The economic consequences of population aging

UNFPA/EWC Technical Policy Seminar
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Report by Sidney B. Westley

15 participants

- 5 from NTA: Ron Lee, Sang-Hyop Lee, Andy Mason, Hiro Ogawa, Sidney Westley
- 9 from the UN system: UNFPA, World Bank, IMF, UNCTAD, DESA
- 2 from universities: Harvard, Queens College
- Edgard Rodriguez from IDRC
- Plus written comments from Tim Miller

Presentations and discussion

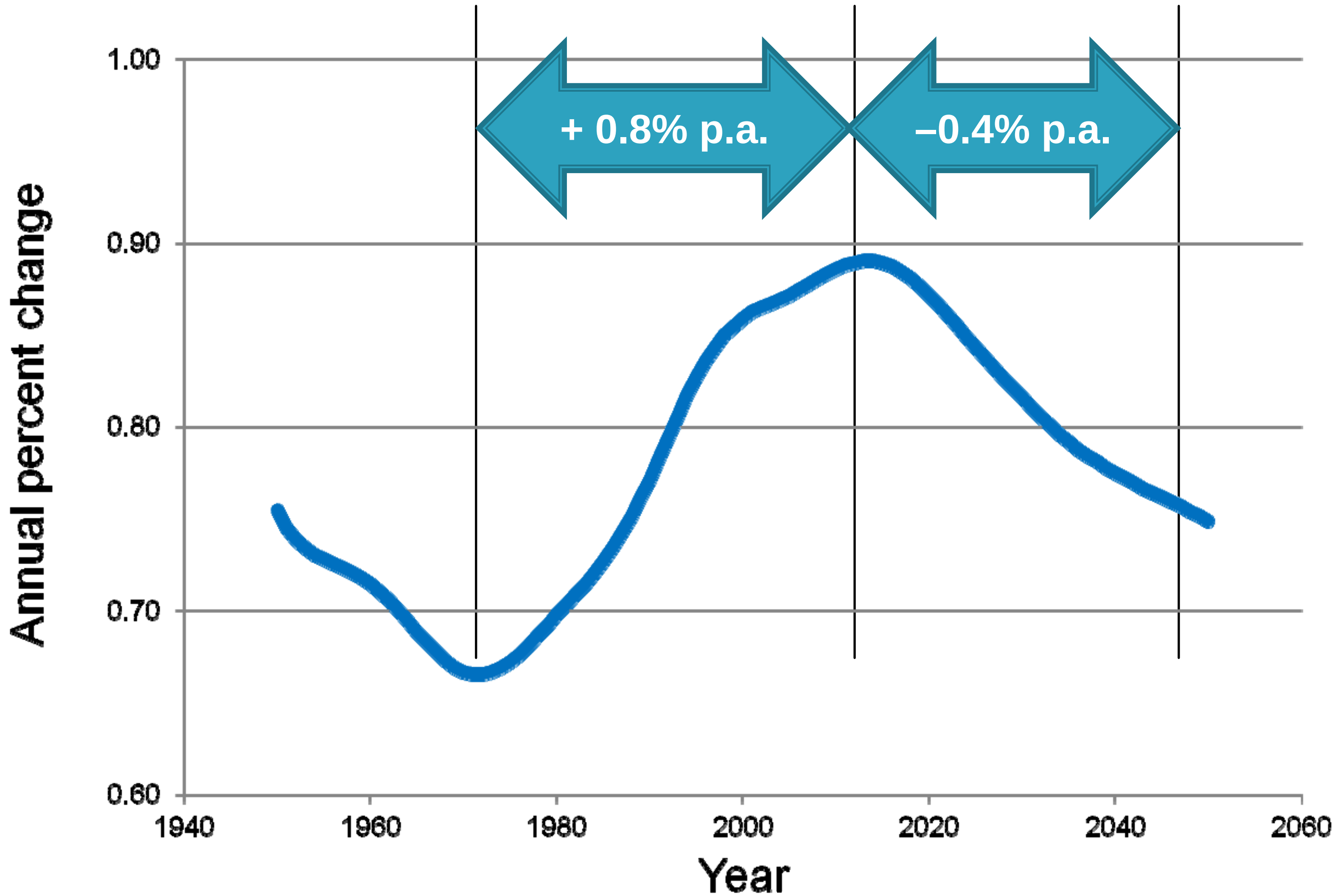
1. Support ratios: Why does population age structure matter?
2. Labor market challenges
3. Investment in education and health
4. Investment in capital
5. Pension systems and options for reform
6. Rising healthcare costs: Will improvements in efficiency be enough?

Evening: Book launch for *Population aging and the generational economy*

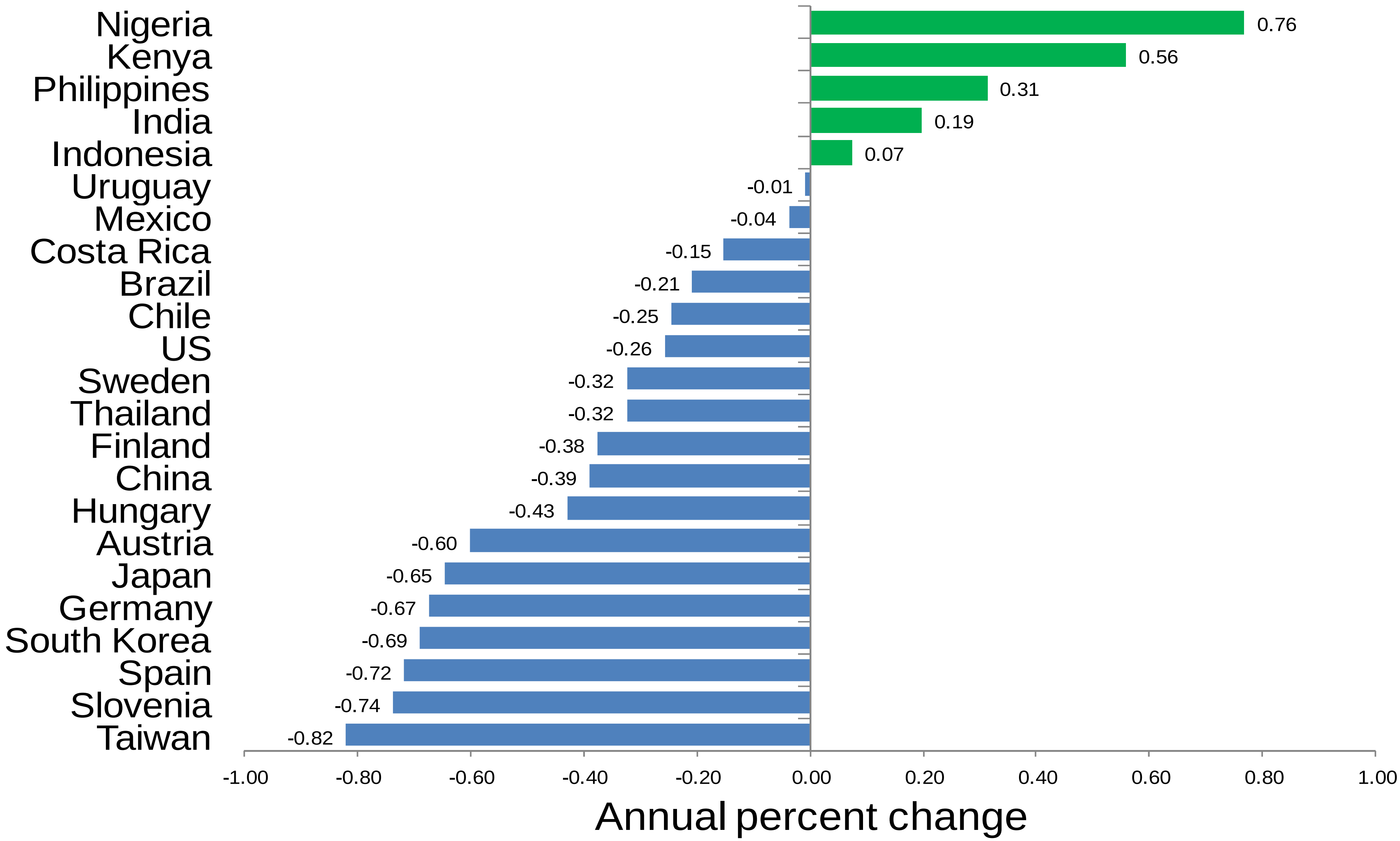
1. Support ratios defined

- Effective number of producers per 100 effective number of consumers
  - Population in each one-year age group
  - Weighted to incorporate age differences in employment, productivity, and consumption

Changes in the support ratio in China, 1950–2050



Average annual change in support ratios of 23 economies, 2010–2050



Do support ratios matter?

- Yes, size matters: Strong evidence from East Asia that high support ratios have contributed to economic growth
  - In 1950, there were 31 women in Japan age 40–59 for every elderly person age 80 and above; in 2010, there were only three.
- But it's also what you do with what you've got: Good policies are important

2. Labor market challenge: Maintain the size of the workforce

- Youth: Education, job training
- Women: Flexible schedules, maternity and childcare leave, daycare
- Older workers: remove mandatory retirement age, seniority-based wages, and incentives to retire early, flexible schedules, lifelong learning
- Overall: remove rigidities so employers aren't reluctant to hire

Labor market challenge: Maintain employment levels and wages

- Potential workers need jobs and adequate wages (productivity)
- In many economies, the problem is demand for workers, not supply
- Particularly a problem today with the economic crisis
- But also a longer-term problem of youth unemployment and underemployment

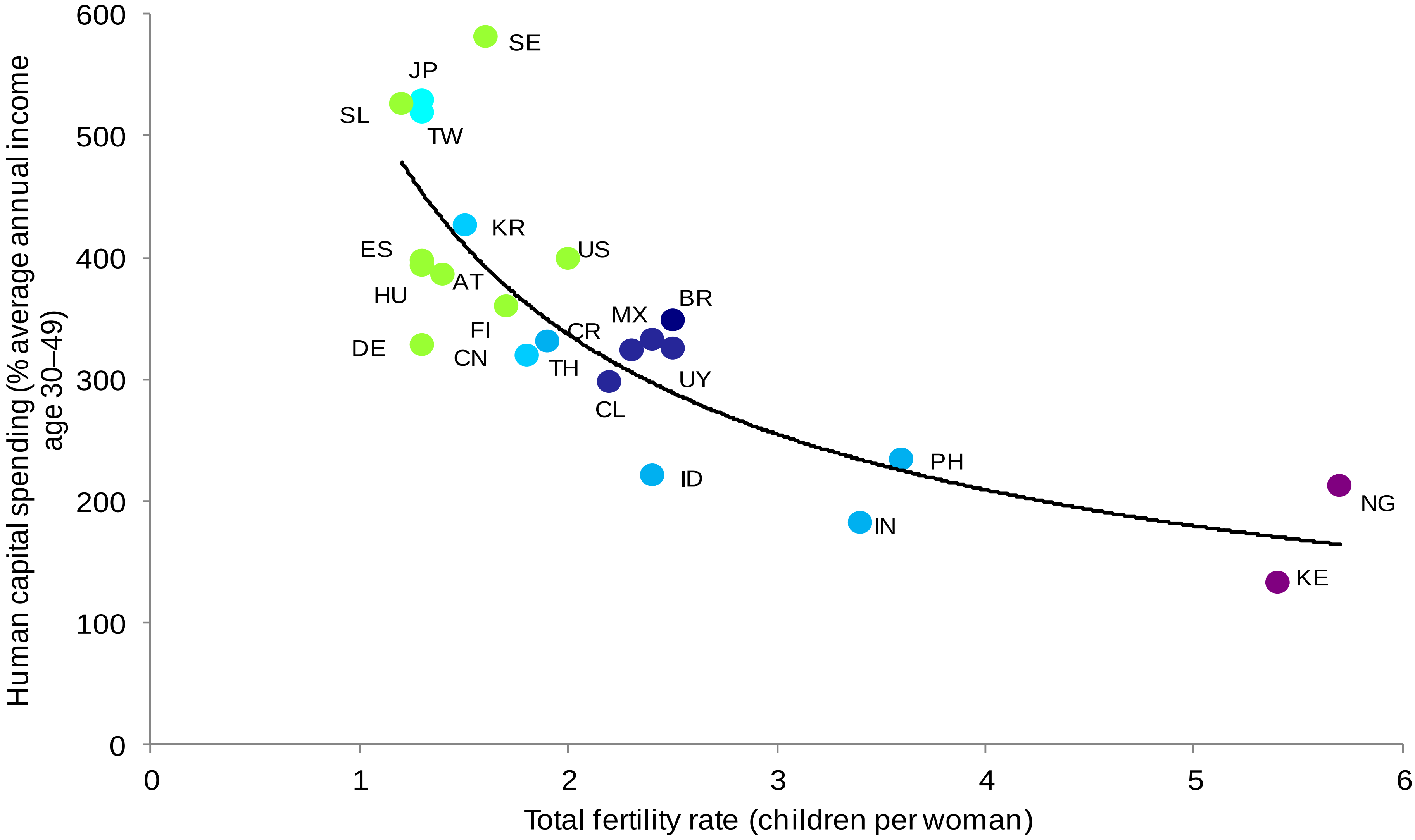
3. Investment in education and health

- With a shrinking workforce, investment in the productivity of each worker assumes greater importance

And we're doing it…

- Spending on children's health and education goes up sharply as fertility declines

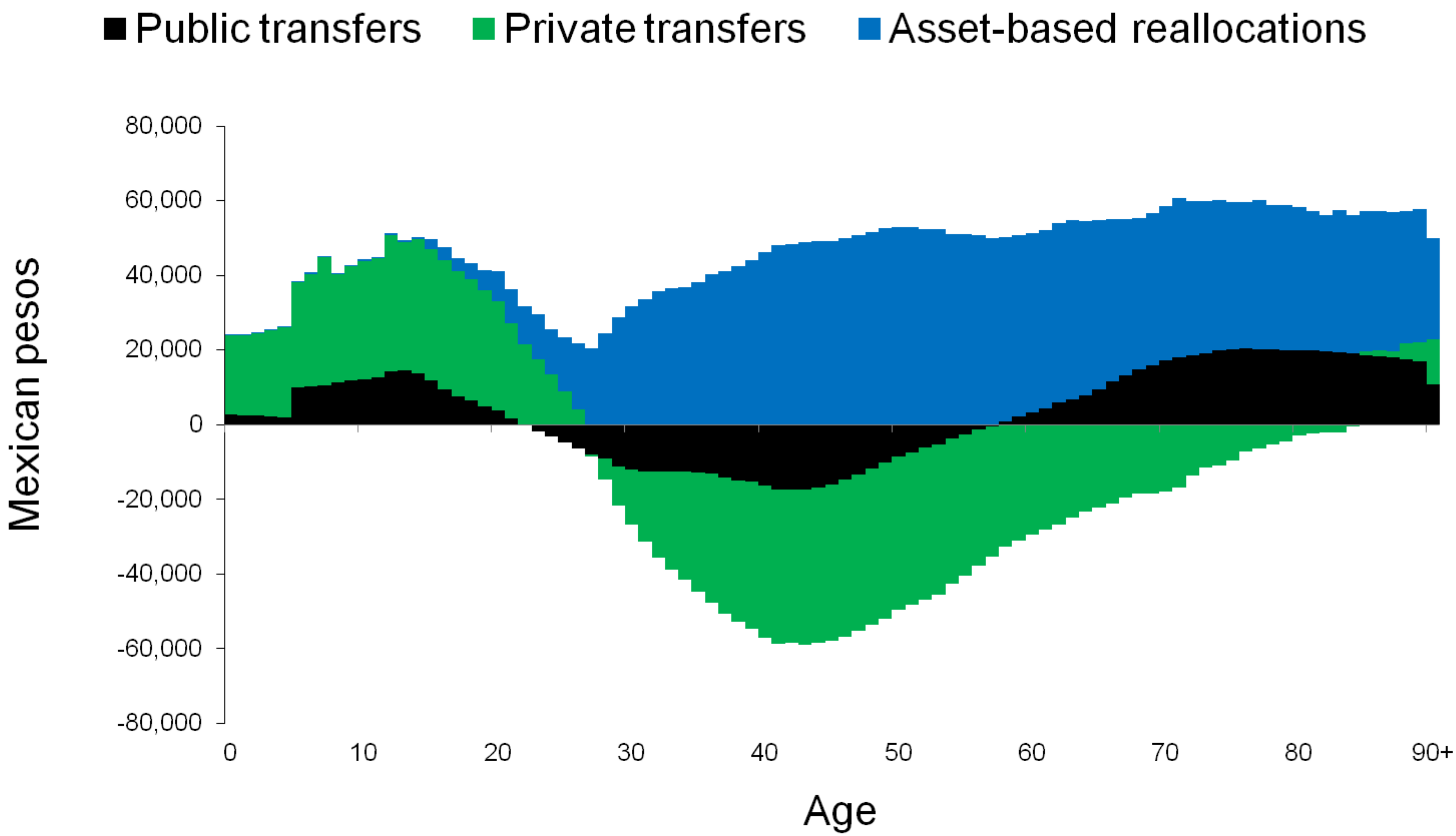
Trade-off between fertility and human capital spending



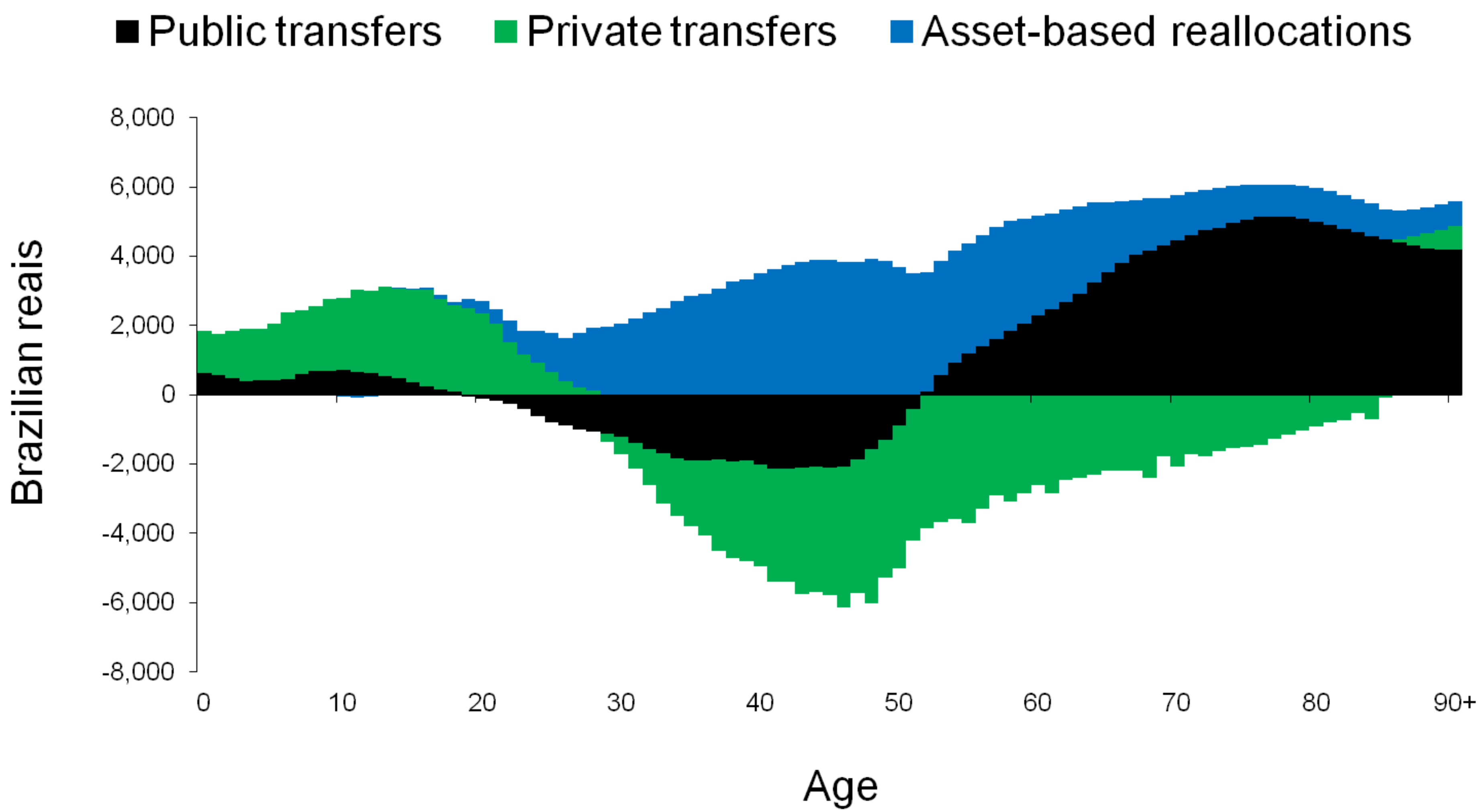
4. Investment in capital

- Dependent populations are supported through a combination of transfers from other age groups and asset income derived from earlier investments
- The relative importance of these three sources of support varies widely in different economies

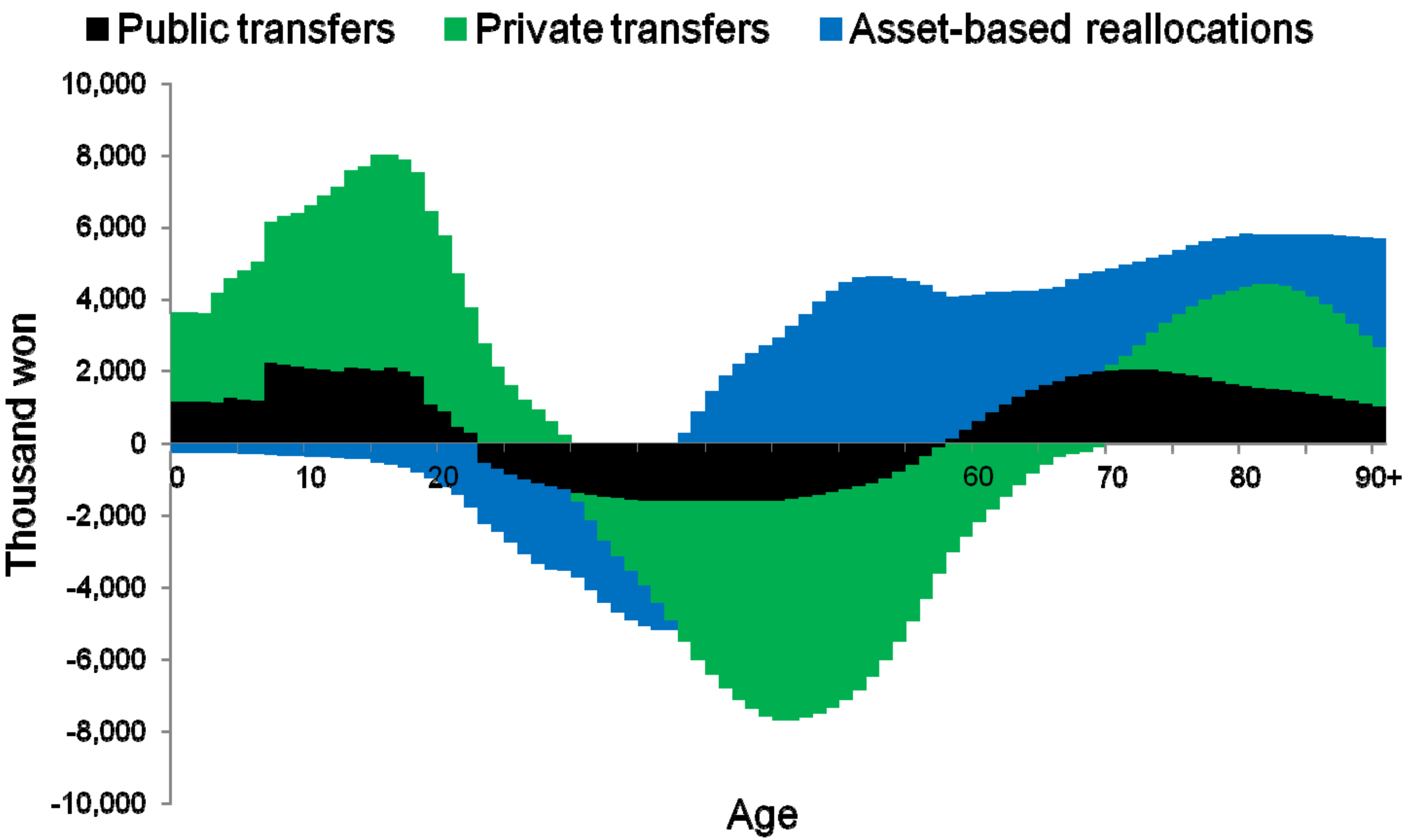
Per capita public and private transfers and asset-based resource flows by age: Mexico, 2004



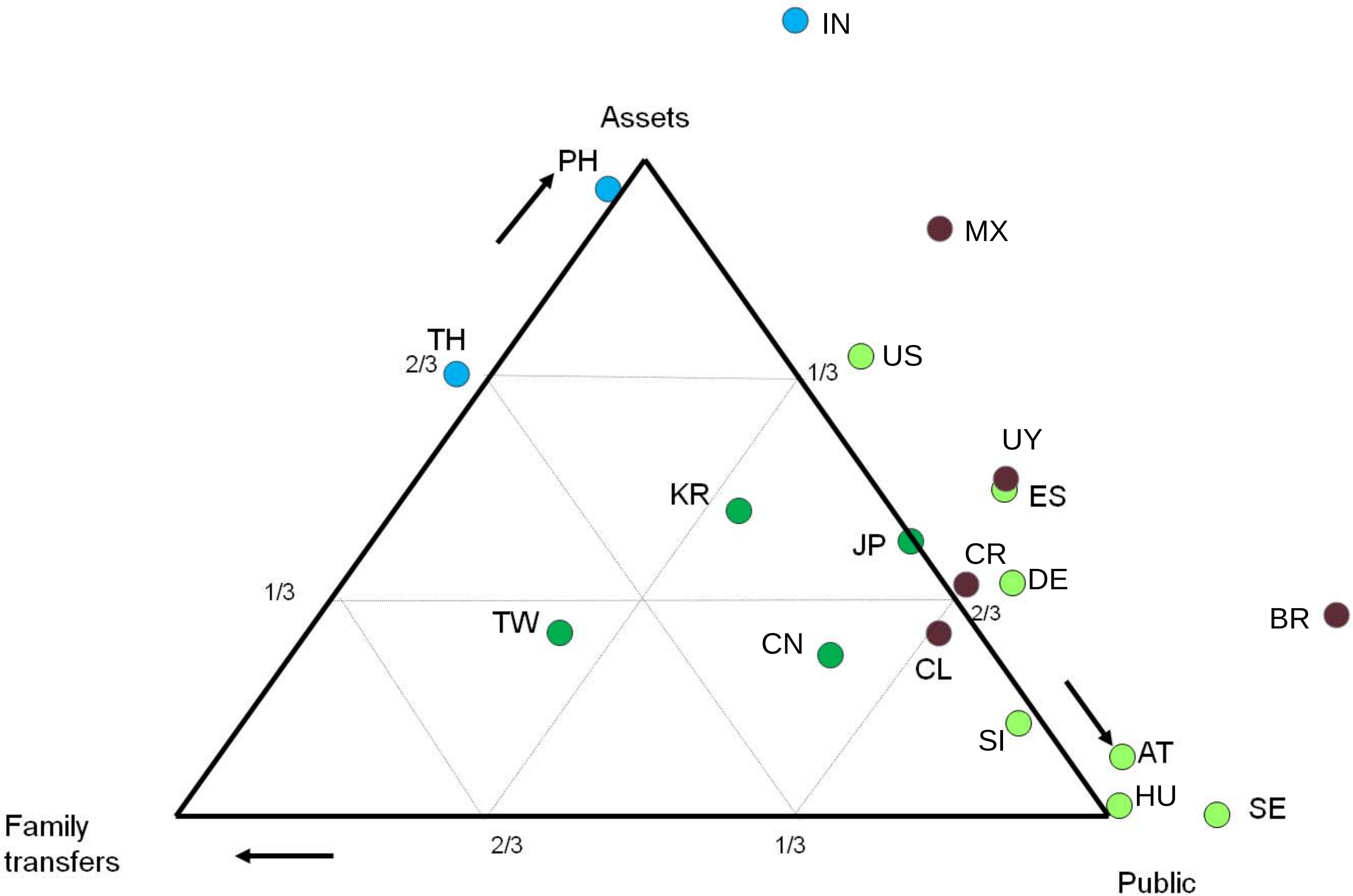
Per capita public and private transfers and asset-based resource flows by age: Brazil, 1996



Per capita public and private transfers and asset-based resource flows by age: South Korea, 2000



Importance of public and family transfers and asset-based flows in old age



Investment in capital: Pros and cons

- Asset accumulation is less sensitive to changes in age structure than transfers
- And assets can be invested in productive capital, contributing to economic growth
- But governments and financial institutions need to make sure that assets are invested productively
- And financial markets can put assets at risk

These considerations are relevant for pension systems

- Pay as you go, or paygo, systems are a form of public transfer

➔ Sensitive to changes in population age structure

- Funded pension systems are a form of asset accumulation

➔ Sensitive to financial risk

5. Pension systems and options for reform

Pension costs are determined by:

- Share of the population that is eligible

➔Goes up with populating aging

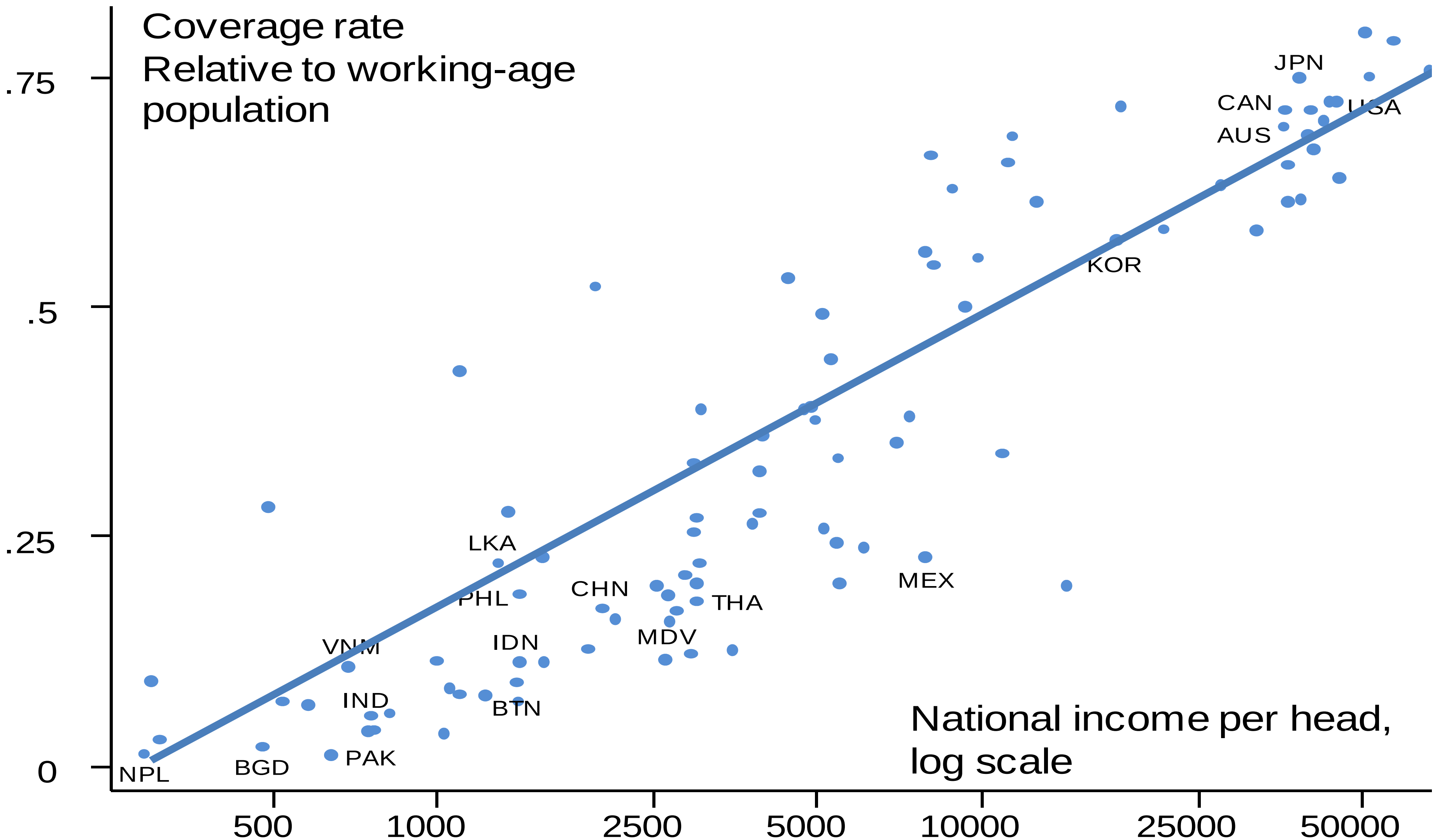
- Proportion of the population that is covered

➔Goes up with economic development

- Generosity of the benefits provided

➔Often high in young systems, may need to come down as systems expand

Pension coverage goes us with per capita GDP (*Source:* Richard Hinz, World Bank)

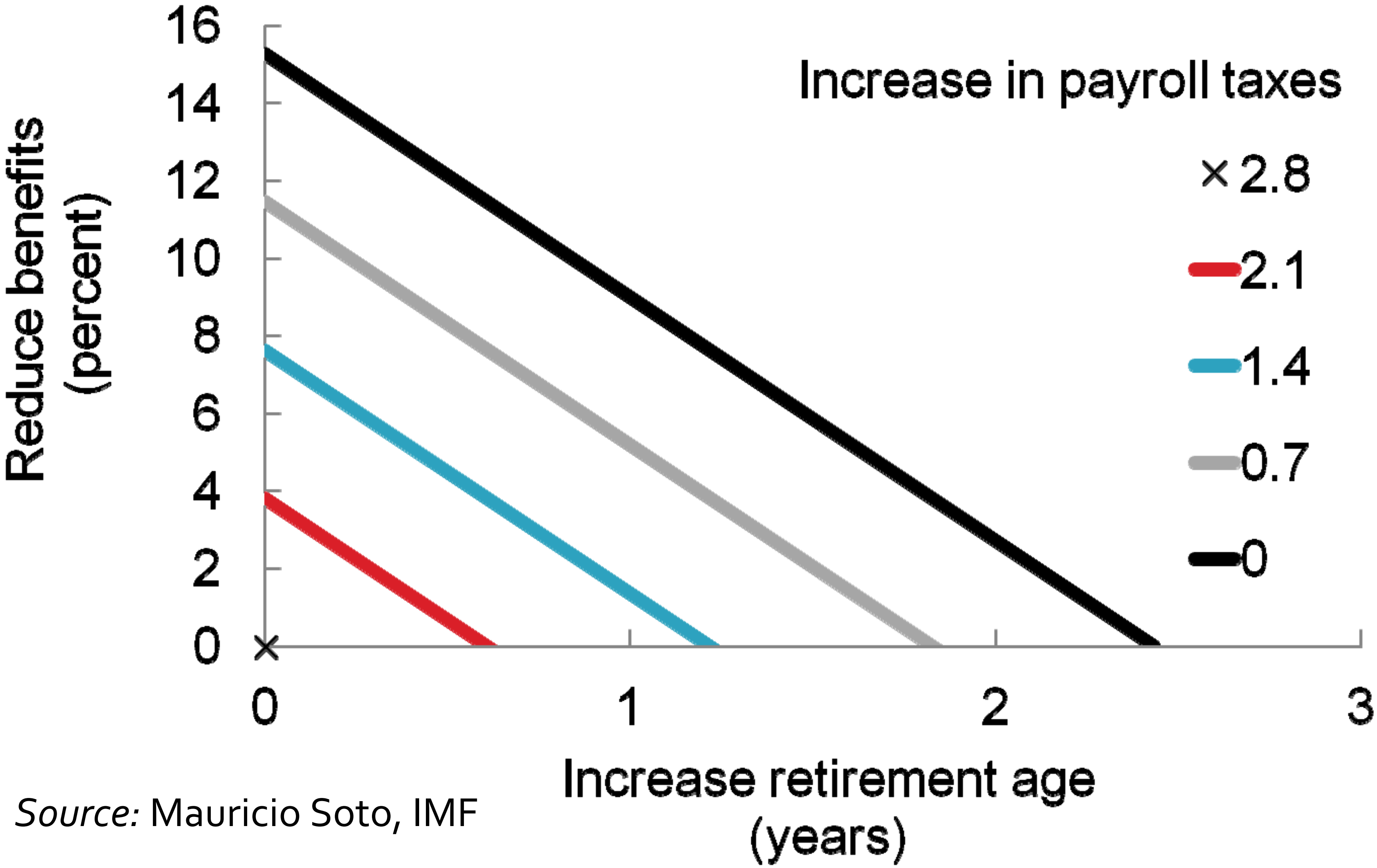


With no policy change, pension costs will go up for economies at every level of development

Pension spending as percent of GDP		
	2010	2070
High-income, mature systems	5.2	15.6
Rapidly growing, new systems	1.8	16.0
Middle-income, low coverage	4.0	15.5
Low-income, low coverage	1.5	13.6

Source: Richard Hinz and Asta Zviniene, World Bank

Three policy changes could reduce or eliminate cost increases



Source: Mauricio Soto, IMF

5. Rising healthcare costs: Will better efficiency be enough?

Healthcare costs are determined by:

- Age-related pattern of utilization

➔ Goes up with populating aging

- Proportion of the population with access

➔ Goes up with economic development

- Consumption increases faster than income (healthcare as a "luxury good")

➔ On average, healthcare spending increases by 1.28% for every 1-percent increase in GDP (Hinz and Zviniene)

With no policy change, healthcare costs will go up even more steeply than pension costs

Healthcare spending as percent of GDP			
	2010	2070 without consumption increase	2070 with consumption increase
High-income, mature systems	7.0	10.1	18.6
Rapidly growing, new systems	3.7	7.9	17.0
Middle-income, low coverage	5.0	14.5	33.6
Low-income, low coverage	4.0	12.9	28.9

Source: Richard Hinz and Asta Zviniene, World Bank

Options for controlling pension and healthcare costs

Pensions

- Delaying the average age at retirement
- Indexing pension benefits to changes in prices rather than wages
- Switching from pay-as-you-go to partly or fully funded pension systems

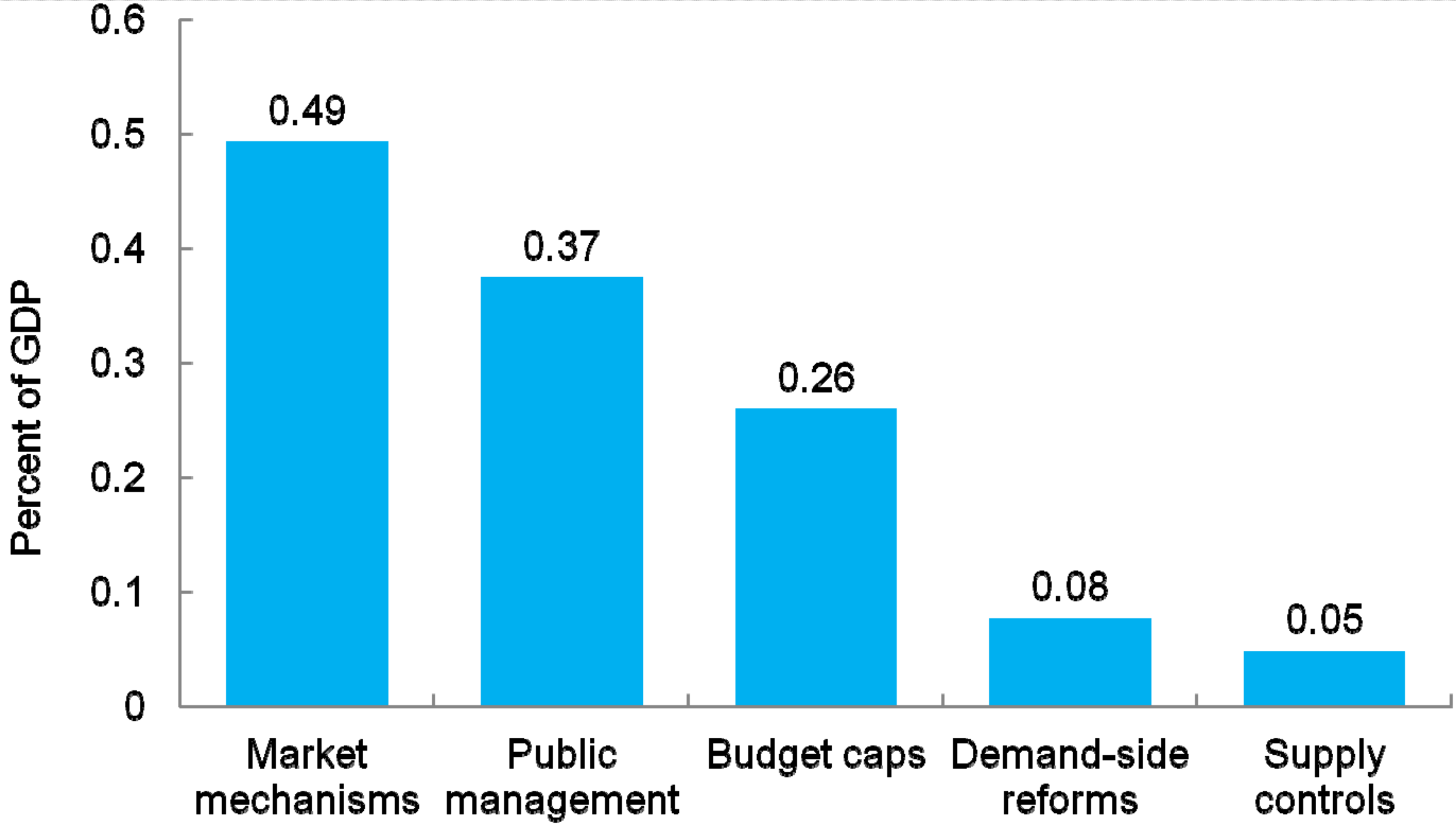
Healthcare

- Reducing inefficiencies in the delivery of healthcare

Different views on how healthcare costs can be controlled

- Current systems are so inefficient that improving efficiency could lower costs without reducing benefits
- Projections from current patterns are unrealistic: Something's got to give
- Increased spending is just a structural change: Some will spend more, but the healthcare industry will earn more
- High spending on healthcare may be a distortion since people often aren't paying themselves

Impact of reform on health spending by 2030: Decrease relative to baseline (% GDP)



Source: Mauricio Soto, IMF

Future directions

- Several groups have produced longterm forecasts of pension and healthcare costs

→ Interesting to compare models based on a common set of inputs

- Much of the discussion concerned problems of high-income economies

→ A second EWC/UNFPA Technical Policy Seminar might usefully focus on developing economies