

# From youth bulge to ageing societies: turning challenges into opportunities

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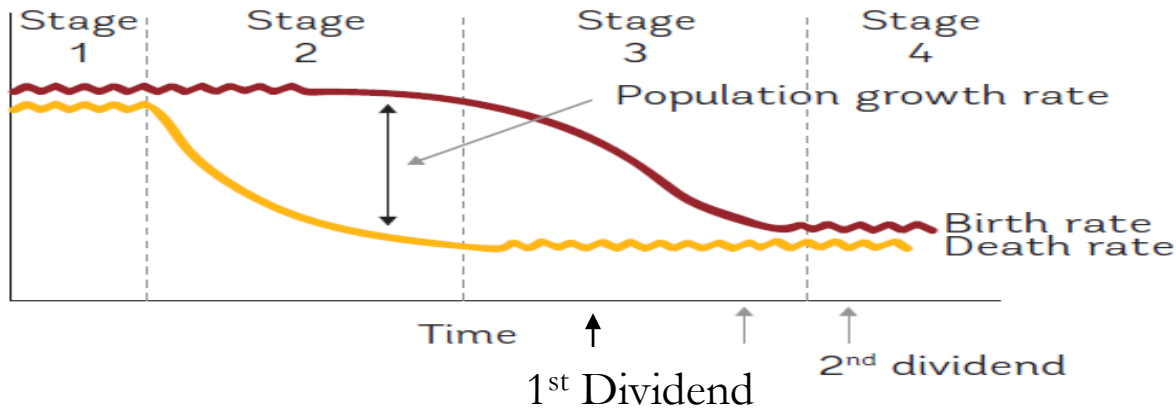


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# Demographic Dividends: As one window closes, another can open – but neither is assured

## The stages of the demographic transition and dividends



ASEAN exhibits remarkable demographic diversity, from early dividend (LAO, TL, KHM, PH) to late dividend (VN, INO, BR, MYM, MY) and post-dividend (SIN, TH)

- First and second dividend periods will usually overlap
- Demographic dividends are not automatic – but rather, depend on policies and behavioral change<sub>3</sub>!

There are two **potential** demographic dividends:



**First window: *Labor dividend*** due to higher ratio of working age to total population which can be leveraged for growth with a healthier and more productive workforce

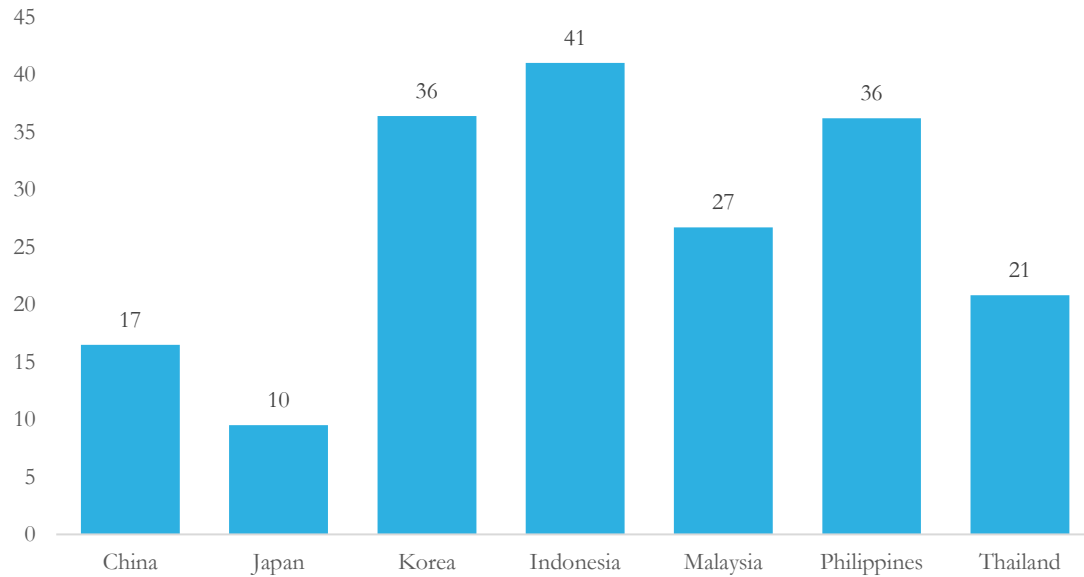


**Second window: *Savings dividend*** brought on by an older population having: (1) stronger incentives to save and deepen human capital; (2) productive investments back to households and the economy; (3) extending productive working lives & savings period. Aging also increases demand for goods and services for an older population.

For East and Southeast Asia, demographics made significant contributions to economic growth in the later decades of the 20th century – but demographic dividends are not a given

Up to 40 percent of the economic growth in East Asian countries can be explained by growth of working age share and total population

Percentage of economic growth explained by growth of working age share and total population, 1965-2005



Source: Finlay and Bloom, 2009

Returns from second dividend can be larger and more sustained than the first labor dividend. For example, East Asia's second dividend was more than double their first demographic dividend in later decades of 20<sup>th</sup> century

However, **demographic dividends are not automatic**. Latin America, that was undergoing demographic transition around the same period, largely failed to benefit from the transition

First and second demographic dividend estimates, 1970-2000 & actual growth

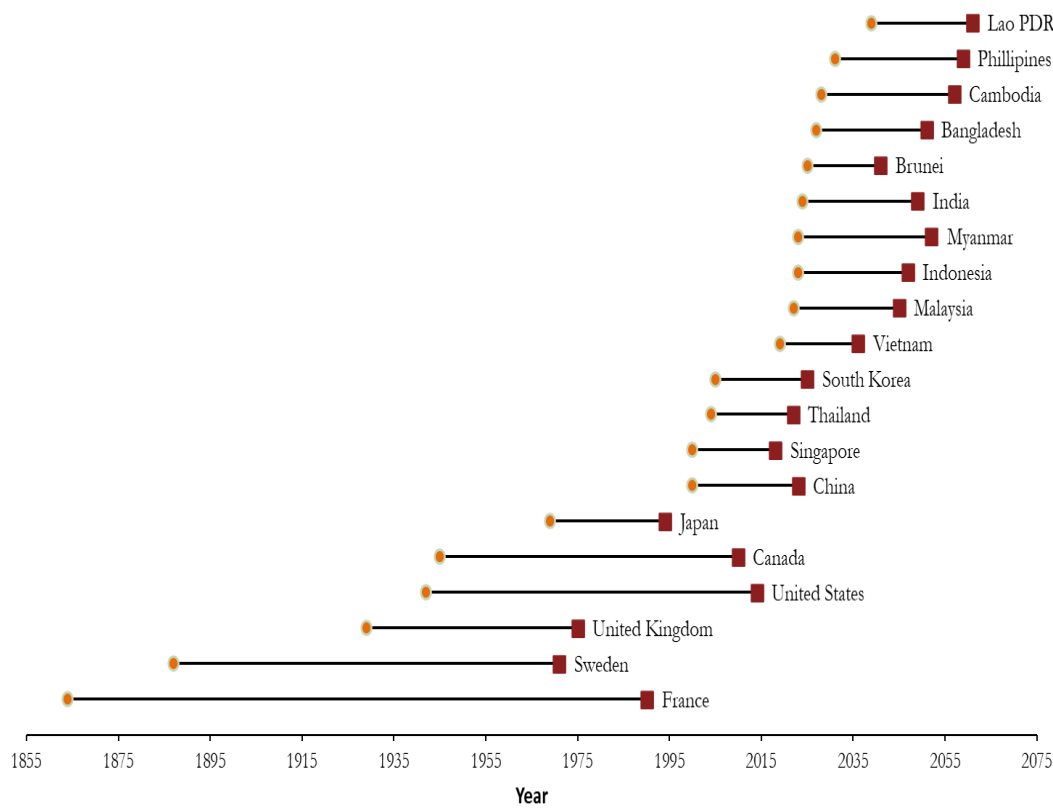
Region	Demographic Dividend - First	Demographic Dividend - Second	Demographic Dividends - Total	Actual growth in GDP/N	Actual - Dividend
East & Southeast Asia	0.59	1.31	1.9	4.32	2.42
Latin America	0.62	1.08	1.7	0.94	-0.76

Source: Mason, 2005

# Ageing in ASEAN is fast & at historically low income levels, but labor market impacts variable across the region in coming decades

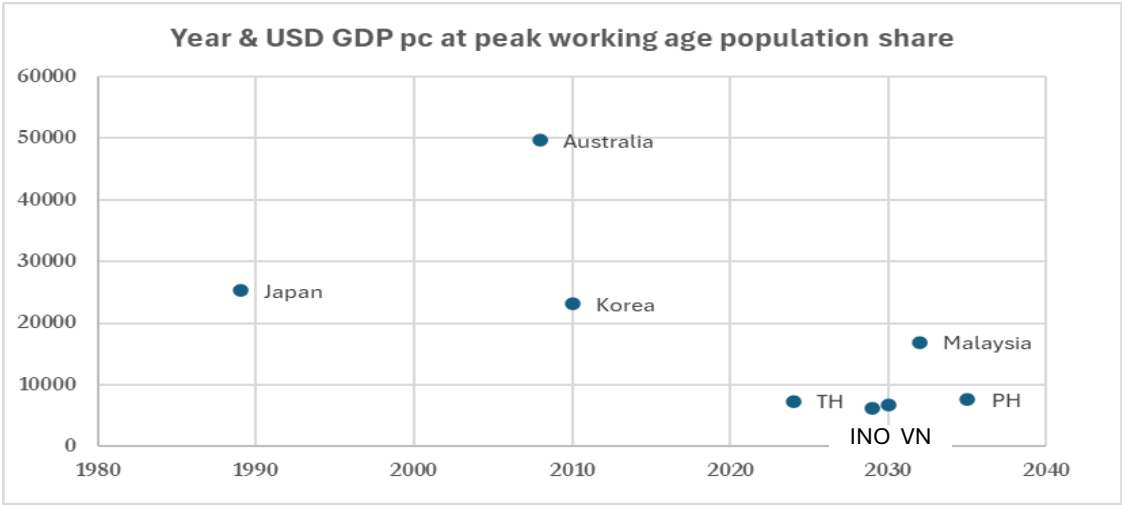
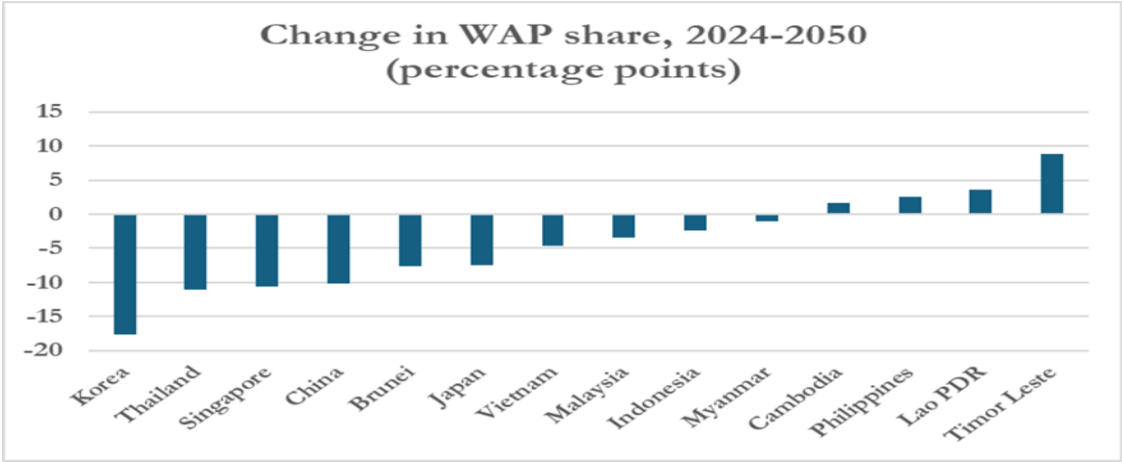
The windows of ageing vary in ASEAN, but speed of transition is dramatic across the board

Aging to aged society milestones (7 to 14% 65+)



Sources: UN WPP 2024 & US census

Working age population trends variable, but peaking at much lower income levels than OECD

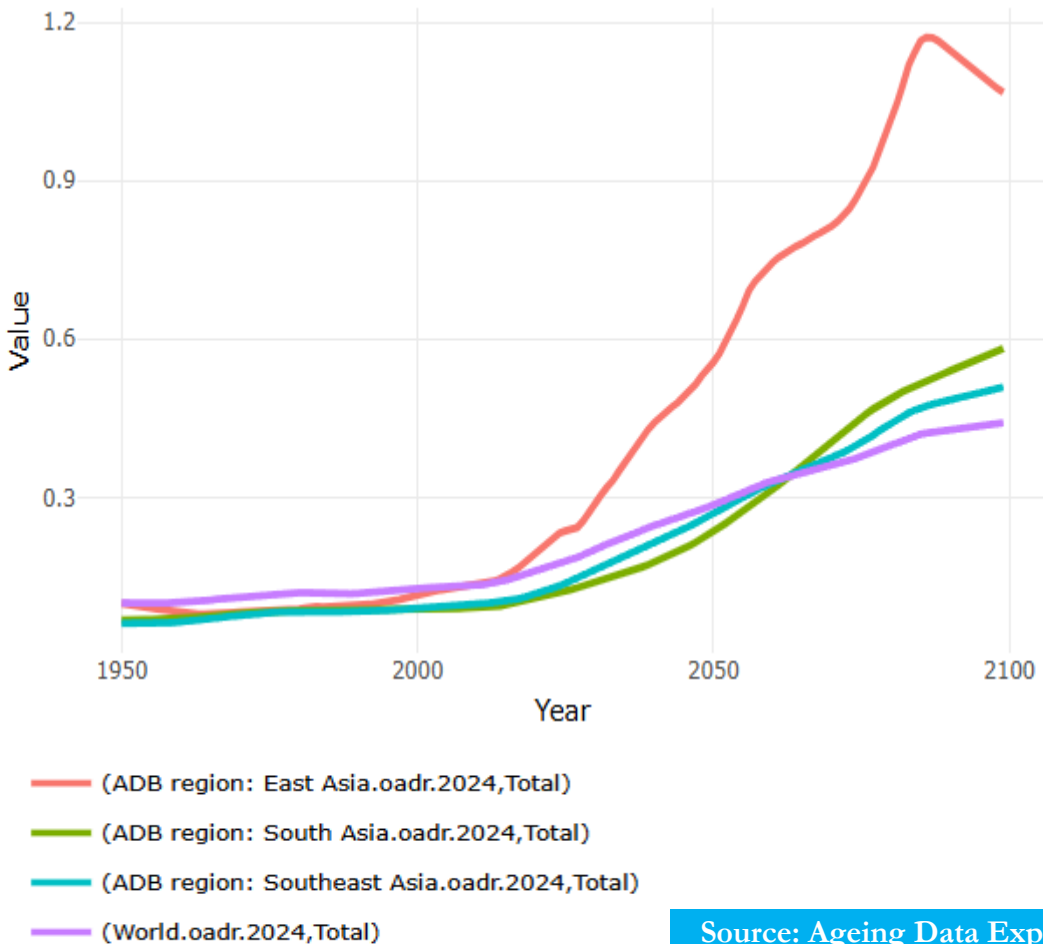


Sources: UN WPP 2024 and World Bank GDP - projections on recent year growth rates

# However, standard measures of old age dependency (OADR) can paint an overly gloomy story around ageing

Standard measures are fixed & mechanical

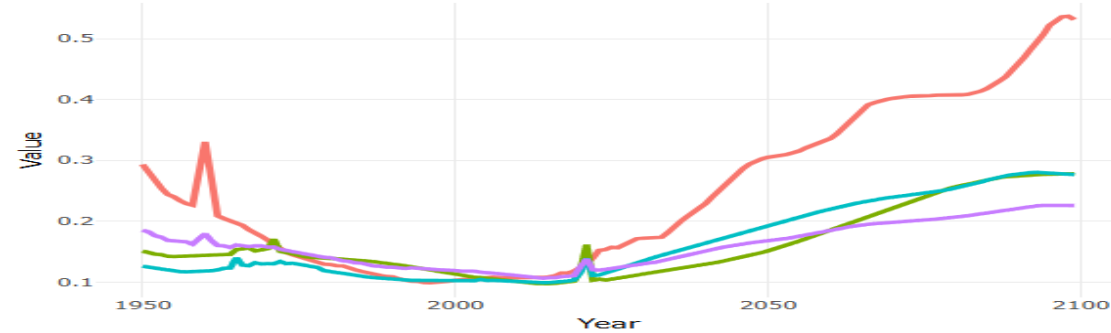
OADR (15-64), Asian regions & world, 1950-2100



Source: Ageing Data Explorer, IIASA

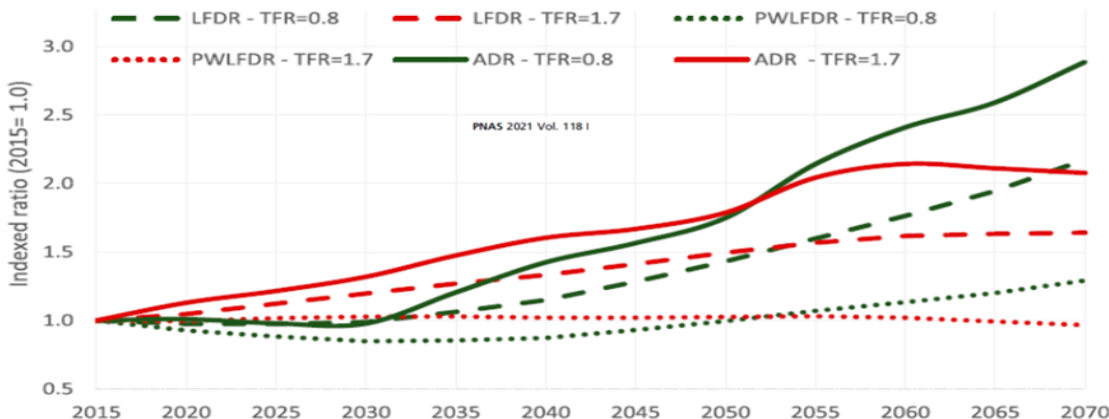
Accounting for greater longevity substantially lowers the dependency ratio

Prospective old age dependency ratio, Asian regions & world, 1950-2100



And accounting for changing productivity dramatically changes the picture

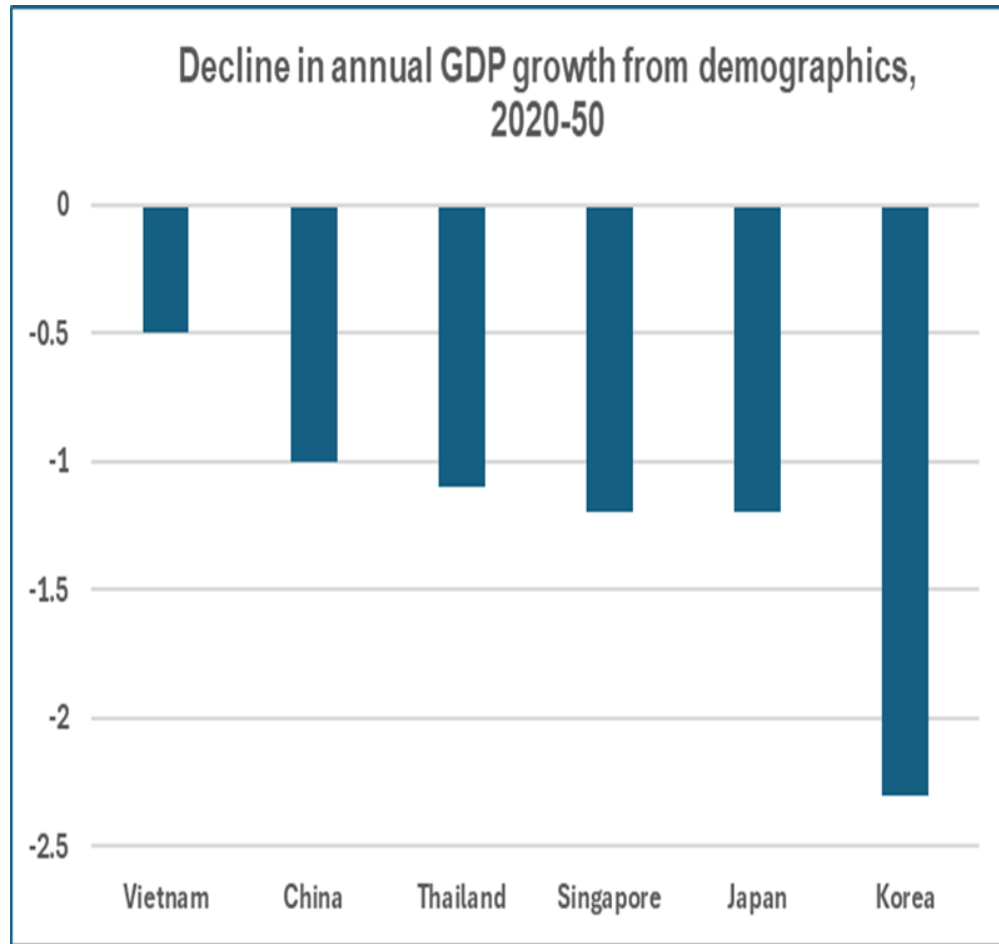
China productivity weighted LFDR, 2015-70



Source: Marois, Gietel-Basten and Lutz, 2020

# Ageing & growth: projections & history seem to diverge

Projections in rapidly ageing Asia consistently find negative impacts on growth from ageing



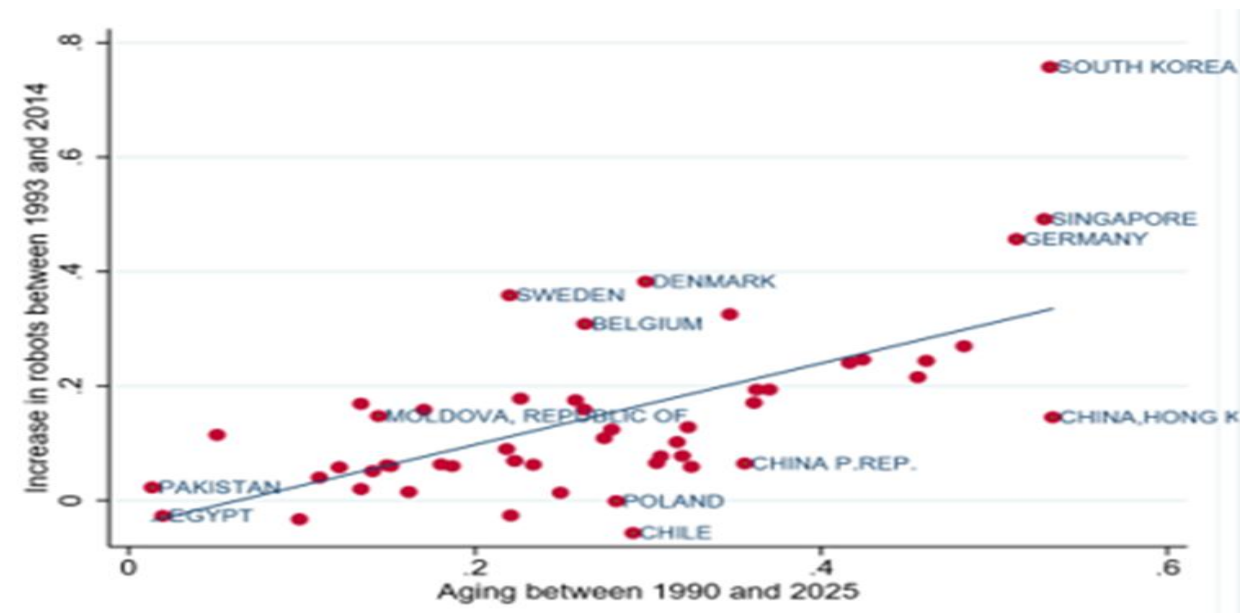
Source: Kotschy & Bloom, 2024

But historical patterns suggest a modestly positive relationship

Acemoglu & Restrepo (2017) look at 169 countries & find some positive and statistically significant relationship between ageing ratios of workforce & economic growth

**This seems in part to be driven by more rapid automation & robotization in rapidly ageing countries**

Ageing rate & robot increase, 1993-2014 (Acemoglu & Restrepo, 2021)





# Realizing the second dividend & navigating societal aging is highly dependent on behaviors & policies for capital & human capital deepening across the life course

Three dimensions influence the savings dividend in distinct but reinforcing ways which require policy attention in prime ages: **secure, healthy & productive aging is not just about old people but ALL people**

## Financially secure aging through savings, assets & pensions



- Extending financial inclusion & literacy
- Offering saving instruments- including pensions - & incentives that turn earnings into savings & asset accumulation
- Channeling savings into investments & higher growth

## Healthy & connected aging



- Limiting direct productivity losses due to illness of workers
- Reducing high health & care spending which depletes savings
- Lowering period of dependency at older ages which frees up family carers for market work/earning

## Productive aging

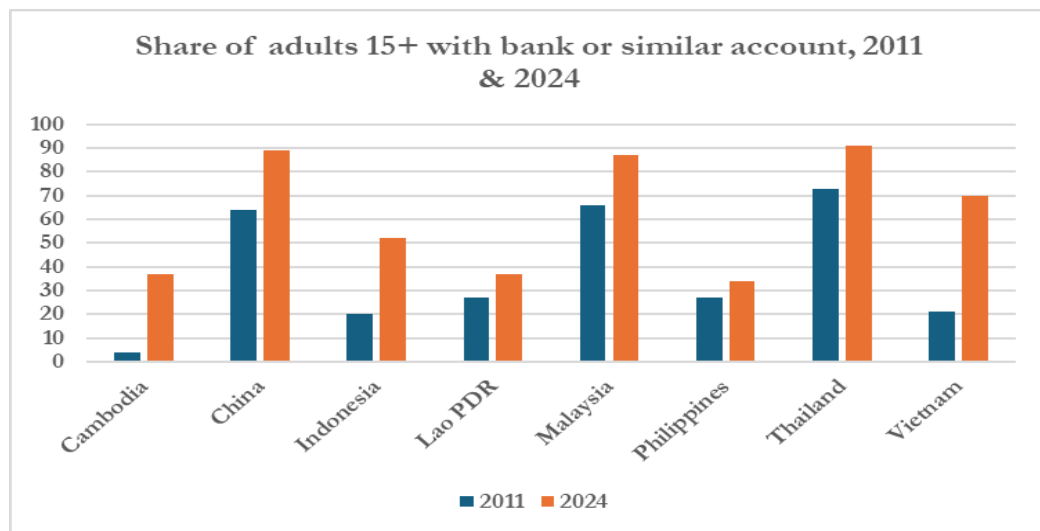


- Promoting lifelong learning/skill upgrading across working life to deepen human capital and boost earnings & capacity to save
- Longer working lives which push out the curve of financial savings/asset accumulation to later ages and thus increase aggregate savings

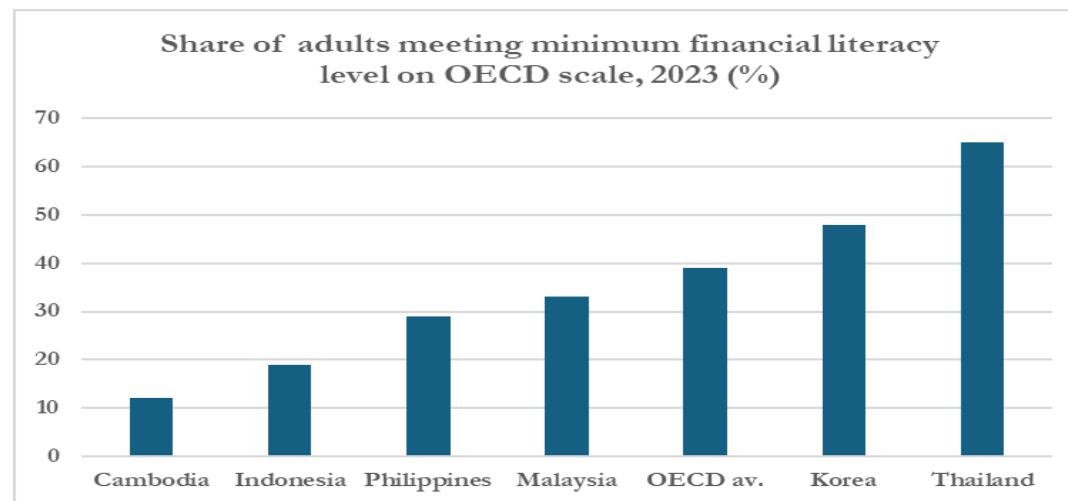


# 1. Financially secure ageing: progress, but some basics still struggle

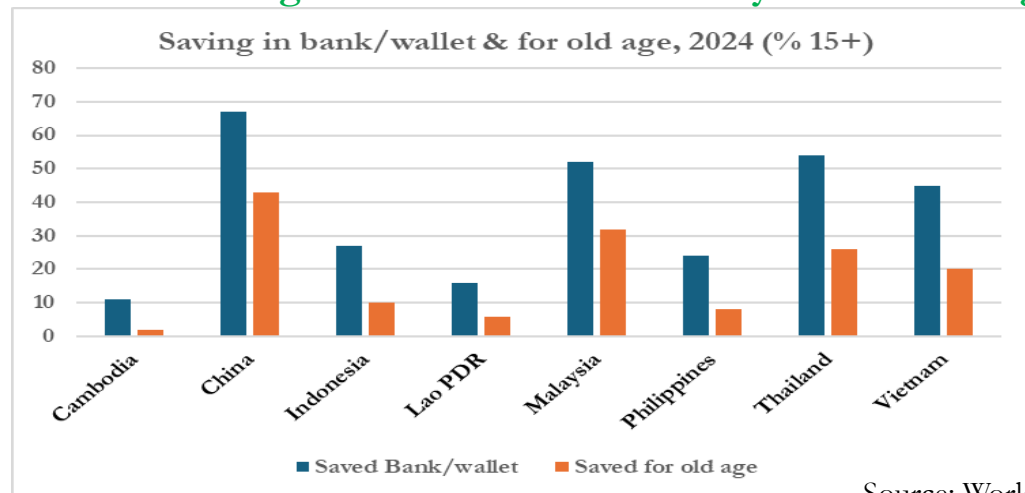
There has been considerable progress in banked population



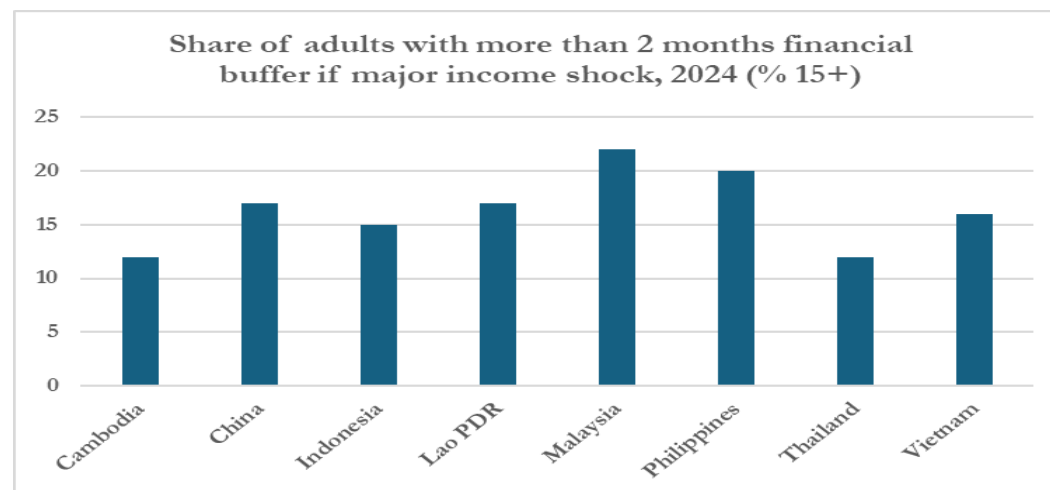
And financial literacy mostly remains low (OECD 2023)



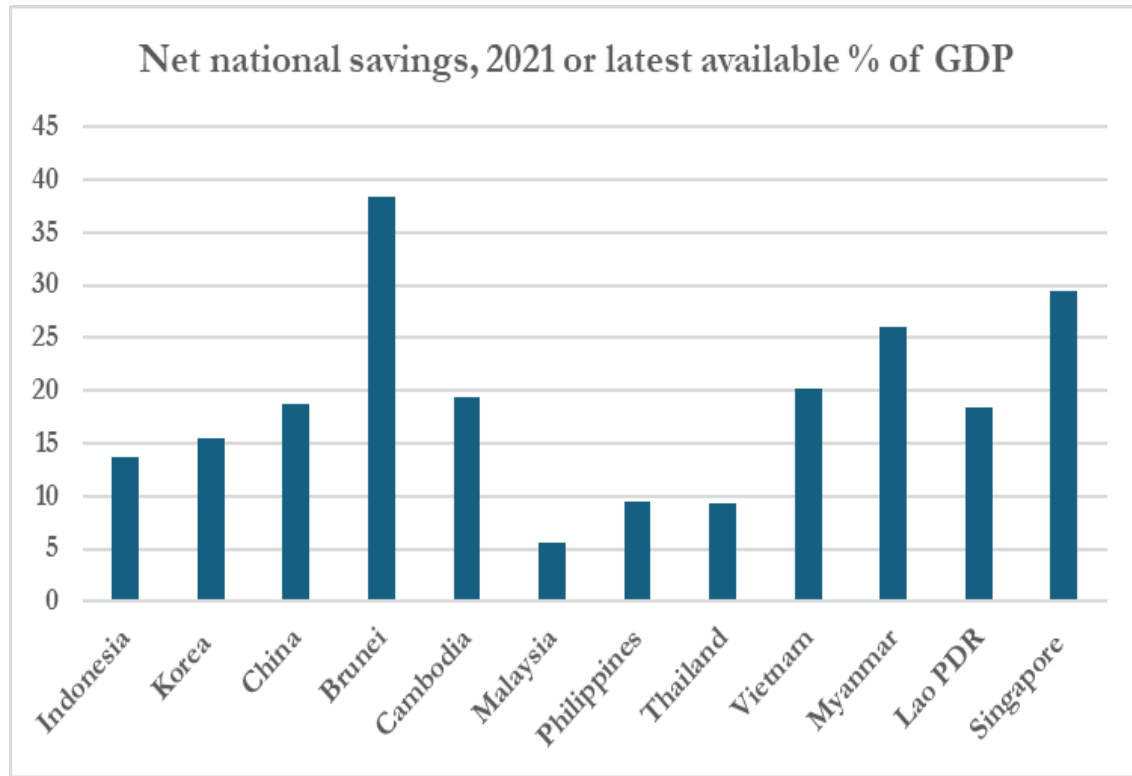
But formal savings more limited & minority save for old age



Large majority lack adequate financial buffers in the face of income shocks

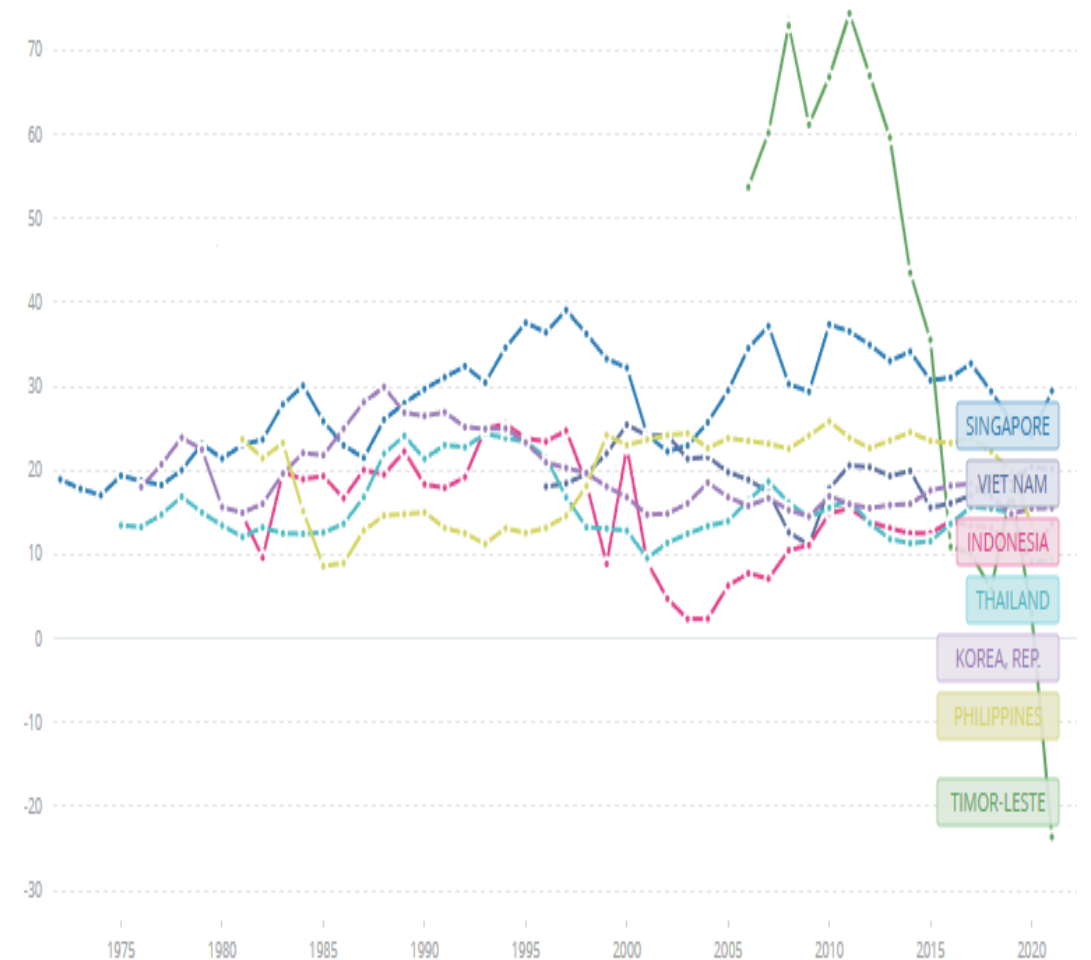


# Savings rates in ASEAN suggest no simple pattern of ageing stage & savings across countries & over time



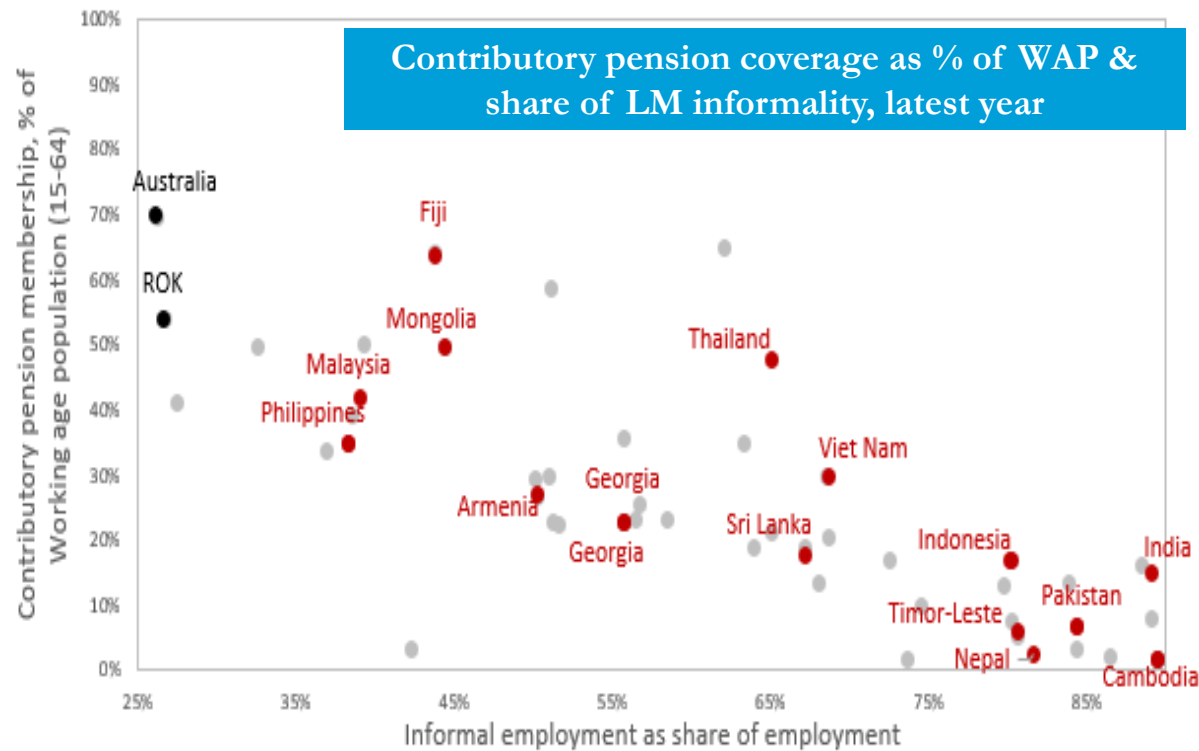
Much depends on the balance between the behavioural & compositional effects of ageing

## Net national savings, 1975-2021, % GDP



## Pension/provident funds are important channels to generate savings, but participation remains stubbornly low in face of high informality and social pensions & informal sector schemes only partly fill the coverage gap

Not only is participation low, but it has increased only modestly in recent decades, with the exception of informal sector schemes



- Low female LFPR & higher informality mean female coverage is much lower than population average
- Headline membership numbers & active coverage also diverge due to low & intermittent contribution density in private sector

Non-contributory pensions fill part of the coverage gap – but a large uncovered "missing middle" remains & benefit adequacy is mostly low in Asia



Source: Chomik et al, 2024 – India benefit is national level benefit for 60-79 year olds

# But policy change is happening in ASEAN plus global innovations

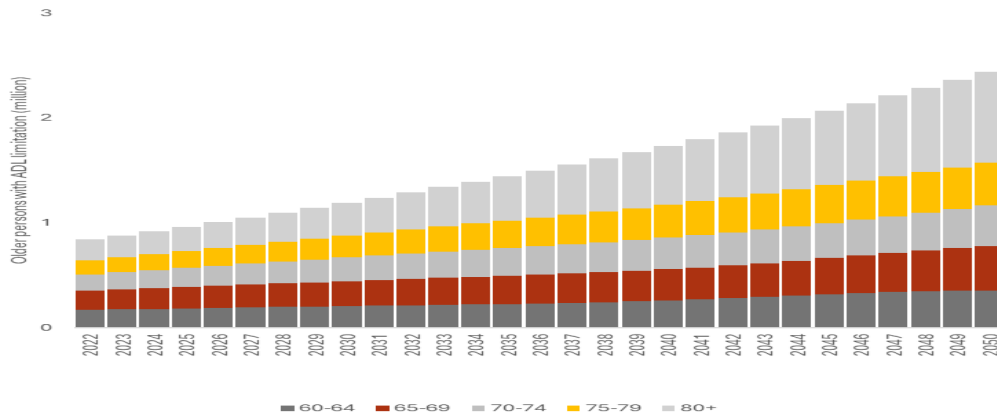
- **Matching contributory schemes for informal workers** growing in popularity, with modest but promising take-up, e.g., Thailand, Vietnam, Malaysia, China hybrid, India. **Design innovations across informal schemes** include flat, flexible contributions; auto-enrolment & simplified KYC requirements; bundling of old age savings & short-term contingencies (health, life, etc); expanded contribution channels (mobile payments/WhatsApp/convenience stores); reliance on aggregators to stimulate demand & streamline administration unions/worker associations/co-ops/microfinance institutions/self-help groups/telcos/gig platforms)
- Complemented by **financial literacy & retirement planning initiatives, and specific digital literacy programmes**, e.g., Singapore Project Wire Up within Seniors Go Digital framework: volunteer-led, one-on-one, and home-based digital literacy program. Combines smartphones & internet connection, volunteer home-based sessions & connection to social networks. Thailand MEDEE digital literacy + occupational skills + physical & mental health program, combining online and in-person from Chiang Mai University. Inclusion of basic money management & financial literacy in school curricula.

## *Global innovations:*

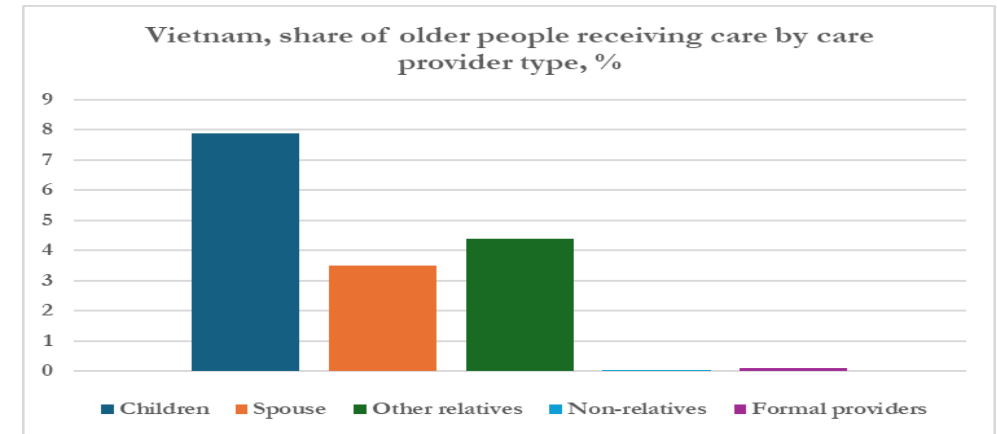
- **Bringing gig workers into contributory pension schemes through various approaches**, including contribution mandates (Belgium & Singapore proposes), stronger legal presumptions of employment relationship (California & UK), earmarked funding from platform revenues (India platform levy), and government/platform partnerships (Grab & Gojek in MY and INO)
- **Monotaxes for self-employed workers** in Latin America that combine taxes and social security contributions into a simple single tax
- **Silver bonds** which provide pension-backed loans to senior entrepreneurs to start or expand businesses, e.g. Mexico Consubanco silver bond with World Bank IFC & private investor backing.
- **Consumption-based old age savings schemes**: Mexico Miles for Retirement; Spain Pensumo. Micro-deductions on digital purchases at point of sale into old age savings account.

## 2. Healthy ageing - demand for aged care is rising & unmet care needs present both challenge & opportunity

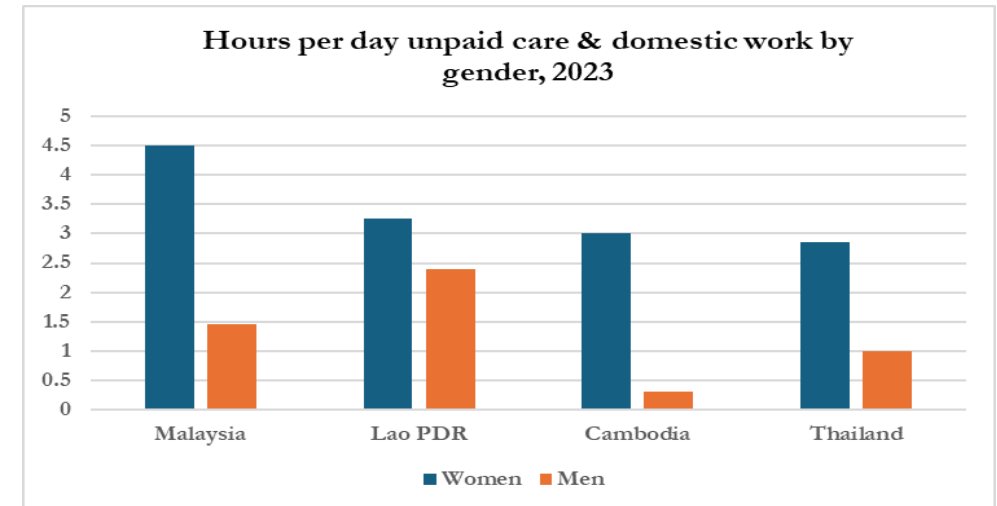
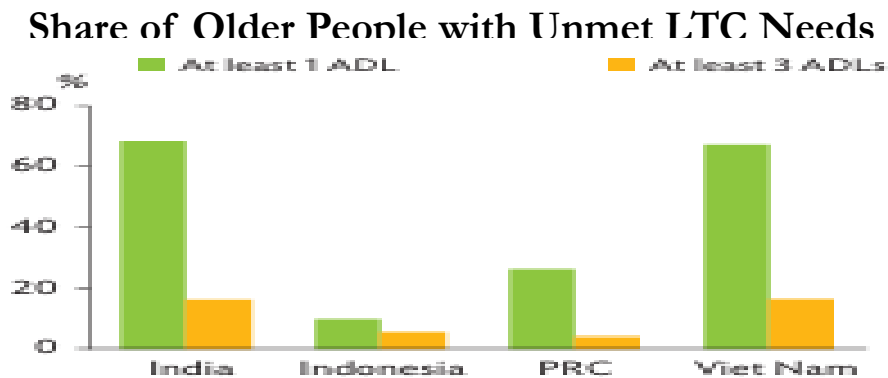
ADL/IADL limitations significant & projected to rise sharply - Malaysia older persons with ADL limitations (WB, 2025)



The overwhelming bulk of care is informal and from female family members

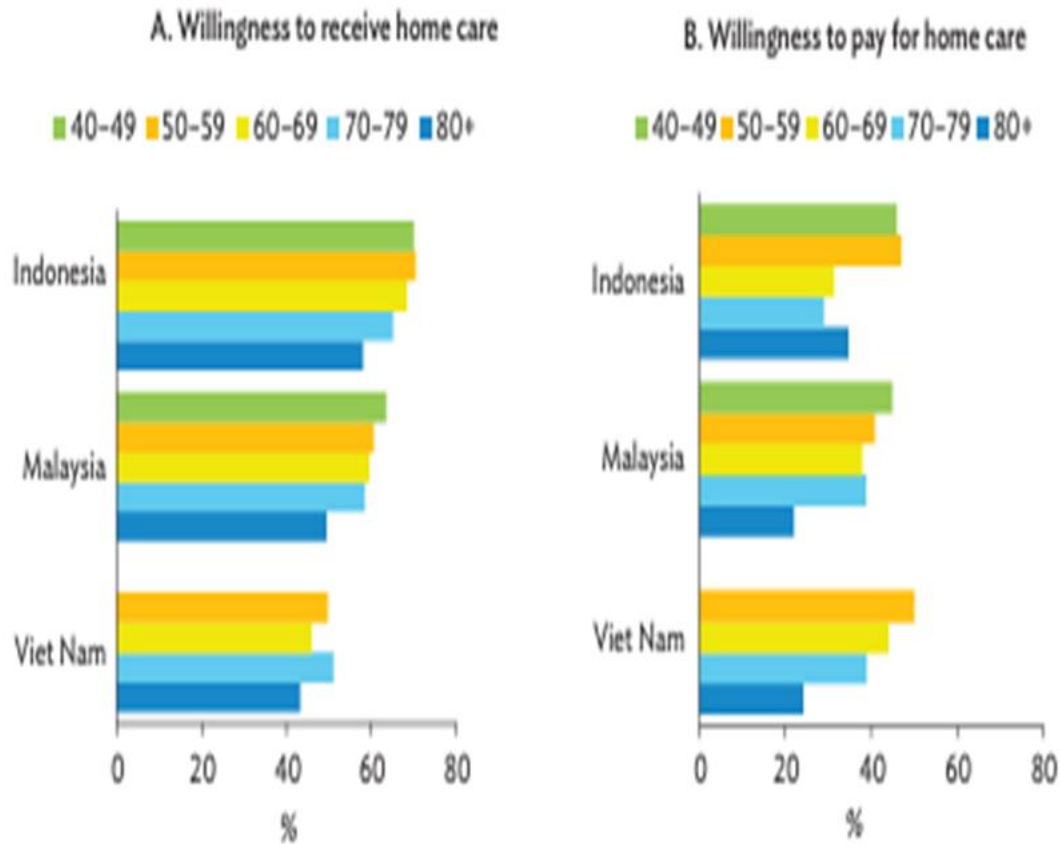


There are already substantial unmet care needs across the region



# Policies & attitudes are beginning to shift in response – though early days

At the same time, there is significant willingness to receive & pay for professional care



Source: ADB, 2024

And emerging Asian governments are moving rapidly on formal LTC policies:

- **China** has the most elaborate policy framework, including nationwide LTC insurance pilots (90/7/3)
- **Thailand & Indonesia** have developed policies as part of their broader health systems/UHC policies, with emphasis on community and home-based care
- **Vietnam, Cambodia, Lao PDR, Timor-Leste & Myanmar** do not yet have standalone LTC policies, but Vietnam reinforcing community level care
- Common challenge is **fragmented governance** within and between levels of government which impedes integrated care across services. Overall, health agencies are becoming more dominant.

**Good practice:** Singapore Agency for Integrated Care promotes integrated care across hospital, community & home services, and across health and social care services



# Two common challenges in developing formal care models: financing & home-based care models

## Financing:

- Public financing for LTC remains negligible mostly or hidden in health budgets & difficult to have consolidated spending estimates (e.g., Malaysia c. 0.03% of GDP on social LTC; Thailand c. 0.02% of GDP on community-based LTC package)
- Explicit LTC funding remains largely from general revenues, but Japan & Korea based on social LTCI and China pilots of LTCI. But, like social health insurance, LTCI may blend contribution & general revenues
- Diverse approaches on co-pays/OOP spending, with Japan, Korea, Singapore & China requiring co-pays, while Thailand and Indonesia under general UHC philosophy & not explicit on co-pays
- Countries with co-pays differentiate them to incentivize use of home/community-based care

## All countries emphasize home and community-based care as the system foundation, but early days of implementing HB/CB models

### Various models:

- Thai Community-Based Long-Term Care (CMLTC) program - per capita allocation for ADL impaired 60+ under ACS package, with strong reliance on volunteer health workers & training/material support for family caregivers
- China contracting to HB care firms & NGO/volunteers & social forces/community service stations
- Vietnam Intergenerational Self-Help Clubs with community block grants – multi-purpose groups from social to health needs
- Indonesia Posyandu Lansia health posts for elderly with volunteers under Puskesmas supervision + BKL program for family care givers

**Common features:** (i) reliance on volunteers & NGOs for grassroots service facilitation; (ii) supplementation of family care givers & capacity building for informal carers; & (iii) strong links to primary care networks.

- Key challenge of achieving continuum of care is **case management** within & between levels of care, e.g., Thai care managers Community-Based Long-Term Care program; Singapore LTC case managers in community care teams, transitional care teams, and care coordinators for HB care.
- Challenge of **market gaps in rural/remote areas** where commercial viability of LTC services is questionable – does one size fit all?



### 3. Productivity and population ageing

#### Potential channels for sustaining productivity as societies age:

- Promoting **lifelong learning/skill upgrading** across working life to deepen human capital and boost earnings/productivity & capacity to save
- **Better health facilitates longer working lives** which push out the curve of financial savings/asset accumulation to later ages and thus increase aggregate savings, including targeted access to credit for mature entrepreneurs
- Ageing may directly & indirectly induce increased economic activity in the “**silver economy**”
- **Migration** – offers important growth potential & some regional economies have high levels (SIN; AUS), but politics can be challenging

#### Global evidence on participation & productivity by age:

IMF (2025) finds improved physical, cognitive & mental health increases labor supply and raises labor earnings & labor productivity, e.g., a decade of cohort health gains in cognitive abilities raised older individuals' labor force participation by about 20 percentage points, weekly hours by around 6, productivity by roughly 30 percent, and total labor earnings by roughly 35 percent.

**60 or 70 really is the new 50 !**

# Across Asia, unexploited health capacity to work of older people presents a significant economic opportunity

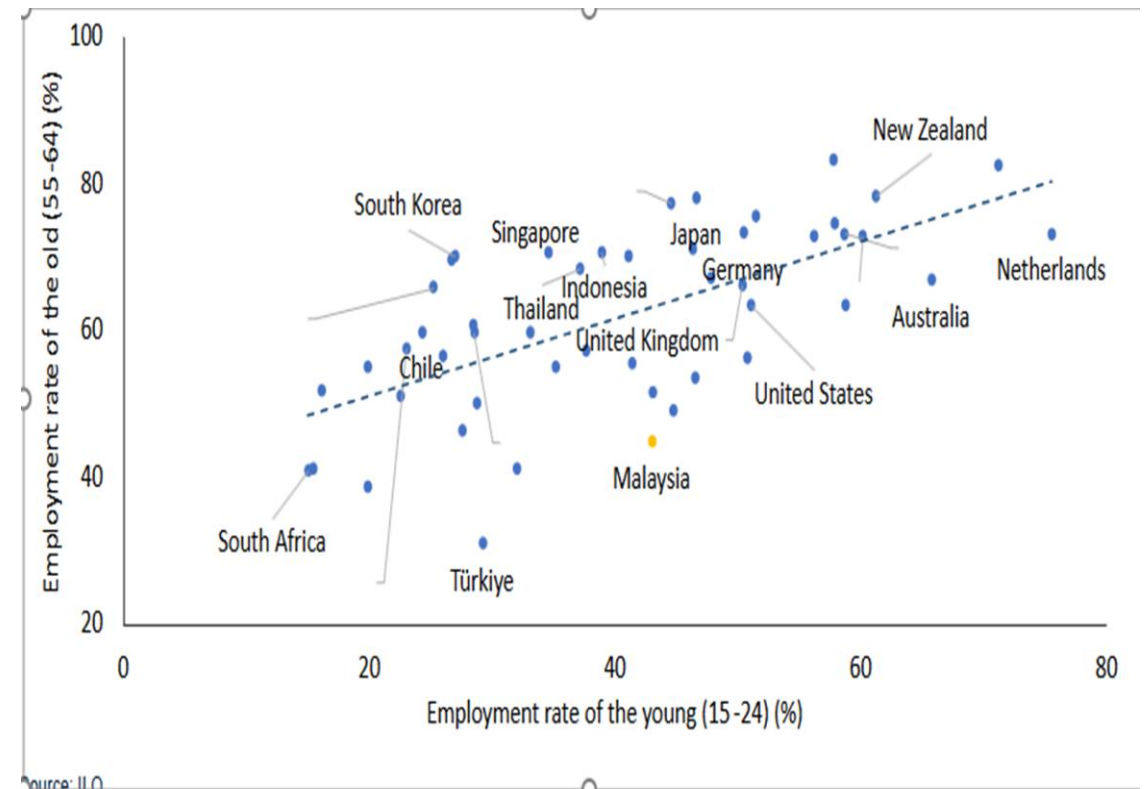
	Increase in GDP if untapped work capacity of 60-69 year olds fully utilized, % of GDP
Indonesia	0.3
Korea	1.5
Malaysia	0.2
China	0.4
Thailand	0.9
Vietnam	1.1
Japan	1.4

Source: ADB, 2024; Kikkawa et al, 2024, based on authored country studies.

Evidence from US & Korea suggests that the **“age-friendliness” of most occupational sectors has increased over time** & age friendly sectors accounted for substantial shares of employment increases – “age-friendly” defined as less physically exerting, fewer job hazards, more responsibility for others, greater job autonomy, better environmental conditions, etc. (Acemoglu et al; Kim et al).

**And higher mature workforce participation does not come at the expense of youth employment**

Employment rates of 55-64 & 15-24 year olds by country, latest available year



# Mid- and late career skill upgrading & credit on the agenda, but effective models still at nascent stages & on-job training mostly low in ASEAN

## Formal sector firms doing variable amounts of on-job worker training across ASEAN



Source: World Bank enterprise surveys, latest year

## At same time, evaluations suggest positive impacts of OJT on wages & firm productivity:

- Malaysia and Thailand 4.5-7.7 % wage increases
- Vietnam – higher performance of firms after OJT/classroom management training

## Mid-career skill upgrading, career transition & support services (including targeted credit) common in HICs in region

- Singapore SkillsFuture mid-career training subsidy top-ups & Career Transition Programmes (SCTP).
- Australia – Workforce Australia Career Transition Assistance for 45+ assesses skills & move into new employment + Skills Checkpoint Program with retraining & upskilling for older workers, career assessments, guidance & training grants.
- Australia National Micro-credentials Marketplace. NZ Qualifications Authority's Micro-credentials Framework.

Targeted credit schemes for older entrepreneurs:  
Thailand older persons fund microcredit; Vietnam ISHC revolving funds; Philippines Integrated Livelihood (Kabuhayan) grant for seniors

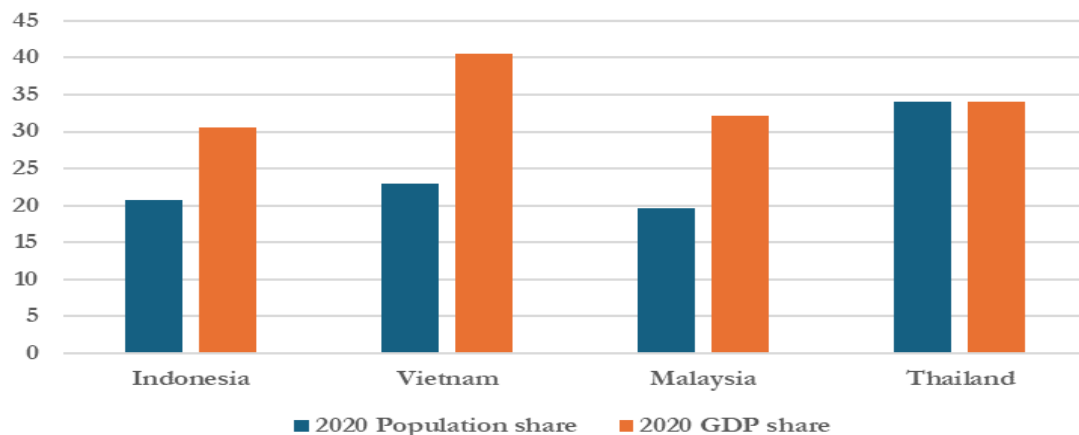
# Ageing also magnifies potential for expanding the "silver (also known as longevity) economy" – the economic impact of older people as *consumers*

The silver economy impacts economic activity in 3 ways:

- **Direct effect** – the spending & activities of older population (50+)
- **Indirect effect** – economic activity due to procurement of goods & services from businesses supplying those servicing 50+
- **Induced effect** – the incremental spending of workers in enterprises linked to 50+ consumption across the whole economy

The economic impact of older people exceeds their population share & will rise over time

Population & GDP share of 50+, 2020



Source: AARP, Global Longevity Economy Outlook, 2019

Silver economy consumption shares are significant across a wide range of sectors globally

Global share of consumption by 50+ by category, 2020 (US\$ trln)



All dollar values reflect PPP-adjusted international dollars and are adjusted for inflation post-2020.

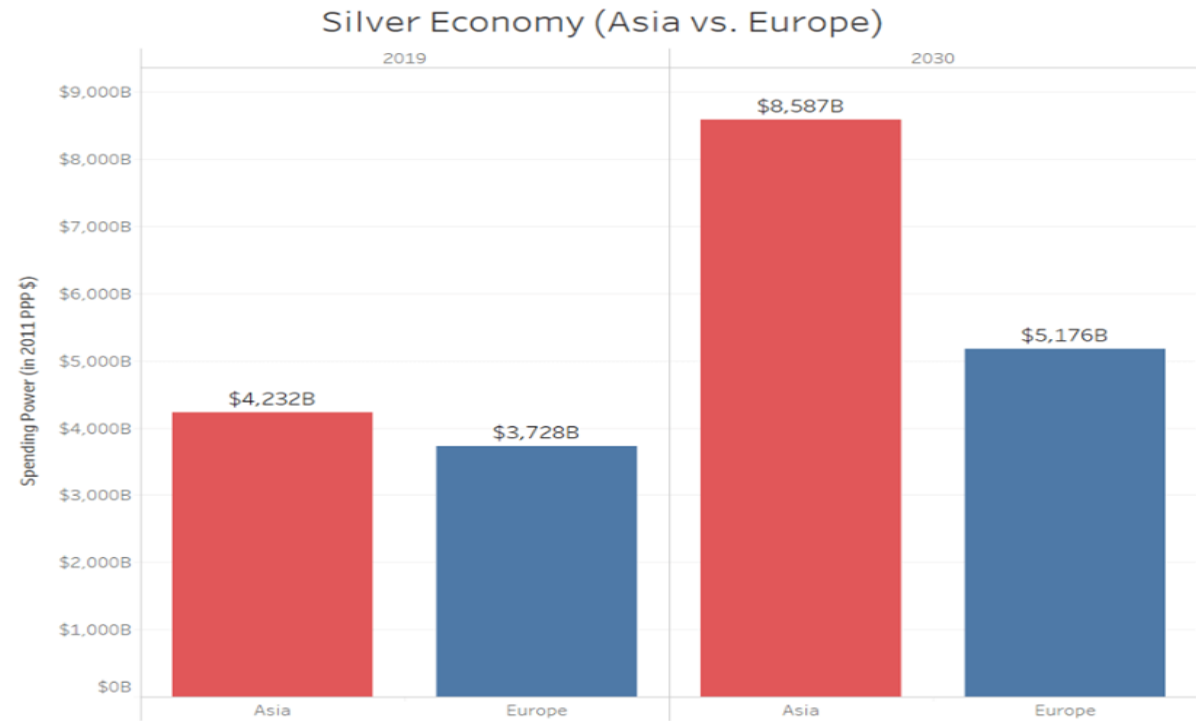
Globally, silver economy projected to account for 59% of consumer spending by 2050 (AARP, 2019)

# Asian silver economy growing faster than global average due to speed of demographic change & high growth rates

Asia-Pacific silver economy was US \$3.2 trn in 2020 and on track for US \$4.6 trn by 2025— more than 40% leap in five years (Ageing Asia 2020)

## Silver economy estimate, 2025 (US\$ bln)

<b>China</b>	2610.9
<b>Japan</b>	884.3
<b>Korea</b>	289.7
<b>India</b>	180.1
<b>Australia</b>	159.1
<b>Taiwan, China</b>	93.2
<b>Thailand</b>	77.4
<b>Indonesia</b>	75.5
<b>Singapore</b>	72.4
<b>HK, SAR</b>	40.4
<b>Malaysia</b>	25.5
<b>New Zealand</b>	25.1
<b>Vietnam</b>	18.9
<b>Philippines</b>	10.9
<b>Myanmar</b>	5.1



Source: World Data Lab, 2019. <https://worlddata.io/silver-economy-spending-power-trends-in-asia/>



# A booming – but competitive – area of focus is AgeTech

ASEAN AgeTech funding has seen 28% CAGR from 2020-Q1/2025 (AARP)

## Five main areas of innovation:

- Digital health and tele-care
- Assistive robotics and mobility – China leading efforts for international standards for elder care robots & industry innovators such as Unitree Robotics, UBTech Robotics, Fourier & AgiBot
- Smart home and Internet of Things (IoT)
- Finance and insur-tech
- Social & cognitive engagement, incl. social media & gamification



# In conclusion...moving to longevity societies

- Rapid ageing is a reality already or it is coming fast across ASEAN
- Preparedness of ASEAN economies is variable, but policy gaps remain & behavioural change across society will be vital
- There are risks to growth & particularly to government budgets – and the politics of reform are not easy

## BUT...

- Talk of an ageing catastrophe or silver tsunamis is overblown & wrongly assumes that societies stand still while demographics progress
- There are good reasons to be optimistic given the policy dynamism in much of ASEAN and demonstrated capacity to adapt to rapid change
- Ageing opens new social, business and economic opportunities which are already being seized in ASEAN and will only grow with time & evolution of social norms



Thank you

Salamat

Terima kasih

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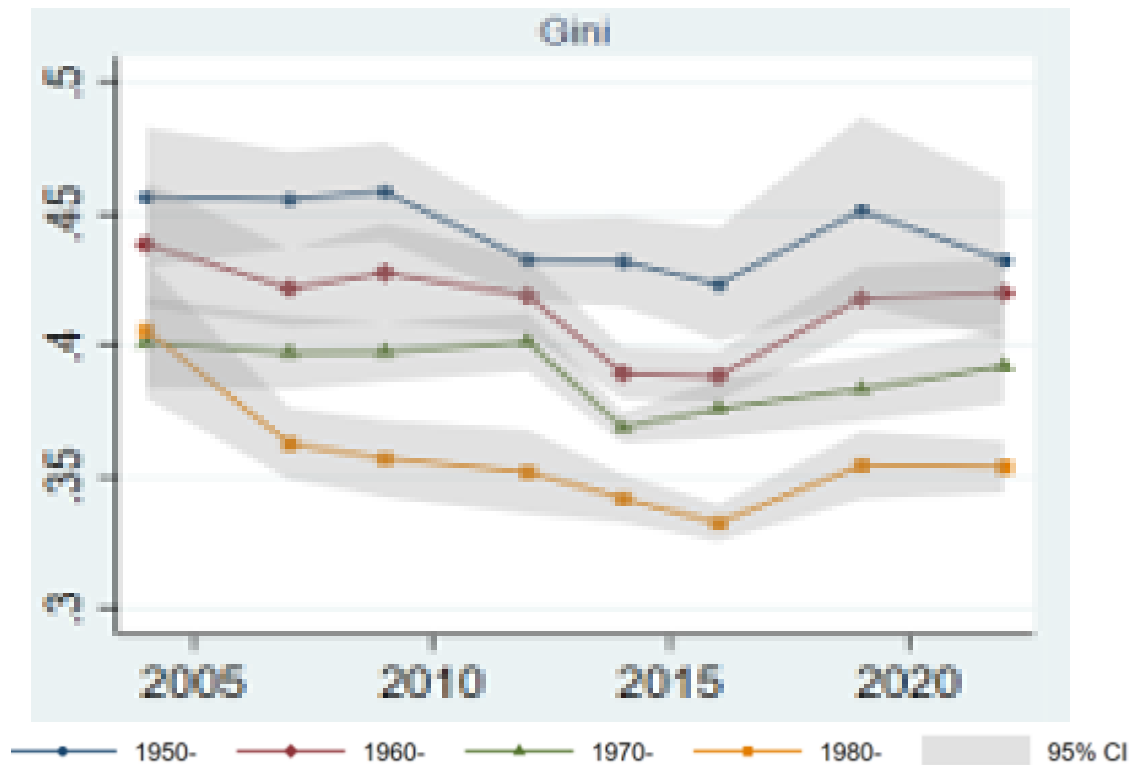
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# In the absence of redistributive tax & transfer systems, ageing may increase inequality, both among older cohorts and for society as a whole

When social security coverage is incomplete, inequality among older cohorts may be higher & increase overall inequality as older share of population rises

Malaysia inequality by birth cohort, 2004-22 (Gini)



Source: Rongen et al, forthcoming

In contrast, with inclusive pension systems, inequality among older cohorts may be lower & reduce overall inequality

New Zealand's universal basic pension flattens inequality at older ages - Urban age cohort inequality median, 1986-2013

Age cohort	Inequality, median level
15-24	0.432
25-44	0.335
45-64	0.339
65 and over	0.198

Source: Alimi et al (2018). Inequality measure is mean log deviation. Higher values indicate higher intra-cohort inequality.