

How will income security and health care financing be affected by population aging; how should they change? An International Perspective

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Overview

- How do different societies provide for the economic needs of their elderly?
- Primarily a descriptive exercise relying on National Transfer Account data.
 - Health consumption and its finance
 - Labor income of older individuals
 - Funding of the lifecycle deficit, i.e., the gap between consumption and labor income.

The NTA Flow Account Identity

- Inflows
 - Labor Income
 - Asset Income
 - Transfer Inflows
- Outflows
 - Consumption
 - Saving
 - Transfer Outflows

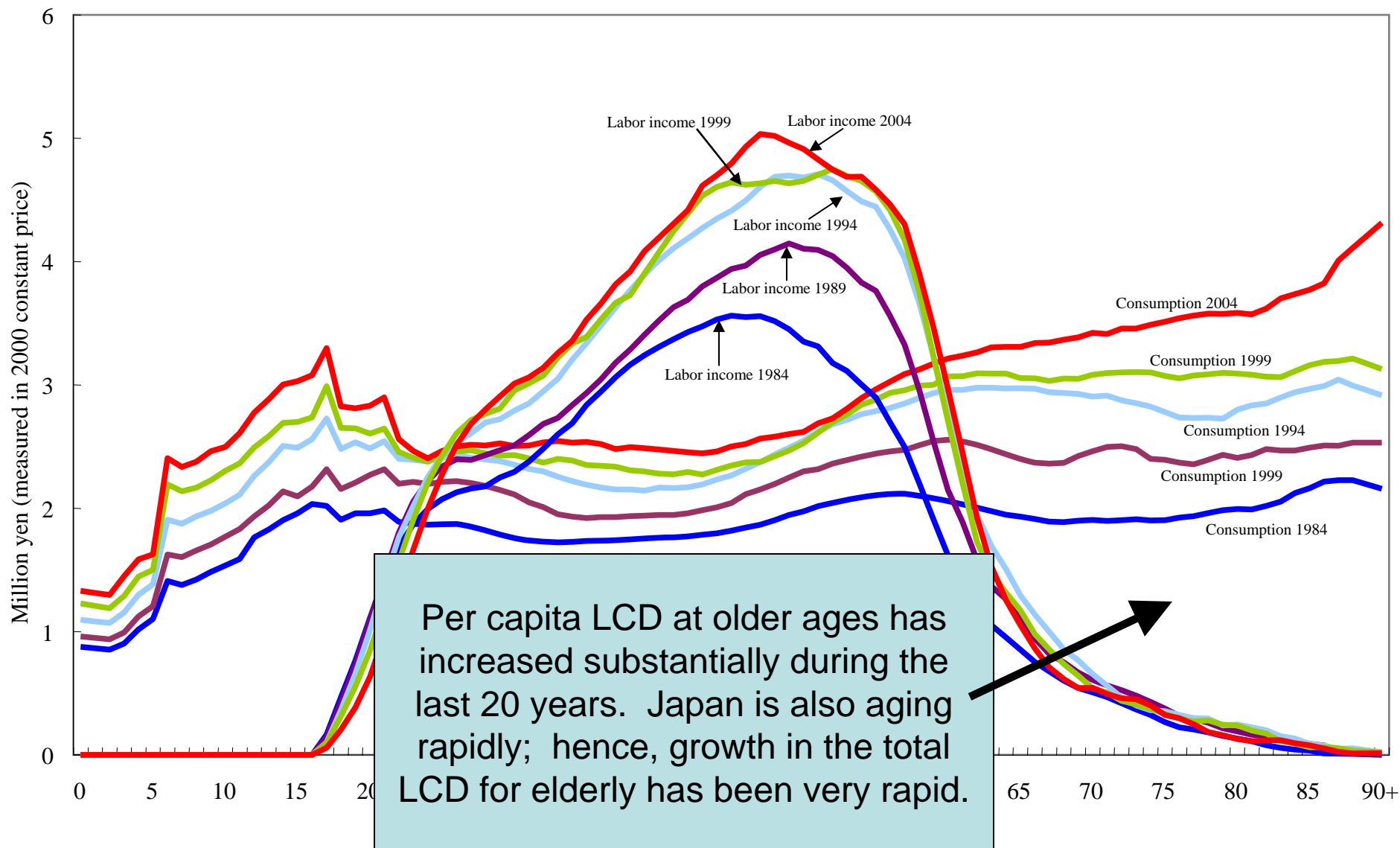
$$\underbrace{Y^l(a) + Y^a(a) + \tau^+(a)}_{\text{Inflows}} = \underbrace{C(a) + S(a) + \tau^-(a)}_{\text{Outflows}}$$

$$\underbrace{C(a) - Y^l(a)}_{\text{Lifecycle Deficit}} = \underbrace{Y^a(a) - S(a)}_{\text{Asset-based Reallocations}} + \underbrace{\tau^+(a) - \tau^-(a)}_{\text{Net Transfers}}$$

Age Reallocations

Source: Mason, Lee, et al., 2009; Lee, Lee, and Mason, 2008.

Figure 5. Age-specific profiles of per capita consumption and production: Japan, 1984-2004

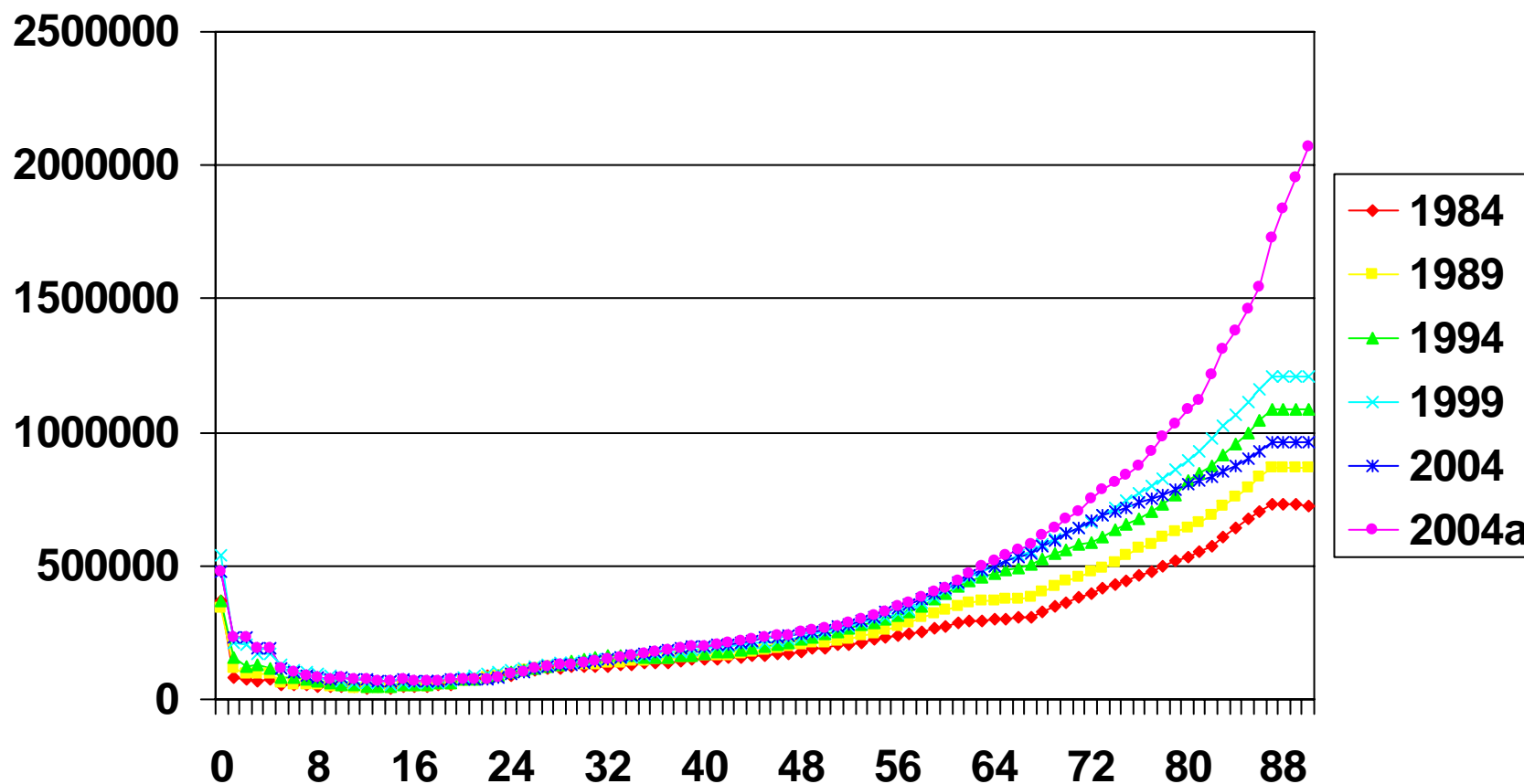


Source: Ogawa, Chawla, and Matsukura forthcoming.

Pattern in Japan and Elsewhere Raises Two Important Questions

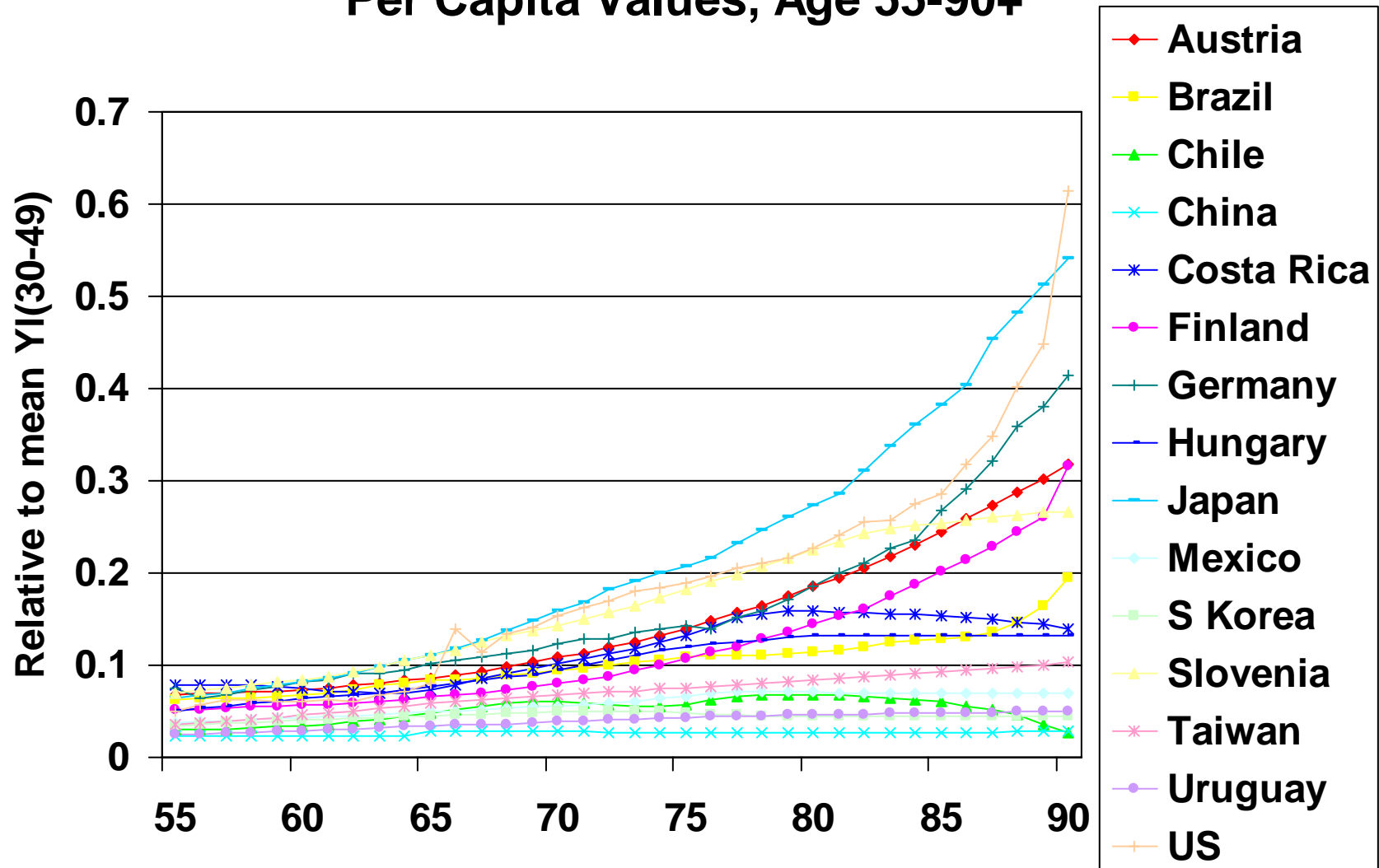
- What steps should be taken to control health care spending which accounts for most of the increase of consumption at older ages?
- Can policies raise the labor income of the elderly?
 - Age at retirement: Gruber and Wise
 - Productivity of older workers

Per Capita Health Consumption, Japan, 1984-2004



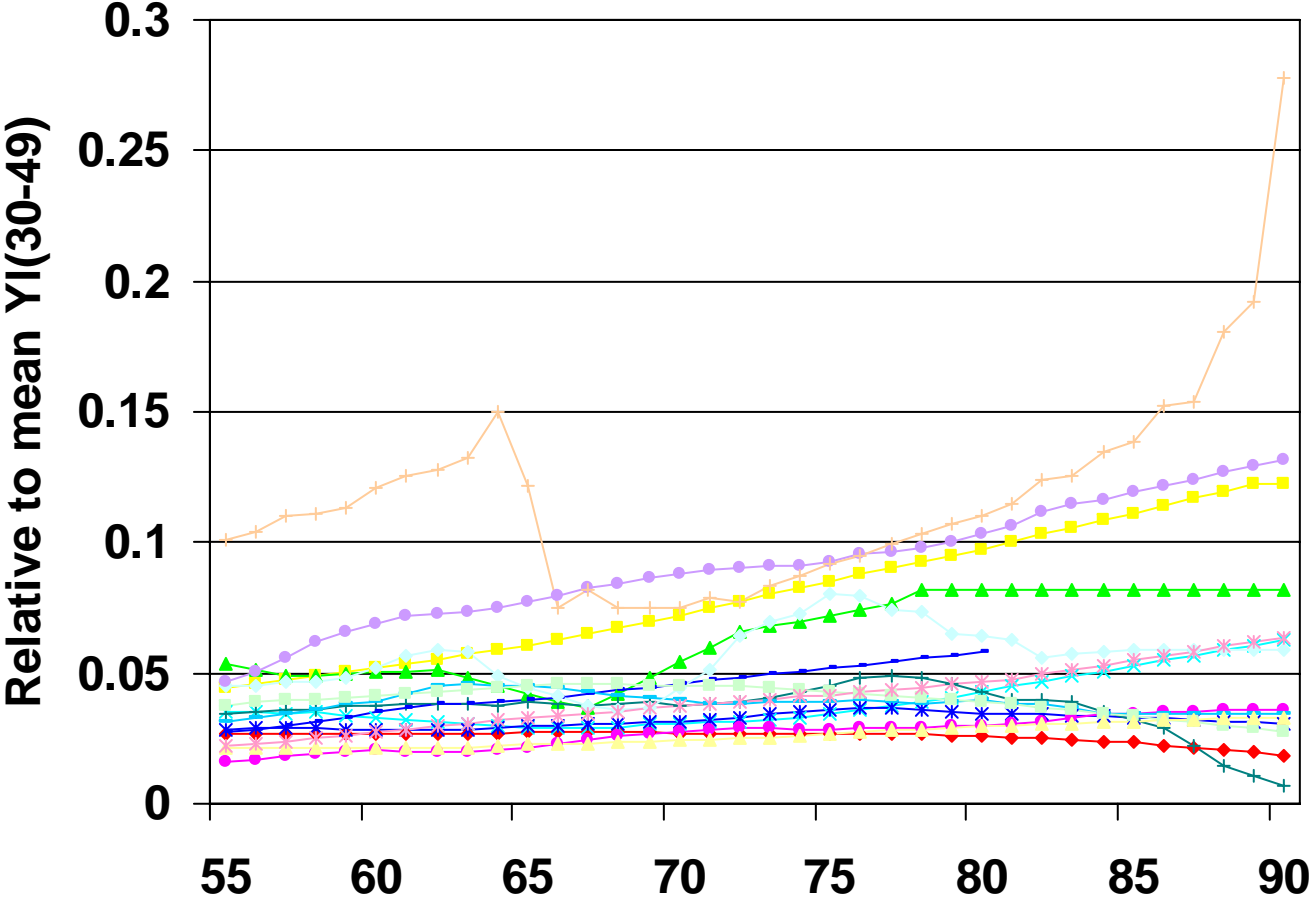
Note: Long-term care introduced in early 2000s included in 2004a.

Publicly Funded Health Consumption, Per Capita Values, Age 55-90+



Source: www.ntaccounts.org.

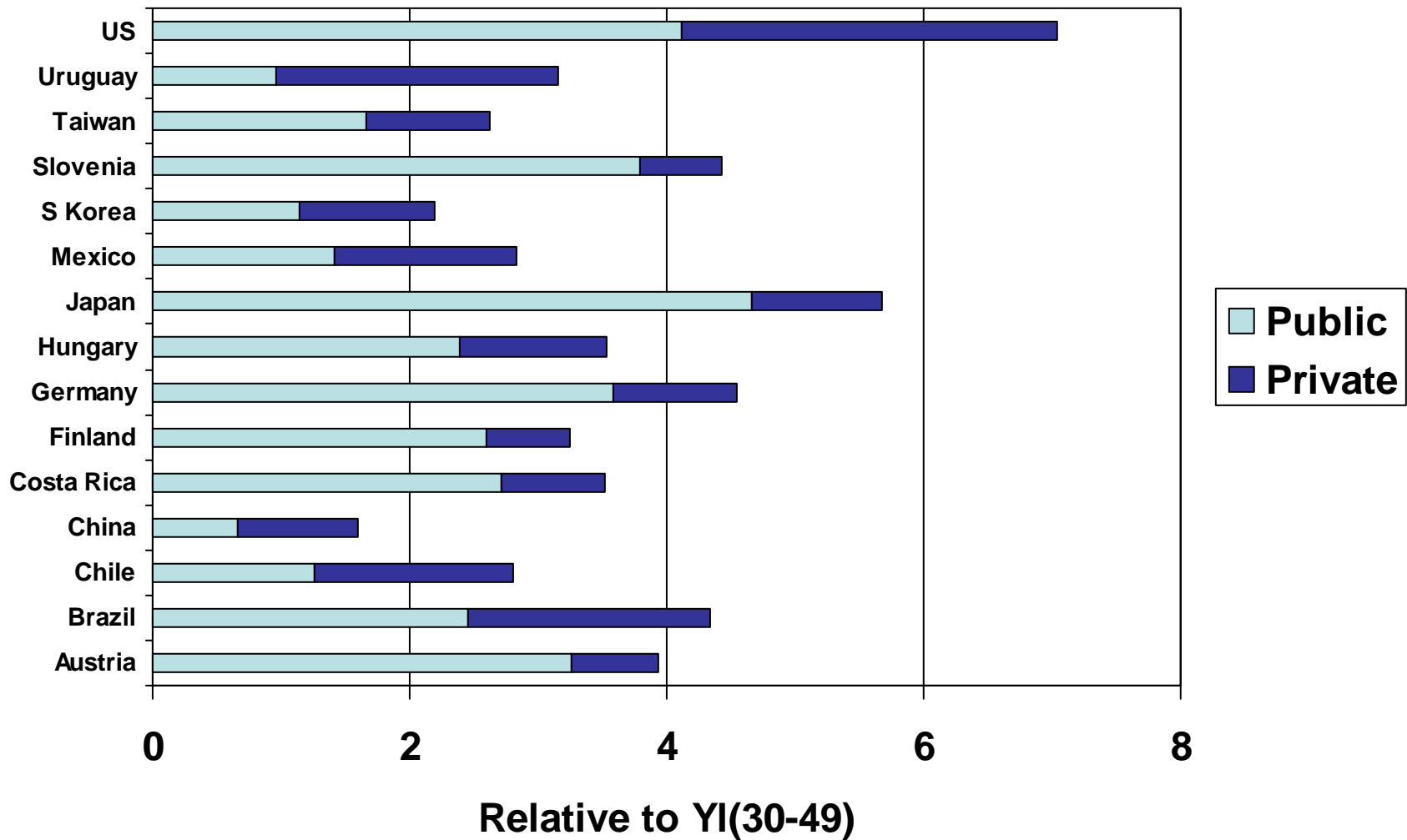
Private Health Consumption, Per Capita Values, Age 55-90+



- ◆ Austria
- Brazil
- ▲ Chile
- ✕ China
- ✱ Costa Rica
- Finland
- + Germany
- Hungary
- Japan
- ◇ Mexico
- S Korea
- ▲ Slovenia
- ✱ Taiwan
- Uruguay
- + US

Source: www.ntaccounts.org.

Health Care Spending, Synthetic Cohort, 55+



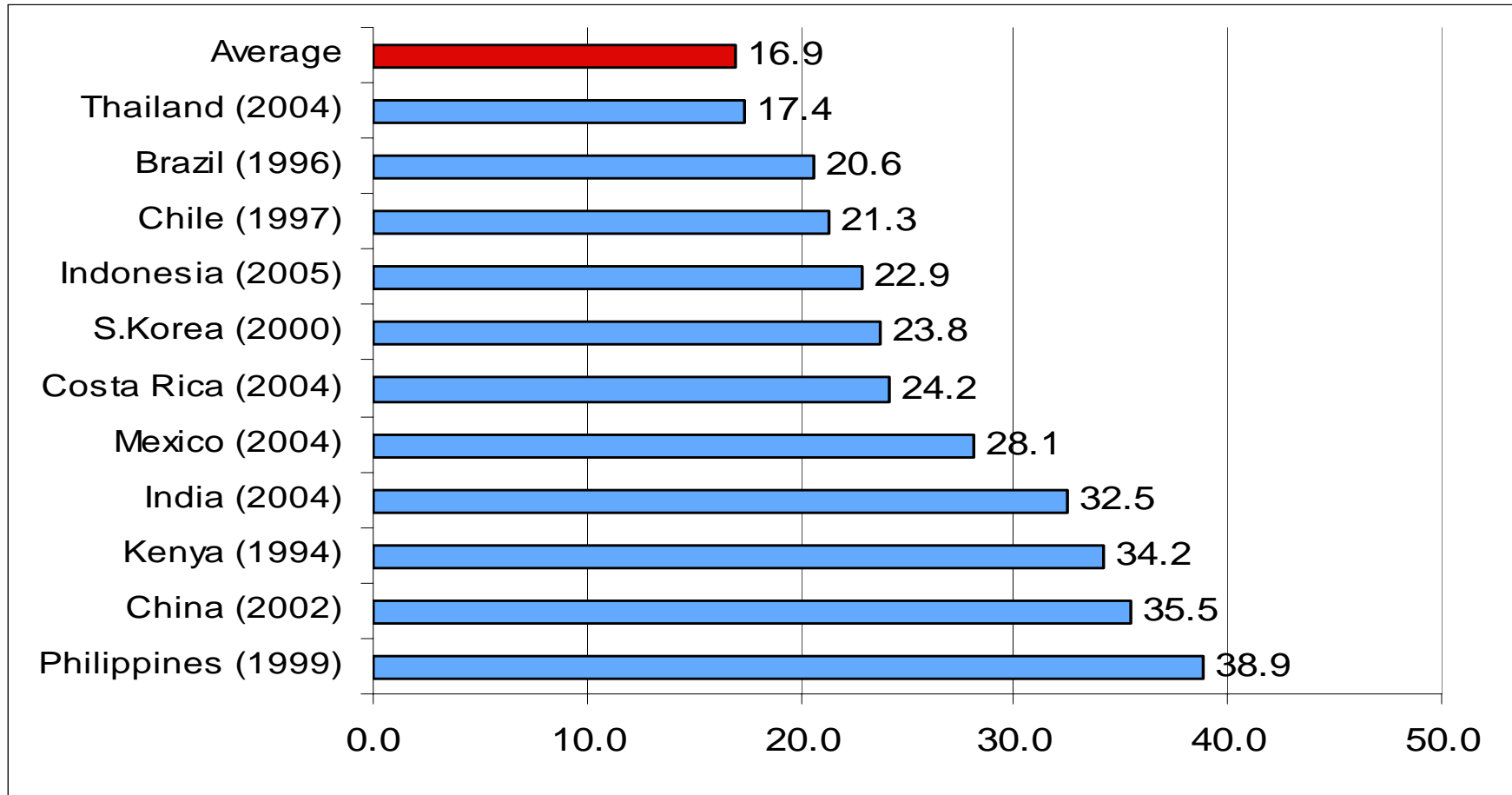
Note: Synthetic cohort values calculated using $L(x)/L(55)$ using the US 2000 life table for both sexes combined. Health spending data: www.ntaccounts.org.

Summary

- Public spending on health in the US is similar to that in other industrialized countries, e.g., Japan and Germany: high and steeply increasing with age.
- Private spending on health is more important in the US and some developing countries than in other industrialized countries.
- The rise in private spending with age in the US is very steep, but not so elsewhere.

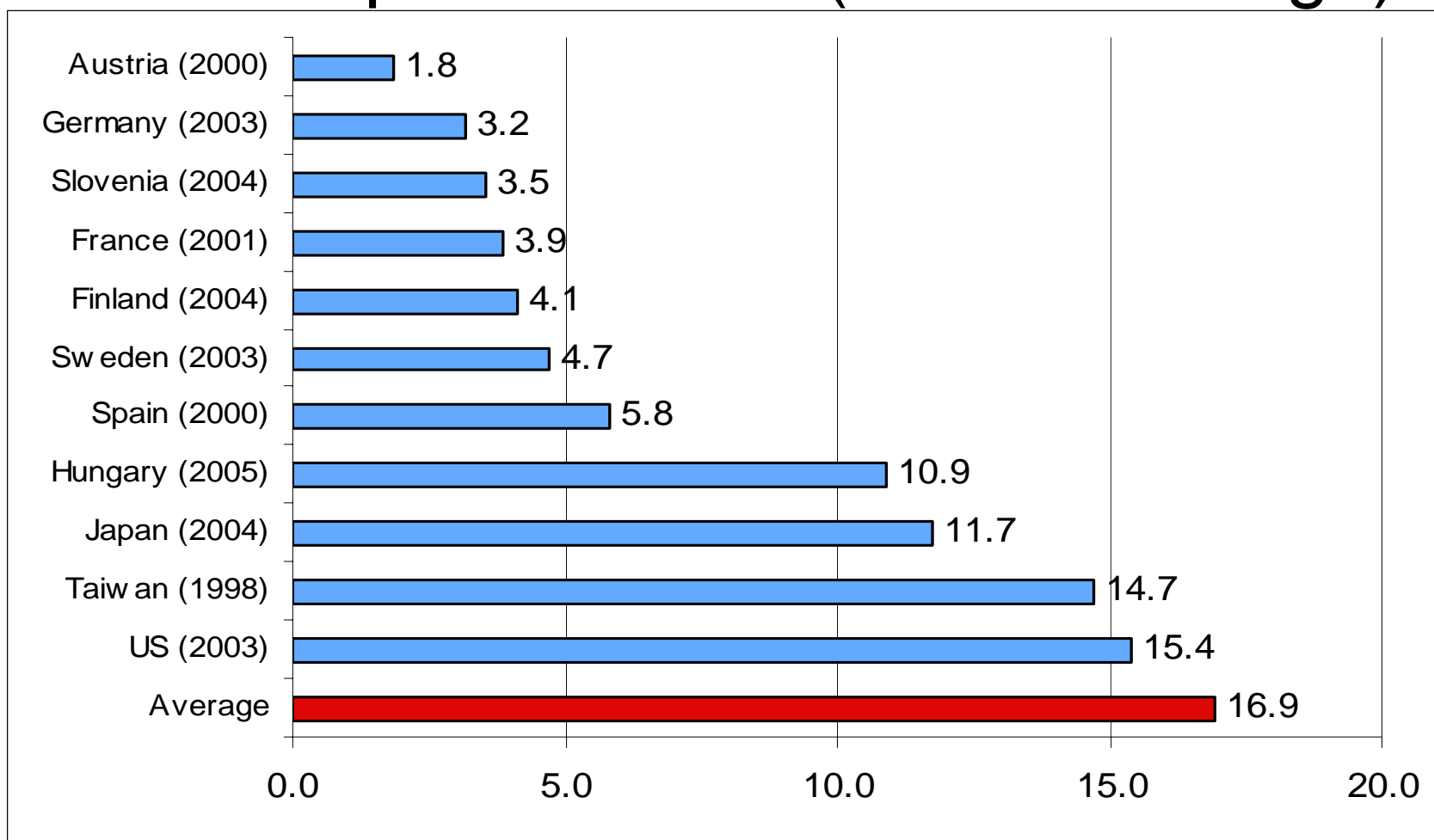
Labor Income

Labor Income as a Percentage of Consumption for 65+ (Above Average)



Source: S-H Lee 2009.

Labor Income as a Percentage of Consumption for 65+ (Below Average)



Source: S-H Lee 2009.

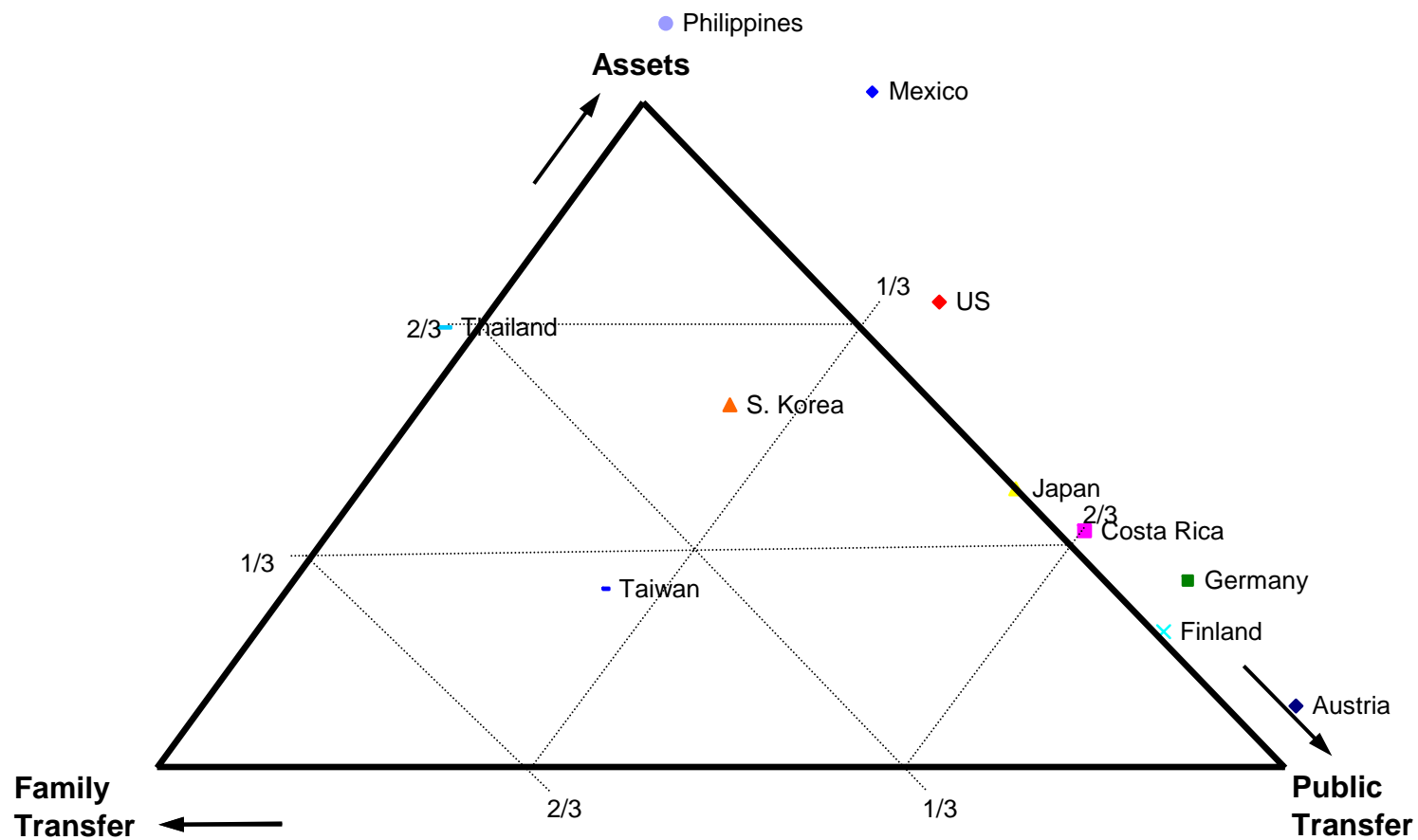
Summary: Labor Income

- Strongly related to level of development
- Very low in Europe and compared with Japan, Taiwan, and the US.
- Strong disincentives to work due to tax and pension provisions in many European countries.
- Compulsory retirement except in the US.
- Low labor income is partly low participation, but also wages and productivity are very low.

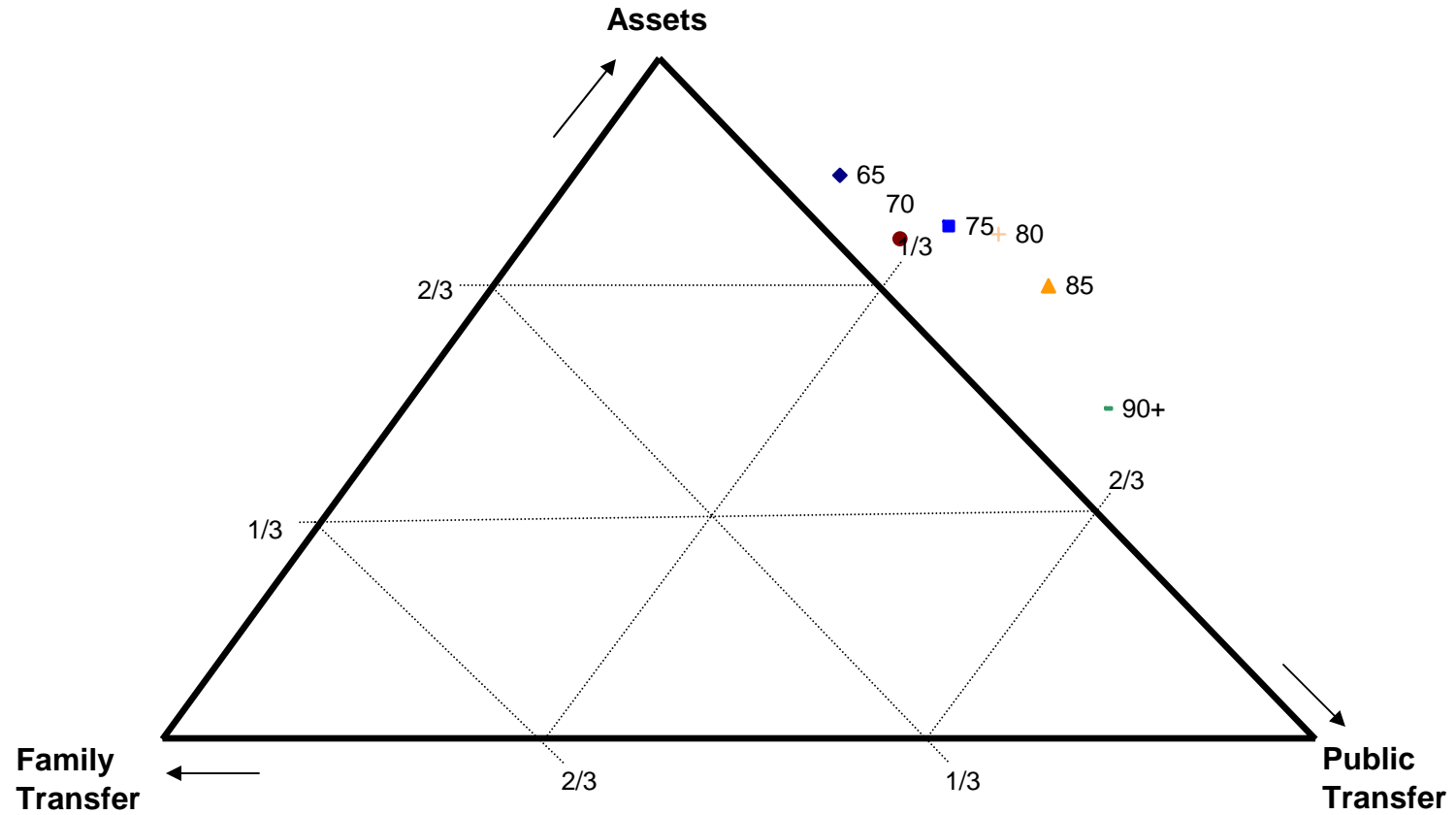
Reallocation Systems for the Elderly

- Lifecycle Deficit is funded in three important ways
 - Asset-based reallocations
 - Asset income
 - Dis-saving
 - Almost all is asset income; dis-saving is rarely observed.
 - Net public transfers
 - Value of all good and services received through the public sector
 - Cash transfers, e.g., pensions.
 - Less taxes paid
 - Net private transfers
 - Net Inter-household transfers
 - Net intra-household transfers

Reallocations as a share of lifecycle deficit, 65 and older, selected countries, recent year.

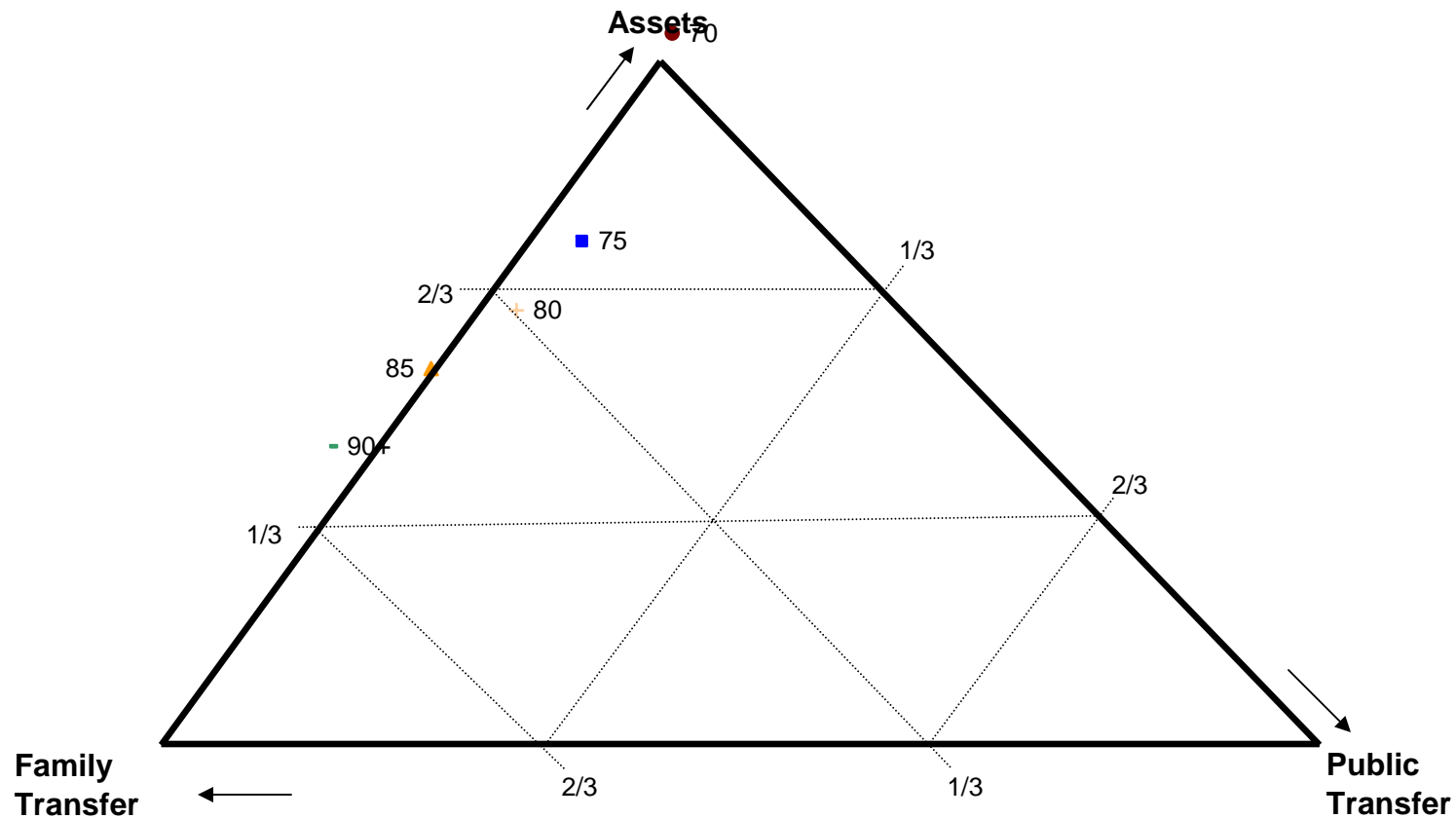


United States (2003)



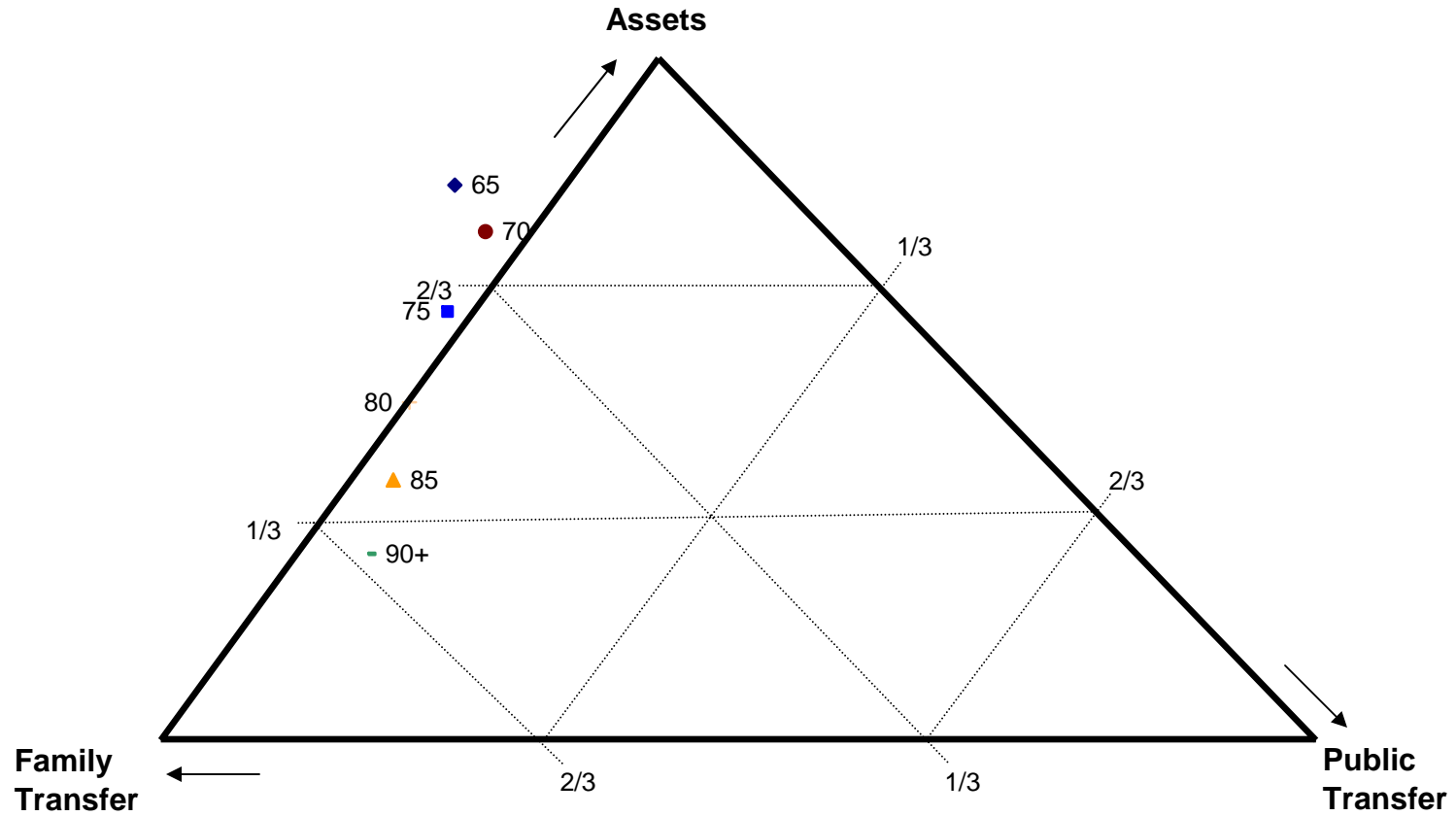
Source: Lee, Lee & Mason (2007)

Philippines (1999)



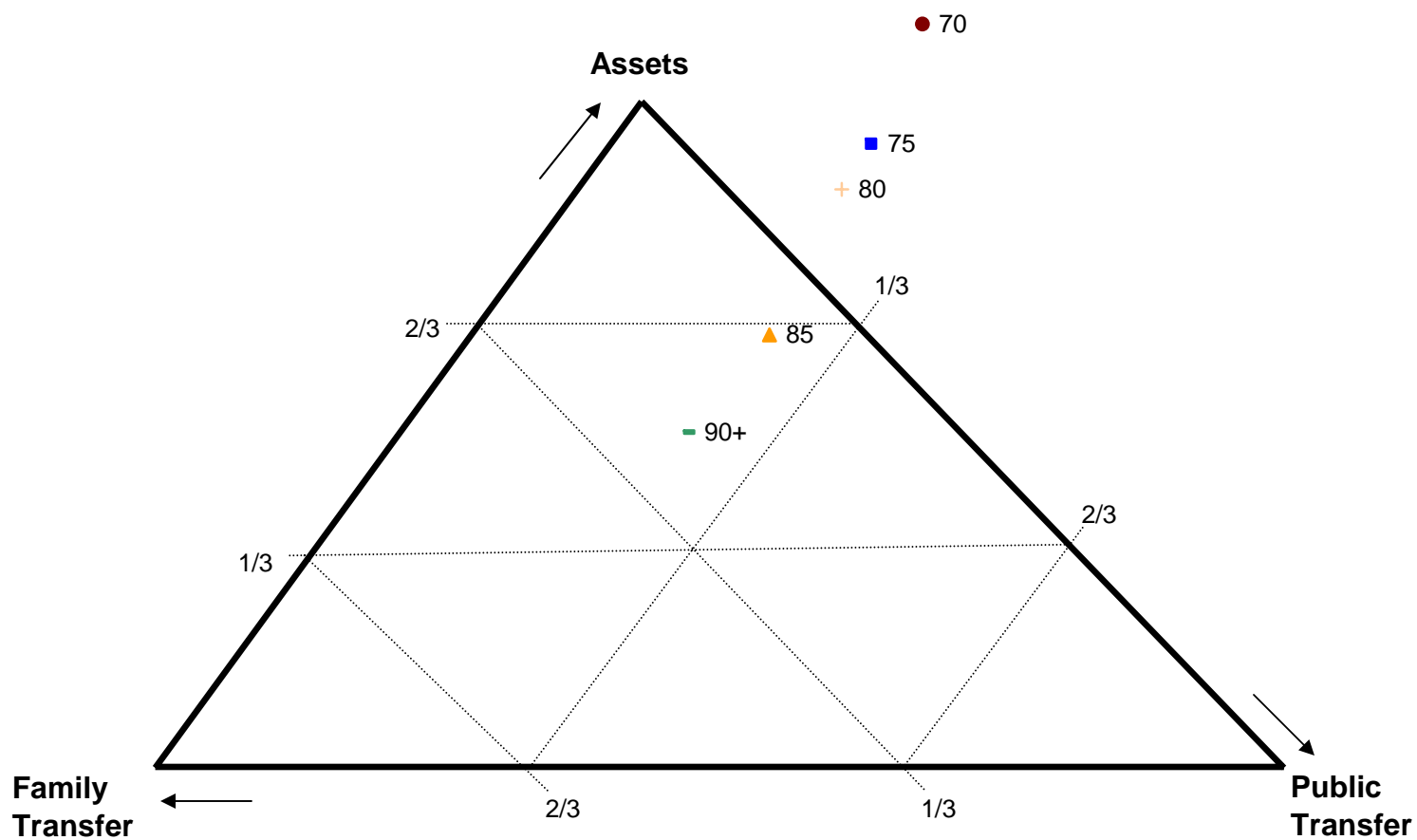
Source: Salas & Rachelis (2008)

Thailand (2004)



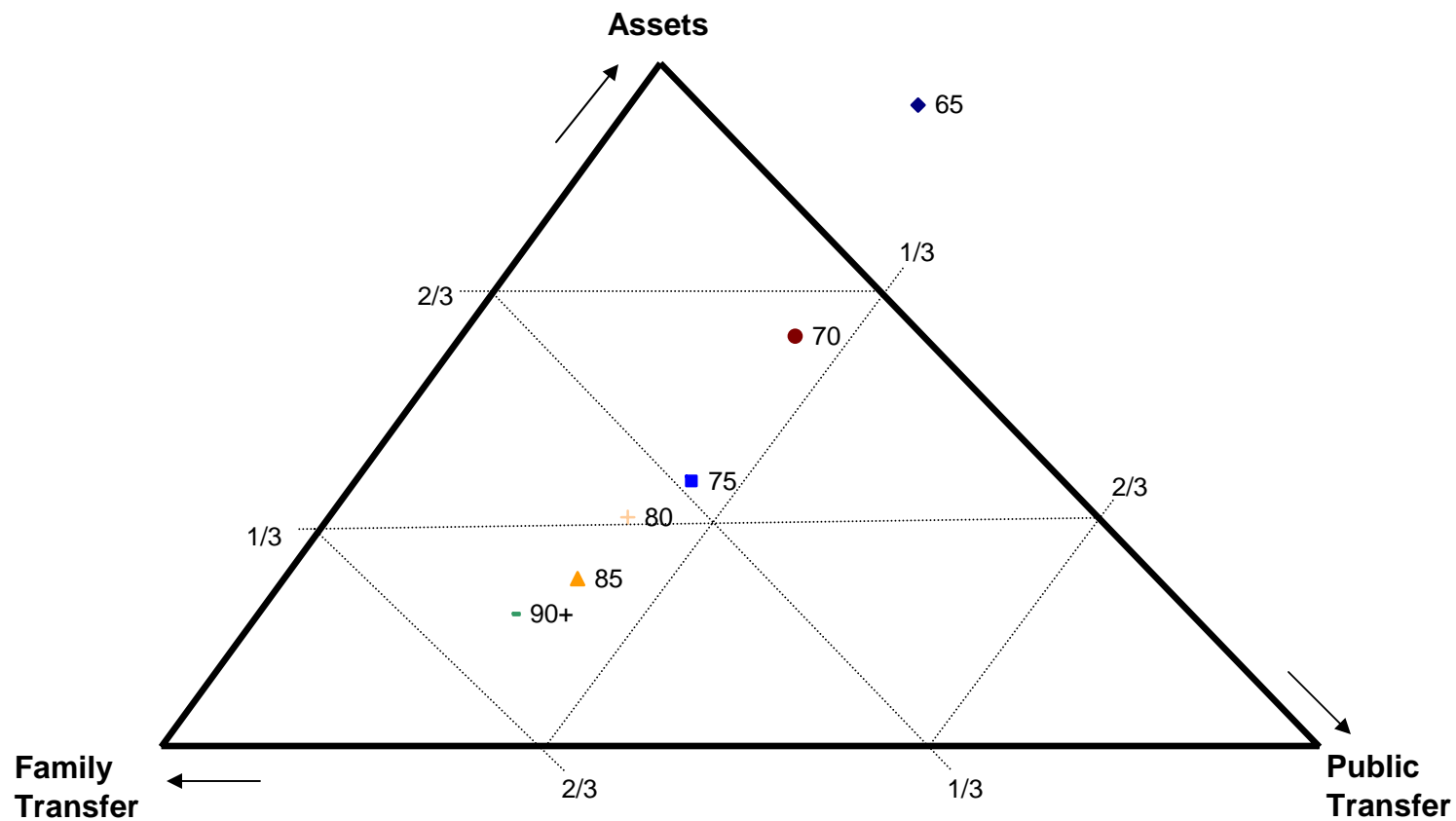
Source: Chawla (2008)

Mexico (2004)



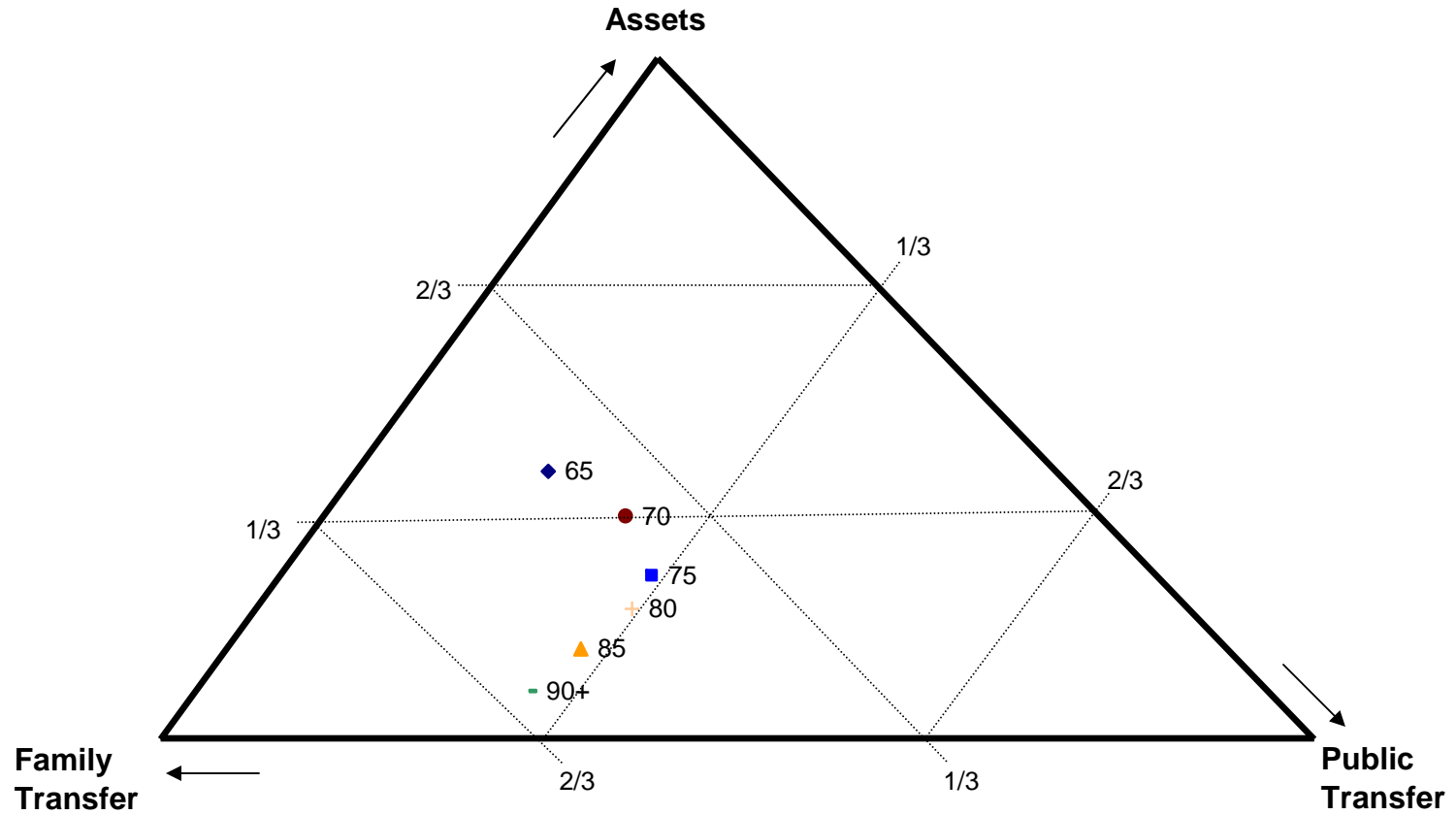
Source: Mejia-Guevara (2008)

South Korea (2000)



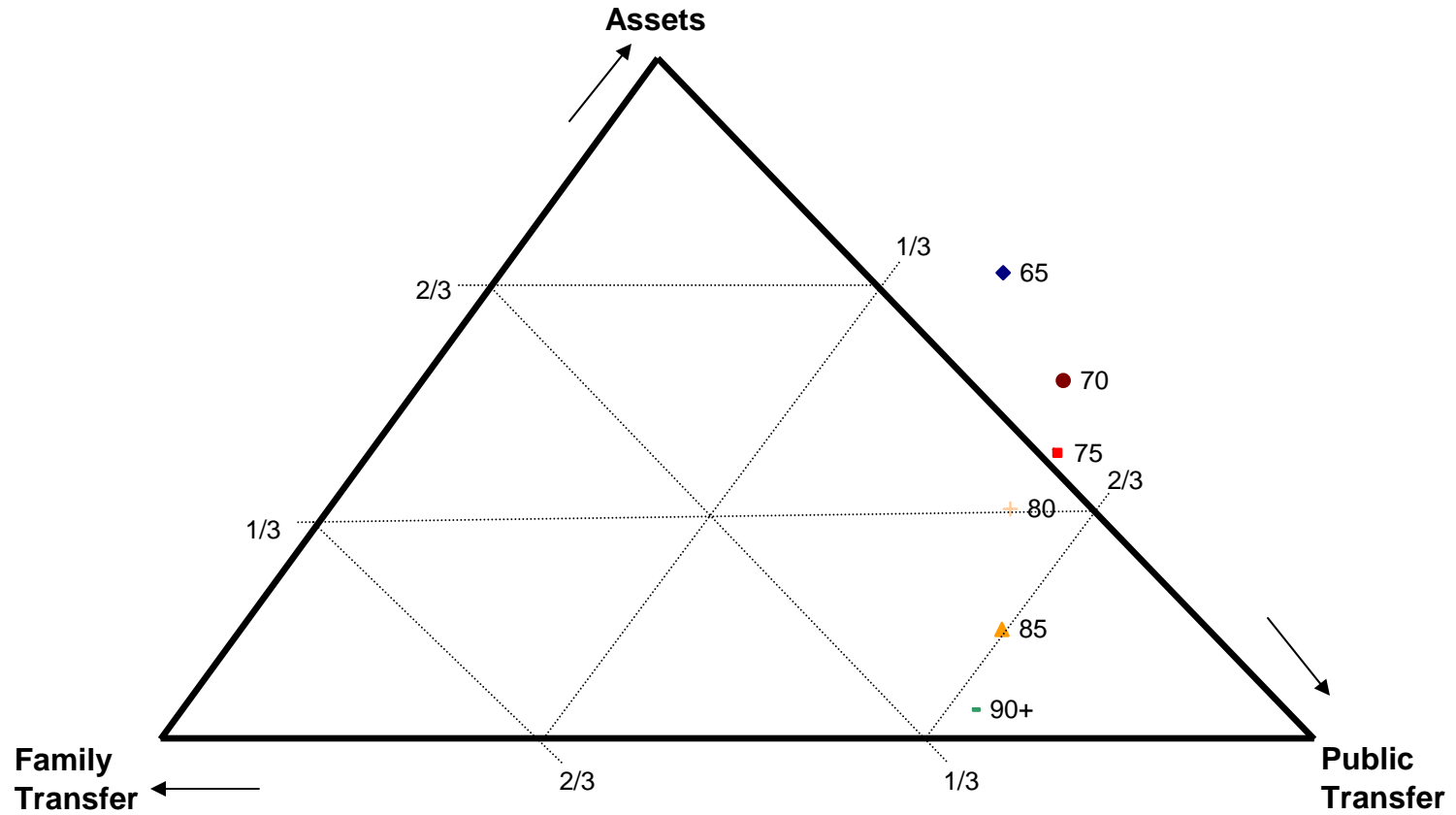
Source: National Transfer Accounts

Taiwan (1998)



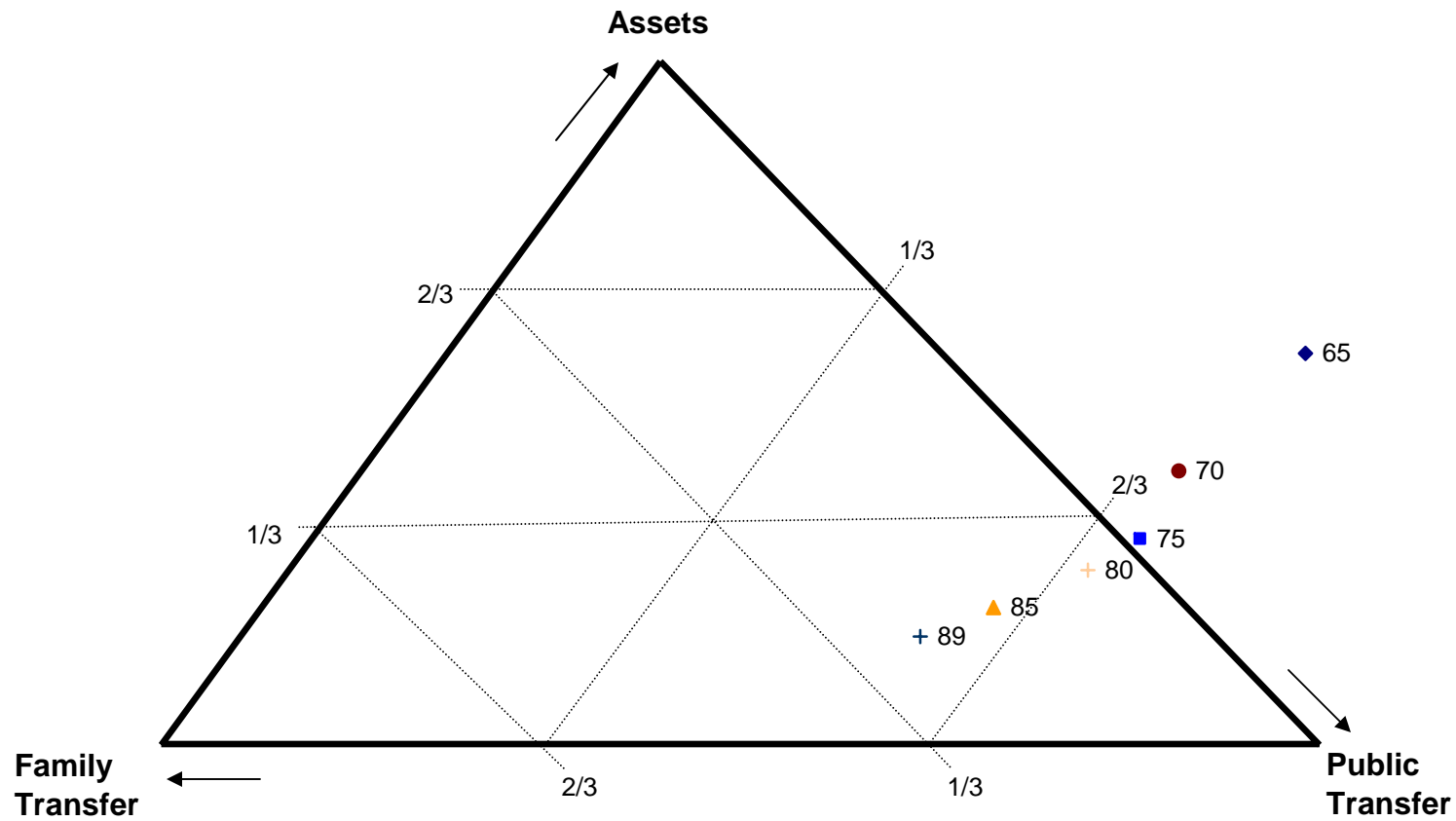
Source: Mason, Lee, Tung, Lai & Miller (forthcoming)

Japan (2004)



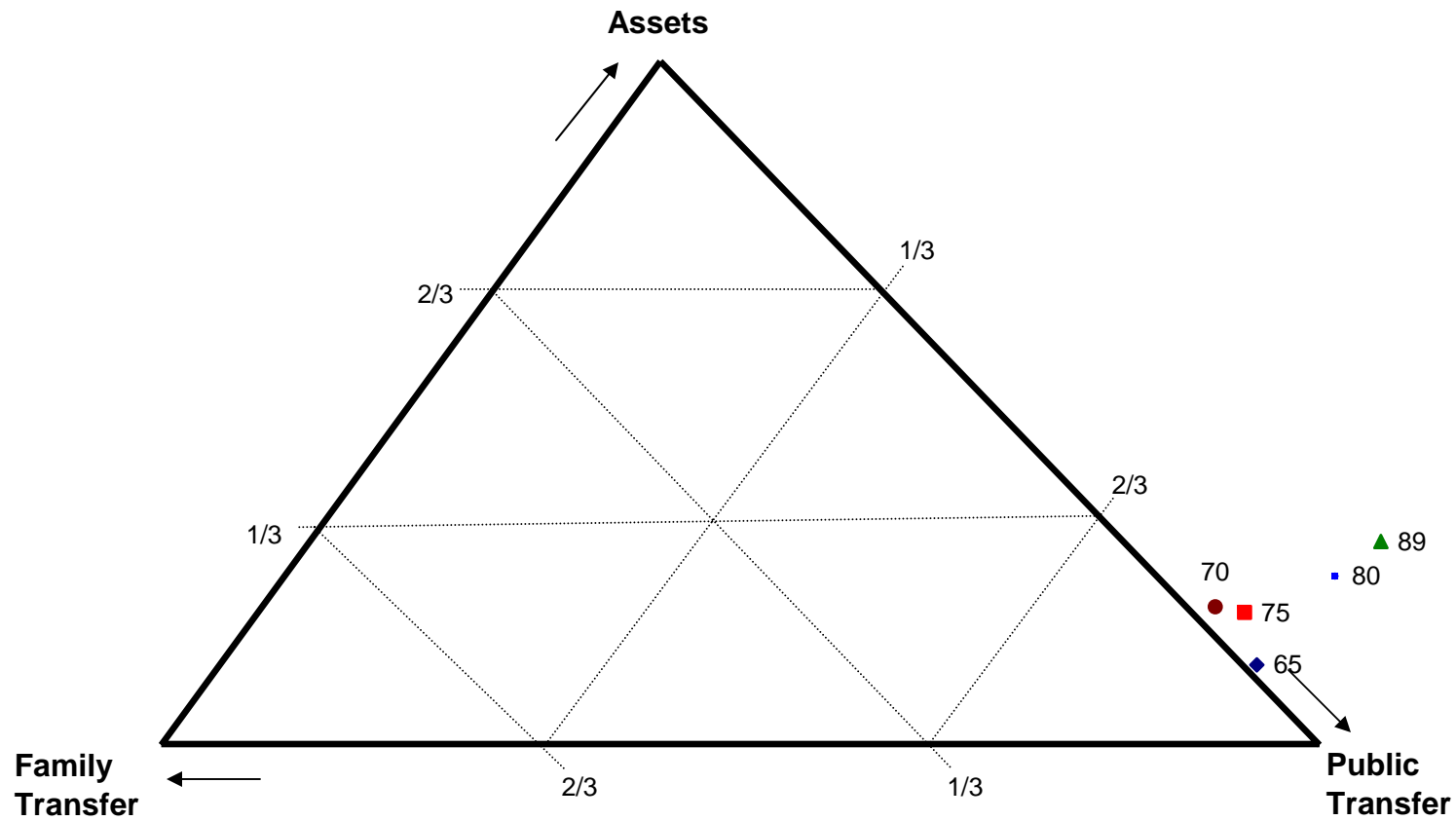
Source: Ogawa, Mason, Chawla & Matsukura (2008)

Costa Rica (2004)



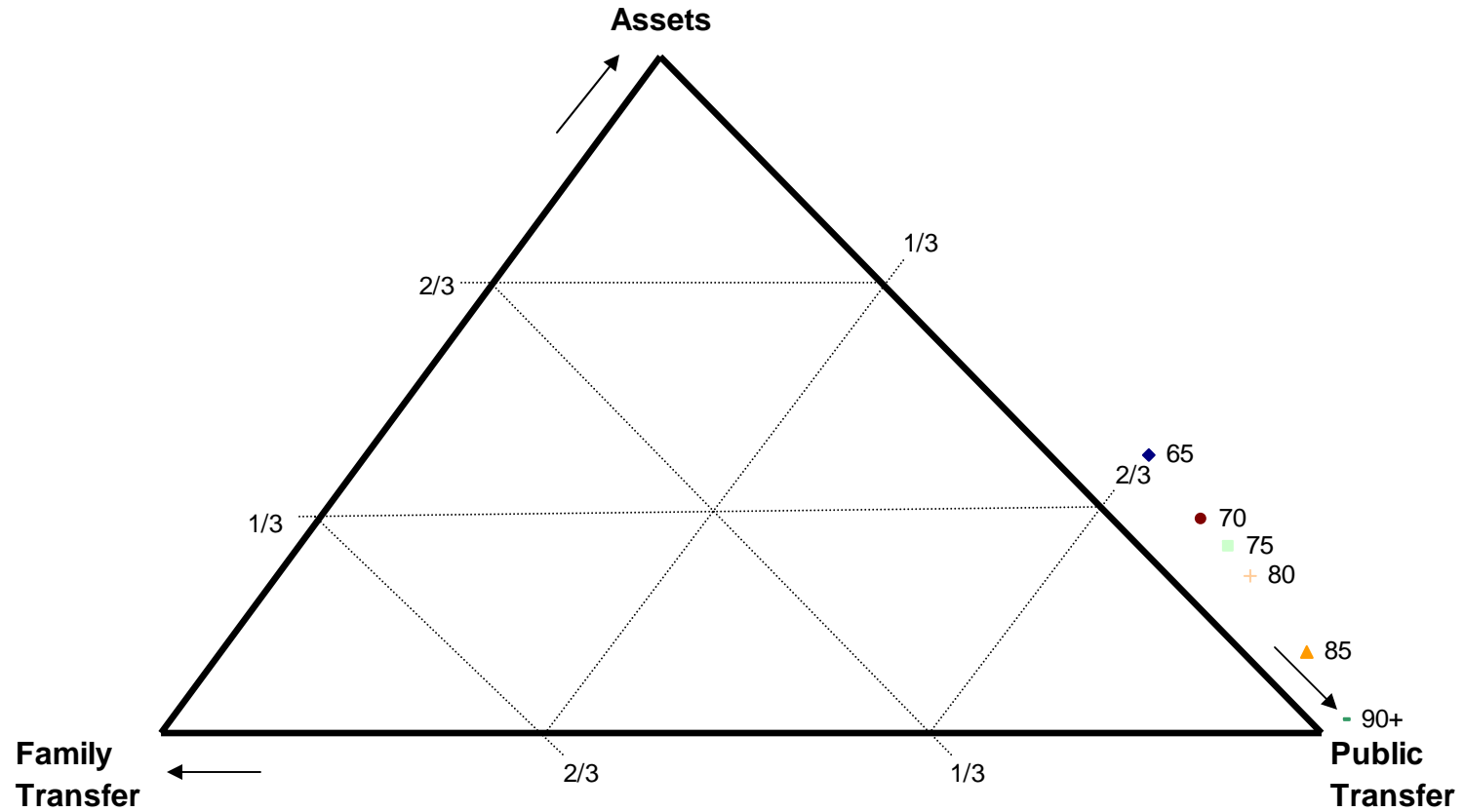
Source: Rosero-Bixby & Robles (2008)

Finland (2004)



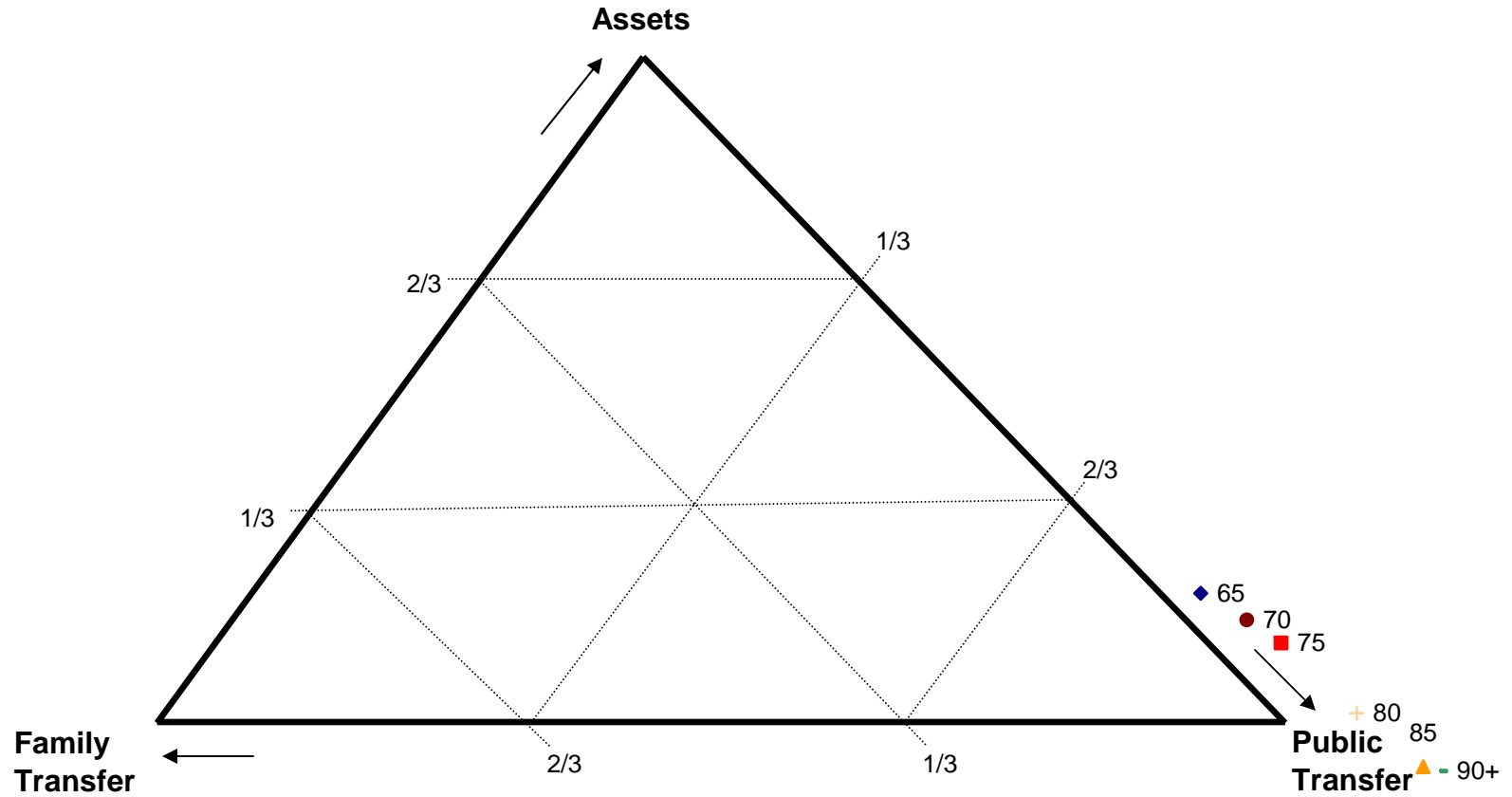
Source: Risto & Vanne (2008)

Germany (2003)



Source: Kluge (forthcoming)

Austria (2000)



Source: Fuernkranz-Prskawetz & Sambt (2008)

Patterns and Generalizations

- In industrialized countries familial transfers are modest and typically downward, i.e., from the elderly to their children and grandchildren.
- In Latin American countries, familial transfers are also downward.
- Familial transfers are an important source of support for elderly in Asian countries.
- Developing countries rely more on asset-based reallocations than industrialized countries.
- The US relies more on asset-based reallocations than other industrialized countries.
- Public transfers are much more important in Europe and Japan than the US.
- Public transfers are much more important in Latin America than in developing Asia.

Age Patterns

- Asset-based reallocations decline and transfers increase with age (except in Finland)
- Familial transfers increase in Philippines, Thailand, Mexico, S. Korea, Costa Rica, and Japan.
- Public transfers increase in Austria, Germany, and the US.
- In Taiwan, public transfers increase among young elderly and familial transfers among old elderly.

Reallocation System Issues

- Incentive and dis-incentive effects on
 - Retirement
 - Saving
 - Human capital investment
- Do systems vary in their risk-sharing features?
- Which systems are most vulnerable to population aging?

The Endh