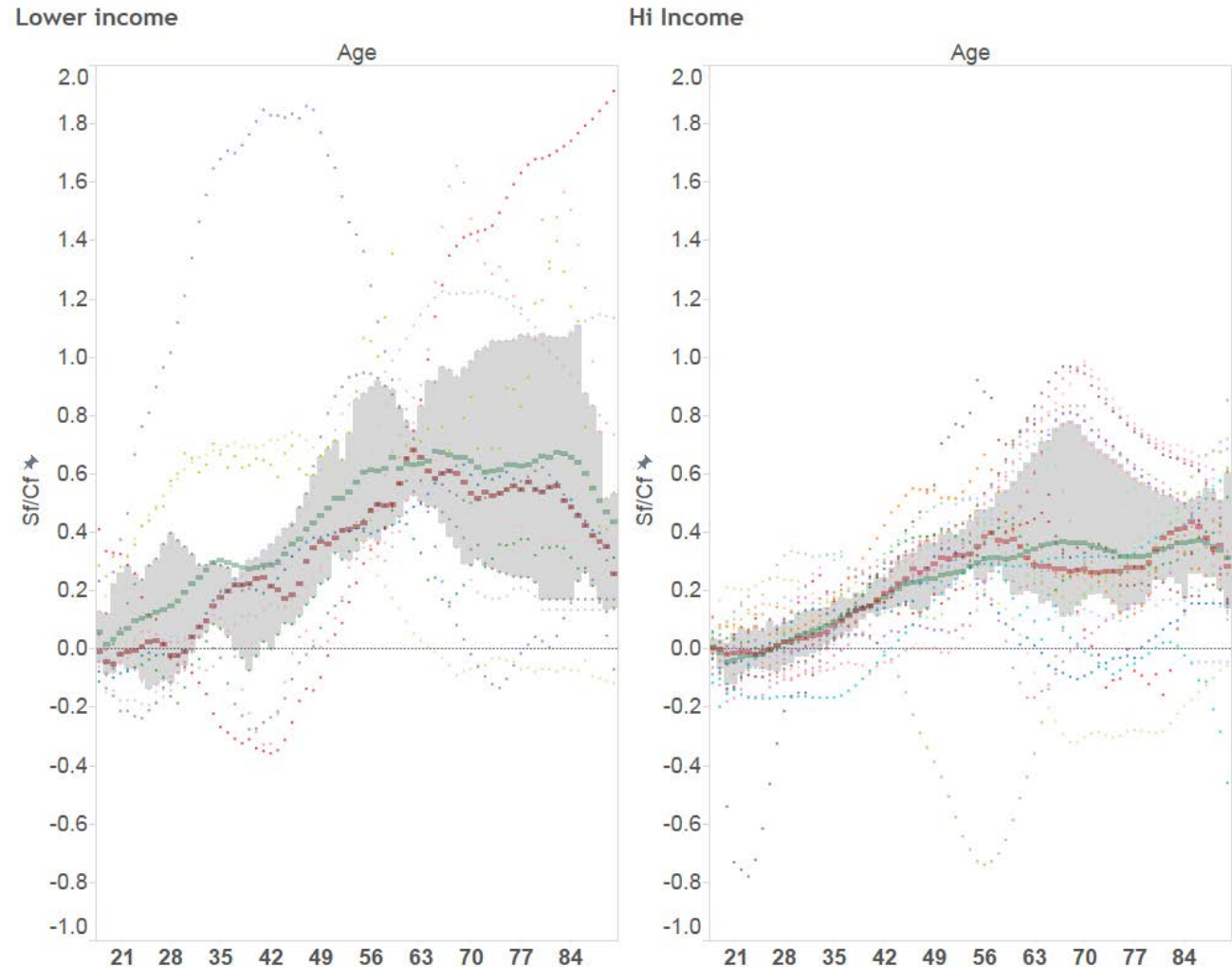


The global context

- **CA surpluses of this size will probably not be sustained**
 - Feldstein-Horioka result
 - Adjustments inside Japan?
 - Adjustments in Japan's external relationships?
- **The need for a global context**
 - Current accounts balance globally
 - Where will the saving and investment be?
- **There is some literature on expected patterns of capital flows**
 - Some predict capital will flow from aging countries to younger ones
 - But others find a move to deficits to meet aging needs
- **NTA data should be able to shed light on this**

A global saving glut?

- The pattern of persistently high elderly saving is shared by many countries
- How will this compare with investment demand?
- Implications for rates of return and S, I levels



Conclusion

- **Prospects for Japan's current account are more complex than commonly thought**
 - Change will depend on relative changes in saving and investment
 - Demographic change will play a major role
 - Government budget adjustment will be key
 - Has direct and indirect effects
 - Existing literature overestimates the decline in old-age saving
- **There is a great deal of uncertainty about all of these factors**
 - What will be relative magnitude and timing of SF, SG, and I?
 - Depends on behaviors that are hard to predict, reactions to policy
 - Global patterns of saving and investment will matter