

Population Aging and the Generational Economy: A Global Perspective

Andrew Mason

University of Hawaii at Manoa and
East-West Center

Ageing in Development
Panel by the Canadian Development Economics Study
Group (CDESG)
Canadian Economics Association
June 9, 2012



Population Aging and the Generational Economy: A Global Perspective

- Book is a large collaborative effort
 - Directed by Ron Lee and Andy Mason
 - Part of a larger project composed of research teams in 37 countries
 - Book has over 50 contributors from 23 countries
 - Work began seven years ago
- Canadian team is led by Marcel Merette

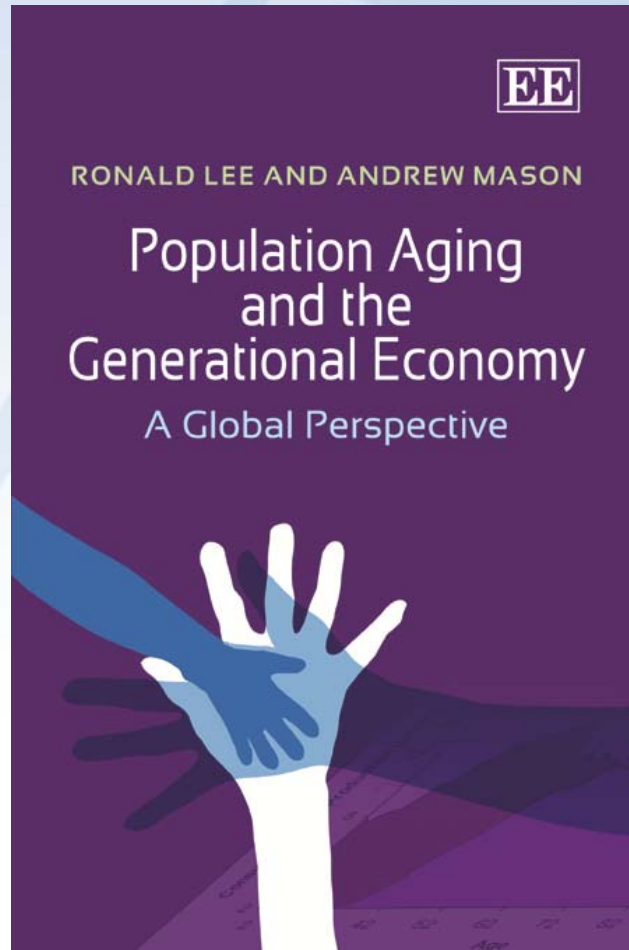
The geographic coverage of NTA and current members



NTA Members			
Asia-Pacific	Americas	Europe	Africa
Australia	Argentina	Austria	Kenya
China	Brazil	Finland	Mozambique
India	Canada	France	Nigeria
Indonesia	Chile	Germany	Senegal
Japan	Colombia	Hungary	South Africa
Philippines	Costa Rica	Italy	
South Korea	Jamaica	Slovenia	
Taiwan	Mexico	Spain	
Thailand	Peru	Sweden	
Vietnam	United States	Turkey	
	Uruguay		



After more than a hundred articles by project members, the first book from the project is out.



Available from the NTA
website: www.ntaccounts.org

Electronic version available for
free thanks to IDRC. Link is on
NTA website.

This continuing effort has been supported by many funders

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

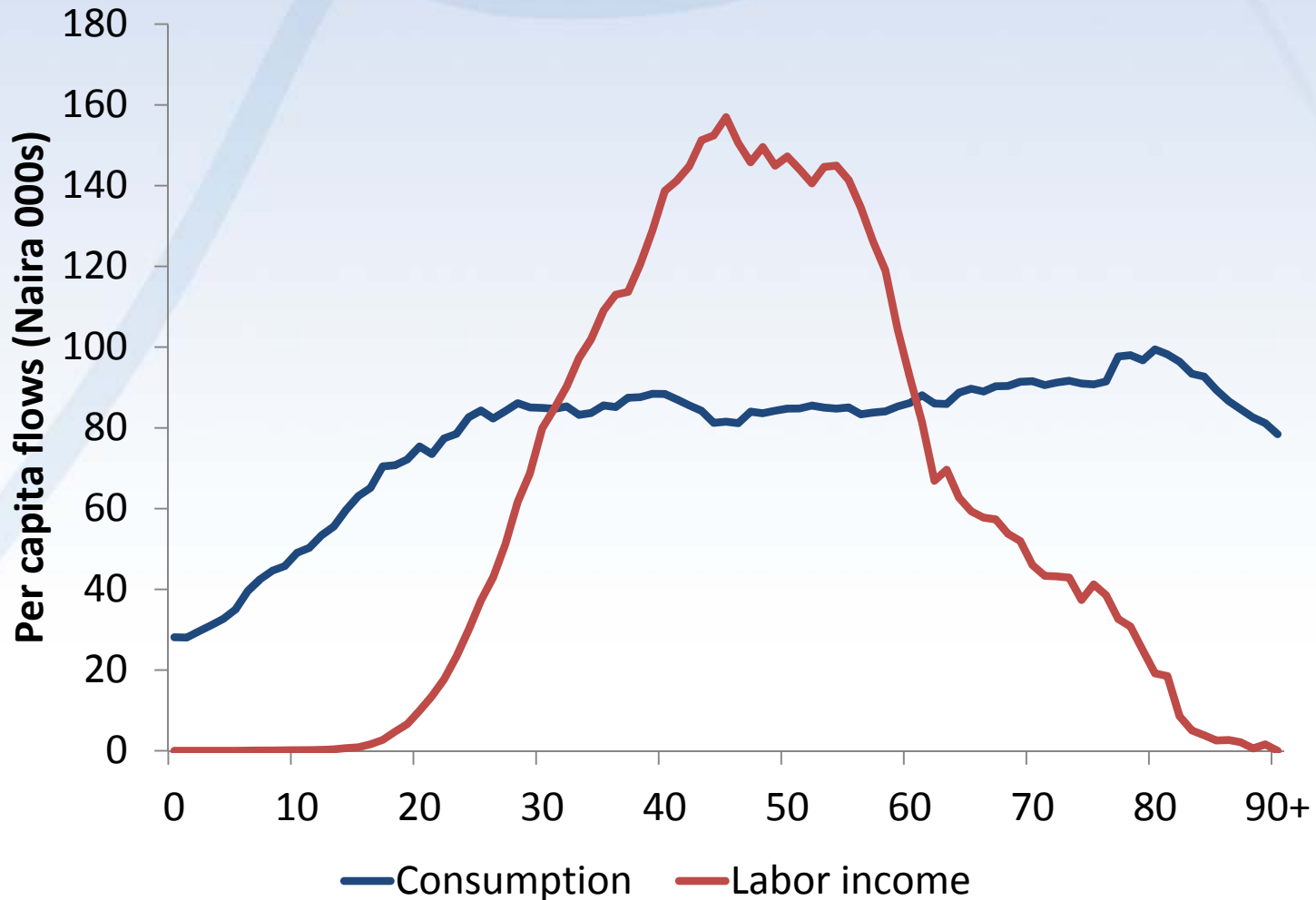
National Transfer Accounts (NTA)

- NTA describes the age patterns of economic activity and the economic relations between the generations.
- Comprehensive set of public and private economic flows including consumption, income from labor and assets, transfers, and saving.
- Illuminates the economic impacts of population change during the demographic transition and throughout the process of population aging.

Children are a heavy economic burden in many developing countries

- High fertility in developing countries has led to very young populations.
- A large portion of what adults are producing is going to meet the material needs of their children.
- Most is going to meet basic needs like food, clothing, and housing.
- Little remains for health and education for children.

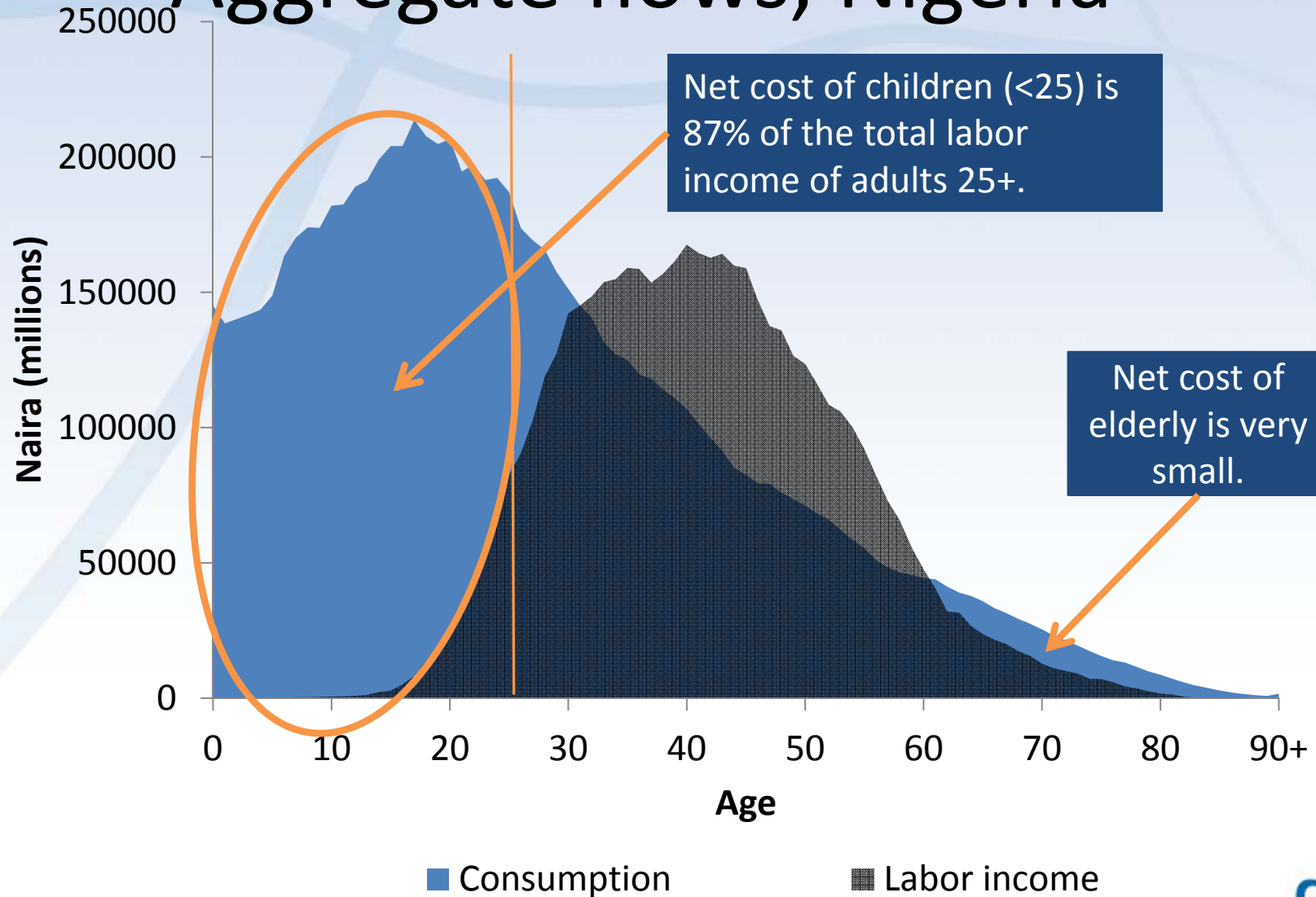
Economic lifecycle flows for Nigeria, per capita values



Andrew Mason June 9, 2012



Aggregate flows, Nigeria



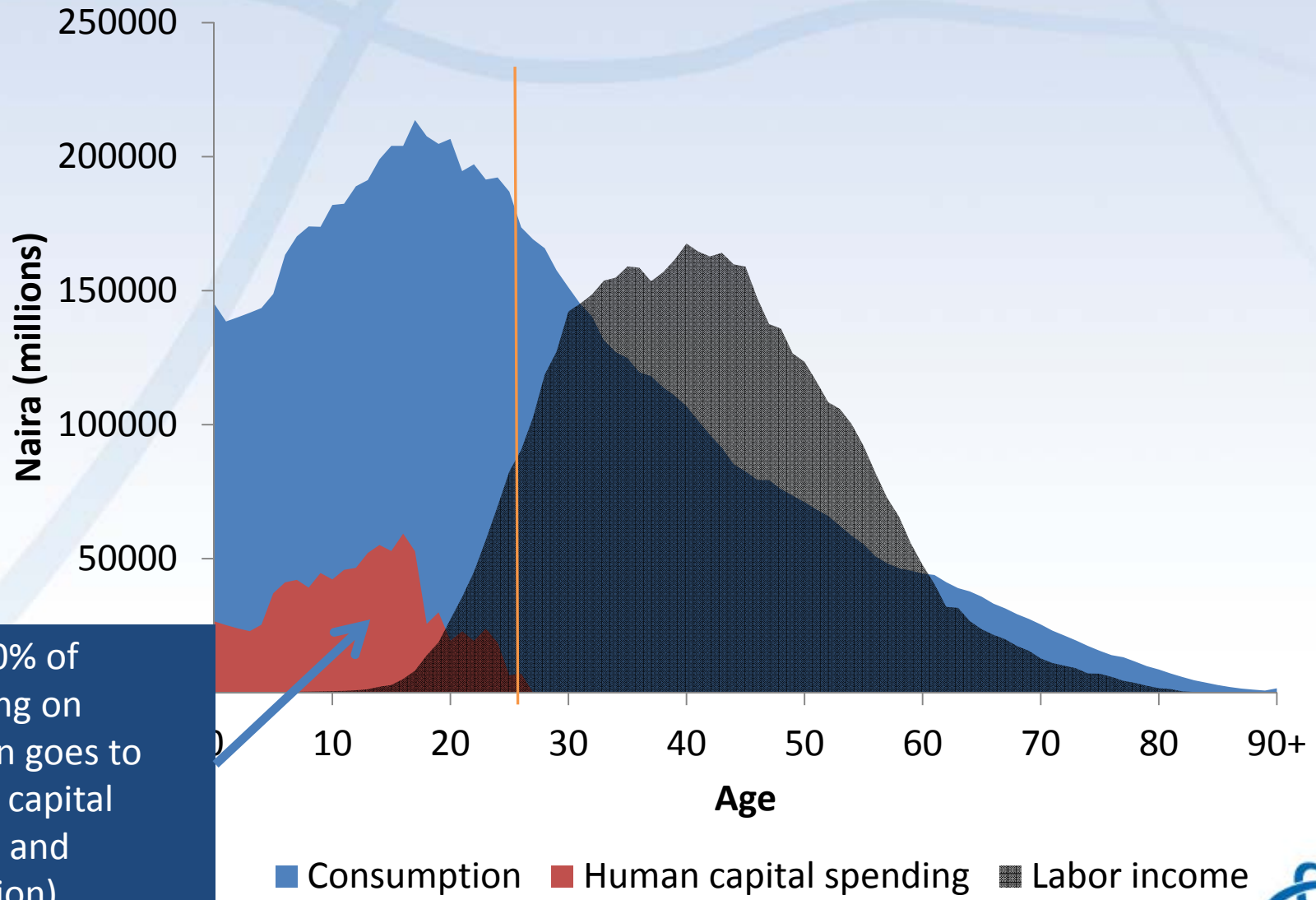
Fertility and the Cost of Children

Selected NTA countries

Country	Total fertility rate	Net cost of children
Nigeria	5.8	87%
Kenya	5.1	62%
Philippines	3.9	70%
India	3.2	50%
Canada	1.6	30%
United States	2.1	30%
China	1.7	19%
Germany	1.3	44%
Japan	1.3	25%

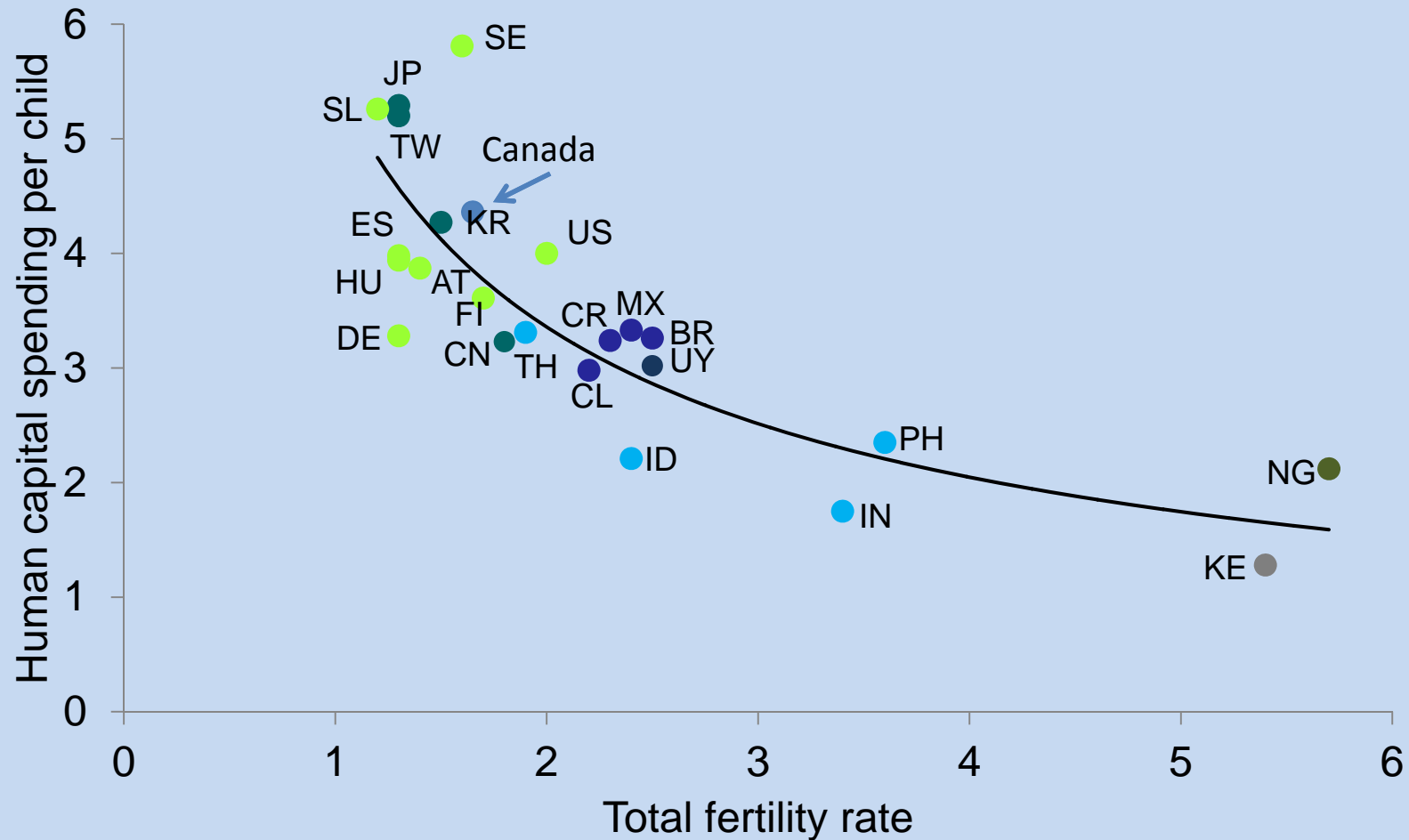
Note: Net cost of children is consumption less labor income of those under age 25 as a percentage of the labor income of those 25 and older.

Human Capital Spending, Nigeria



Only 20% of spending on children goes to human capital (health and education)

Tradeoff between fertility and human capital spending, 23 NTA countries



Note: Human capital spending is years of labor income required for health and education to raise one child.

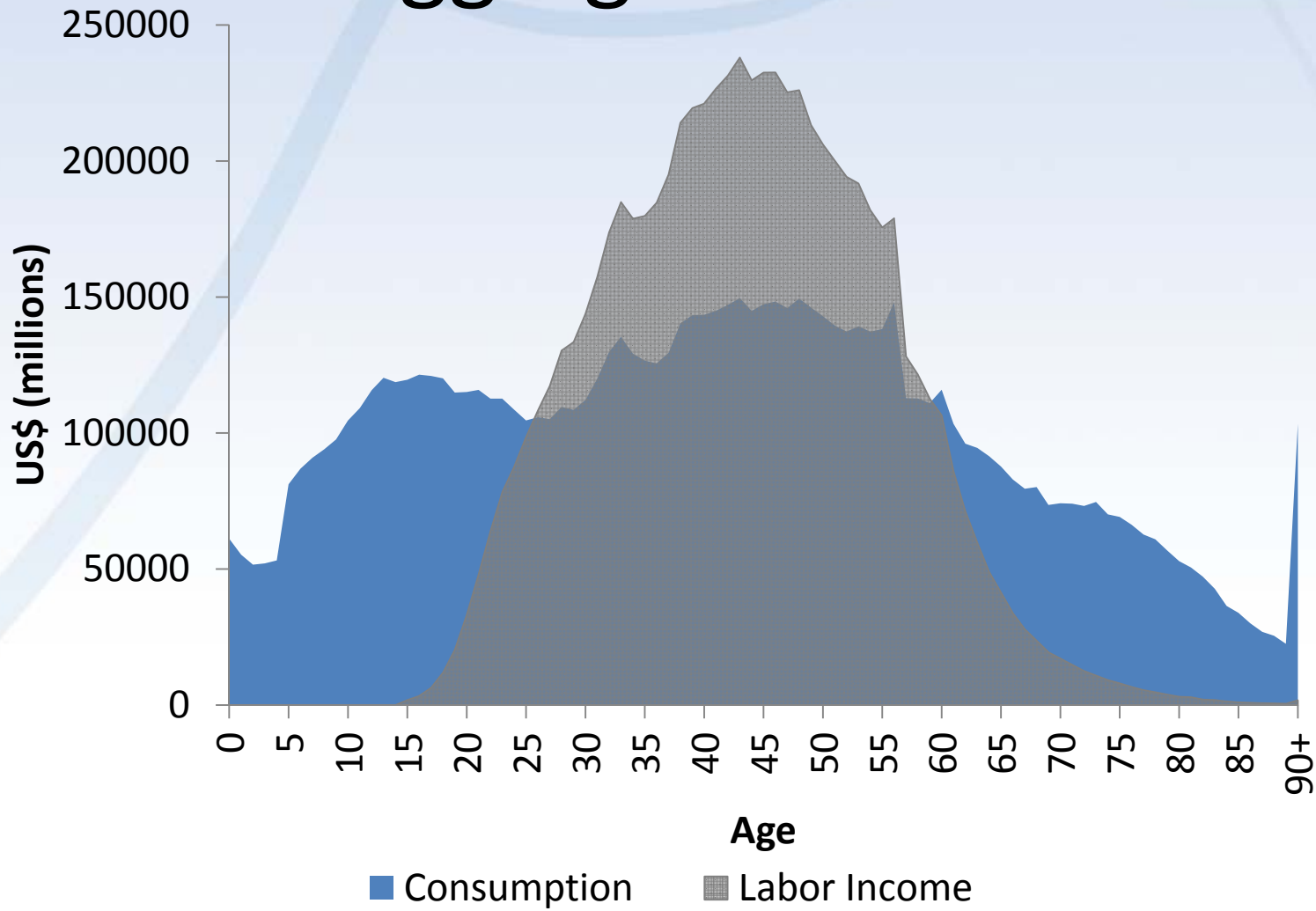
Andrew Mason June 9, 2012



In countries with lower fertility . . .

- Children claim a much smaller share of the nation's production.
- More can be devoted to raising human capital spending per child.
- More can be used to raise standards of living and to reduce poverty.
- More can be saved and invested in the future.
- But low fertility eventually leads to populations with high rates of old-age dependency.

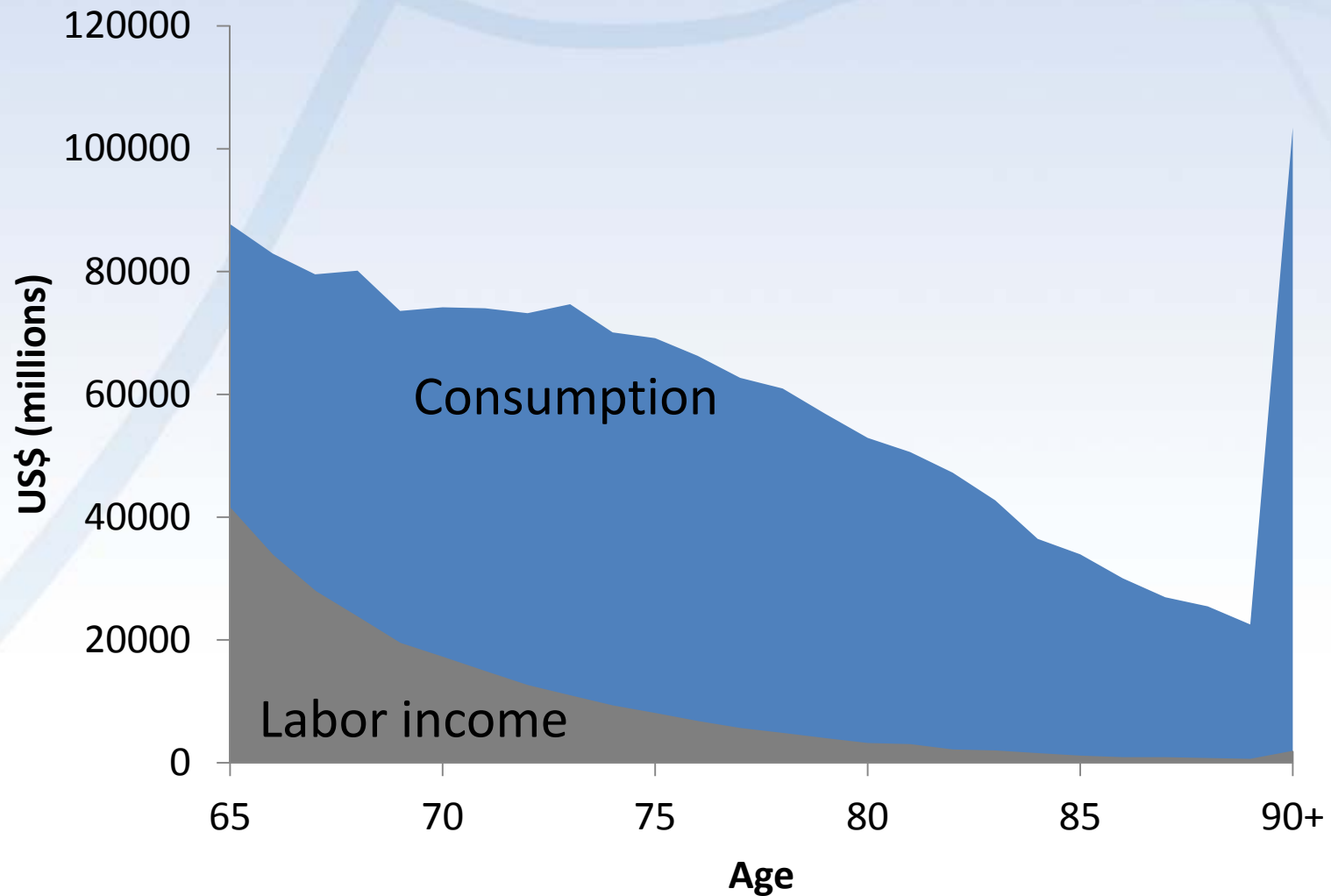
The US Economic Lifecycle, Aggregate Flows



Andrew Mason June 9, 2012



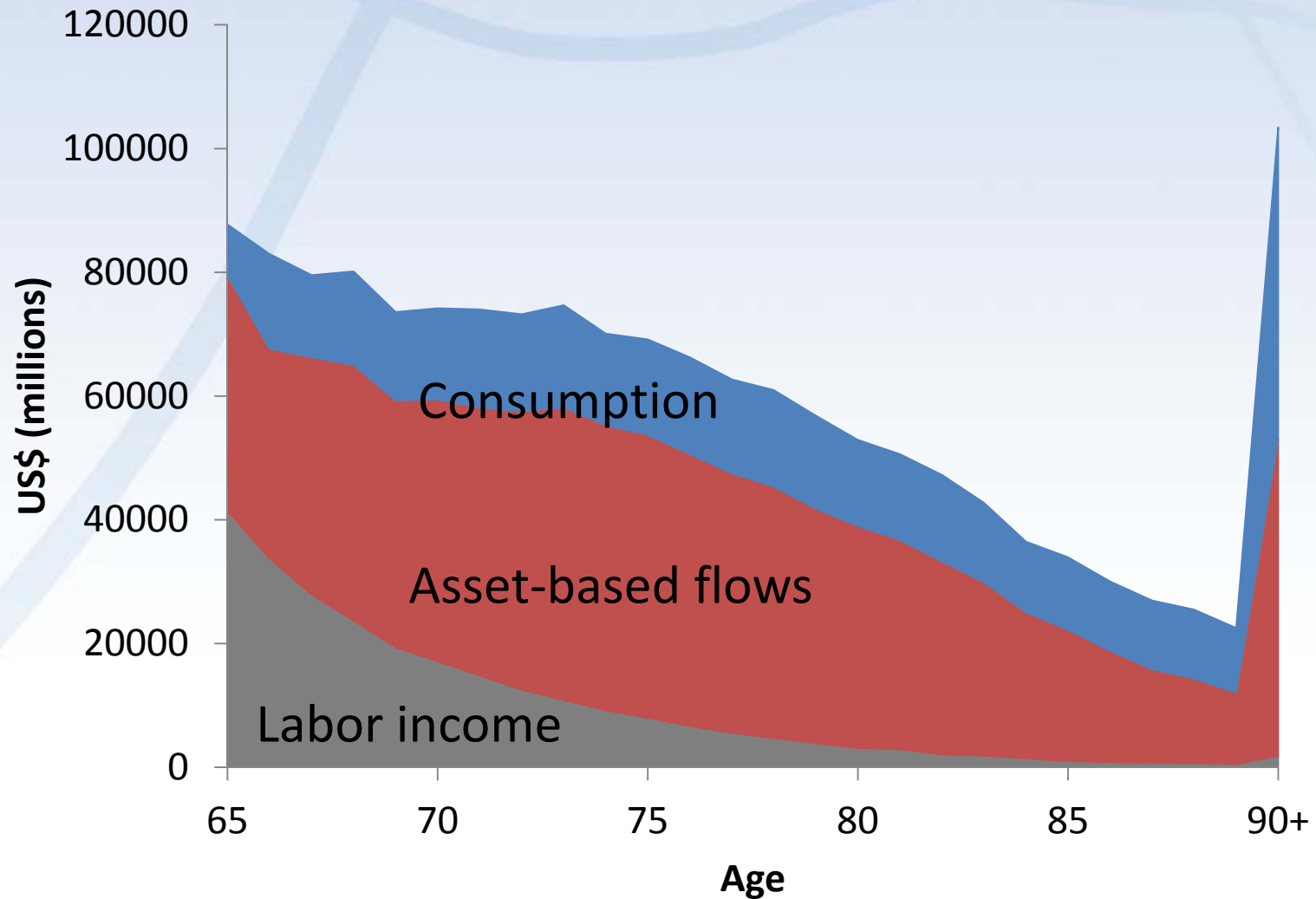
US Economic Lifecycle, 65+



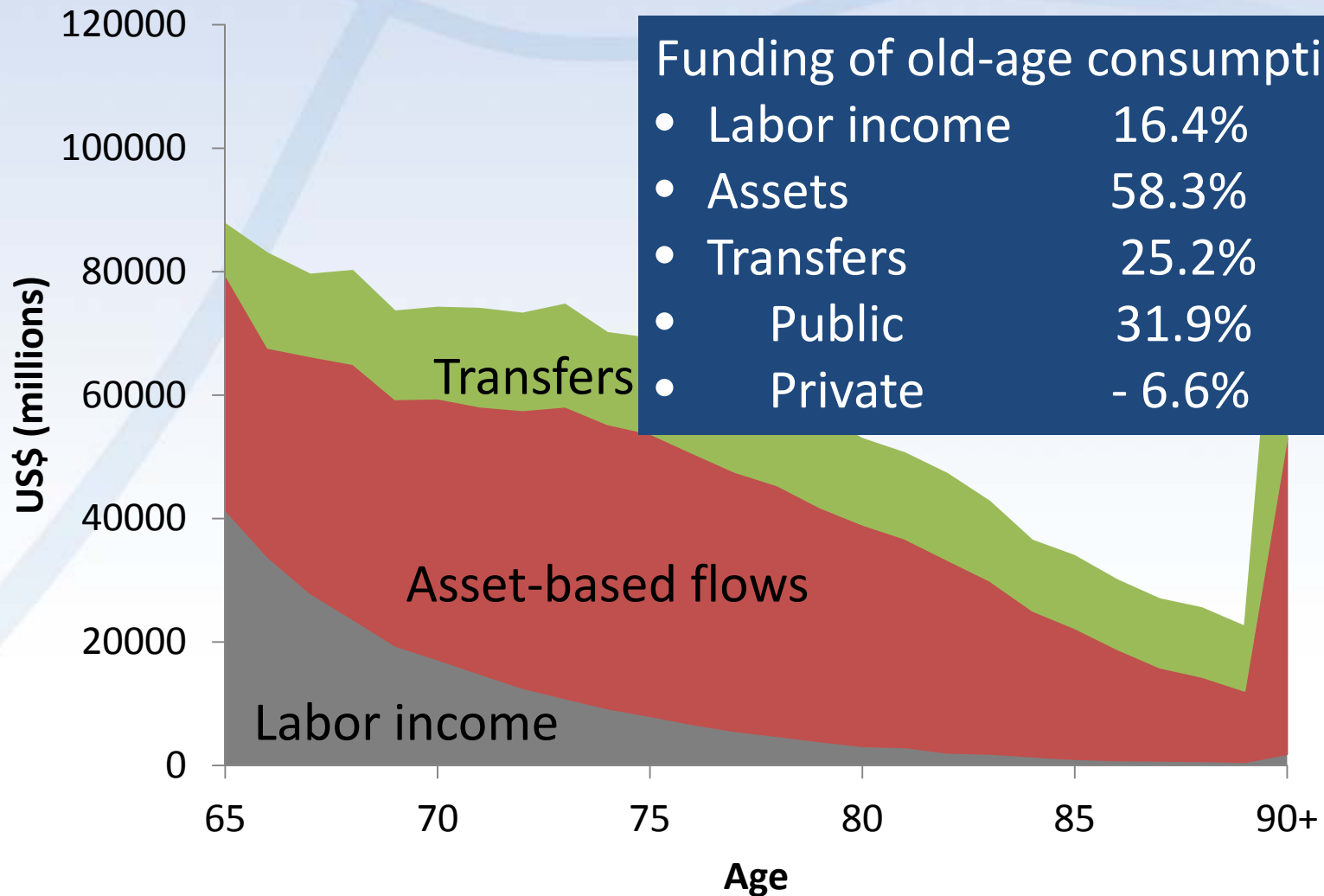
Andrew Mason June 9, 2012



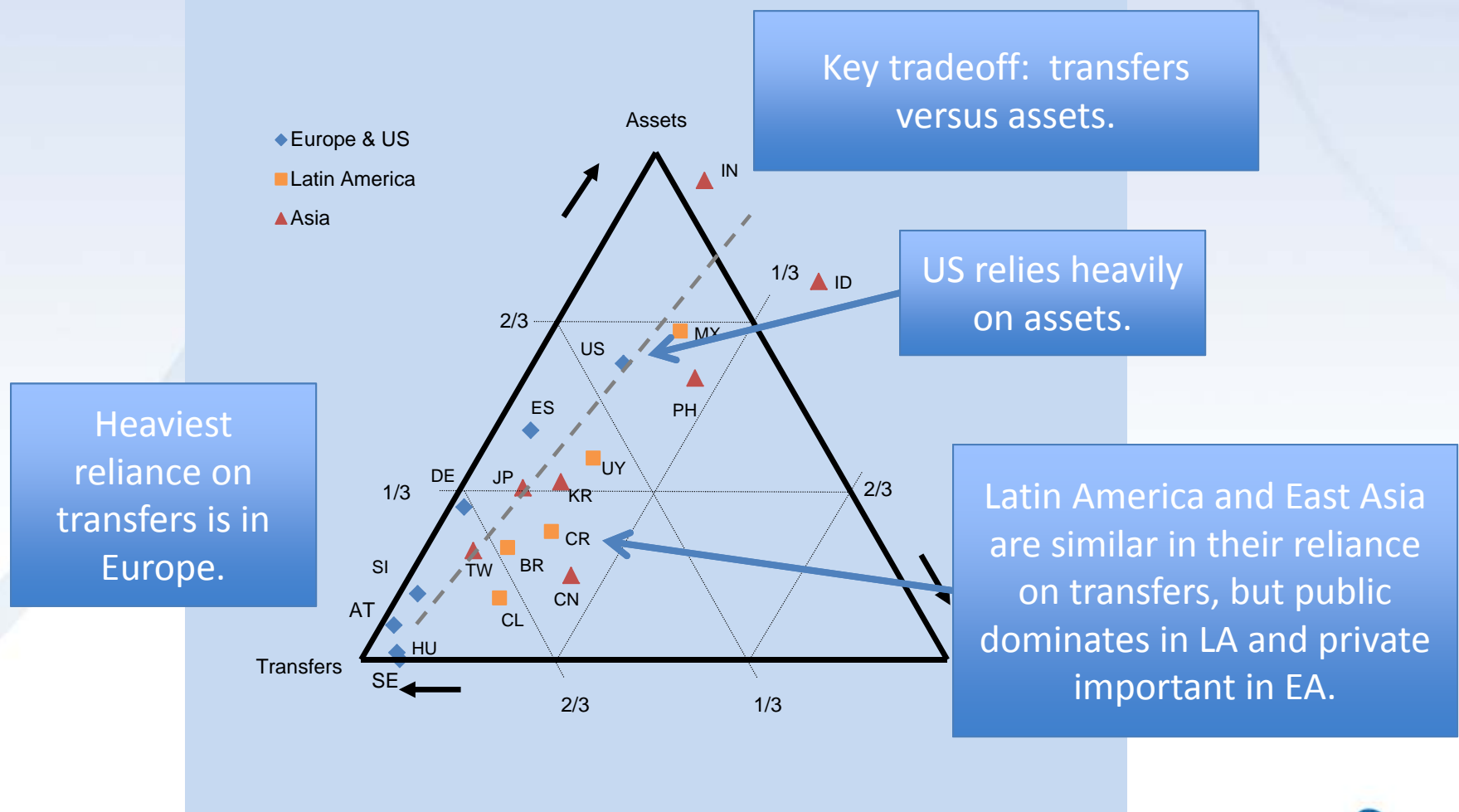
Old-age Funding System, US



Old-age Funding System, US



Old-age Support System NTA Countries



Concluding Remarks

- High fertility and young age structure lead to a heavy economic burden which undermines human capital spending.
- Transition to low fertility is leading to populations with a high percentage of elderly.
- Social and economic structures determine whether the elderly are an economic burden.
- Elderly can be relatively self-reliant.
- In doing so, their financial wealth and continued labor can raise standards of living for all.