

Economic Consequence of Population Ageing in Asia



Bazlul H Khondker
Department of Economics
Dhaka University
Chairman



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Asia: Some Key Facts

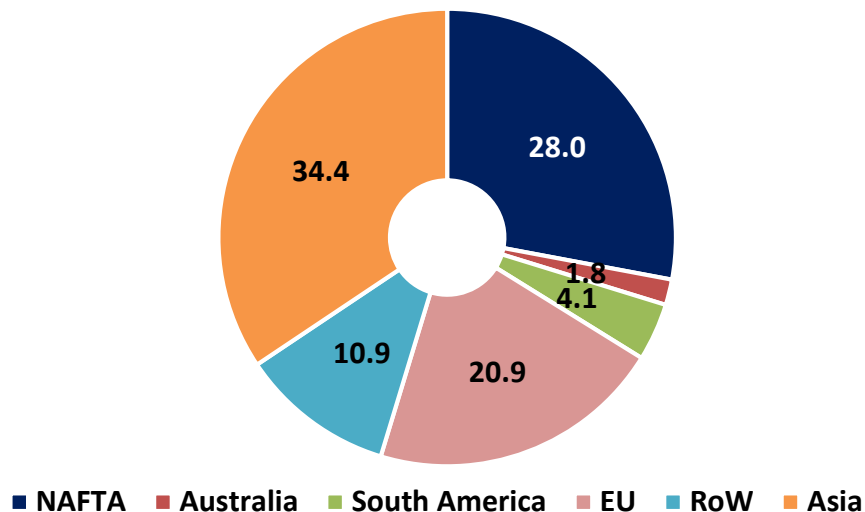


- Largest and most populous continent, located in both the northern and eastern hemispheres
- Size: 44.58 million KM²; Population: 4.463 billion (2016)
- Comprises 30% of the world's land area and 60% of the world's current population

Asia: Some Key Facts

- Asia has the world's two most populous countries:
 - China 1.4 billion (2016) – accounting for 31.7% of Asia; 18% of global population
 - India 1.3 billion (2016) – accounting for 29.4 % of Asia; 17.5 % of global population
- It is a diverse continent – *demography, culture, religion, labour market informality, technology, natural resources, conflict and economic well being*

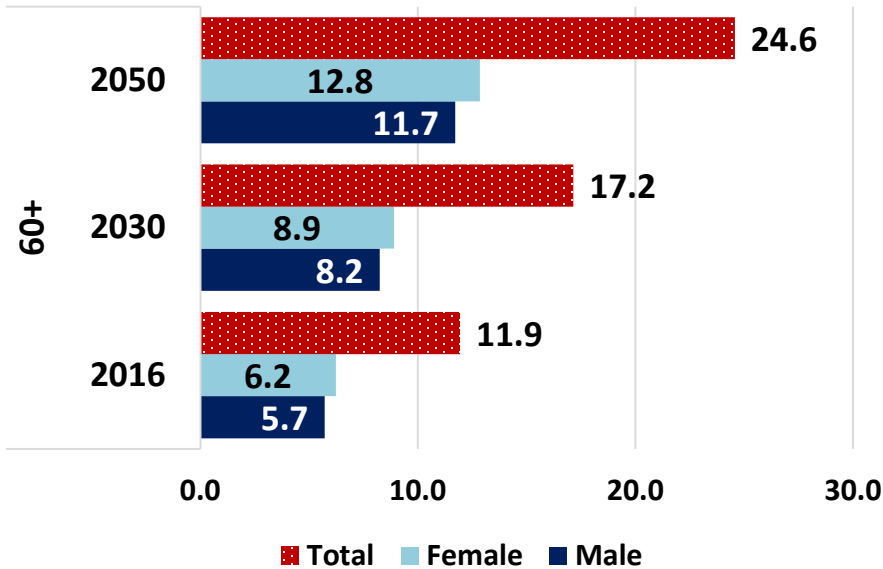
Distribution of Global Economy



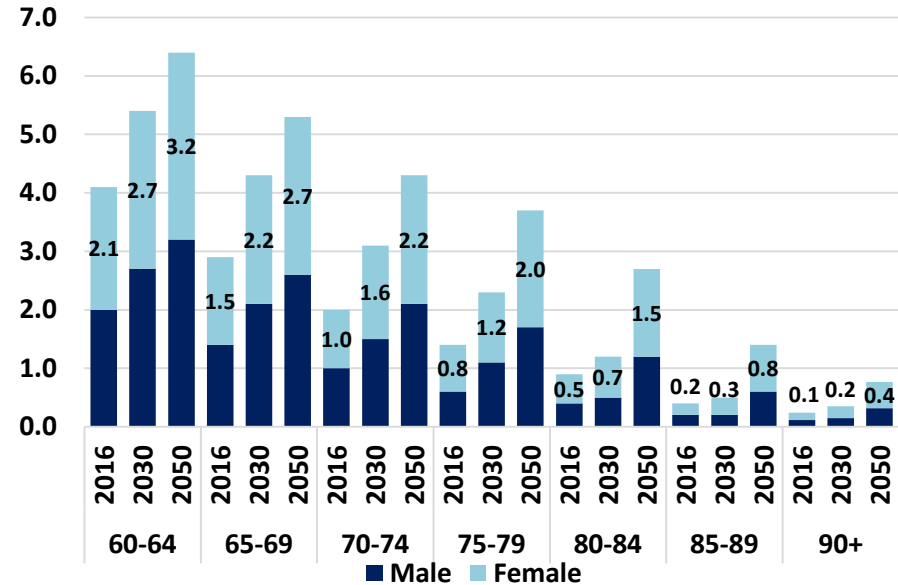
- Together Asia is the largest economy with 34.3% of the \$74 trillion global economy (*World Bank, Feb 1, 2017*)
- Asia Per Capita Income: \$6,317 (*2016, IMF 2018*); Singapore \$55,000; Afghanistan \$561

Ageing in Asia

Asia: 60+ Population % of Total Asia Population



Asia: Ageing Structure (%)



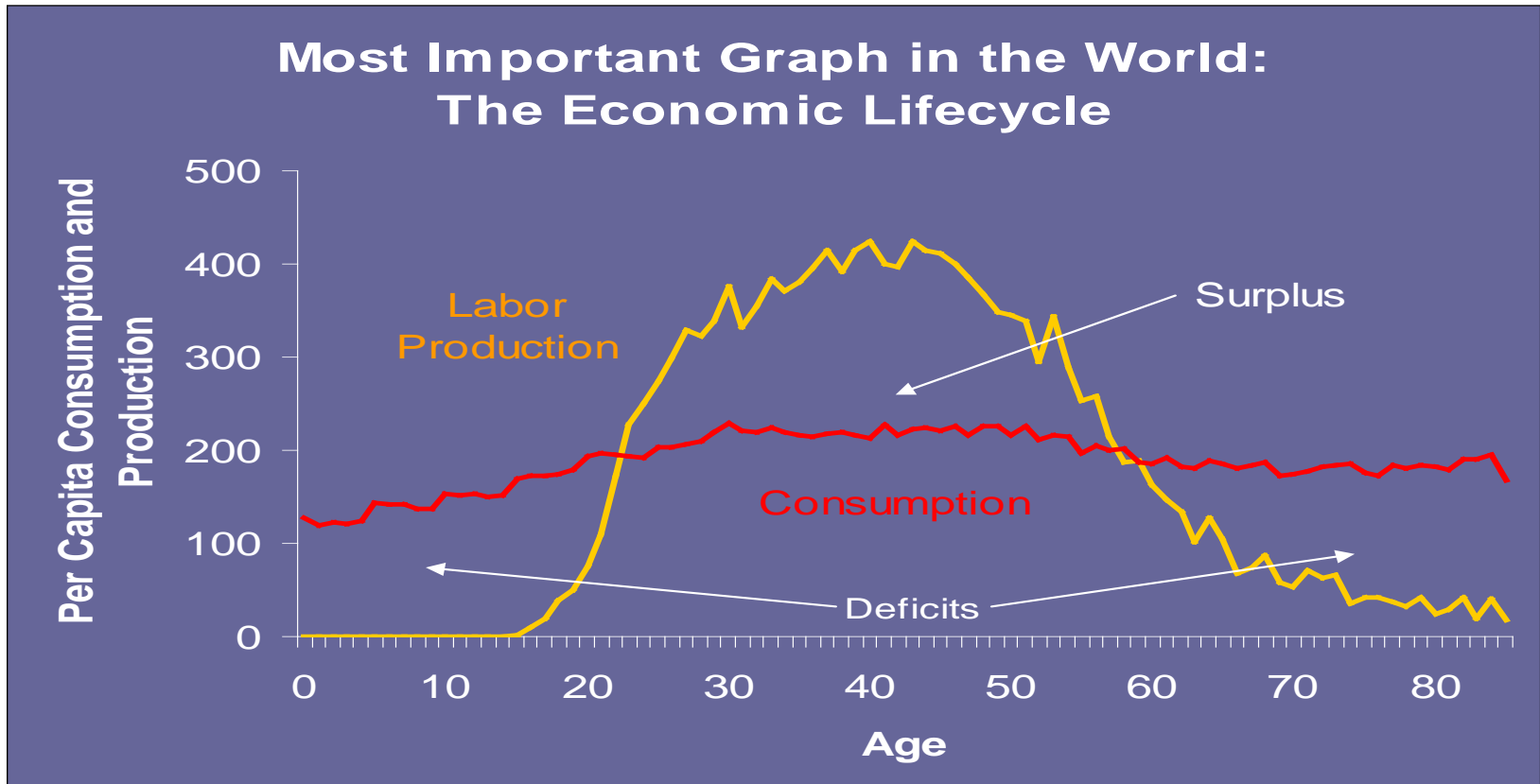
- Asia ageing very fast: in 2016 share of 60+ was 12%; in 2030 share of 60+ will be 17% and in 2050 25%
- In 2050, the population of older women will be 1.1 percentage points larger than older men; in 2016, it was 0.5 percentage points
- Share of older women larger than men in all old-age cohorts

Changing Age Structure and Economy

Two periods of demographic dividend:

- Working population greater than consuming population -> per capita income boost (*“first demographic dividend”*)
 - *Transitory* – working age population stops increasing
- Lower mortality, longer lives. Need more wealth to support future consumption
- More older population -> more wealth per capita, rise in productivity and asset income (*“second demographic dividend”*)
 - *Permanent* – with adequate distributive wealth?

Life Cycle Deficit

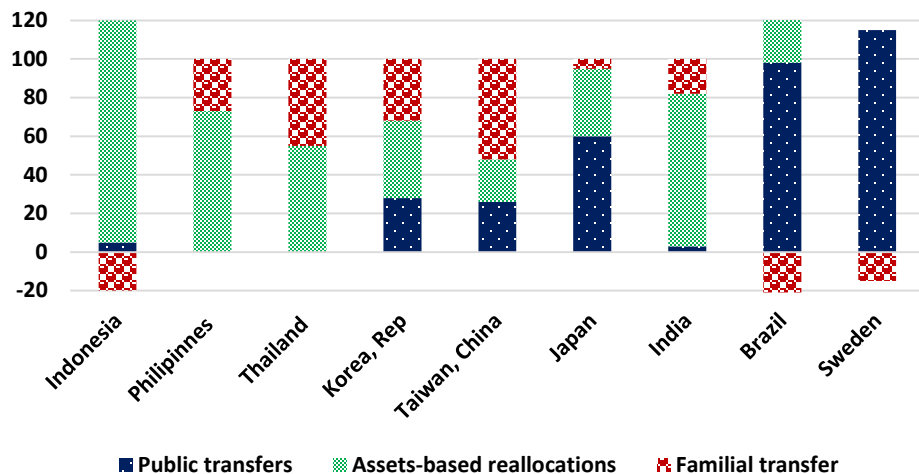


Important: how is the second 'LCD' supported?

- Transfers
- Labour income (*in old age?*)
- Poverty
- Pensions (including social pension)

Old-Age Consumption Support and Income Source

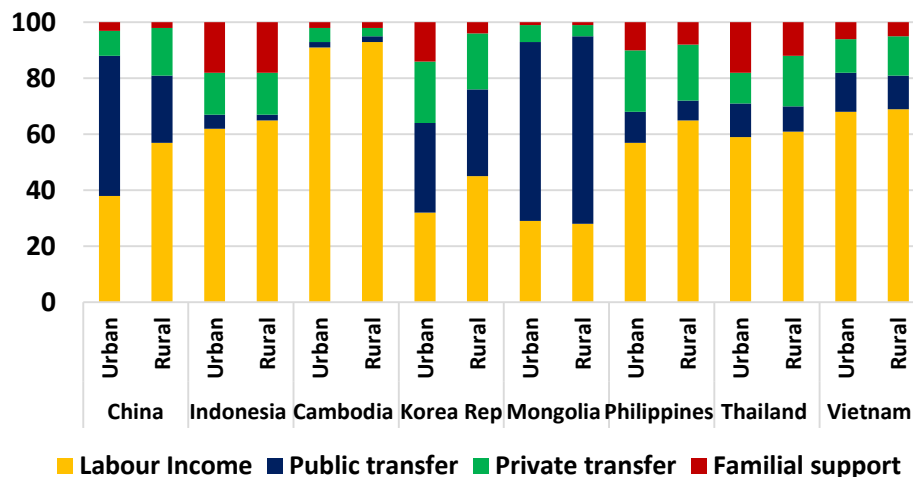
Old age consumption support [NTA]



- Asset-based reallocations dominant in Indonesia, the Philippines, India and Thailand
- Public transfers more significant in richer Asia: Japan, Korea, and Taiwan
- Minor role of public transfers in Asian middle-income countries compared to other middle-income countries such as Brazil

- Labour income is dominant source – especially in rural Asia
- Public and private transfers small
- The common assumption that familial support is the dominant income source in old age in Asia is not validated by the evidence

Old Age income sources [WB 216]

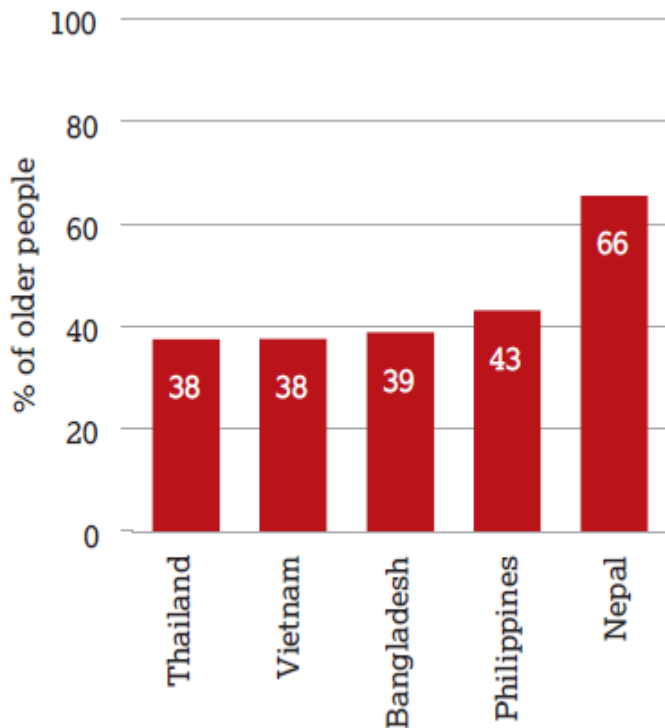


Old-Age Employment

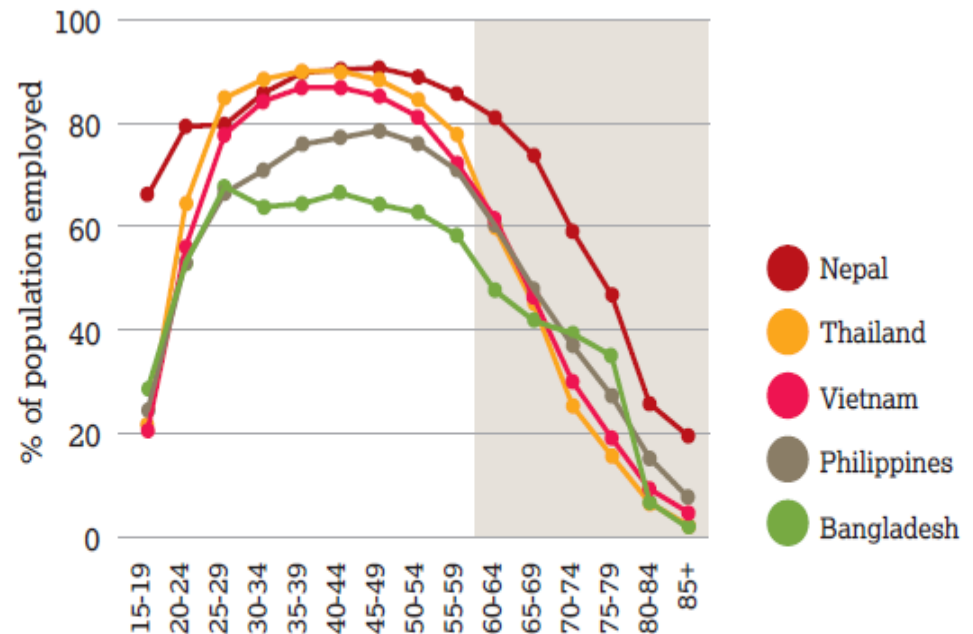
HelpAge International Study (2016) of five Asia countries concludes:

- A large share of older people in employment, but work level decreases with age. Health and old age disability are major reasons
- ***Labour participation declines with ageing***

Older people (60+) in employment

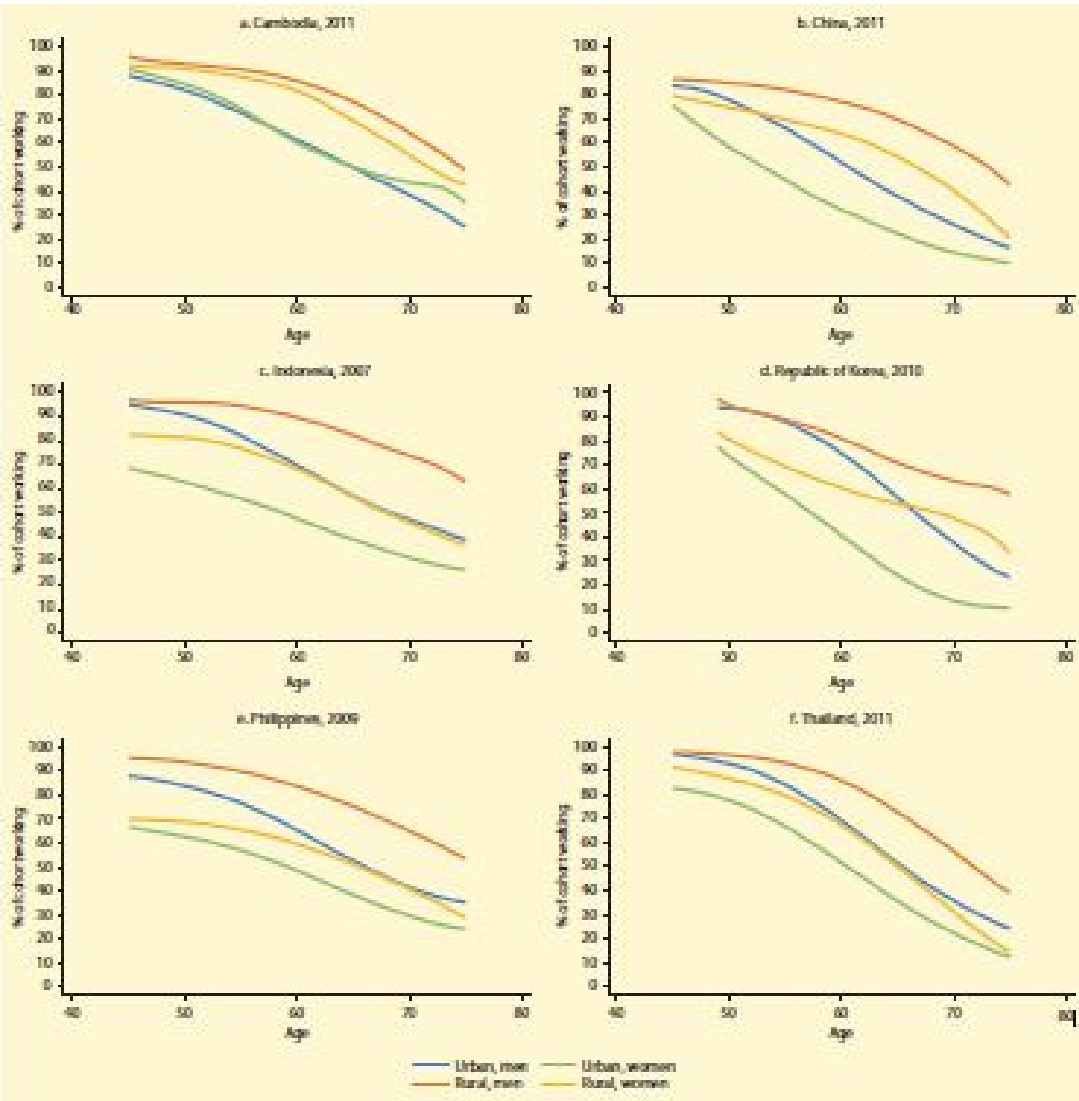


Levels of employment, by age (15+)



Old-Age Employment

WB Study (2016) for six East Asian countries also reported falling laborforce participation with ageing



- Weekly working hours dropped from 80 at age 40-50 to about 30-40 after the age 65

- Working hours by rural older persons higher than urban older persons

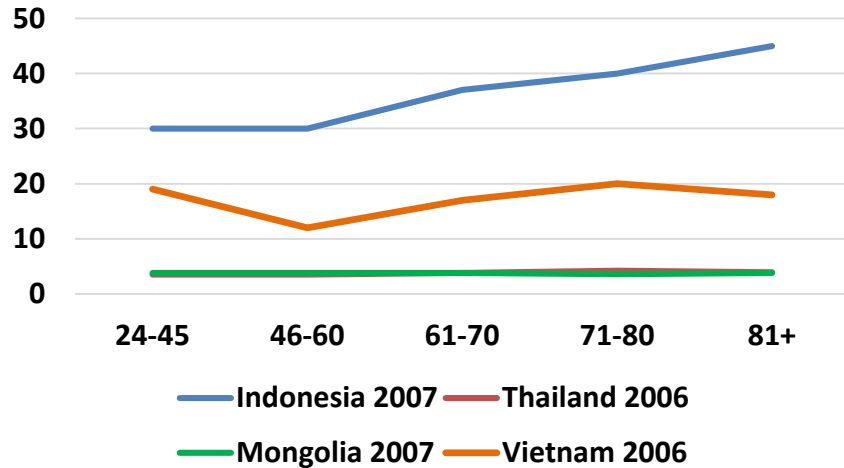
- Older women work less than older men

- Lowest working hours reported for urban women

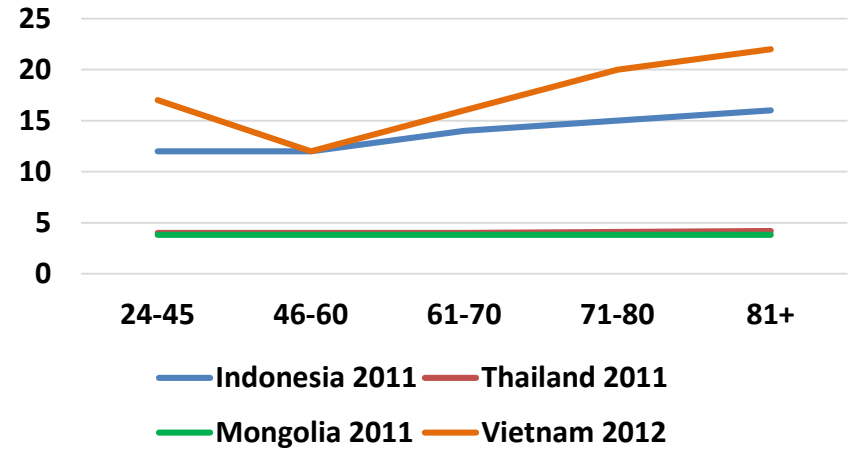
Implication for income and labour market

Old-Age Poverty

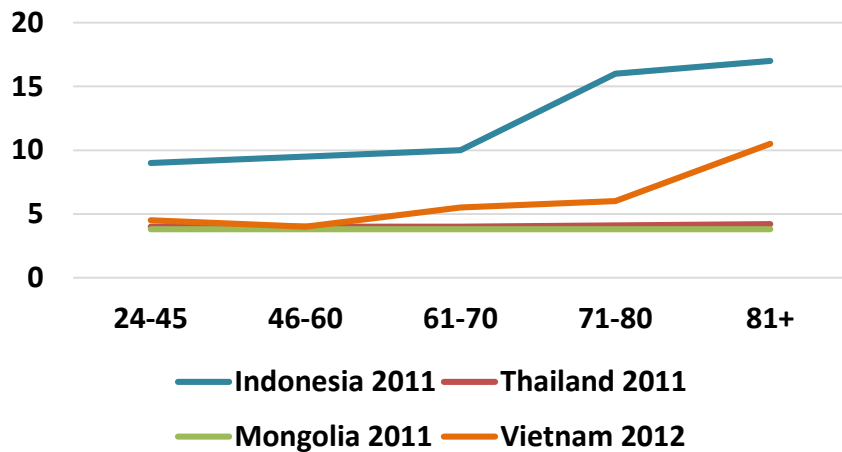
Consumption poverty 2006-08 (%)



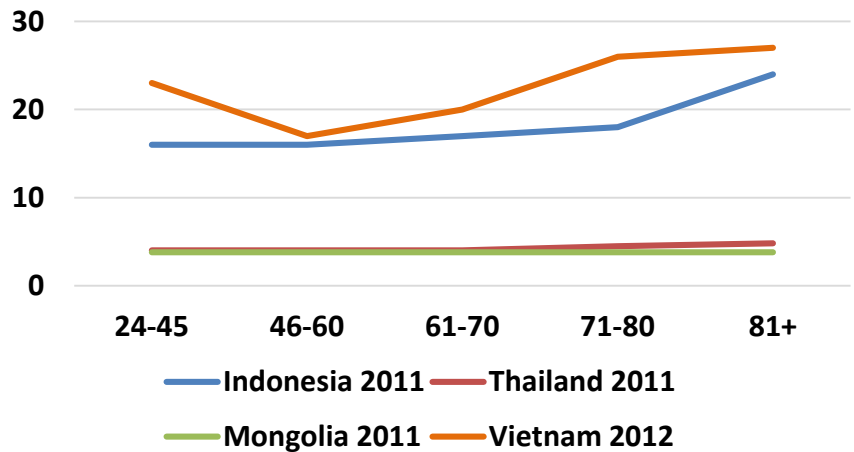
Consumption poverty 2011-12 (%)



Urban consumption poverty (%)



Rural consumption poverty (%)



Source: Household surveys; Poverty based on per capita daily income less than S\$1.25 (2005 \$PPP)

Old-Age Poverty

Key features:

- Declining poverty due to lower population growth and higher income growth
- Old-age income poverty much more volatile than consumption poverty – Reveals the role of savings and assets accumulation
- Lower poverty rates in Thailand and Mongolia compared to others highlight the role of wider coverage of social pensions

Key correlates:

- Highly educated older people less likely to be poor
- Older people with highly educated children less likely to be poor
- Old-age employment does not always lead to lower old-age poverty

Pensions are associated with significant (*1%-5% level*) poverty reduction – both for urban and rural old people [Source: WB 2016, Bangladesh : HAI 2014]

	Urban	Rural
China	-10.5	-12.7
Indonesia	-8.8	-13.9
Thailand	-0.6	-1.2
Vietnam	-5.6	-22.1
Bangladesh	-8.9	-16.3

Pensions

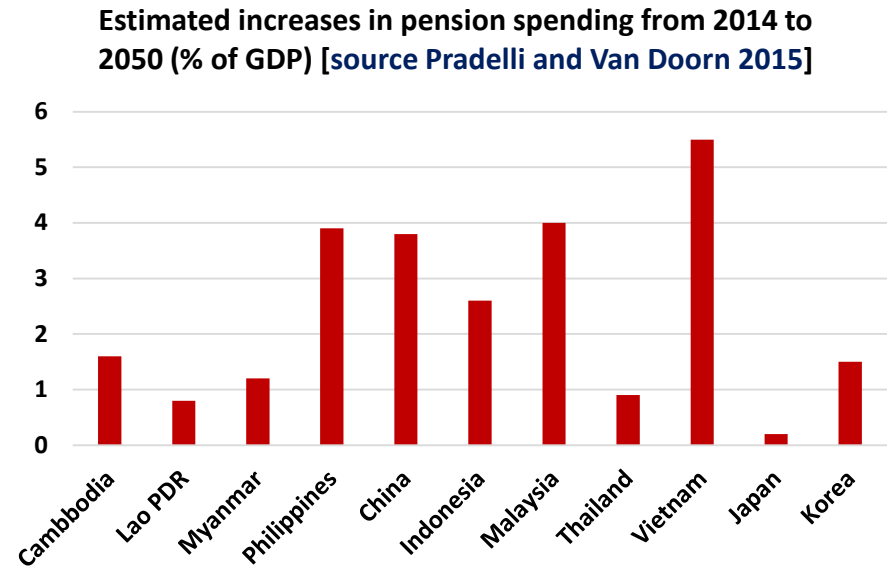
Given the state of consumption support and income sources, enhanced public transfers (social pensions) are needed, especially for elderly poor

High-income Asian economies: Broad coverage and financially sustainable. *Challenge:* Pension adequacy

Middle-income economies: Dual challenges – improve sustainability of existing coverage and expand coverage of large informal sectors

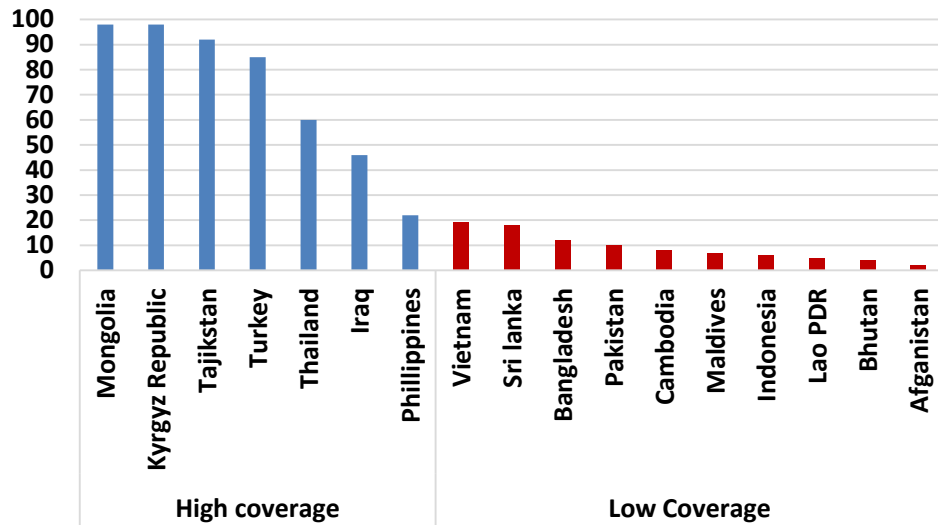
Low-income economies: Exploring suitable models to ensure broad coverage within the constraints of fiscal space

Country (year)	Deficit/surplus in 2040 (% of GDP)	Source
China (2011)	-3.5	Herd et al (2010)
	-3.3	Ma, Zhang and Li (2012)
Korea (2013)	-1.4	National pension service
Mongolia (2011)	-4.5	World Bank 2011
		Government service insurance system;
Vietnam (2012)	-1.7	Mesa-Lago et al 2011
Thailand (2011)	- from 2041	Yamabana 2011
Philippines (2011)	- from 2029	ILO FACTS 2013



Contributory and Social Pensions

Share of contributory pensions in poorer segment



Increasing contributory pension coverage among the poor in Asia will be difficult, as they nearly always work in the informal sector (WB 2016)

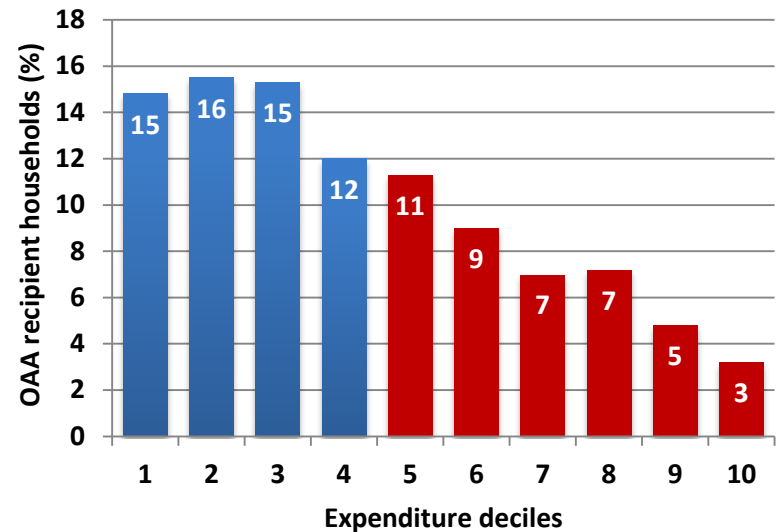
Social pension could be an option for the elderly poor in Asia

- *Universal coverage*
- *Pension tested*
- *Means tested*

Low coverage associated with large exclusions and inclusions – defies the purpose of the scheme

(Household Income Expenditure Survey 2010)

Bangladesh: Distribution of OAA



Contributory and Social Pensions



In most countries about one-half of older people (or more) receive no pension [HAI 2016]

- **Earnings-related pensions (“contributory”)**
 - Low coverage (less than 20% of older people)
 - Share of younger generations actively contributing to pensions also remains low
- **Social pensions make the biggest contribution to coverage in all countries**
 - Significant variation in design (universal, pension-tested, means-tested) and adequacy
 - Particularly important for women

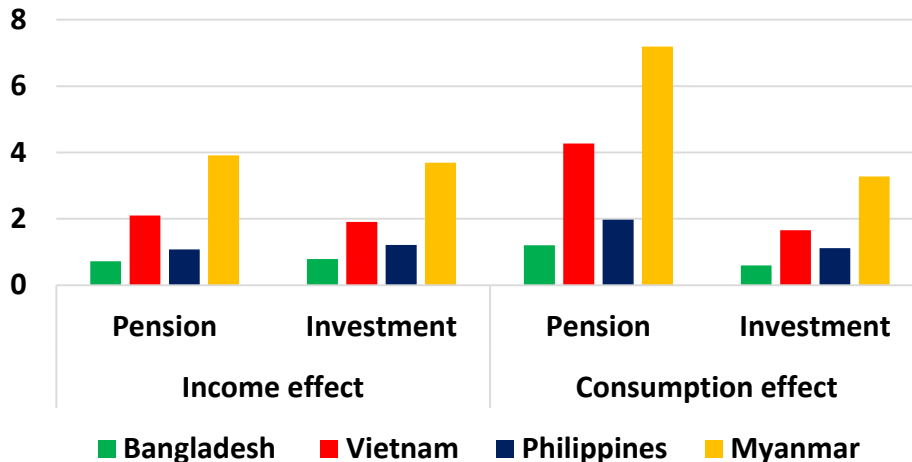
Is there a trade-off between pensions and investment?

Social Accounting Matrix

SAM Multiplier Model

		Activity					Factors		Institution				Total Use	
		A1	An	LAB	CAP	HH	GoV	INV	RoW		
Commodity	C1	Endogenous [Multiplier]						Exogenous [Investment]						
	..													
	..													
	Cn													
Factors	Labour	Leakage						Other						
	Capital													
Institution	Household	Leakage						Other						
	Government													
	Investment													
	Rest of the world													
Total Supply														

Simulated effects (% change over base values)



- Little trade-off between spending on pensions or investing in a physical infrastructure project
- Income effect similar
- Consumption effect much higher with pensions

Source: HAI 2014-2017

Concluding Observations

- Notwithstanding differences between countries, Asia is ageing fast
- Transfers (public, private and familial) may not be adequate to support old age LCD in Asia
- Many elderly are compelled to work to supplement transfers
- But there are limits to labour-market participation due to:
 - Health
 - Disability
 - Lack of skills and opportunities
- Expanding contributory pensions among Asian poor is constrained by their participation in the informal sector
- Social pensions with increased coverage and adequate generosity may be a pragmatic approach
- Most important: **Needs urgent action, delay not an option**