

# Population Dynamics and Social Policy: National Transfer Accounts (NTA) Approach

Sang-Hyop Lee

University of Hawaii at Manoa (UHM) &  
East-West Center (EWC)

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# Key Issues

- How population change influence society and economy (current and future)
- What policies can be pursued to influence the outcome—research provides policy tools!

# Population and Policy Issues

- Demographic dividend (economic growth and saving)
- Income security (support system) for the elderly
- Fiscal sustainability
- Intergenerational equity
- Retirement and pension issues
- Responsibility of private vs. public sector
- Human resources (healthcare and education)
- Implication on gender issue and inequality

# Most significant efforts: National Transfer Accounts (NTA)

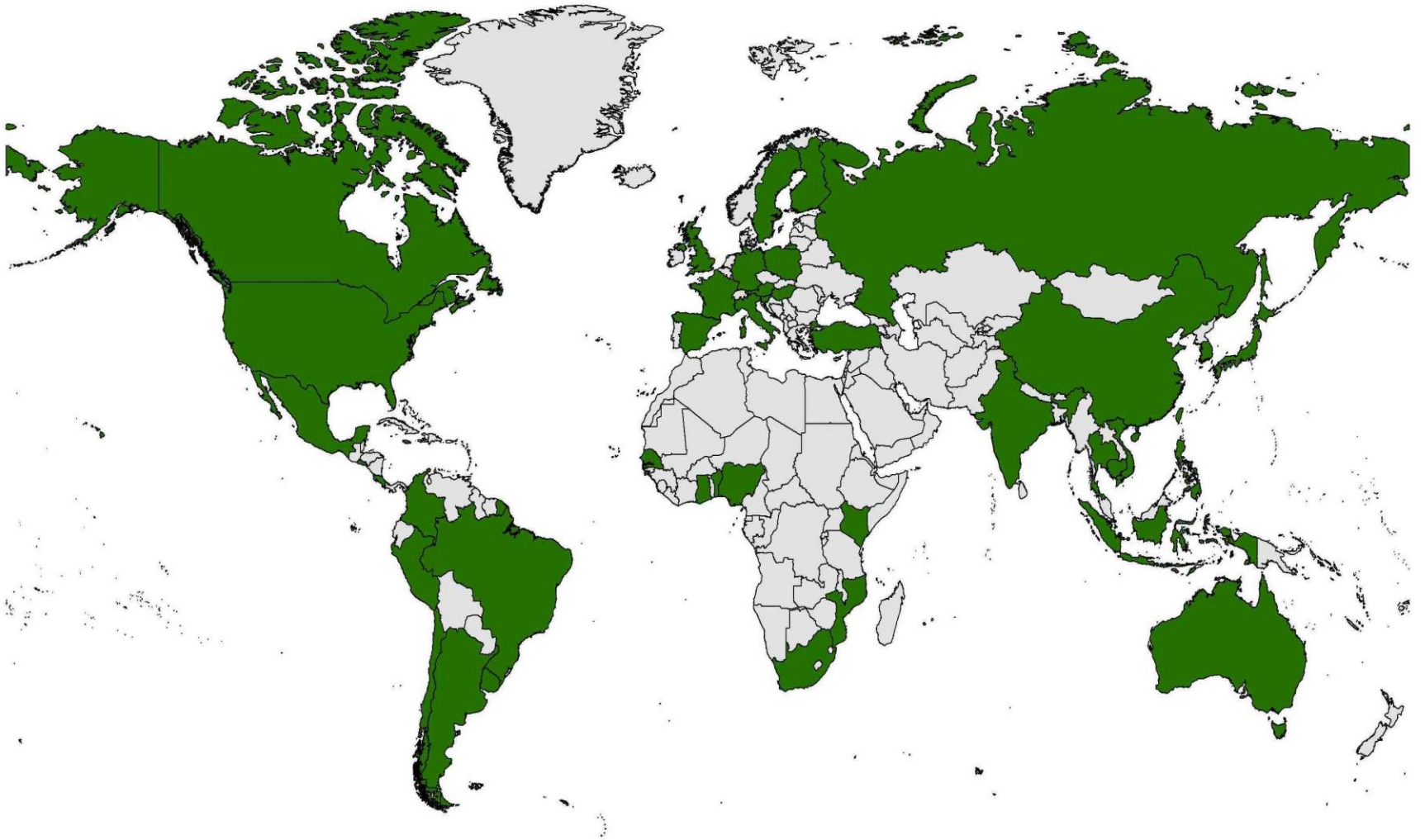
- Integrating population into economy (marriage)
- Quantifies how each age groups acquires and uses economic resources.
- Constructed using existing data (population estimates, surveys, administrative records, macroeconomic data).
- Consistent with UN System of National Accounts.

# Two Directors



# NTA is comparative: Regional Structure

NTA Members			
Asia-Pacific	Americas	Europe	Africa
Australia	Argentina	Austria	Benin
Bangladesh	Brazil	Finland	Ghana
Cambodia	Canada	France	Kenya
China	Chile	Germany	Mozambique
India	Colombia	Hungary	Nigeria
Indonesia	Costa Rica	Italy	Senegal
Japan	El Salvador	Luxembourg	South Africa
(Lao PDR)	Jamaica	Netherlands	
(Malaysia)	Mexico	Poland	
Philippines	Peru	Russia	
South Korea	United States	Slovenia	
Taiwan	Uruguay	Spain	
Thailand		Sweden	
Vietnam		Turkey	
		United Kingdom	



# Global Meetings

11<sup>th</sup> Dakar, Senegal, May/June 2016 (TBA)

10<sup>th</sup> Beijing, China, Nov 10-14, 2014

9<sup>th</sup> Barcelona, June 2013

8<sup>th</sup> Rio, Brazil, December 2011

7<sup>th</sup> Honolulu, June 11-12, 2010

6<sup>th</sup> Berkeley, January 9-10, 2009

5<sup>th</sup> Seoul, Korea, November 5-6, 2007

4<sup>th</sup> Berkeley, January 19-20, 2007

3<sup>rd</sup> Honolulu, January 20-22, 2006

2<sup>nd</sup> Berkeley, January 2005

1<sup>st</sup> Berkeley, January 2004

Website <http://www.ntaccounts.org>





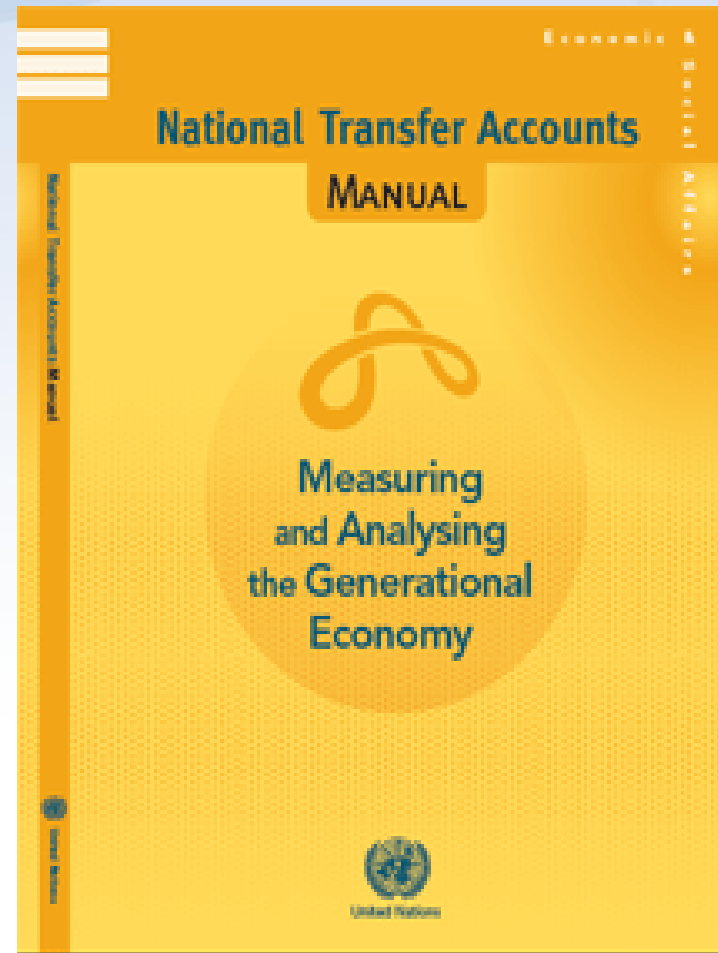
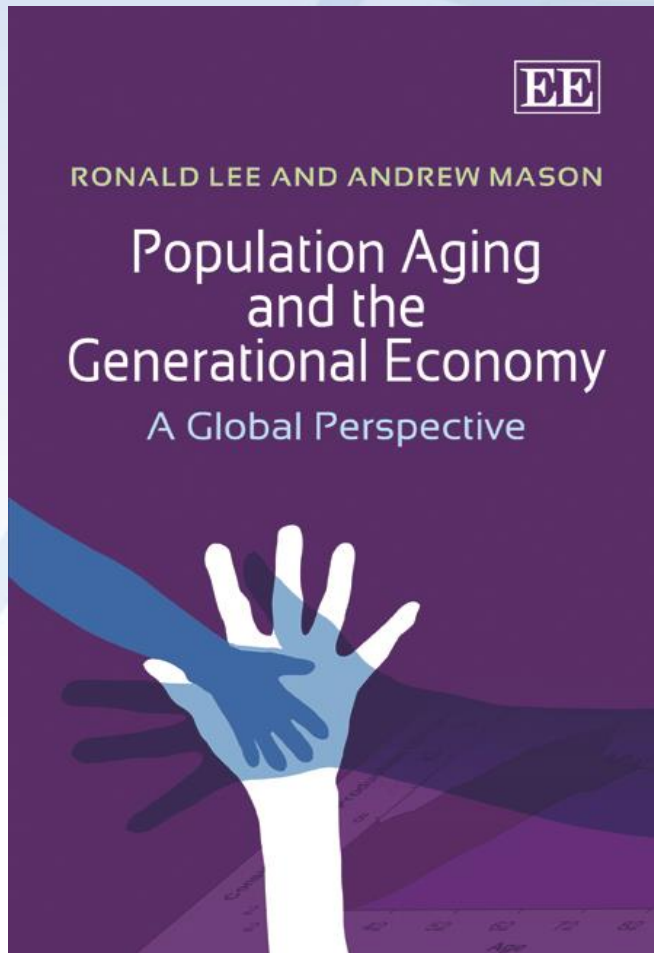
# THE 10TH GLOBAL NATIONAL TRANSFER ACCOUNT CONFERENCE



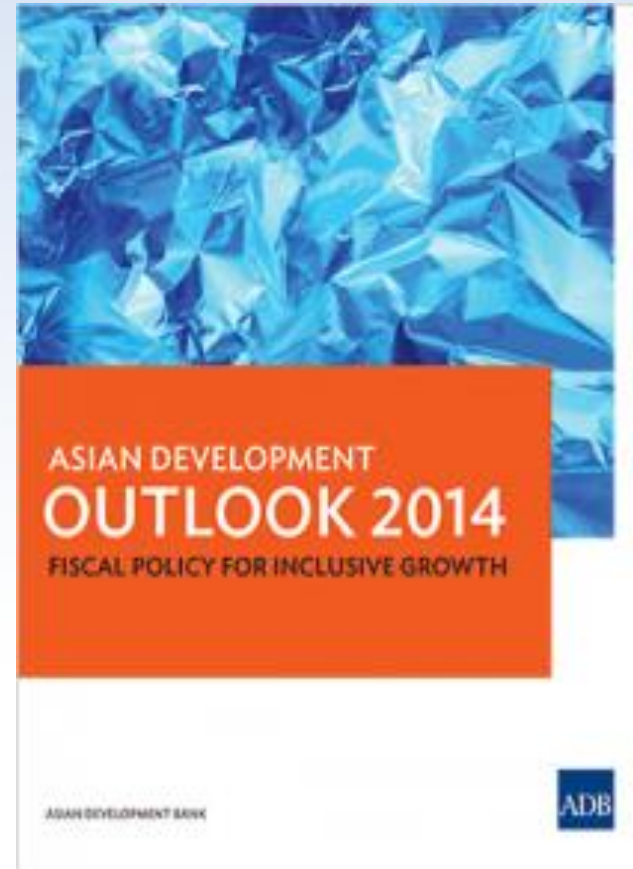
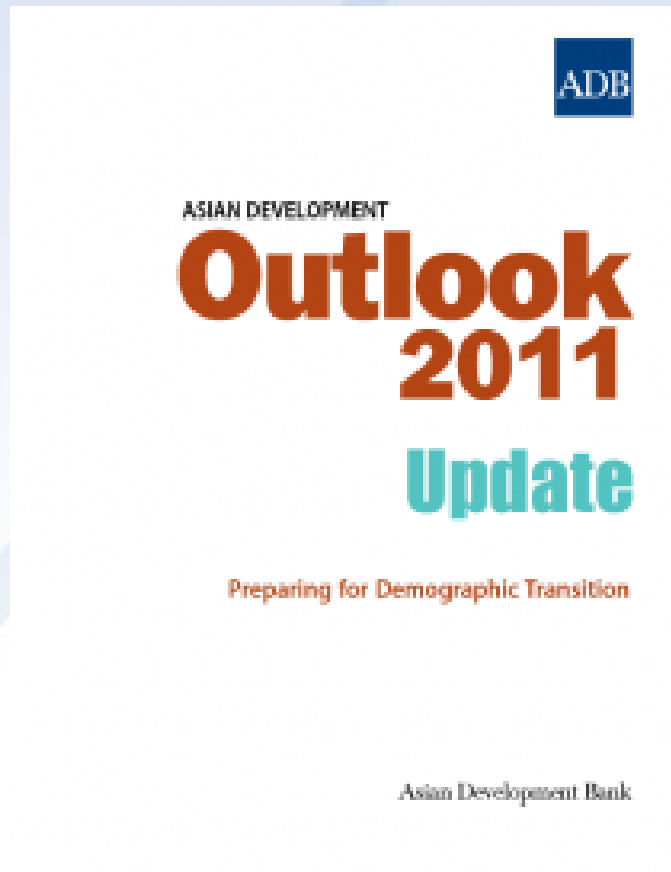
# The continuing effort has been supported by many funders

- UN Population Fund (UNFPA)
- National Institute on Aging (NIA)
- Bill and Melinda Gates Foundation
- International Development Research Center (IDRC), Canada
- UN Population Division
- East-West Center, Hawaii
- Center for the Economics and Demography of Aging, UC Berkeley
- Asian Development Bank
- Japan: MEXT.ACADEMIC FRONTIER
- MacArthur Foundation
- European Union
- In-country support from governments and other funders in many countries.

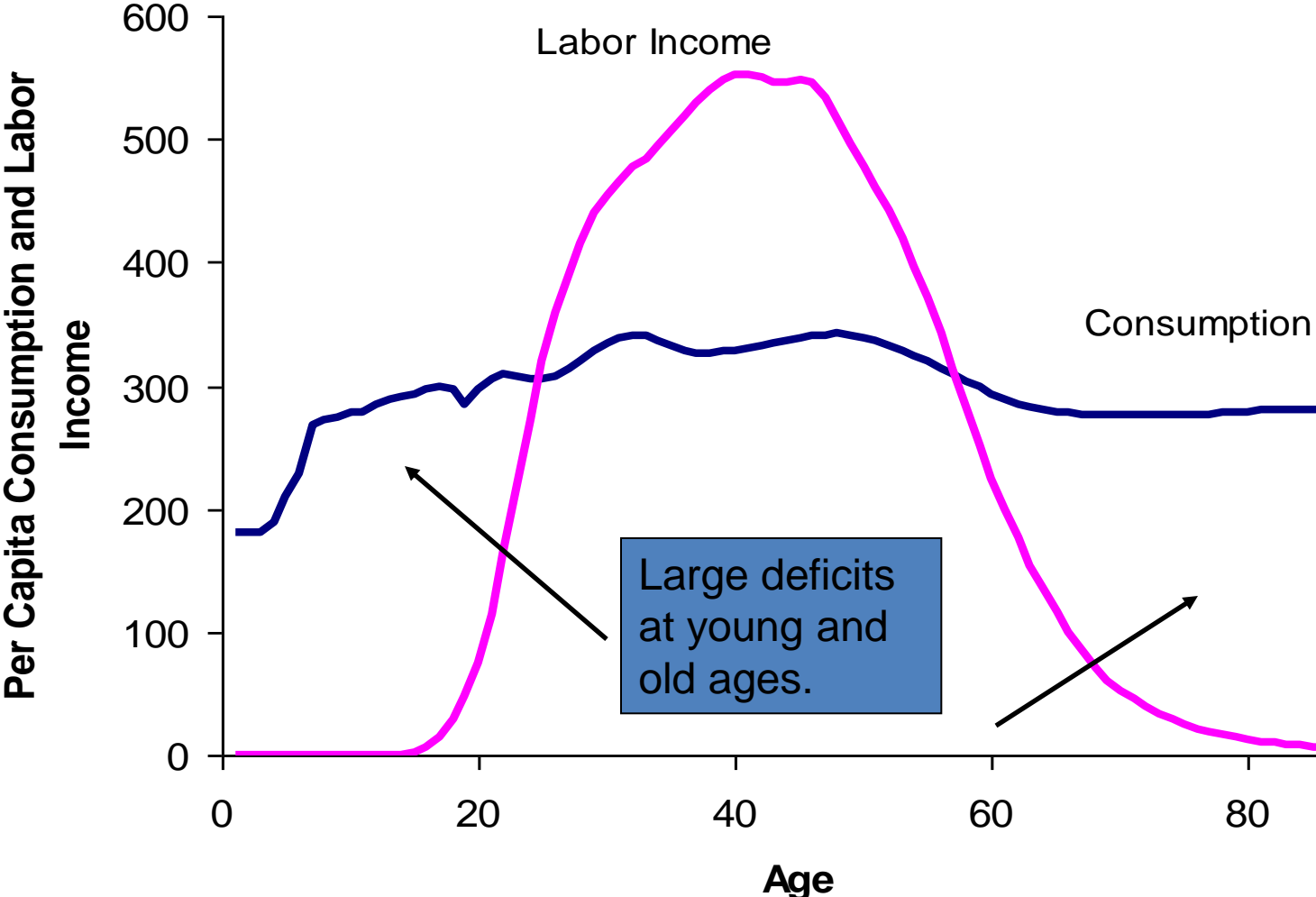
Hundreds of articles, books, and UN manual.



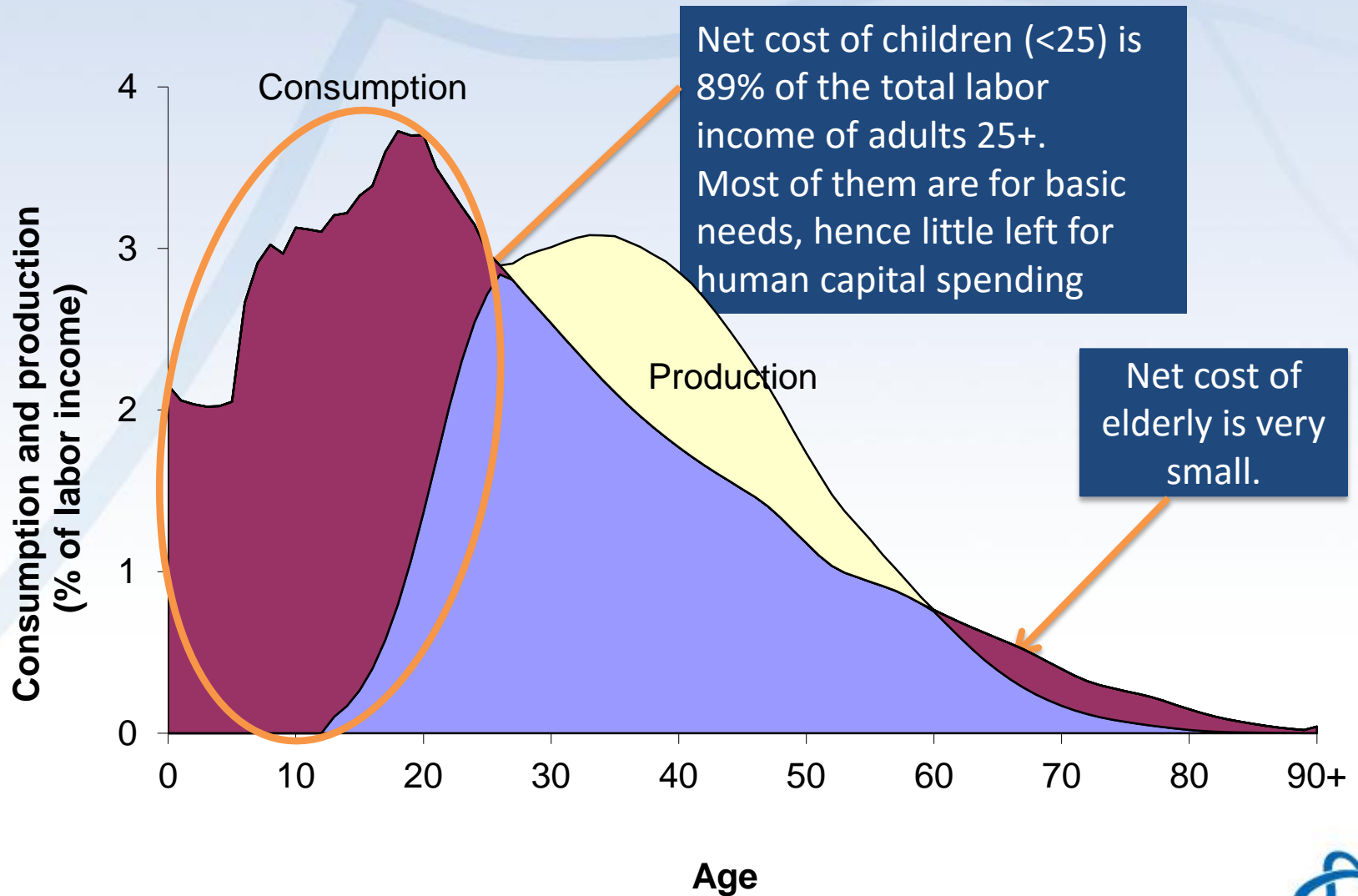
# Asian Development Outlook 2011, 2014



# The Economic Lifecycle



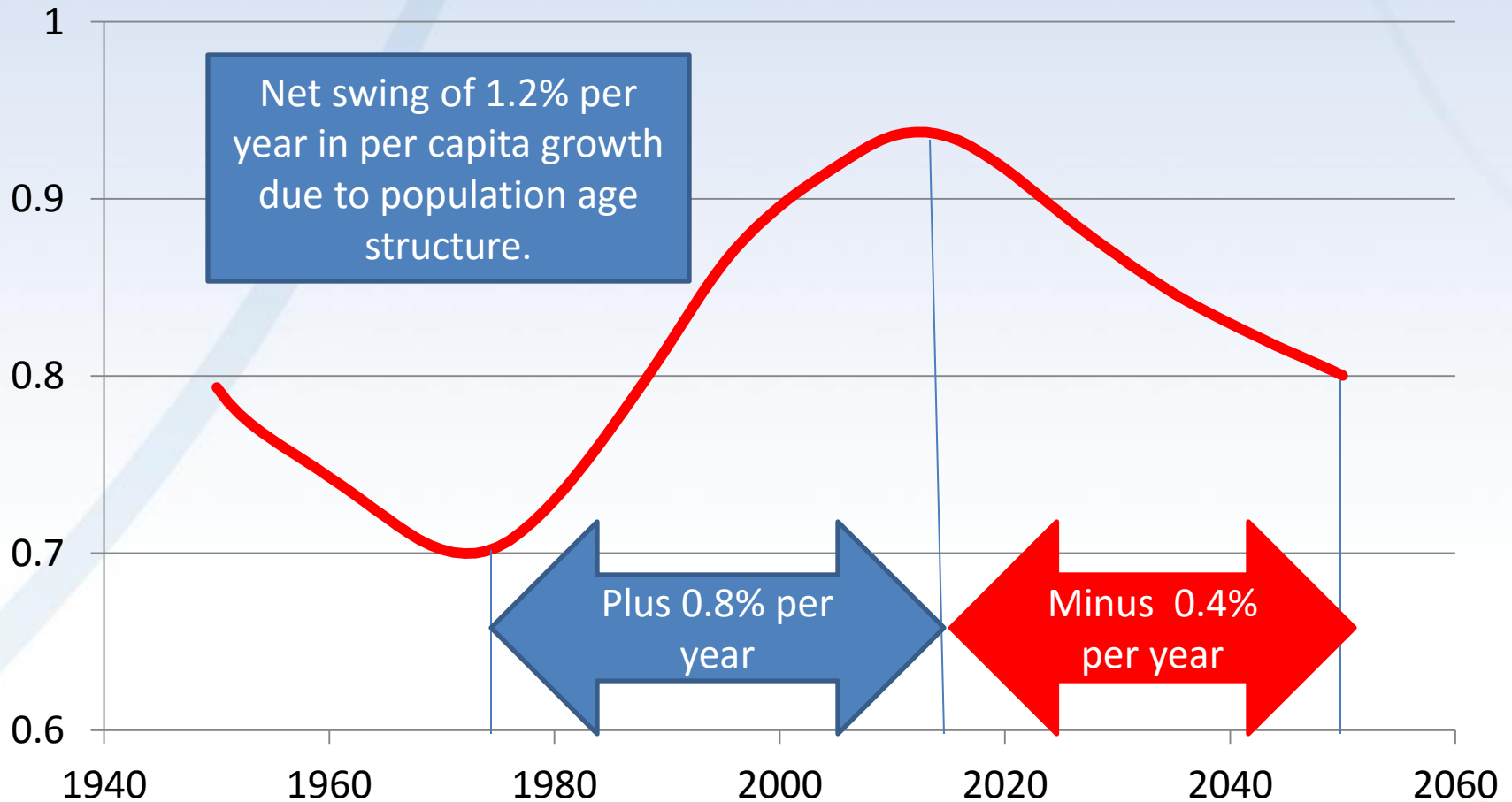
# Aggregate flows, the Philippines



# The Support Ratio

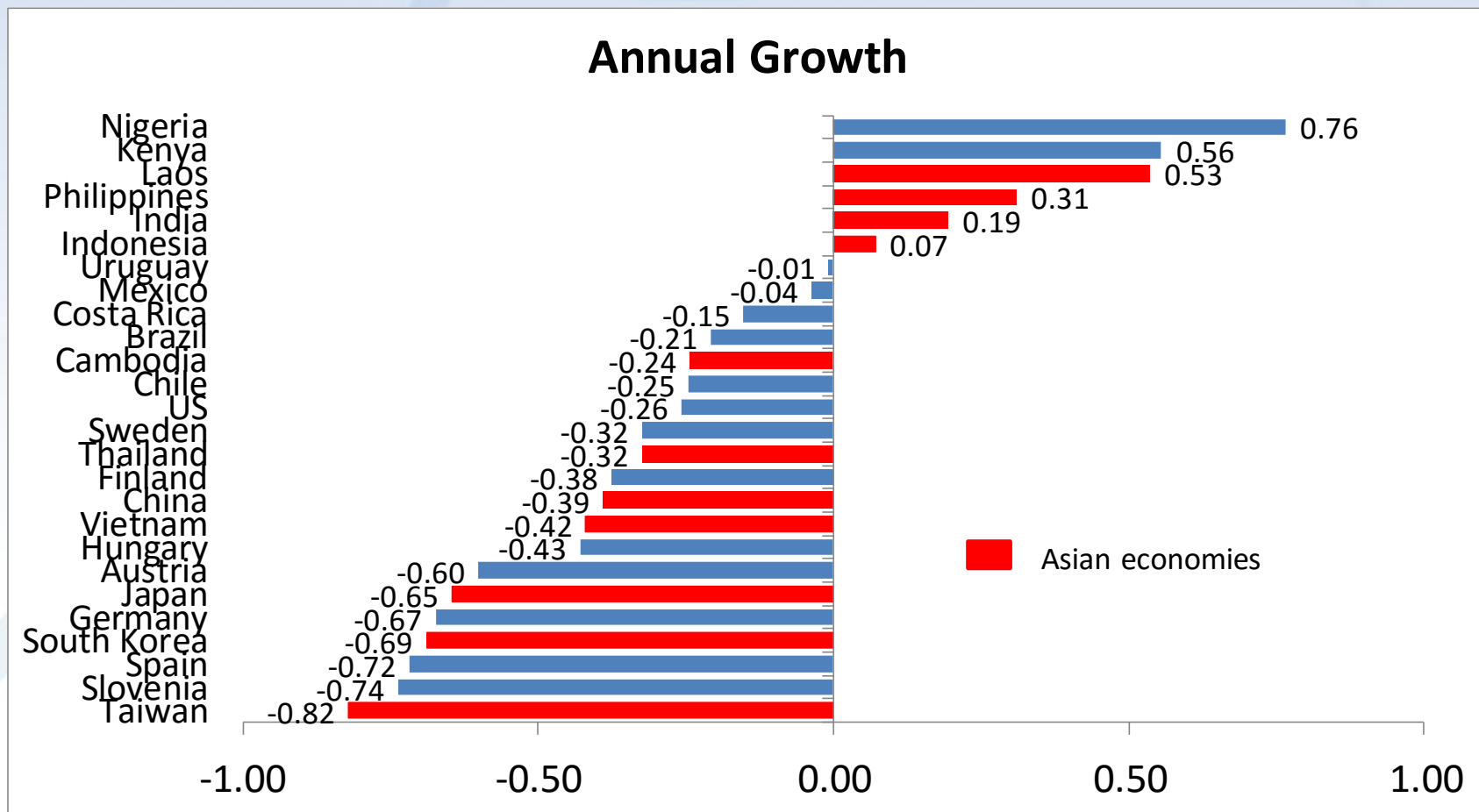
- Measures the number of workers relative to the number of consumers.
- Given worker productivity, a 1% increase in the support ratio leads to a 1% increase in per capita income (Demographic Dividend)
- Use NTA profiles as base years estimates of:
  - Age-specific variation in labor productivity
  - Age-specific variation in consumption

# Support Ratio, China

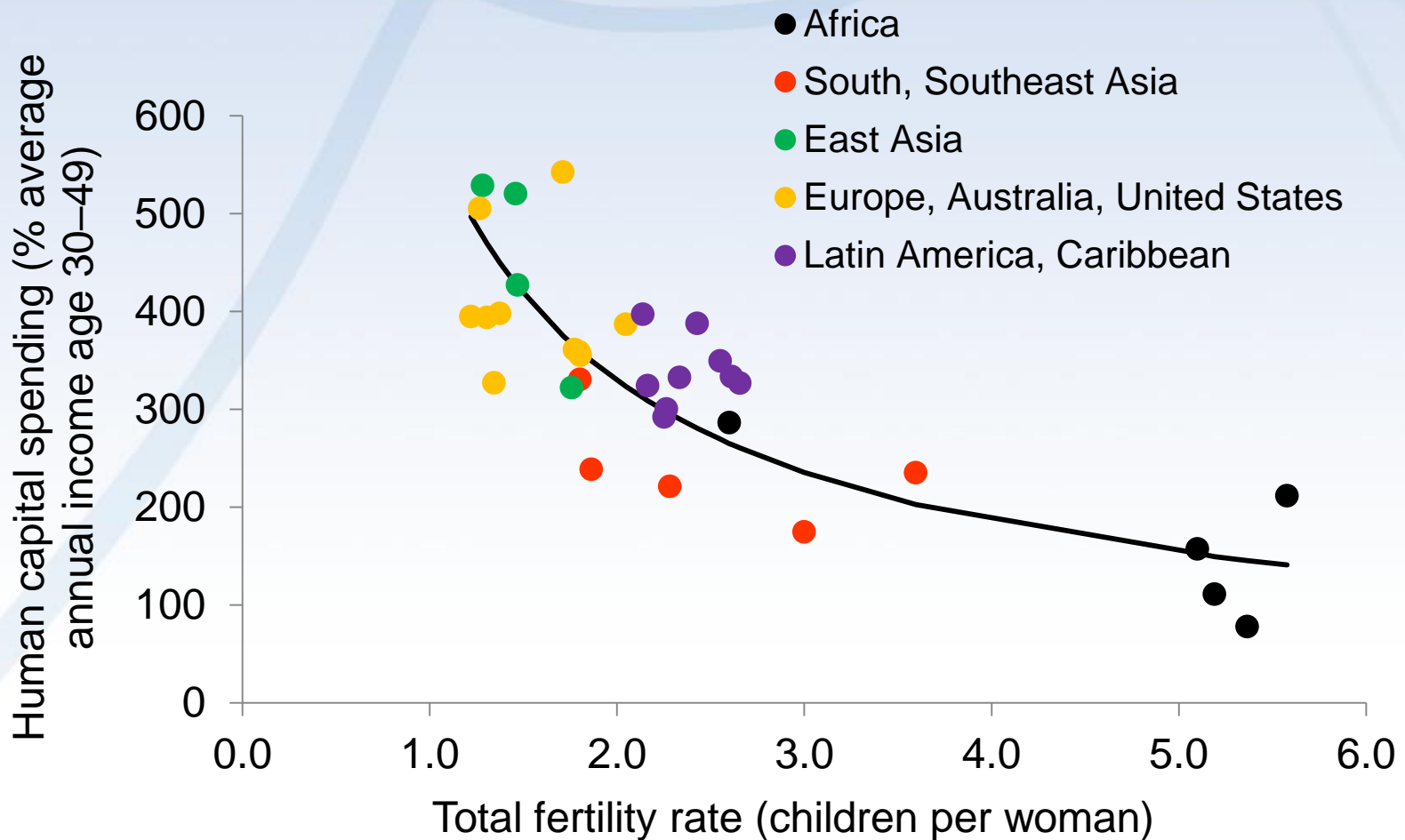




# Support Ratio, Annual Growth NTA Economies, 2010-2050

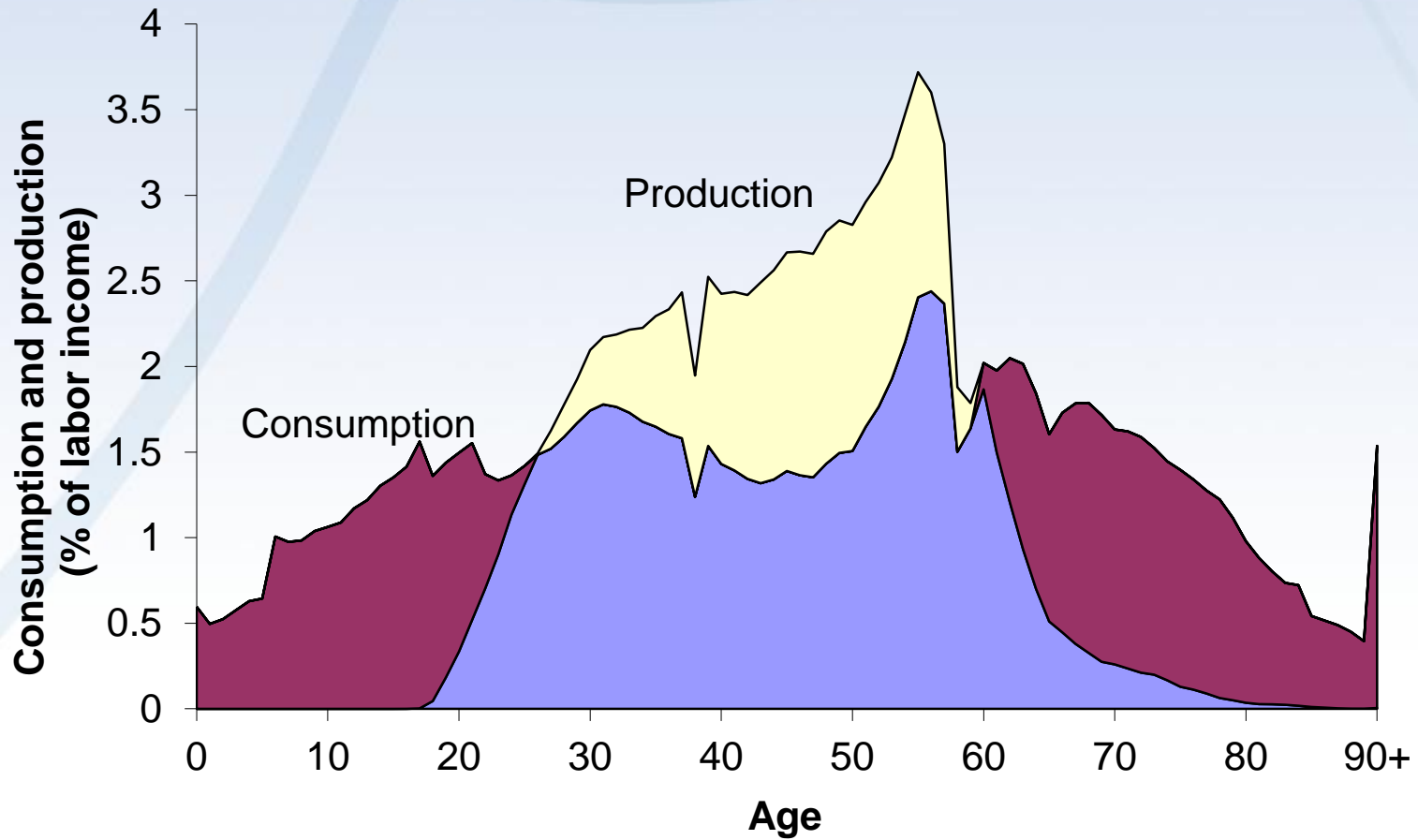


# Fertility/human capital tradeoff



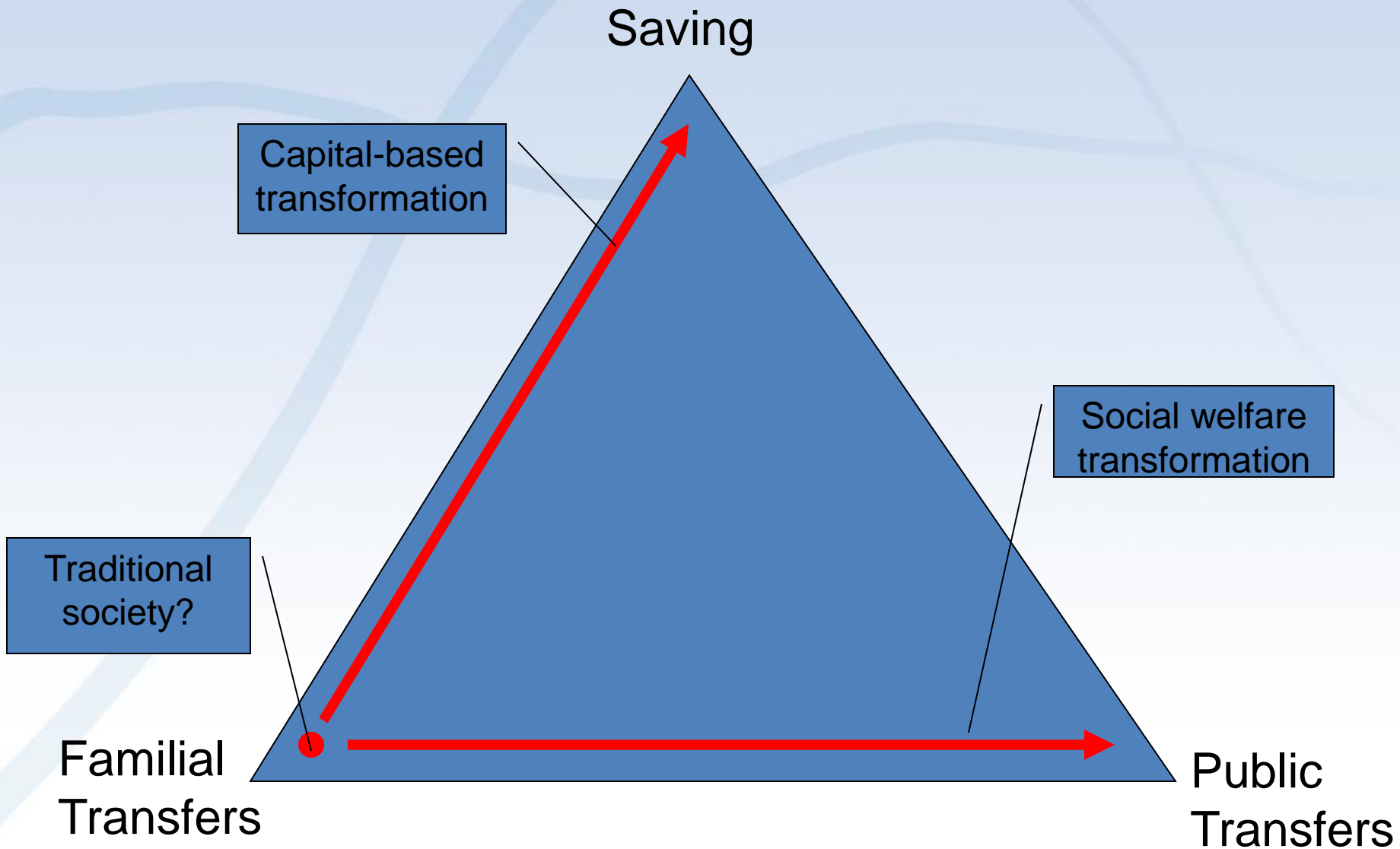
Updated from NTA database [www.ntaccounts.org](http://www.ntaccounts.org)

# Aggregate flows: Japan

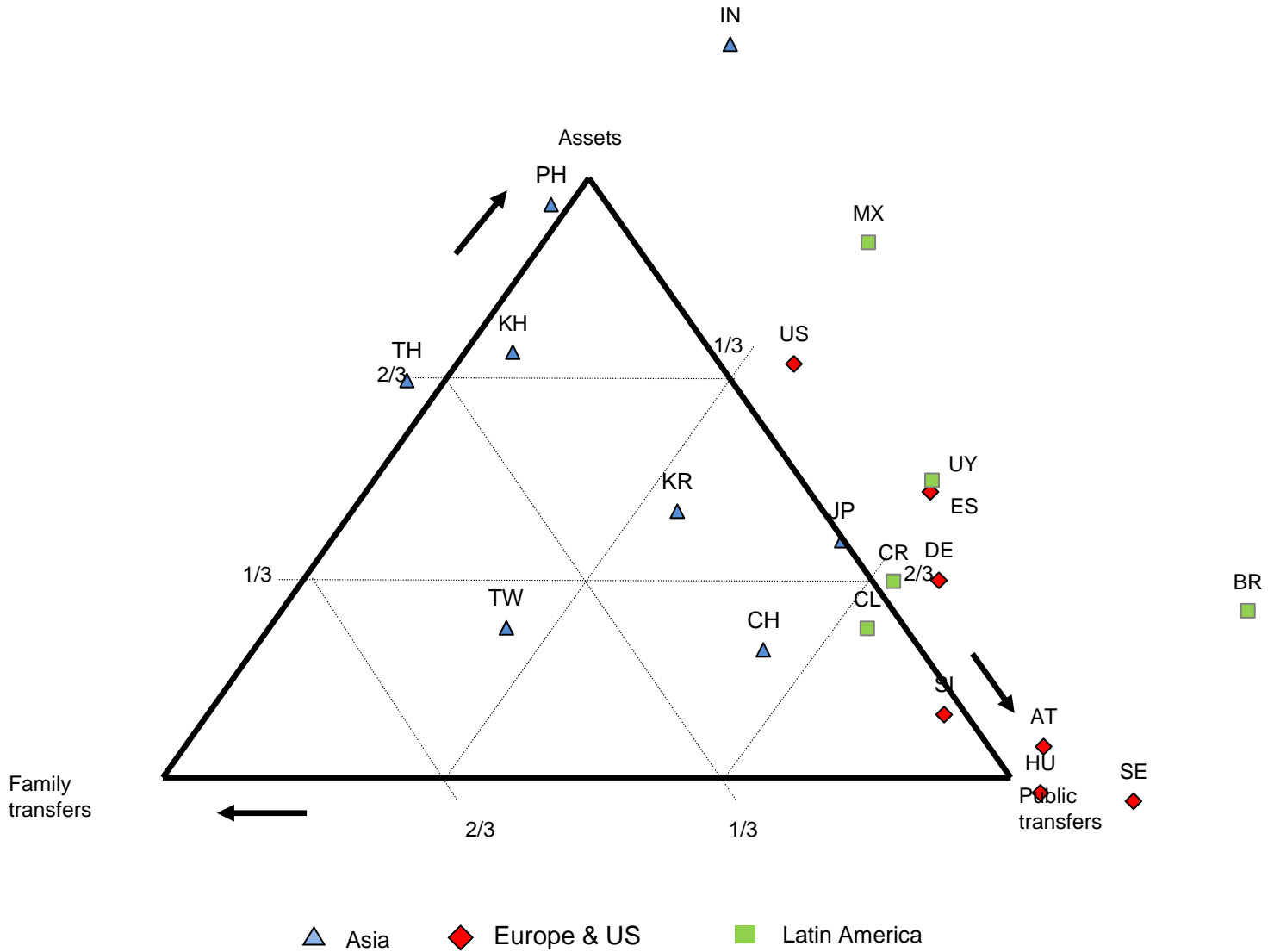


# Sources of consumption for elderly (support system)

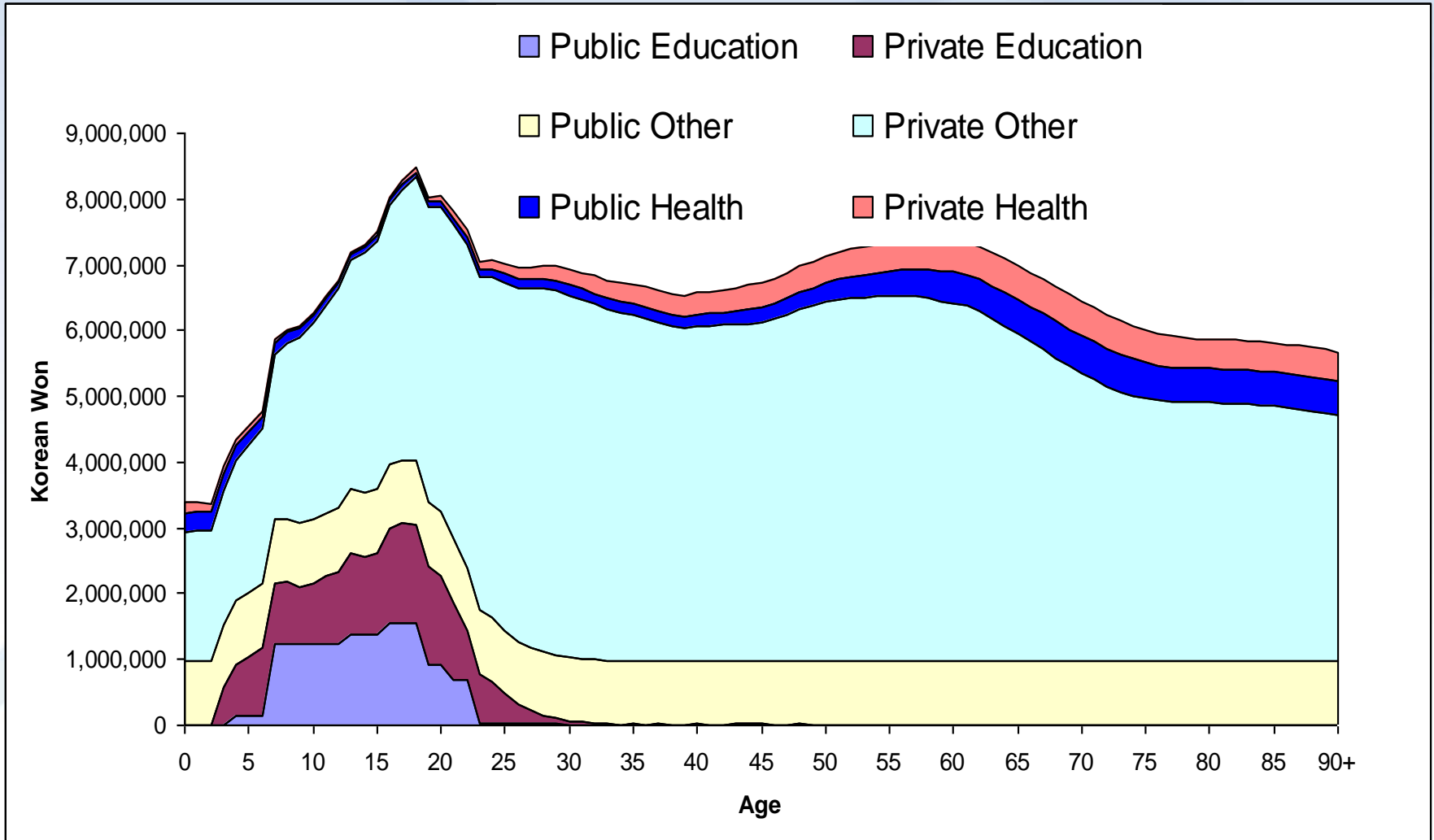
- Familial transfers
- Public transfers
  - Social Security System
- Asset-based Reallocations (saving)
  - Interest, dividends, rent from personal assets
  - Home
  - Dis-saving



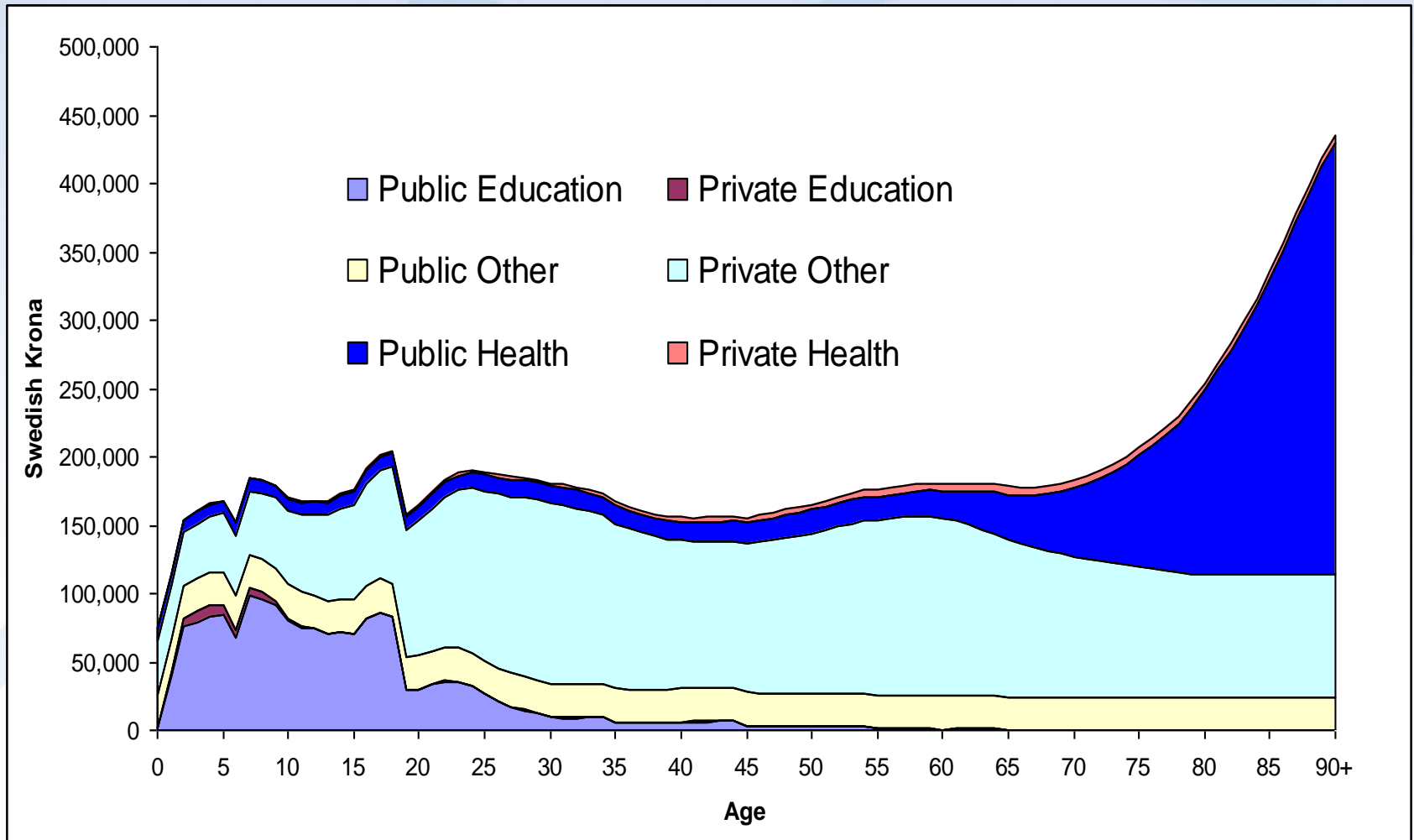
# Evolution of Old-Age Support System



# Per capita consumption by sector (Korea)



# Per capita consumption by sector (Sweden)





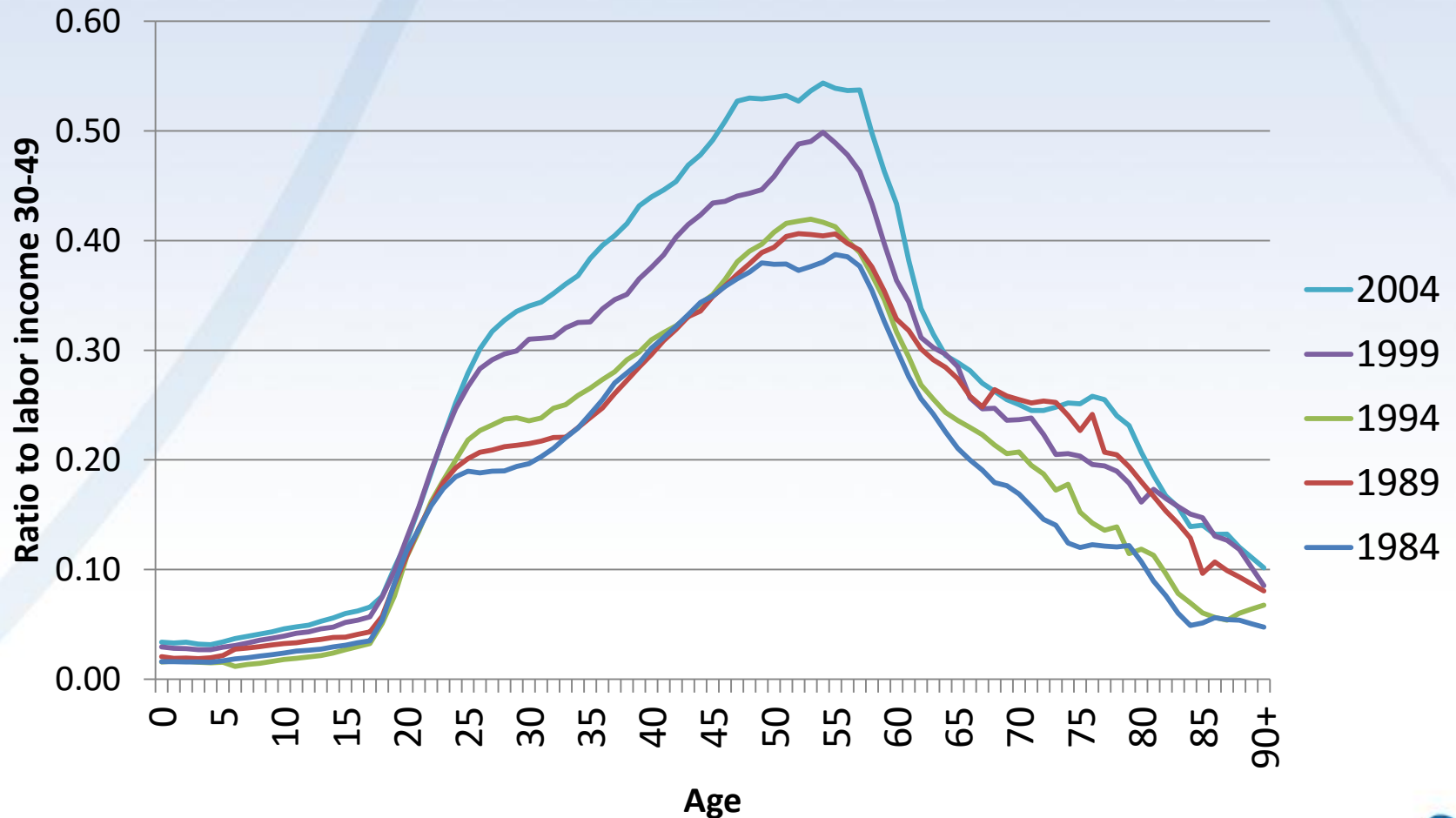
# Revisit: Future Support Systems in Asia?

- Work more?
- Increase familial transfers?
- Increase public transfers?
  - Maybe inevitable.
  - Projections based on the “current system” suggest that public transfer system will not be terribly onerous.
- More reliance on capital accumulation?
  - Human capital & asset/savings
  - Implication on growth (demographic dividend)
  - Need to develop a system to facilitate

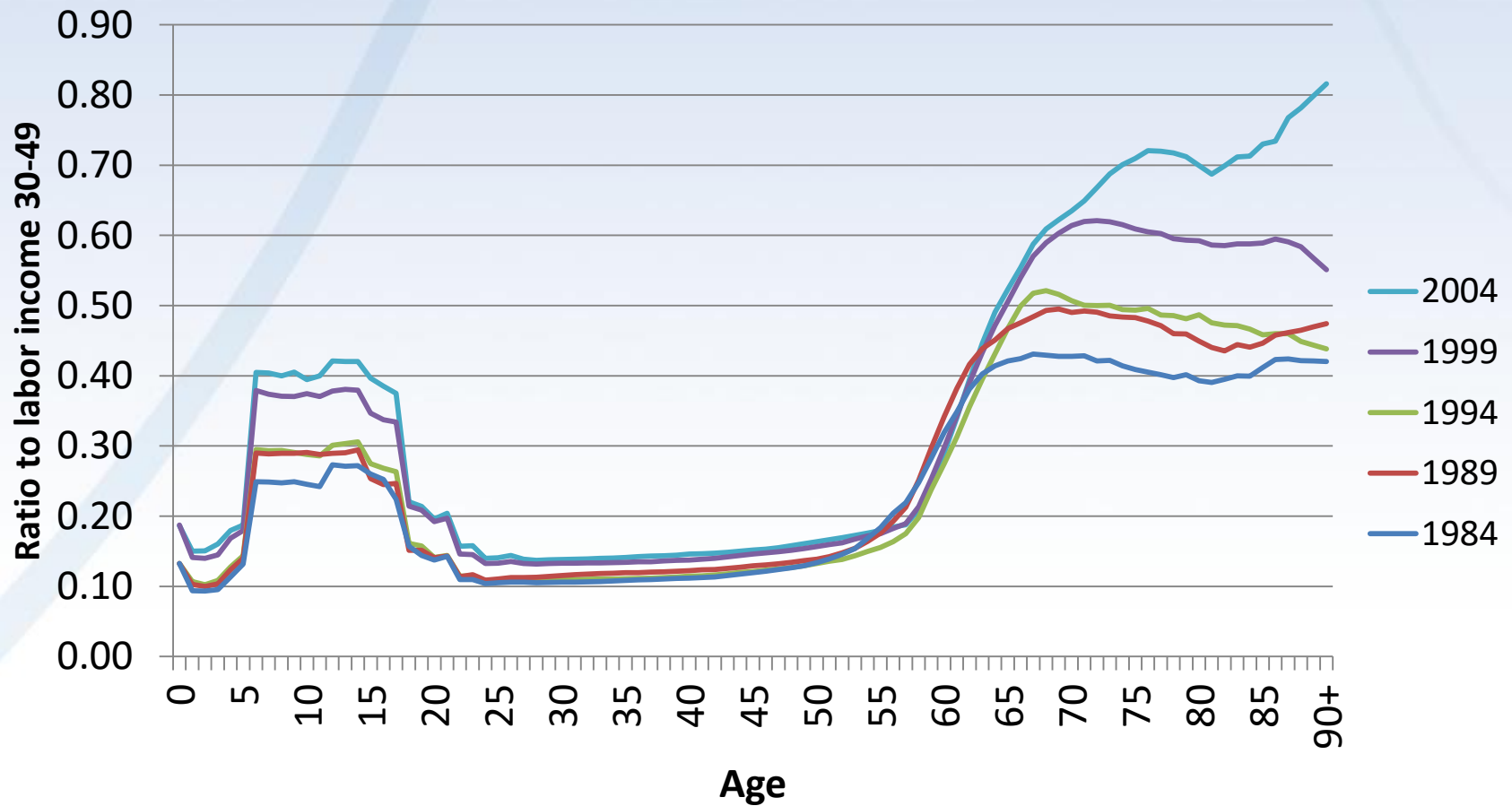
# Other policy implications from NTA research

- NTA by socio-economic status
  - NTA by gender (Time Use Survey)
  - NTA by formal vs. informal sector
  - NTA by urban and rural
  - NTA by income level
- Policy simulation
  - Example: effect of pension reform

# Per capita tax burden by age, Japan NTA



# Per capita benefit by age, Japan NTA



# In summary, NTA project is

- Data improvement and research
- Capacity building
- Policy simulation and policy awareness

# Conclusion

- Our economic systems are being tested by unprecedented changes in population age structure.
- Stakes are very large: economic growth, generational equity, economic security for children and elderly, and sustainability of support systems.
- Complex systems are involved: governments, labor markets, families, financial markets, education systems, and health care systems.
- Essential that policy be informed by the best possible data linking population and the economy.

Thank you  
Terima Kasih