VID Conference: 2014

Prospective ageing in developing countries (with a focus on Southeast Asia)

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Stuart Basten Associate Professor in Social Policy Department of Social Policy and Intervention, University of Oxford

Sergei Scherbov Deputy Program Director, World Population Program, IIASA

Warren Sanderson Professor of Economics and Professor of History, Stony Brook University

# Overview of talk

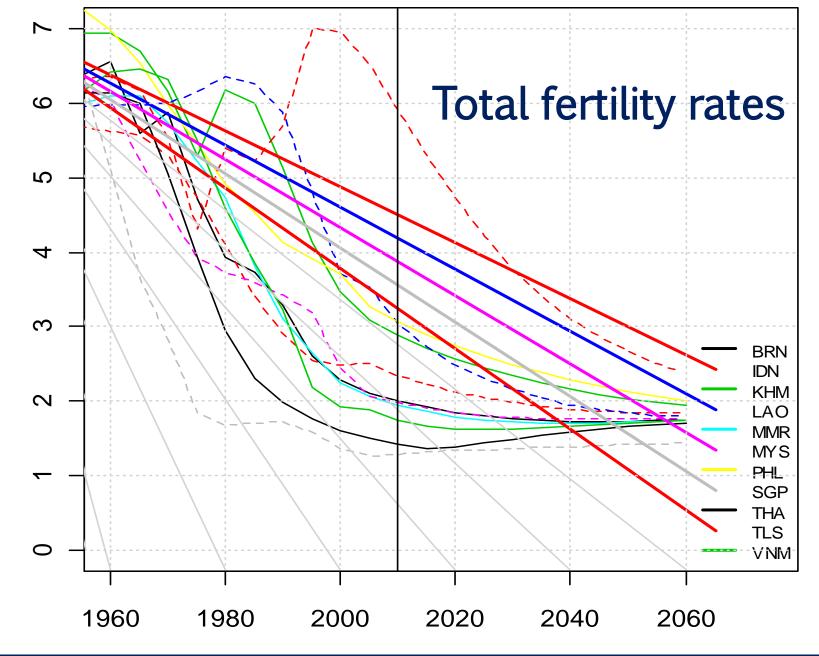
- Demographic context of ageing in SE Asia
- Traditional measurements
- Origin of these measures and applicability to SE Asia (and other low- and middleincome countries)
- Prospective measurements of ageing for SE Asia
- Conclusions



## A note on data

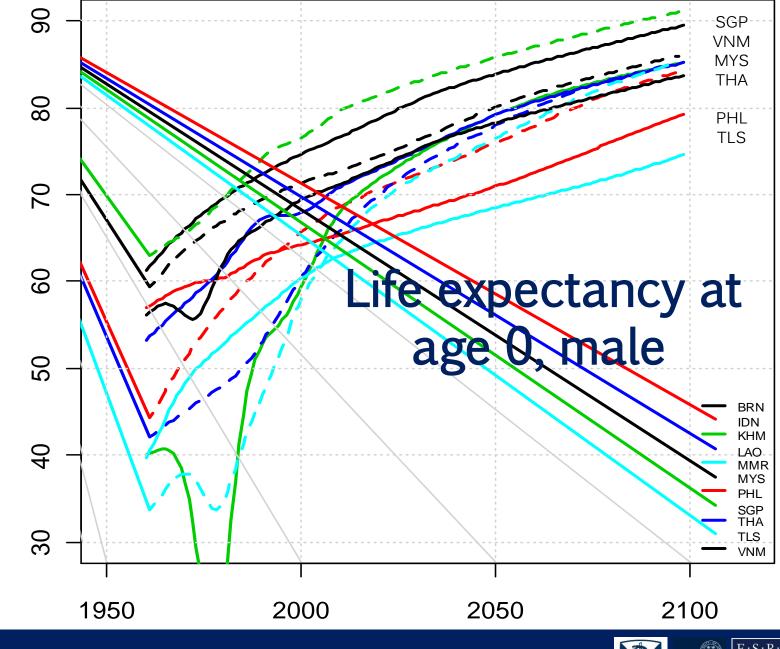
- All data used: UN *World Population Prospects* 2012 Revision
- By no means uncontroversial (e.g. forecasts of fertility increase etc)





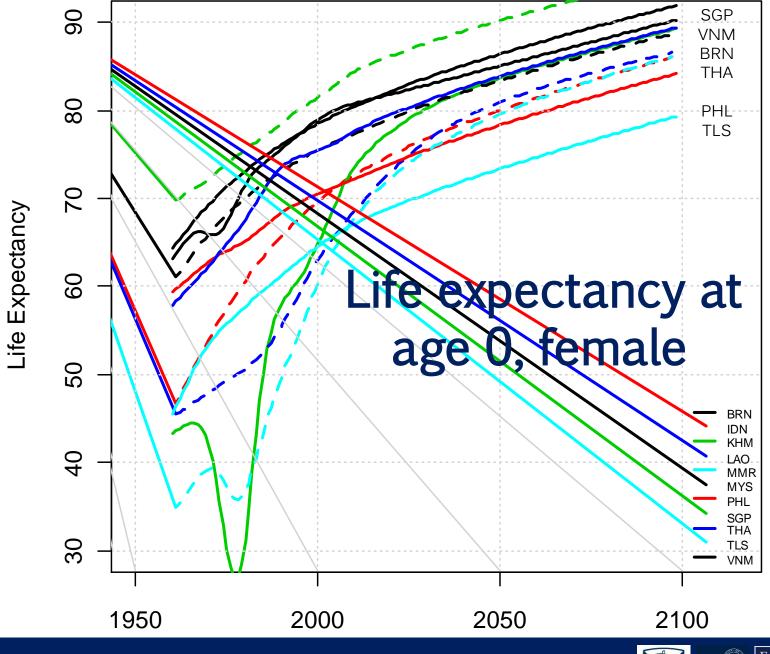


Age

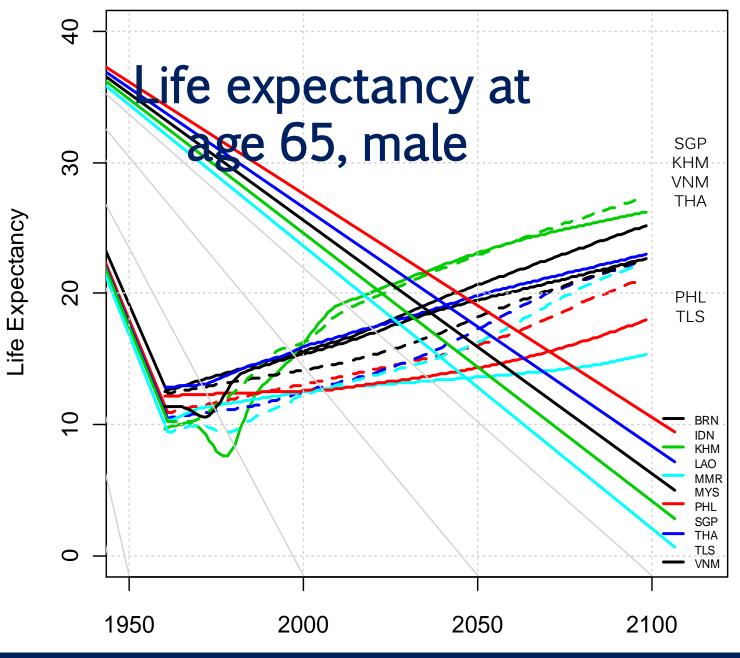


Life Expectancy

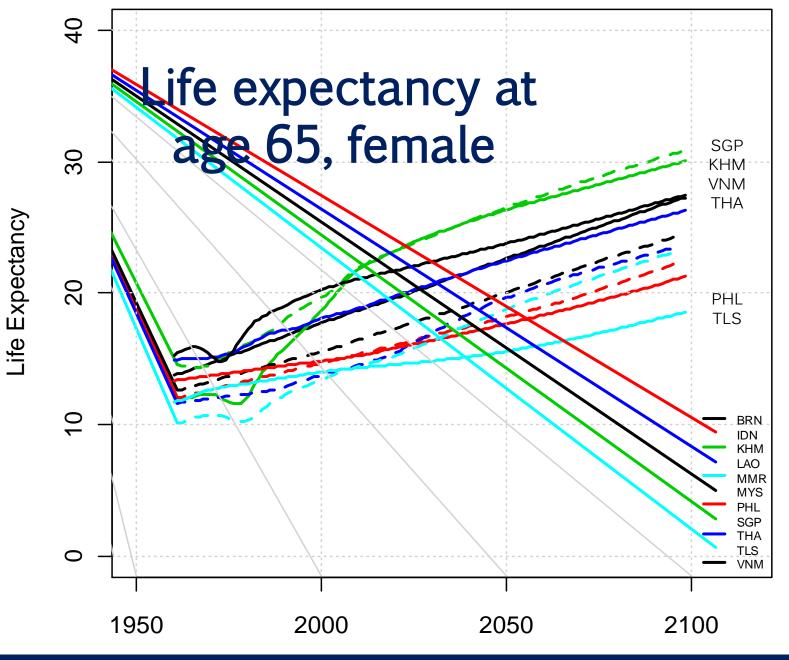




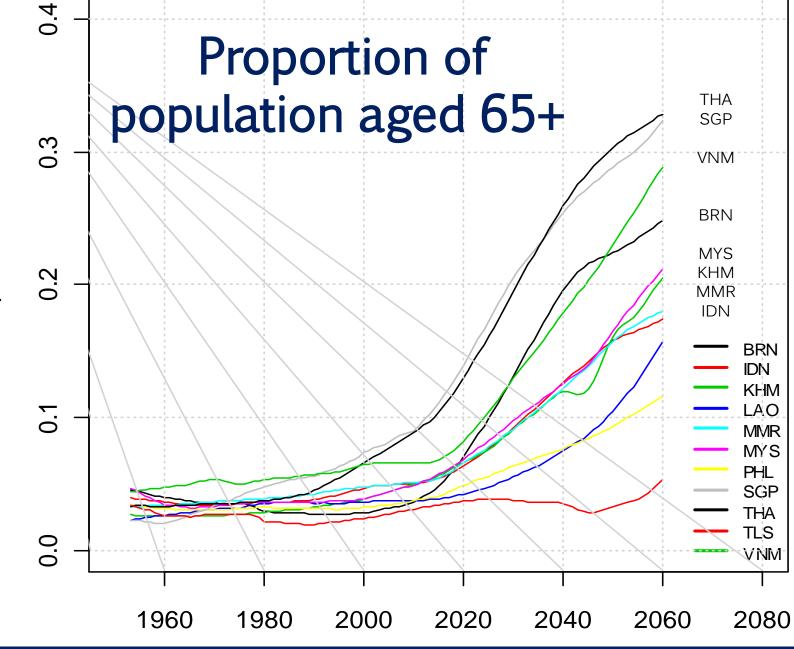






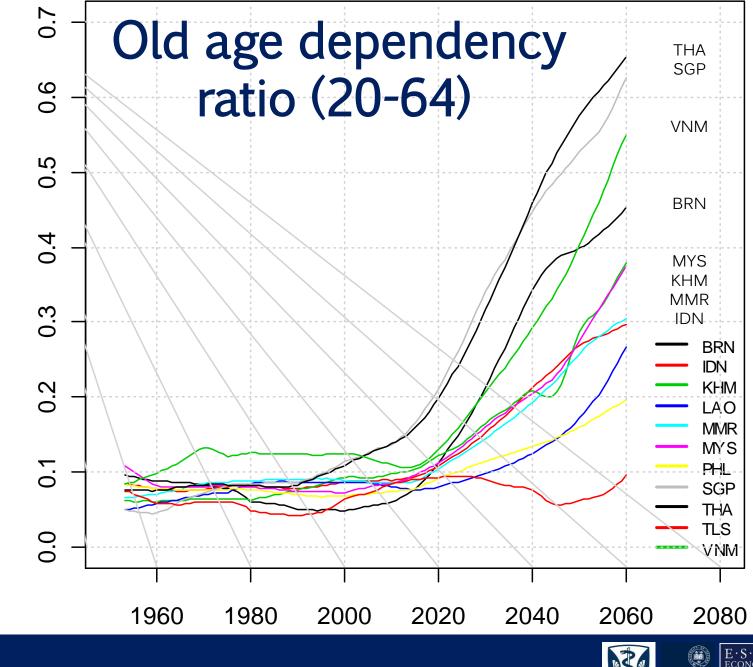








Proportion



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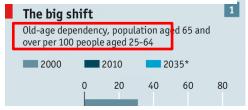
UNIVERSITY OF

Ratio

### The enduring nature of the OADR Economist World politics Business

### Demography, growth and inequality Age invaders

The



### India has weakest retirement system globally: Report **Business Standard**

Press Trust of India | Mumbai October 16, 2014 Last Upda

The projected old age dependency ratio for 2035 range from 12 per cent in South Africa and 13 per cent in India to 55 per cent in Germany and 58 per cent in Japan, it said.

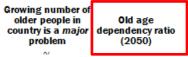
It further added that the ratio highlights the impact of the ageing population between now and 2035, and the likely effects on the funding requirements for pensions, health and aged care.

### PewResearchCenter

FEBRUARY 4, 2014

### The countries that will be most impacted by aging population

### Aging & Dependency



### Learning about the Unknown: the Economic Impacts of Aging in Europe and Central Asia

April 25, 2014

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HE WORLD BANK

In some countries this process is particularly fast. Poland, for example, has one of the fastest aging populations in the European Union but had a fertility rate of just 1.30 in 2012. Furthermore, the ratio of the country's population over 65 as a percentage of the population aged 20-64 (the old age dependency ratio) is expected to increase from 20.9% in 2010 to 58% in 2050 and 70.7% in 2060 while the share of the working age population (15-64) is projected to drop from 71.3% in 2010 to 53.4% by 2050. All of these trends spell potential economic trouble for Poland.



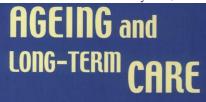
Monday, November 24, 2014 | 06:32 PM IST

Journal of Population Research

### BELOW-REPLACEMENT FERTILITY IN EAST AND SOUTHEAST ASIA: CONSEQUENCES AND POLICY RESPONSES

**Bhakta B. Gubhaju**,<sup>†</sup> Economic and Social Commission for Asia and the Pacific **Yoshie Moriki-Durand**, Economic and Social Commission for Asia and the Pacific

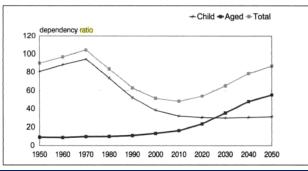
In the other four low-fertility countries, although the **current elderly depend**ency ratios are 10 per cent or lower, the magnitude of the increase varies consider**ably by country.** Both Korea and Singapore will experience a rapid fivefold increase in this ratio, reaching 49 per cent in Korea and 50 per cent in Singapore in 2050. The dependency ratios in China and Thailand are also likely to exhibit substantial increases in the next 50 years, to 37 per cent in China and 34 per cent in Thailand.



National Policies in the Asia–Pacific

Edited by David R. Phillips & Alfred C. M. Chan

#### Thailand: Total, Child and Aged Dependency Ratios, 1950–2050 (per hundred)



IMPACT OF DEMOGRAPHIC CHANGE IN THAILAND

### PAPERS IN POPULATION AGEING

### **Population Ageing in East and South-East Asia:** Current Situation and Emerging Challenges



UNFPA Country Technical Services Team for East and South-East Asia Bangkok, Thailand

#### Table 11: Population ageing in the ESEAR countries, 2000-2050

	Percentage of older persons in population			
Country	2000	2025	2050	
Japan	23.2	35.1	42.3	
Rep of Korea	11.0	24.1	33.2	
Singapore	10.6	30.0	35.0	
China	10.1	19.5	29.9	
DPR Korea	10.0	15.5	22.4	
Thailand	8.1	17.1	27.1	
Indonesia	7.6	12.8	22.3	



### TABLE 1.6 TRENDS IN PERCENTAGE OF POPULATION AGED 65+

	2005	2010	2020	2030	
Japan	19.9	22.6	28.5	30.8	
South Korea	9.3	11.0	15.4	23.2	
Singapore	8.5	10.2	17.9	27.5	
Thailand	7.8	8.7	12.4	17.4	
China	7.6	8.2	11.7	15.9	
Philippines	3.9	4.3	5.7	7.6	
USA	12.4	13.0	16.1	19.8	
Germany	18.9	20.5	23.0	28.2	

Source: World Population Prospects: The 2008 Revision, United Nations Population Division 2009, medium projection.





### Vietnam's aging rate among fastest in the world

TUOITRENEWS UPDATED : 12/05/2013 14:02 GMT + 7 Ageing population may overwhelm Thai pension system: research The Nation October 9, 2012 1:00 am

# This Asian nation faces a growing crisis from aging

Dhara Ranasinghe | @DharaCNBC Wednesday, 23 Oct 2013 | 7:10 PM ET

**Macnbc** 

### J≊karta Post

# Challenging opportunity for aging population

Robert Fletcher, Jakarta | Opinion | Sat, July 02 2011, 8:00 AM

### Vietnam's rapid aging population a new challenge THANHMEN

TN News

Thursday, January 09, 2014 12:00



NEWS

## Old at ~65?

- Bismarckian/early 20C work incapacity reforms & 1934 US Commission on Economic security (Costa 1998; Kohli 1987)
- 1936 First Railroad Retirement Act
  - 'It is a commonplace fact that physical ability, mental alertness, and cooperativeness tend to fail after a man is 65' (quoted in Graebner 1980)



# Ageing in 20C Europe and N. America meant:

- Large-scale **welfare systems** paid for by growing states and large tax receipts
- Proliferation of male breadwinner [life-long industrial] labourer households
- Few years life expectancy [~5-10] and general ill health at 65
- 'Pensionable' and 'retired' similar concepts
- Mid-60s = arguably 'old' and 'dependent'



# Challenging this construction

- Growing literature on validity of OADR in industrialised countries (Fuchs 1984; Sanderson and Scherbov 2007)
  - Break in link between pensionable & retirement age (e.g. OECD 2009)
  - Increased (healthy) life expectancy (e.g. Luy et al. 2014)
  - Changing labour force patterns (e.g. Kalwij 2008)
  - Differential expenditure among over 65s (e.g. Gray



An even stronger justification for lowand middle-income countries?

- 1. Structure of care and dependency
- 2. Capacity of states and labour systems
- 3. Differential labour force participation
- 4. Increased longevity



# Structure of care and dependency: Pension coverage

	Statutory Pensionable Age		Pension type	Old age pension
	Male	Female		recipient ratio
				above retirement
				age (incl. mean-
				tested & periodic
				benefit), %
Brunei	60	60	Provident fund	
Cambodia	55	55		5.0 (2010)
Indonesia	55	55	Provident fund	8.1 (2011)
Lao PDR	60	60	Earnings-related	5.6 (2010)
Malaysia	55	55	Provident fund	19.8 (2010)
Myanmar	n/a	n/a	none	
Philippines	60	60	Flat-rate	27.0 (2010)
Singapore	55	55	Provident fund	
Thailand	55	55	Earnings-related	1.0 (2012)
Timor-Leste	n/a	n/a		
Viet Nam	60	55	Scanncieng(sHodzathadhn et a	al., 2 <mark>0320,5\$80,10</mark> 011)



# Structure of care and dependency: The care triangle

- Roles of state, NGOs/private sector, family
  - Role of individual savings systems; families; kin-based care (though see Basten, Mutarrak and Pothisiri 2014)
- Current burden of healthcare and longterm care expenditure = low; and not based around boundary of 65



# Capacity of states and labour systems

- High levels of informal economy

   Weak capacity to obtain tax receipts
- Poor networks of infrastructure
- Governance issues
- Political instability?

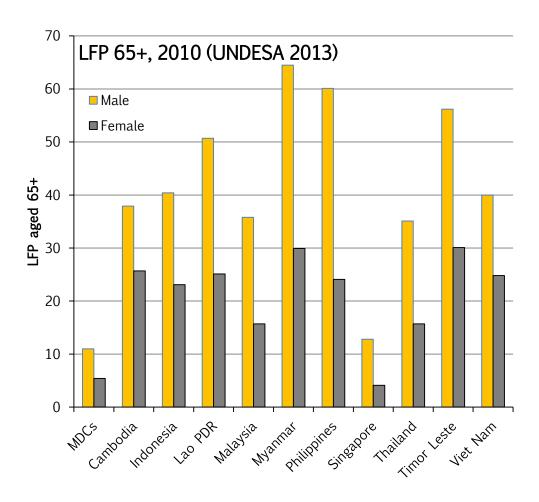
Informal employment as % of total non-agricultural employment (women left, men right) [ILO 2014]





# 65+ labour force participation

- Different employment structures
- Lower female LFP = shortage of opportunities, unsupportive attitude of employers, lack of qualifications rather than inherent incapacity (UNFPA 2007)



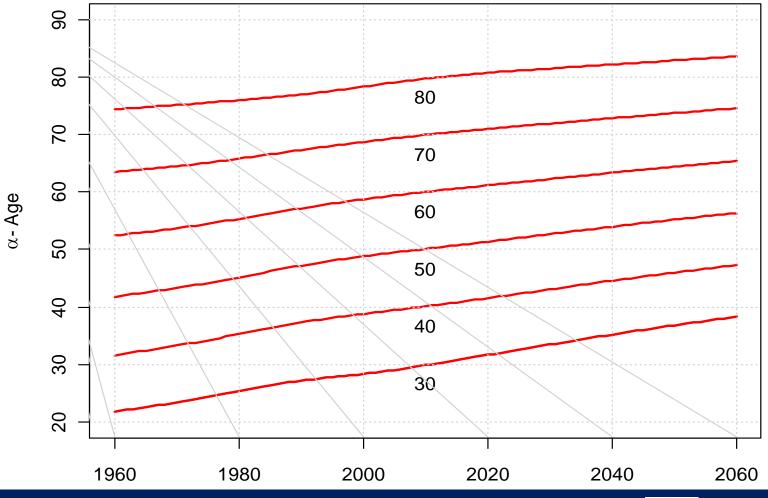


## Towards a prospective view

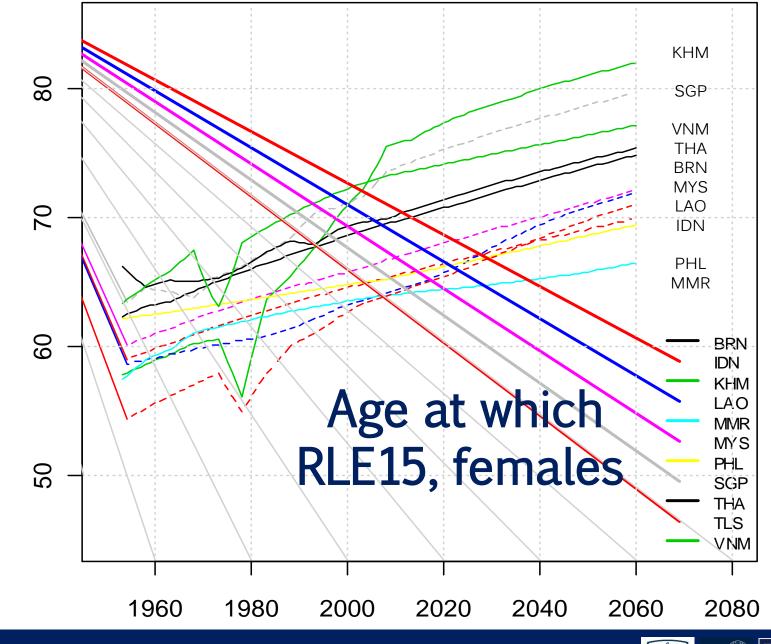
- Shift boundary to 'old' and 'dependent'
- Think prospectively: RLE?
  - Literature on healthcare expenditure (Fuchs 1984; Zweifel et al. 1999; Grey 2005)
  - 15 years RLE as 'boundary'
  - Use UN projected life tables
- Equally arbitrary? See later



### Trajectories of α-ages over time, Thailand, Males (standard 2010)

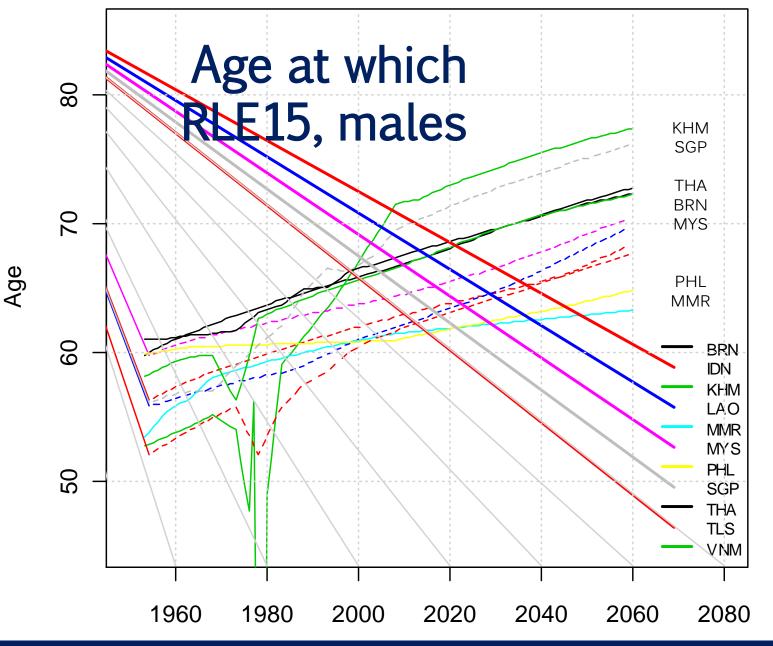




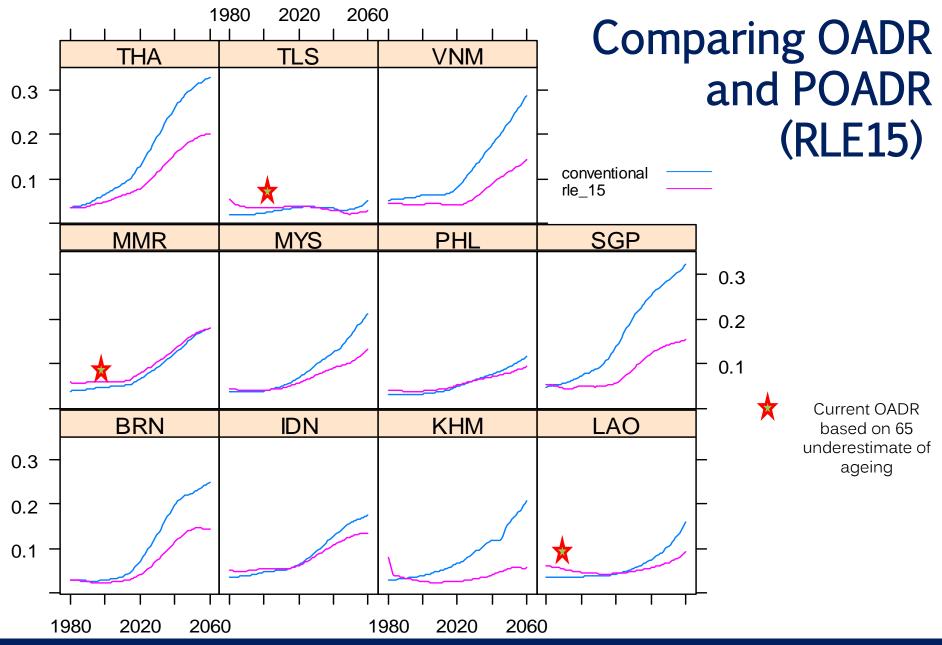




Age









# What 'worries' us about population ageing?

- Pension systems?
  - Reform, adjust, retrench where in crisis
  - Design differently where not yet developed
- Labour productivity?
  - Raw numbers of people? Migration? Freeing of 'older age' labour?
  - Naïve to ignore multipliers of human capital, technological innovation
- Healthcare systems?
  - Recognise differences between age groups



# Advantages of POADRRLE15

- General concentration of morbidity, chronic ill-health
- Least likely to be able to engage in labour force (and/or civil society?)
- Factors in forecast improvements in life expectancy
- More rational figure of 'dependency'



## Weaknesses of POADRRLE15

- Assumptions of e<sub>0</sub> increases
   Different scenarios or SSPs?
- Assumptions of *RLE<sub>15</sub>* both as boundary and constant
- Ignores differential mortality/ill-health
  - More micro-level understanding necessary
  - Closer work with actuarial / insurance professions



# Conclusions

- Challenges of population ageing in LMICs (e.g. in SE Asia) likely very significant
  - Basic income security; long-term care; healthcare; retrenchment of family care?
- Need for prioritisation

   What IS the ageing crisis? Dependency?
- Current measurements unfit for purpose
   Eurocentric, misleading, unrevealing

