

# Is Low Fertility and Rapid Population Aging Really a Problem?

10<sup>th</sup> Global Meeting of the  
National Transfer Accounts Network

Beijing, November 14, 2014

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## Based on:

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# ISSUE

- Widespread concern that low fertility and rapid population aging will lead to:
  - Severely strained public budgets
  - Reduced standards of living
- Governments of more than 50 countries reported to the UN that their birth rates were too low.
- Many governments are adopting programs to encourage couples to have more children.

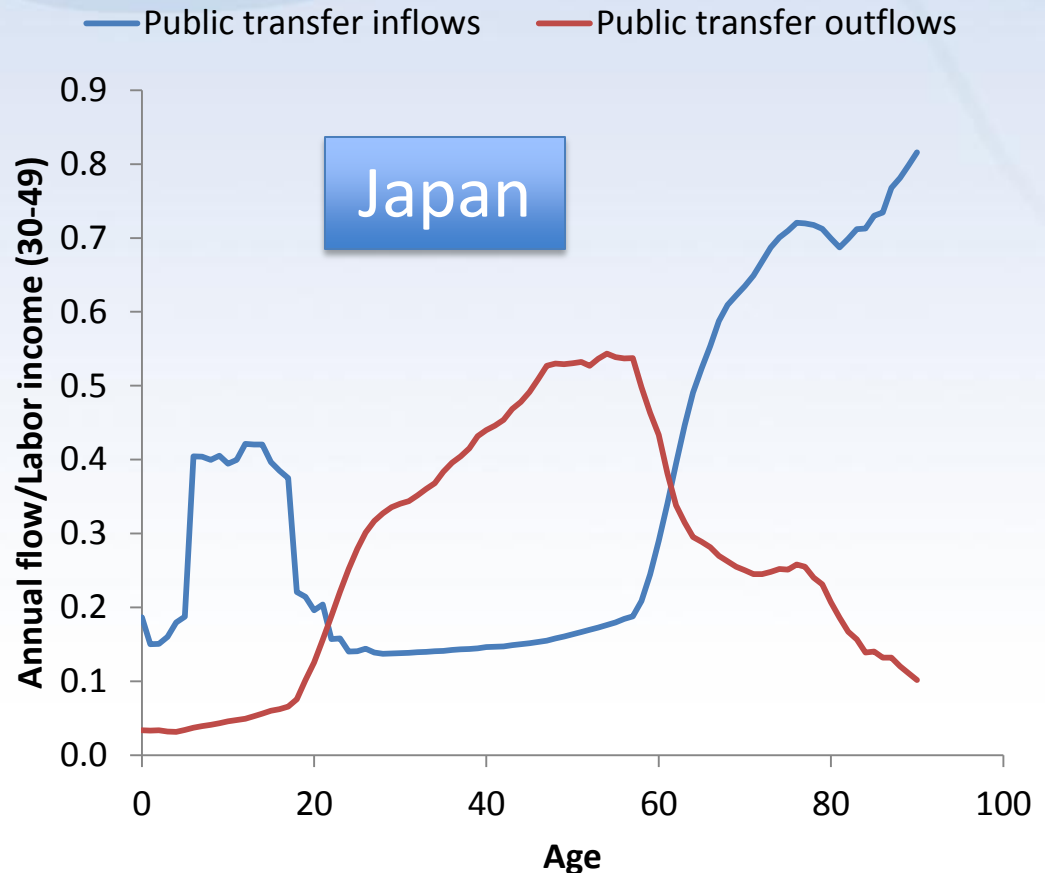
# Findings

- Moderately low birth rates, below replacement fertility, are actually ideal for achieving a high material standard of living.
- Fiscal problems can be addressed by:
  - Investing more, and more effectively, in human capital
  - Adjusting retirement ages and eligibility for public support in response to the improved health of older adults
  - Adjusting public spending and tax systems as needed
- Only if birth rates are very low, should governments actively pursue pro-natalist policies.

# Low Fertility Does Create Fiscal Problems

# Evidence: Public Sector

- Detailed estimates of public benefits and taxes paid at every age in 29 economies.
- Determined the fertility rate the would produce an age structure allowing the highest age-specific benefits per tax dollar spent.



# Fiscal support ratio for Japan

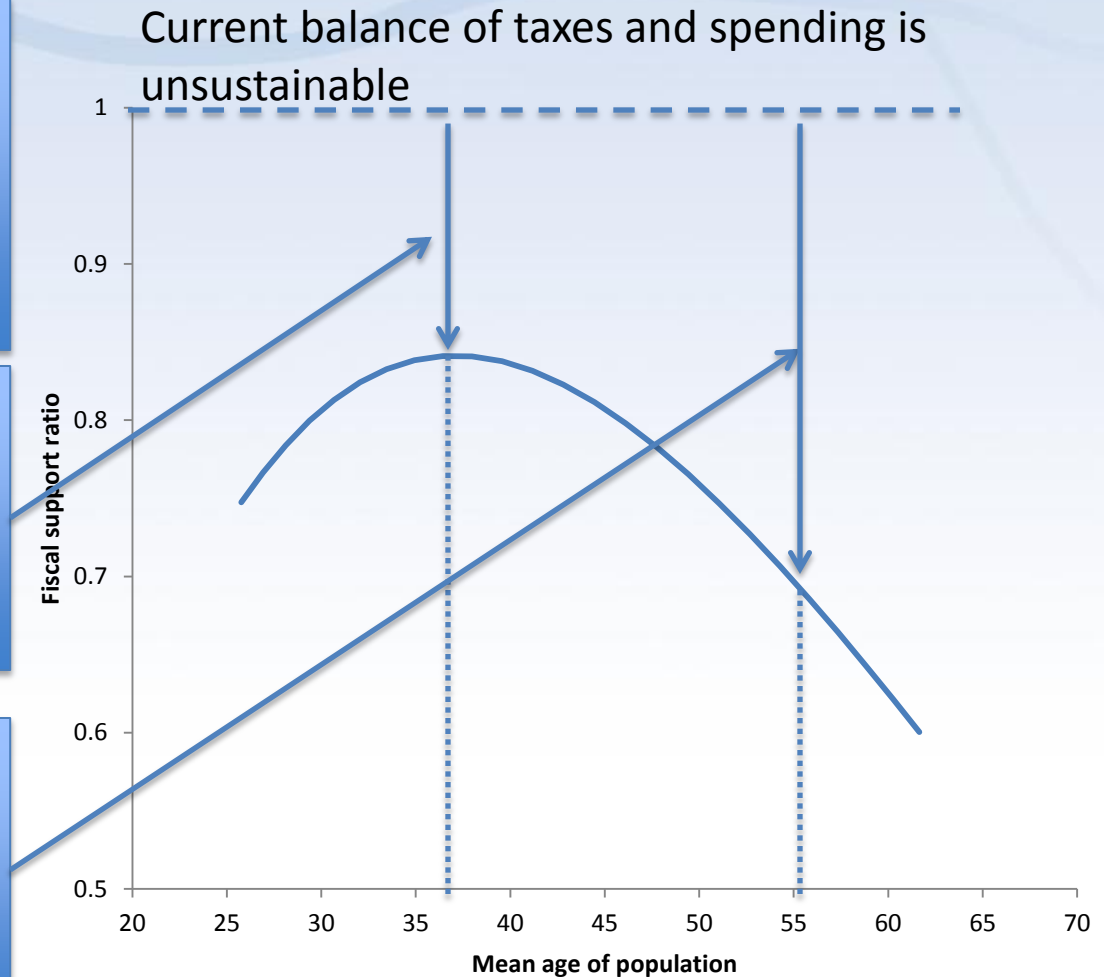
SRG summarizes the adjustments to taxes and/or spending required to maintain current balance between inflows and outflows.

## Best possible outcome

- TFR of 2.7 and mean age in the mid-30s
- Spending cut of 16% or
- Tax increase of 19%

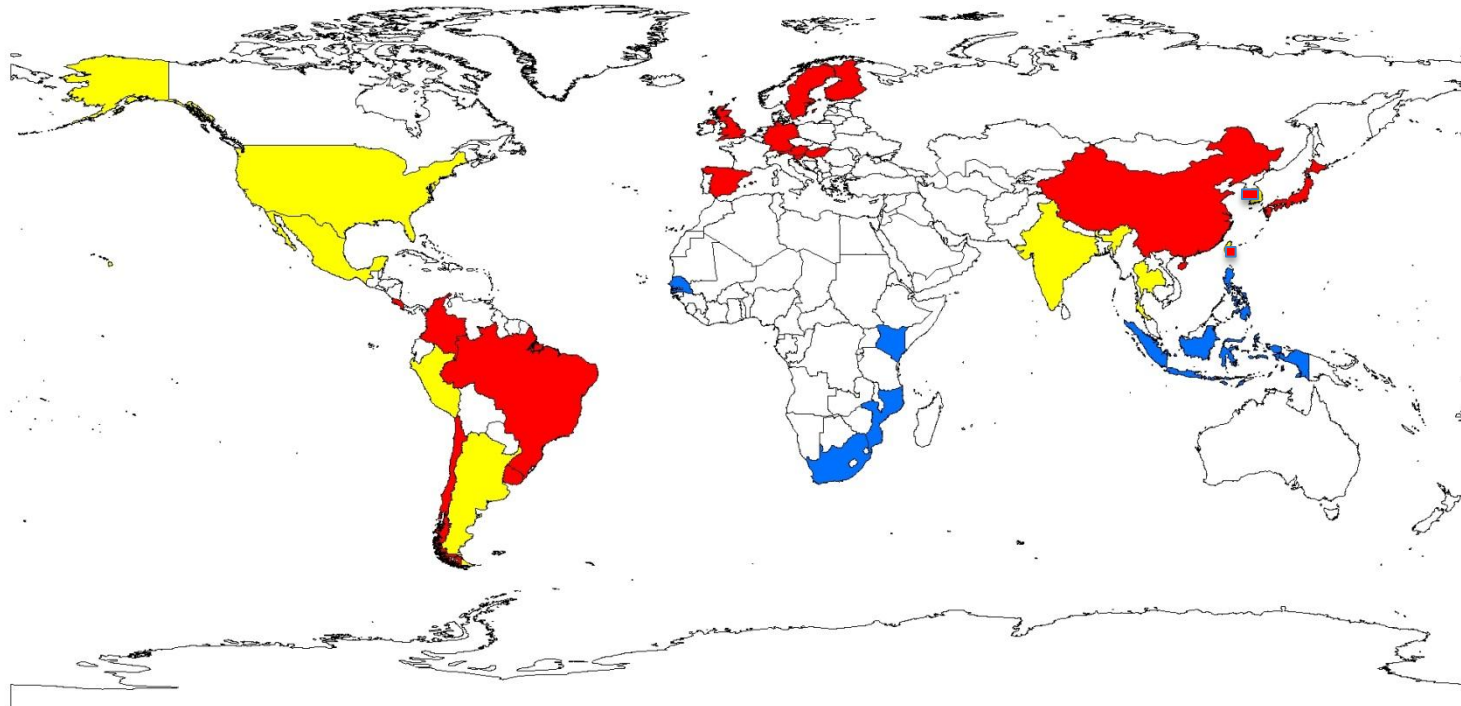
## Status quo outcome

- TFR of 1.34 and mean age in the mid-50s
- Spending cut of 30% or
- Tax increase of 45%



Given age profiles of public transfer inflows and outflows and 2009 mortality schedule.

# Births and Government Budgets





# Moderately Low Fertility Is Best for Standards of Living

# Evidence: Standards of Living

- Detailed estimates of public benefits received and taxes paid at every age in 29 economies.
- Detailed estimates of private costs and benefits at every age in 40 economies.
- Capital costs of a larger labor force.
- Determined the fertility rate that would produce an age structure allowing the highest level of consumption at every age.

# Current TFR and TFRs that maximize standard of living

Income group	Current TFR	Standard of Living	
		K/Y=OECD average	S/Y = Golden rule
Upper-middle income	2.19	1.52	1.20
High income	1.58	1.79	1.48
- low TFR	1.35	1.74	1.44
- high TFR	1.88	1.86	1.54

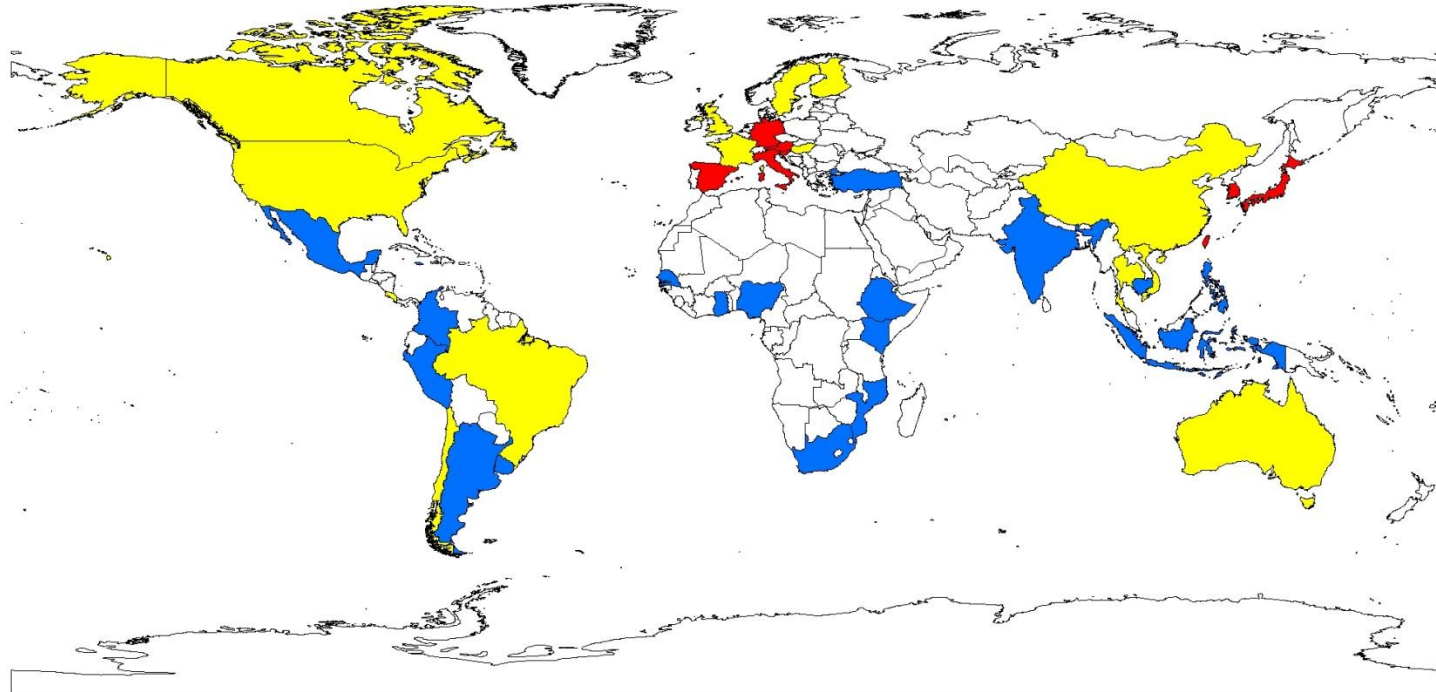
Upper-middle income Economies: Argentina, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico, Peru, South Africa, Turkey, and Uruguay.

High income Economies:

TFR<1.5: Austria, Germany, Hungary, Italy, Japan, Slovenia, South Korea, Spain.

TFR>1.5: Australia, Canada, France, Sweden, UK, US.

# Births and Standards of Living

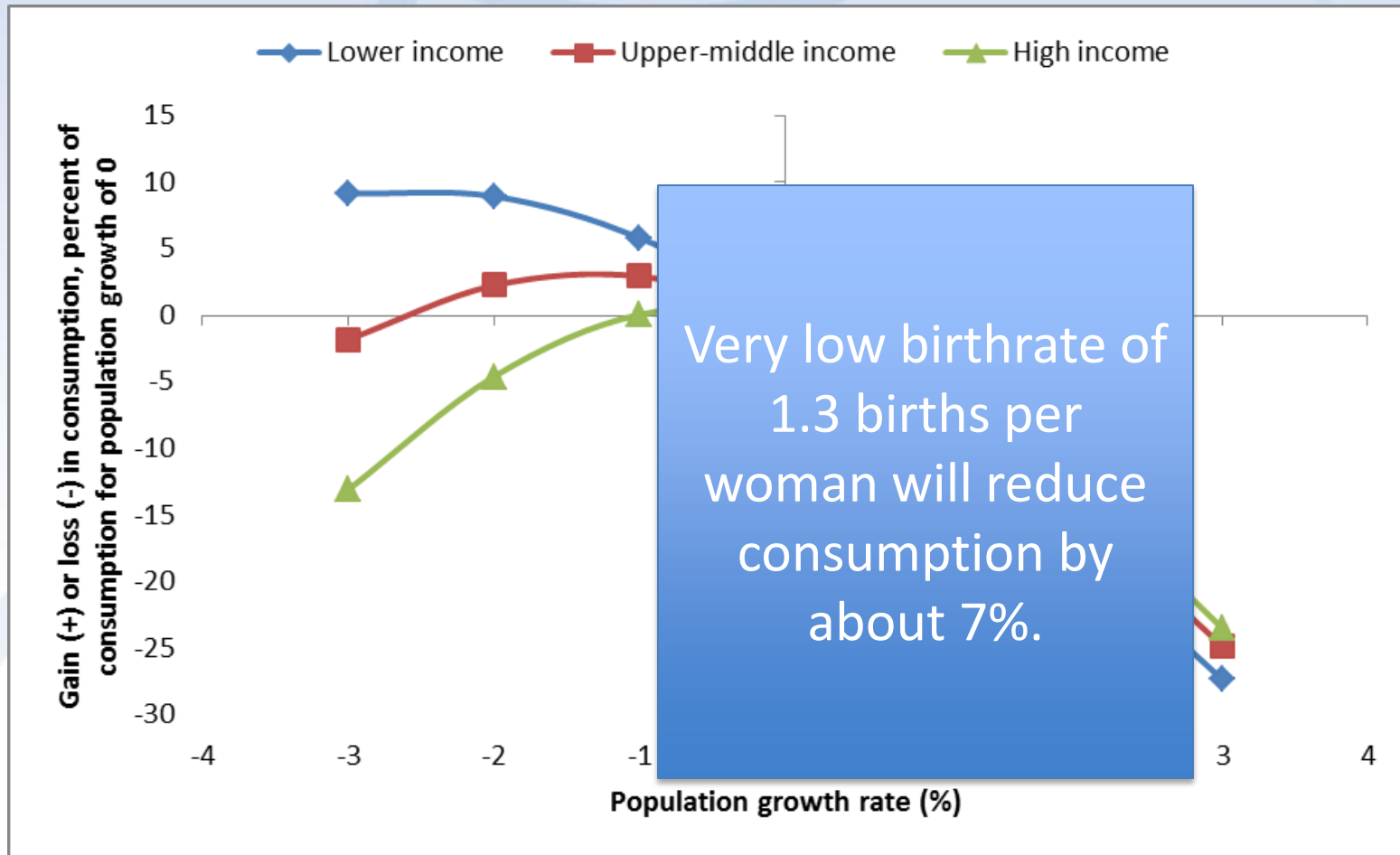


## Legend

### Births per Woman

- Too many
- About right
- Too few
- All others

# Effect of TFR on Consumption ( $K/Y = 3$ , own mortality schedule)



Note: Average values for NTA economies using their current survival schedule and consumption and labor income profiles.

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# Summary

- Changes in age structure in recent decades have led to a very favorable but transitory demographic dividend.
- Going forward, for any demographic scenario, major adjustments to the public sector will be required.
- In most countries, encouraging higher fertility is the wrong answer. It will lead to lower standards of living.
- In a few countries with VERY low fertility, pro-natalist policies should be explored.