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

\[
Y^l(a) + Y^a(a) + \tau^+(a) = C(a) + S(a) + \tau^-(a)
\]

- **Inflows**
  - Lifecycle Deficit
  - Asset-based Reallocations
  - Net Transfers

\[
C(a) - Y^l(a) = Y^a(a) - S(a) + \tau^+(a) - \tau^-(a)
\]

Per capita LCD at older ages has increased substantially during the last 20 years. Japan is also aging rapidly; hence, growth in the total LCD for elderly has been very rapid.

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+

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.ntacounts.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)
Source: Mejia-Guevara (2008)
South Korea (2000)

Source: National Transfer Accounts
Taiwan (1998)

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

Finland (2004)

Source: Risto & Vanne (2008)
Assets

Family Transfer

Public Transfer

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 End