Counteracting the Impact of Societal Ageing on Income Inequality: A Case Study of Malaysia and Social Pensions

Philip O'Keefe (CEPAR), Gerton Rongen & Peter Lanjouw (Vrije Universiteit Amsterdam) and Matthew Dornan (World Bank)

CEPAR Pensions & Retirement Colloquium, November 2025

Outline

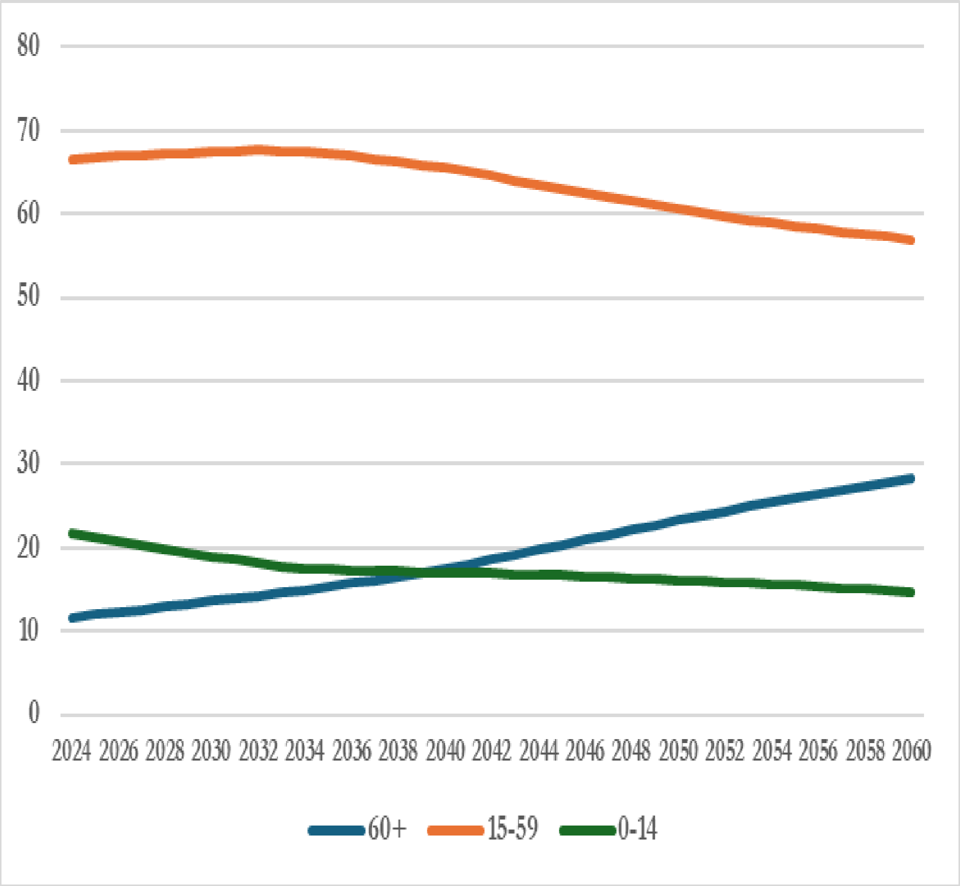
- **Malaysia's context:** demographics, overall inequality, the pension system, and inequality by age cohorts

- **Simulating an expanded social pension**: impacts on poverty, inequality & fiscal costs

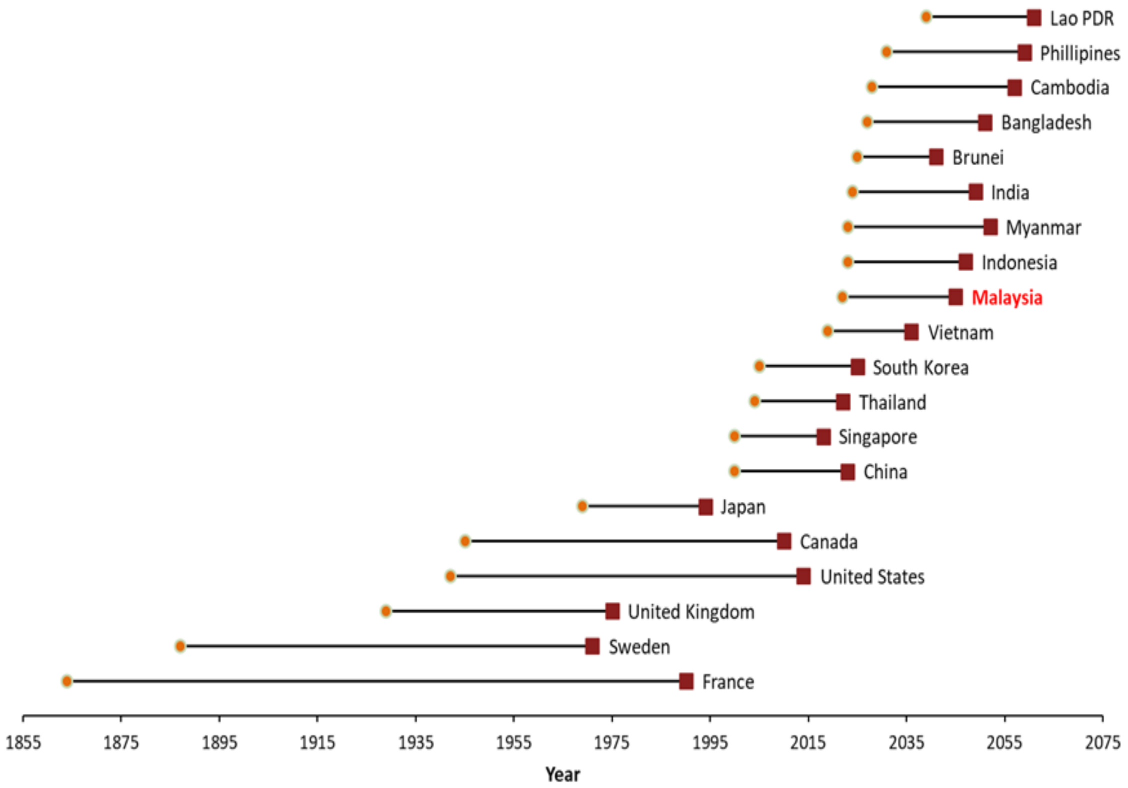
- **Some policy suggestions**

Like most emerging Asian countries, Malaysia will age rapidly in coming decades & at relatively lower income level than most OECD countries

Malaysia, population groups shares, 2024-60



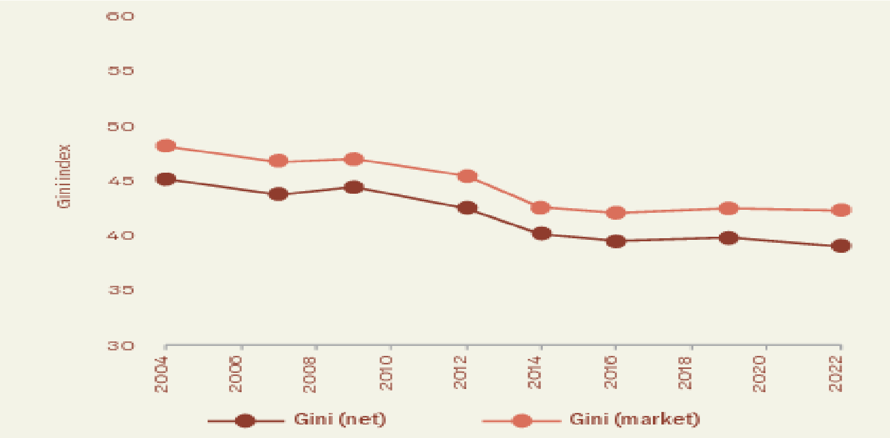
Years became/will become ageing (7% 65+) & aged society (14%+) & transition period



Source: UN WPP 2024, medium variant

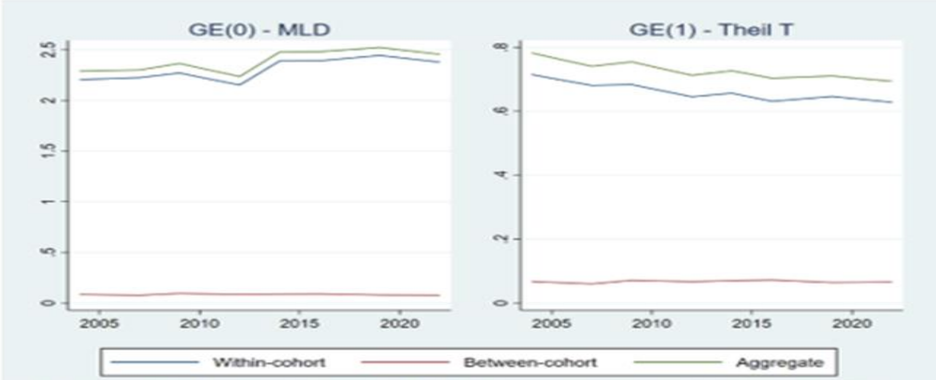
Overall inequality has moderated in recent years, but remains relatively high & is mostly explained by within-cohort inequality

Gini coefficient, 2004-22, market and net



Source: World Bank 2024, using pc HH income. Market = before tax & transfers.

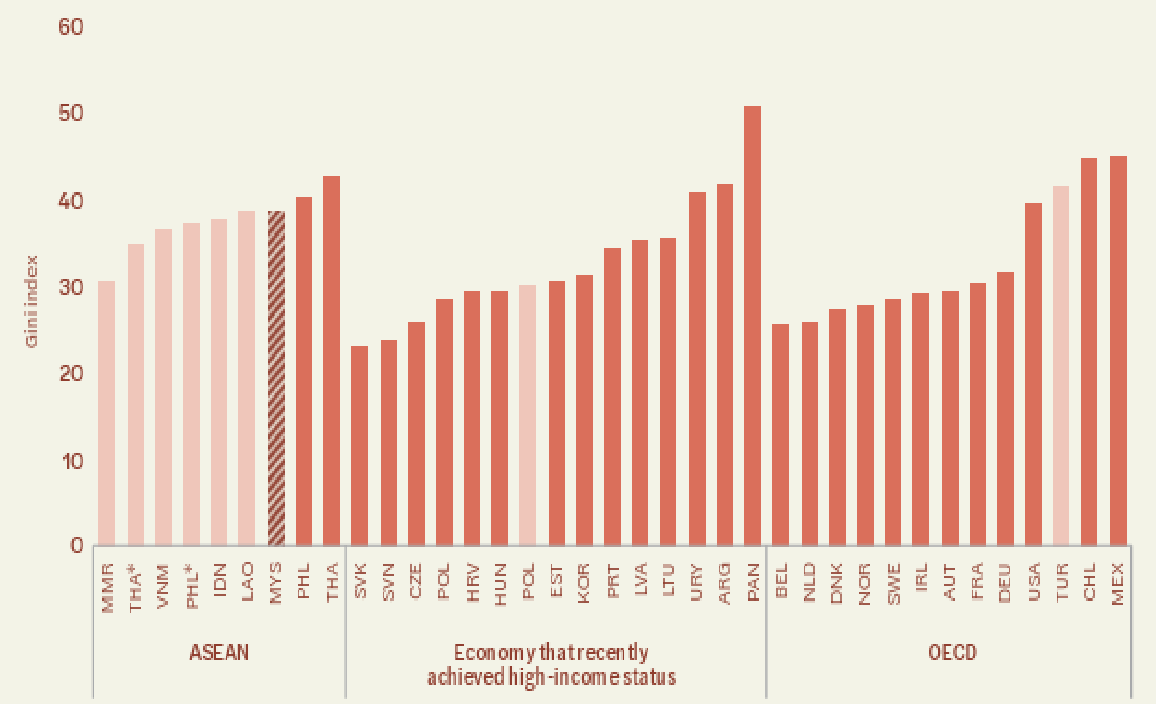
GE inequality within & between cohorts, 2004-22



Note: decomposition of aggregate inequality of individual income as measured by the GE(0) and GE(1), into between- and within-cohort inequality, based on five-year birth cohorts. The sample excludes individuals under 15 and students under 25.

Source: Rongen et al, forthcoming

Inequality is higher than in most OECD, but comparable to most ASEAN countries

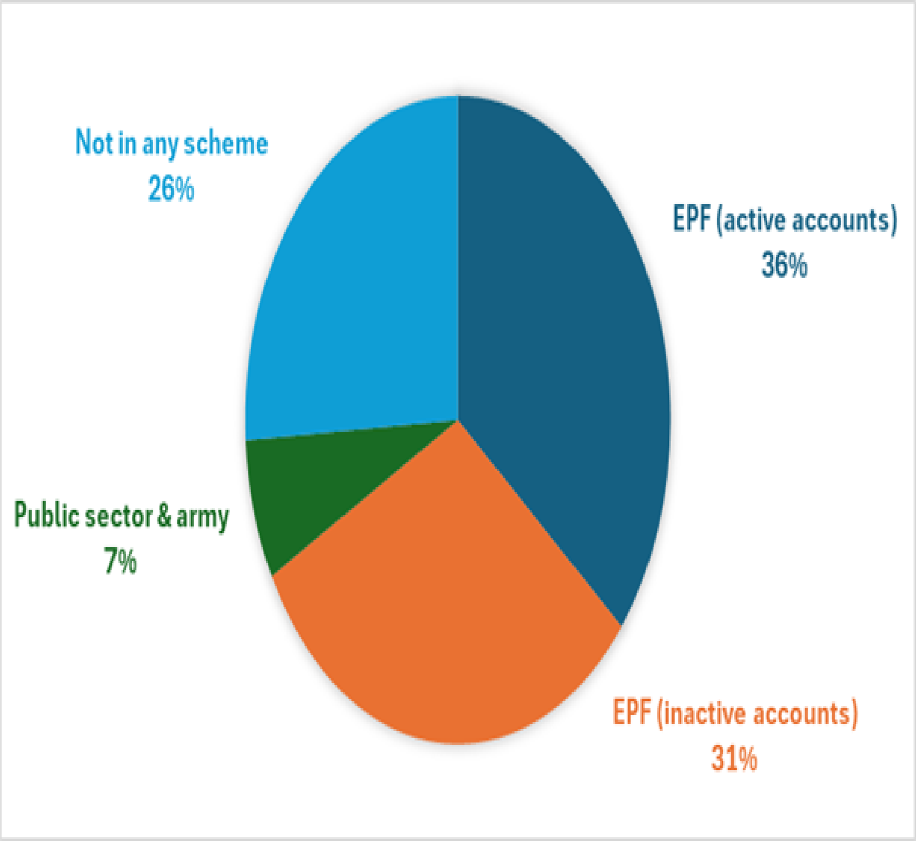


Source: World Bank staff based on data from the World Bank Poverty and Inequality Platform (https://pip.worldbank.org/) and Department of Statistics Malaysia (DOSM) Household Income, Expenditure and Basic Amenities Survey (HIES/BA).

Compared to most OECD, the tax & transfer system does relatively little to reduce inequality

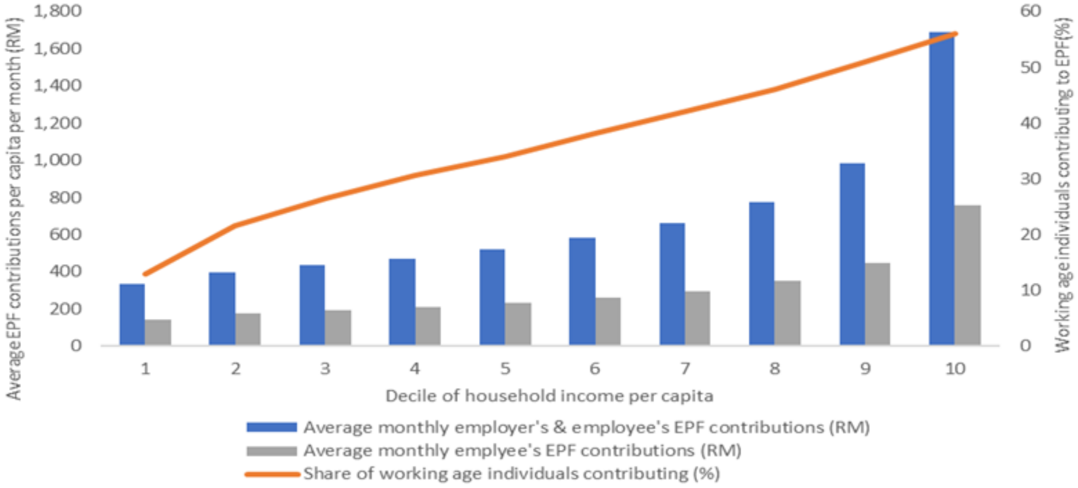
The contributory pension system has partial coverage, especially among lower income groups, informal workers & women, & poor adequacy even for covered

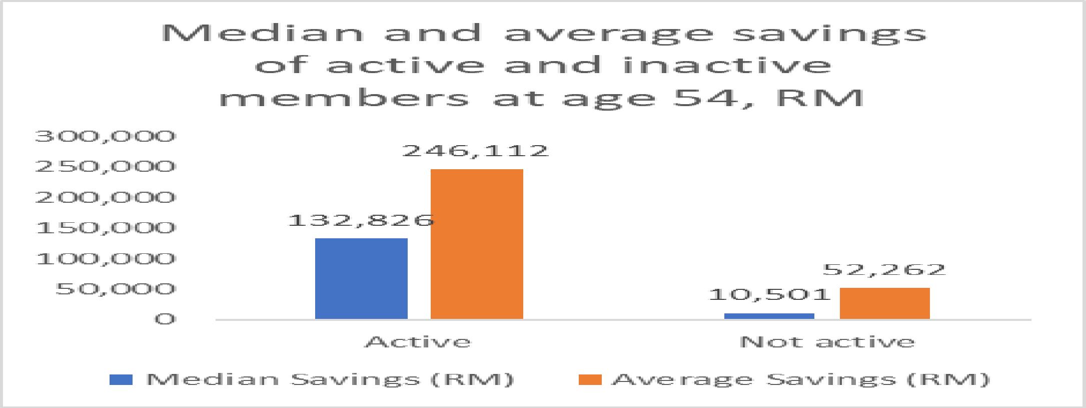
Participation in contributory pension schemes, as share of working age population (%)



Sources: Employee Provident Fund & World Bank

Share of WAP contributors by income decile (%) & average monthly contributions (RM)

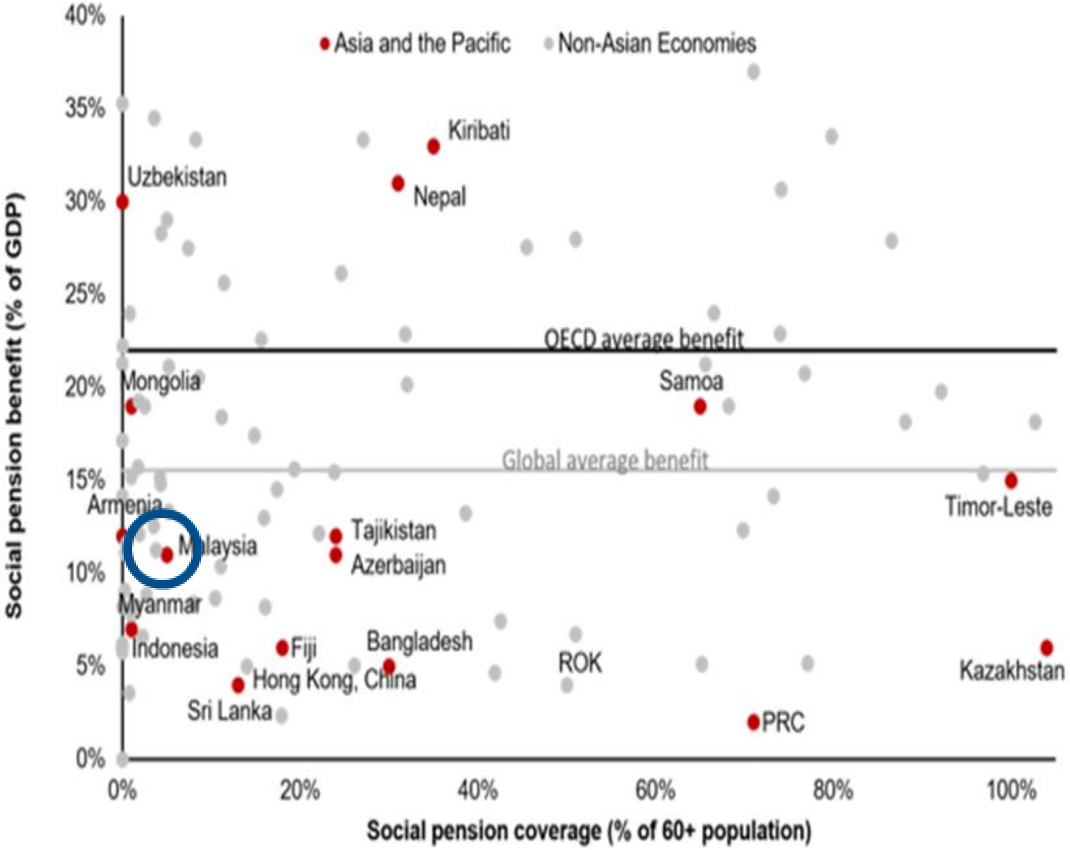




Note: 2022 medians = USD 30,187 (active) & 2,387 (not active)

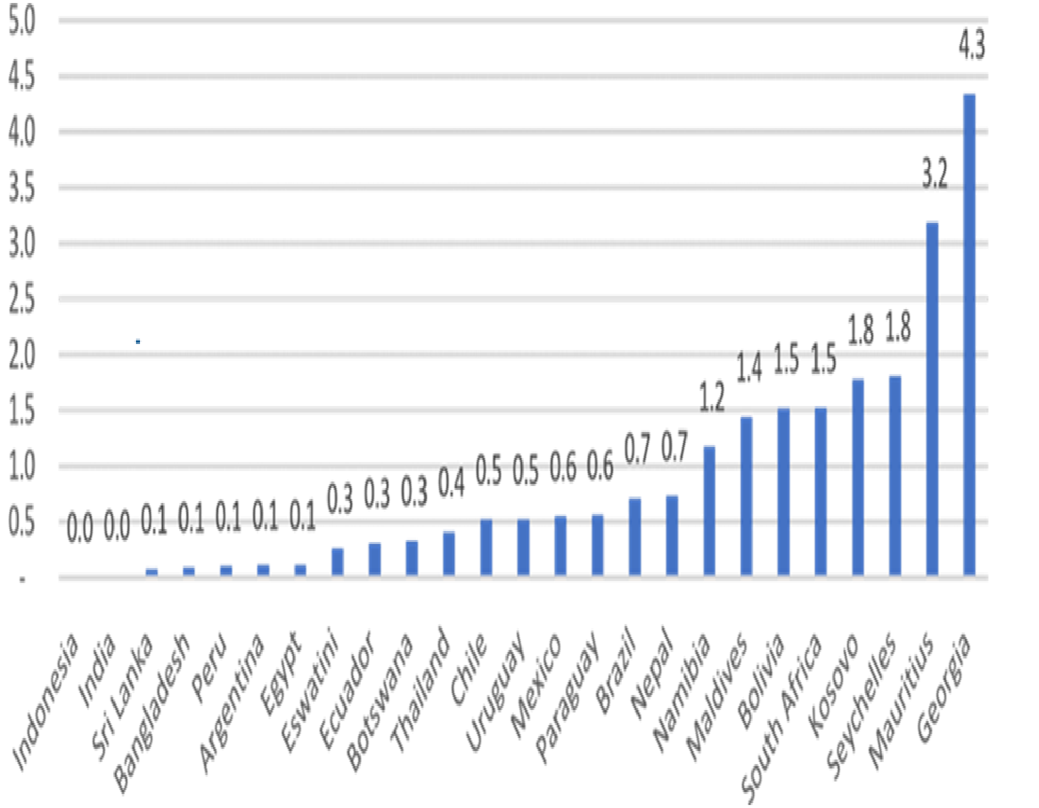
In contrast to neighbours such as China, Thailand & Korea, non-contributory social pension coverage is very low – resulting in a large "missing middle" between EPF participants & social pensioners

Coverage (% 60+) & benefit adequacy (% GDP pc) of social pensions, latest year



Source: Chomik et al,2024 based on World Bank ASPIRE

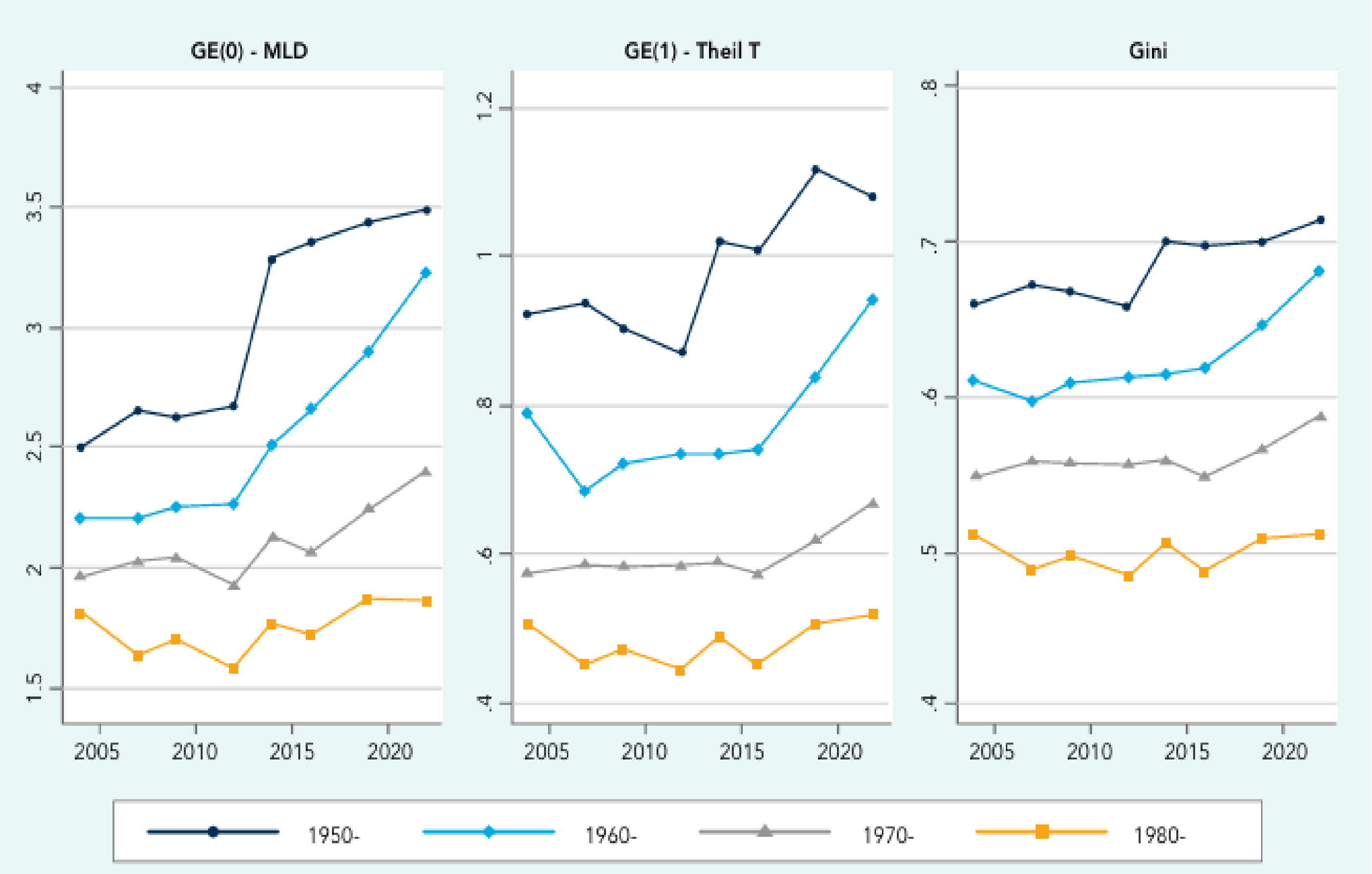
Social pension spending as % of GDP, latest year



Malaysia social pension spending in 2024 = 0.05% of GDP

One consequence is that within-cohort inequality rises sharply with age by all measures & the relative patterns are stable over time

Within-cohort inequality by ten-year birth cohorts, 2005-22, GE & Gini measures

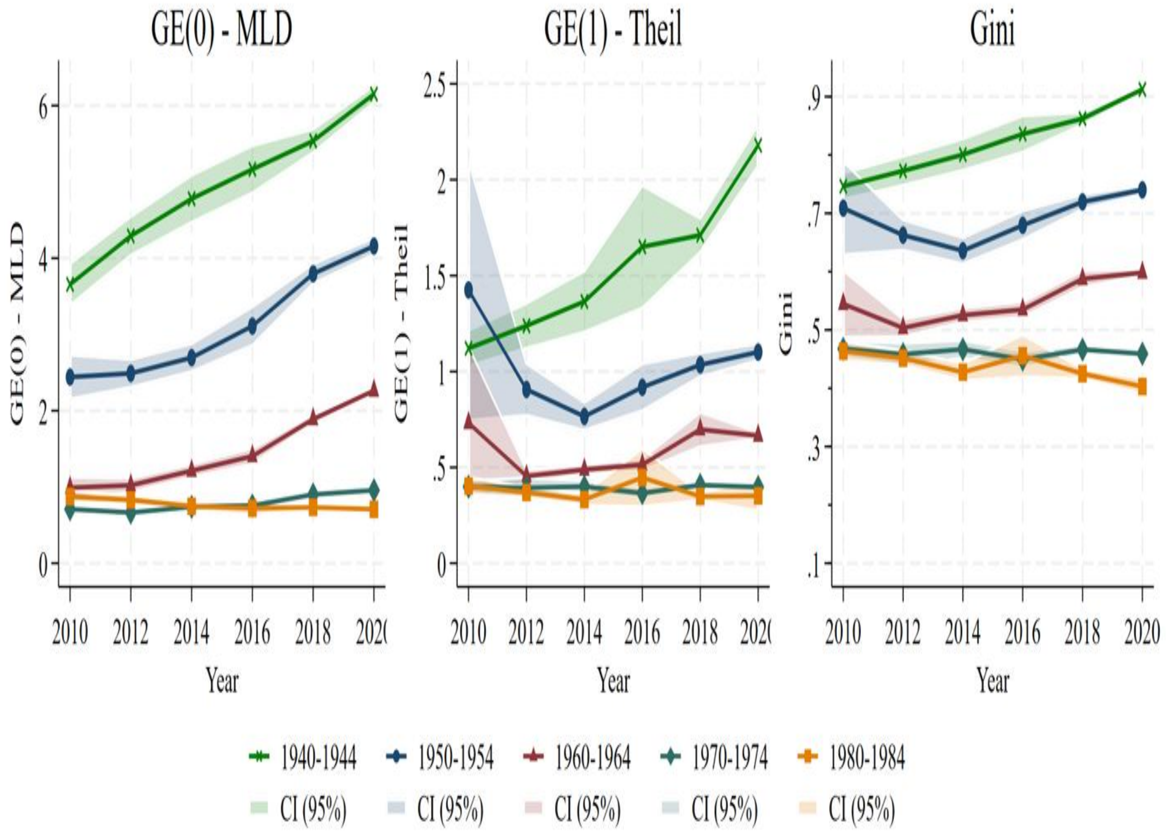


Source: Rongen et al forthcoming. 10 year birth cohorts and based on individual incomes. Population 15+ excluding students

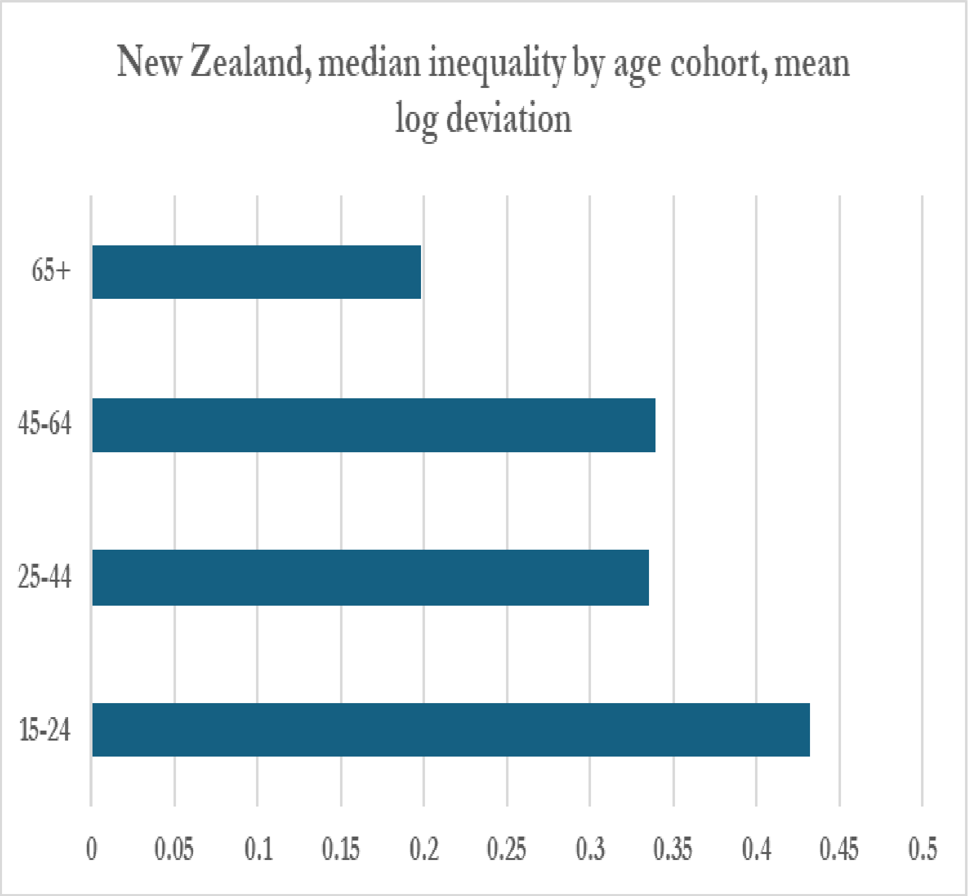
- Inequality patterns are in part reflective of under-coverage & distributional incidence of the pension system, which is likely *dis*equalizing
- The dispersion in intra-cohort inequality across birth cohorts has increased over the past decade

This inequality pattern can also be seen in some Asian neighbours with high informality & partial pension coverage – in contrast to the equalizing role of pensions in most OECD

Vietnam inequality by birth cohort, labor income, various measures



Source: CEPAR, VHLSS



Source: Alimi et al, 2018. Higher MLD = more unequal

Research & policy questions…

1. Could significant expansion of Malaysia's social pension help to mitigate old age poverty and reduce inequality among older people & overall in society ?

2. Can this be done in a fiscally affordable manner, both currently and as Malaysia ages rapidly in coming decades ?

3. What design options strike the best balance in terms of welfare impacts & fiscal sustainability?

We simulate the poverty & inequality impacts of 4 social pension design options, each with variable eligibility ages

Scenario 1: ***Individuals of eligible age in the poorest 40% of households (B40)*** based on household income. The benefit is set at RM 600 per month, around USD 145 (c. 350 in PPP terms) - equal to the current social pension benefit.

Scenario 2: ***Eligible age individuals in poorest 60% of households (B60)***. Total fiscal cost is set to equal the cost under scenario 1, which means that the benefit is lower, at RM 433 per month.

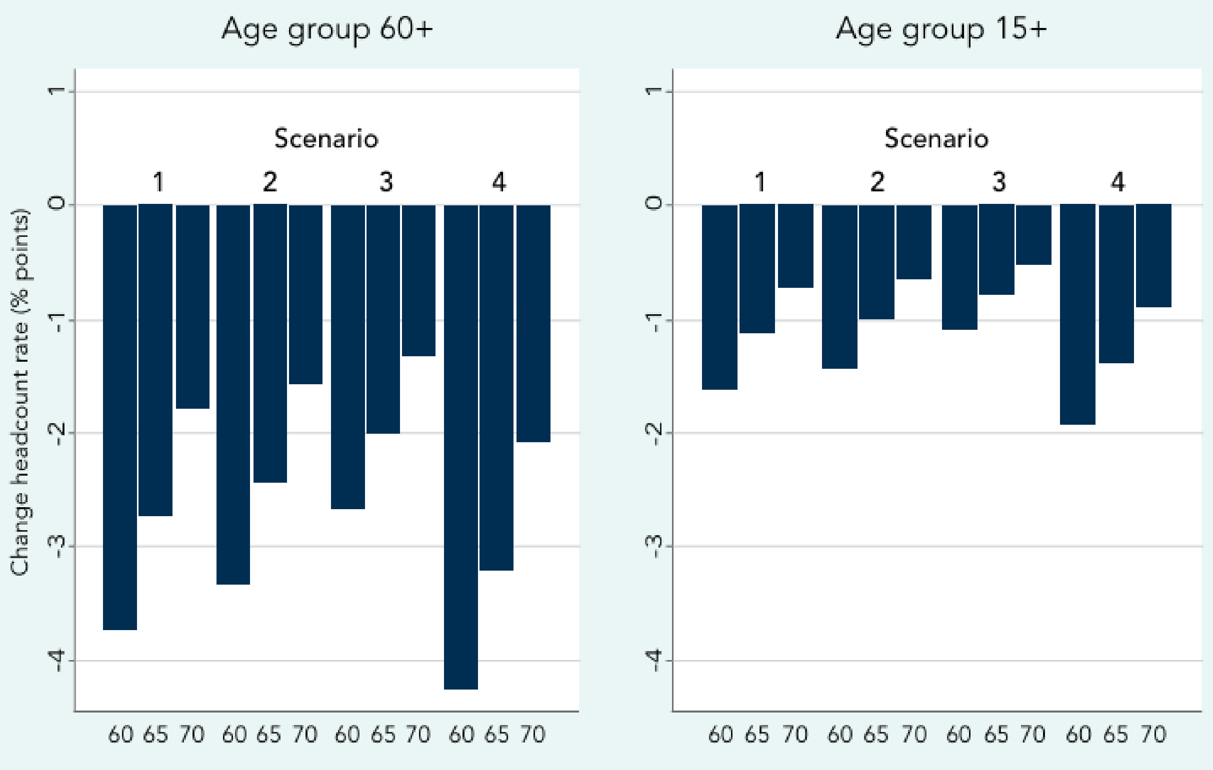
Scenario 3: ***All eligible age individuals***, irrespective of household income. The same fiscal cost restriction applies, so benefit is even lower at RM 294 monthly.

Scenario 4: ***Individuals of eligible age in B40 households, but benefit of RM 900*** per month (i.e., 1.5 times current social pension benefit).

All options simulated for eligibility ages of 60 (current), 65 and 70 – benefit amounts above for age 60 threshold

The impacts on poverty are strongly positive, but higher when targeted & with lower eligibility age

Reduction in poverty headcount for 60+ & total adult population, various scenarios

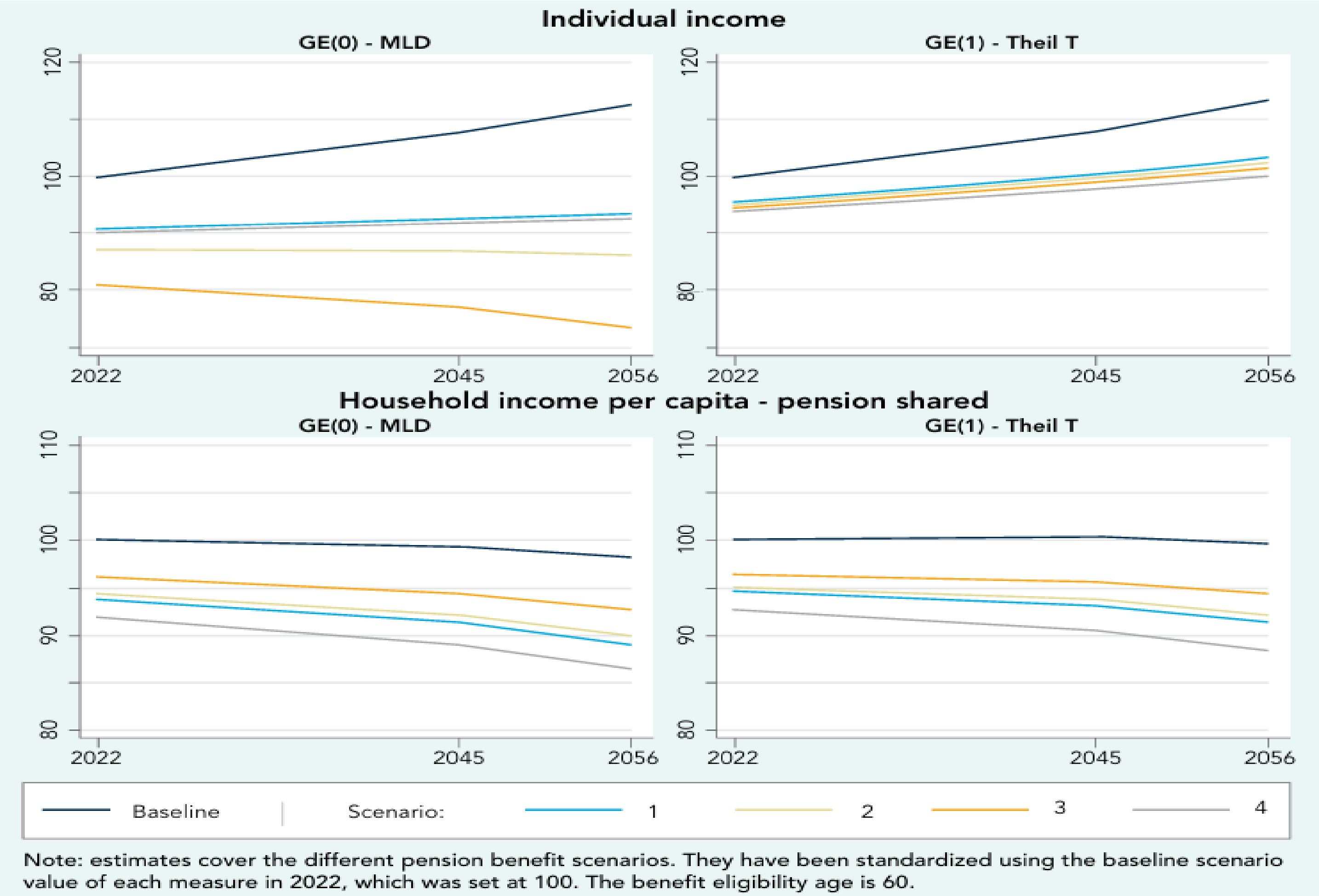


For each age group, bars give the estimated change in the poverty headcount rate across simulated combinations of pension scenarios and eligibility ages.

- While apparently modest percentage point reductions, they are substantial in *proportional* terms. Baseline 2022 poverty rates was 7 percent for 15+ population, and 5.7 percent for 60+ population
- **Thus, for 60+ population, this represents 46-74% reduction in poverty rate**
- **For entire adult population, 15-28% reduction in poverty rate with 60 as eligibility age**

Reductions in inequality are also substantial relative to the status quo & rise as societal ageing advances

Impact on aggregate inequality by reform scenario, individual & HH pc income



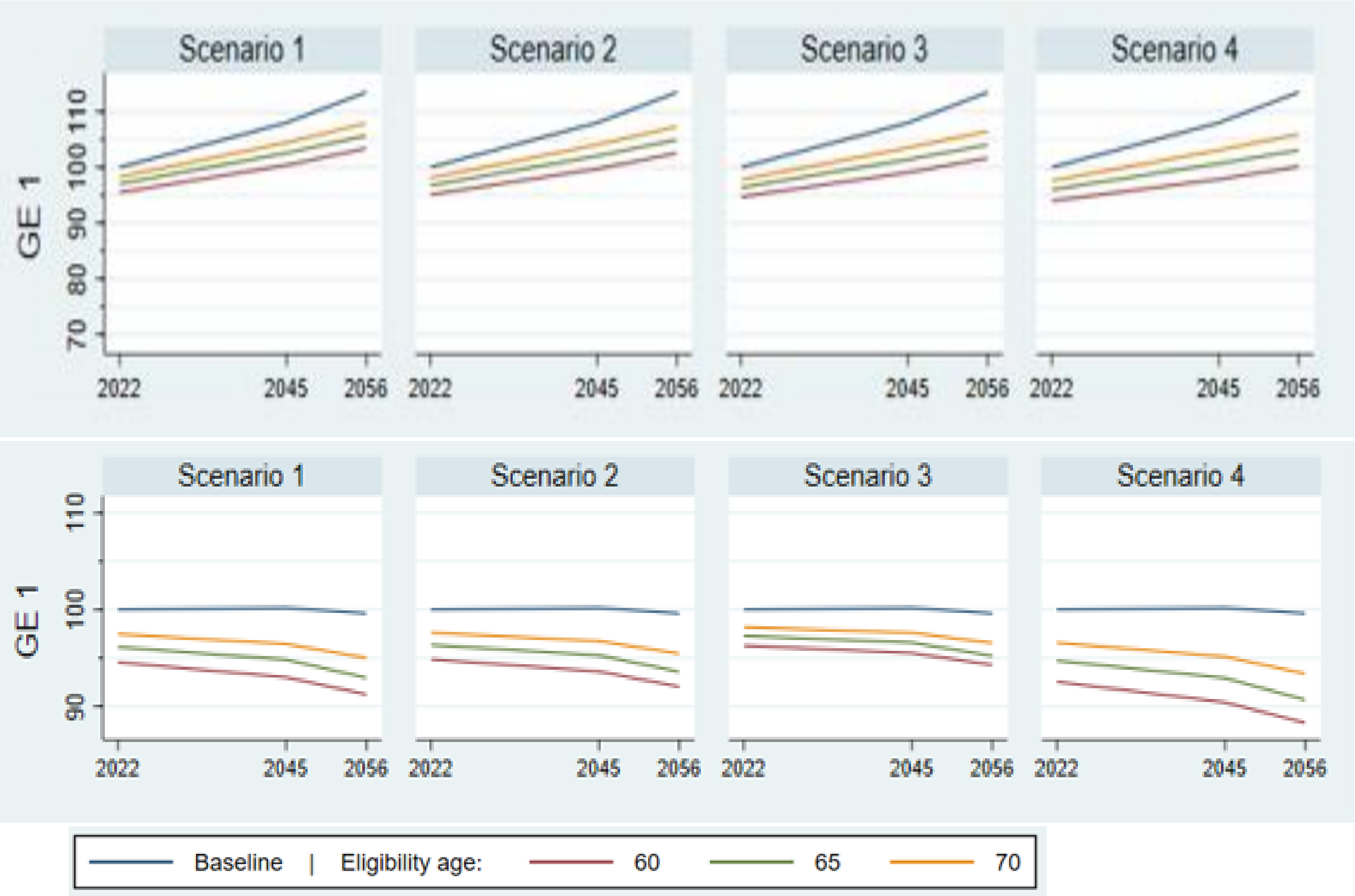
Source: Rongen et al,. forthcoming

Assumptions:

- Within-cohort inequality remains at 2022 levels for each group
- Co-residence rates of older people remain as at 2022 - this is not realistic as co-residence rates are declining steadily (& co-resident older people somewhat more unequal than non-coresident)
- For older people with zero incomes, we impute an income of RM 1 (c. US 25 cents) in order to calculate for whole older population.
- Analysis also run with HH equivalence square root of HH size measure

Older social pension eligibility ages somewhat reduce the inequality impact – though all ages dominate the baseline

Inequality impact by scenario & variable eligibility ages



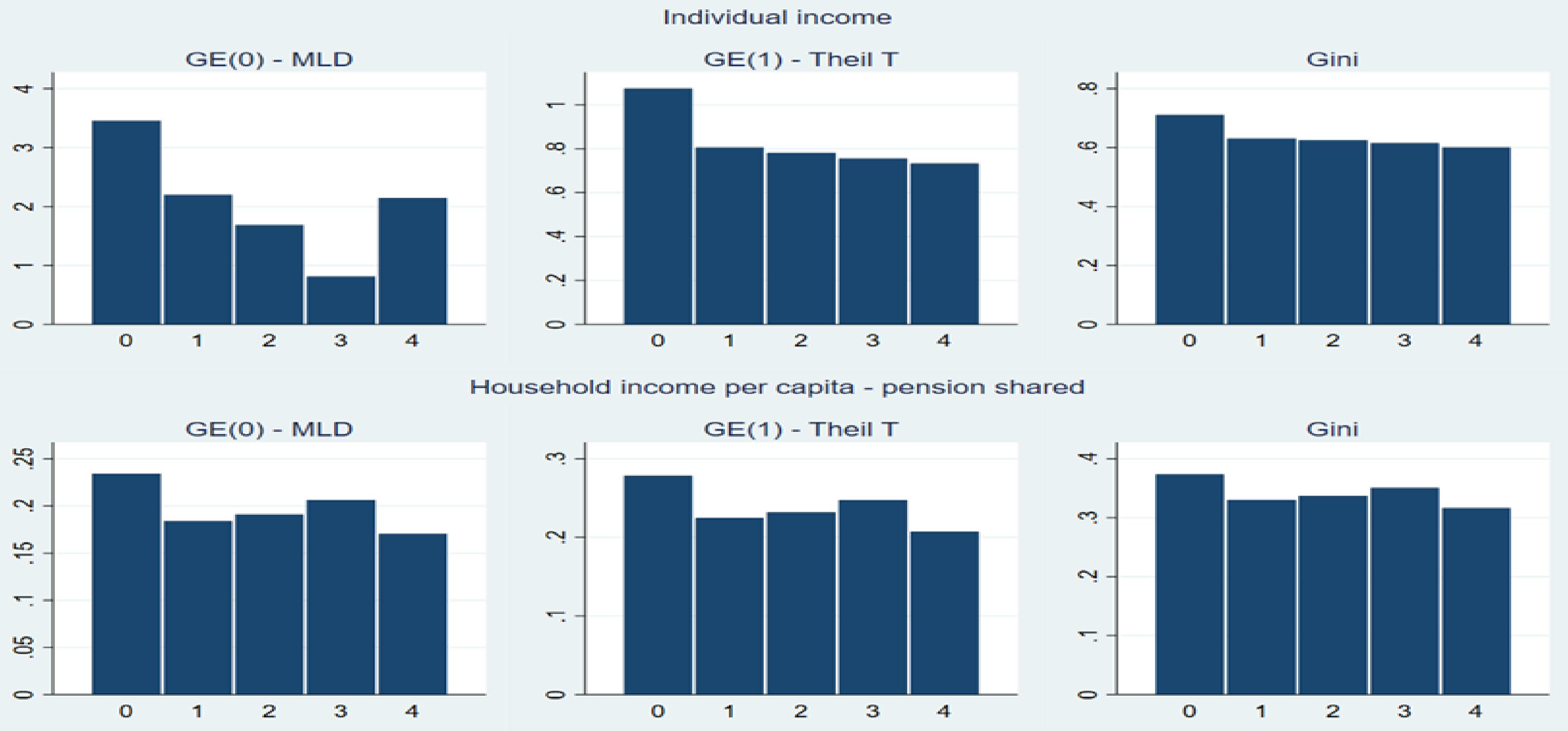
Individual income

HH pc income

Source: Rongen et al,. forthcoming

Focusing on inequality just among the 60+ population, we see similar positive impacts

Inequality impact among 60+ for baseline "0" and reform scenarios, 2022, various measures

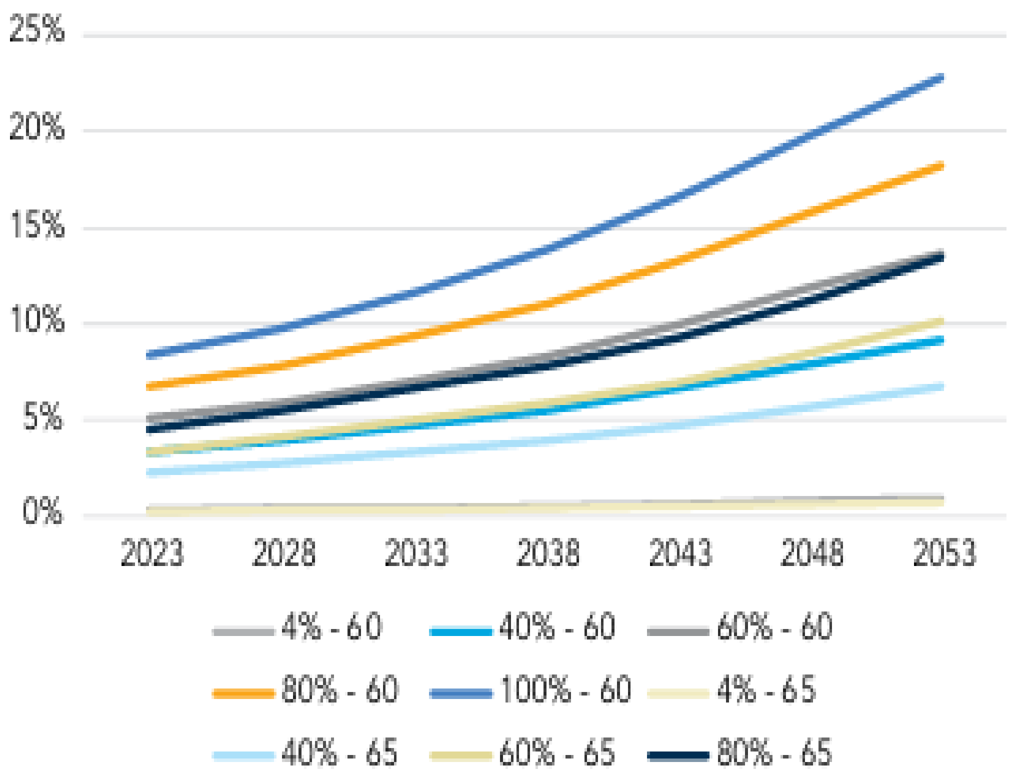


Note: simulated effects of pension benefits on inequality among the 60+ population in 2022, for three inequality measures. The horizontal axis gives the pension benefit scenario; number 0 indicates the baseline scenario of inequality as estimated based on the HIS 2022. The pension eligibility age is 60.

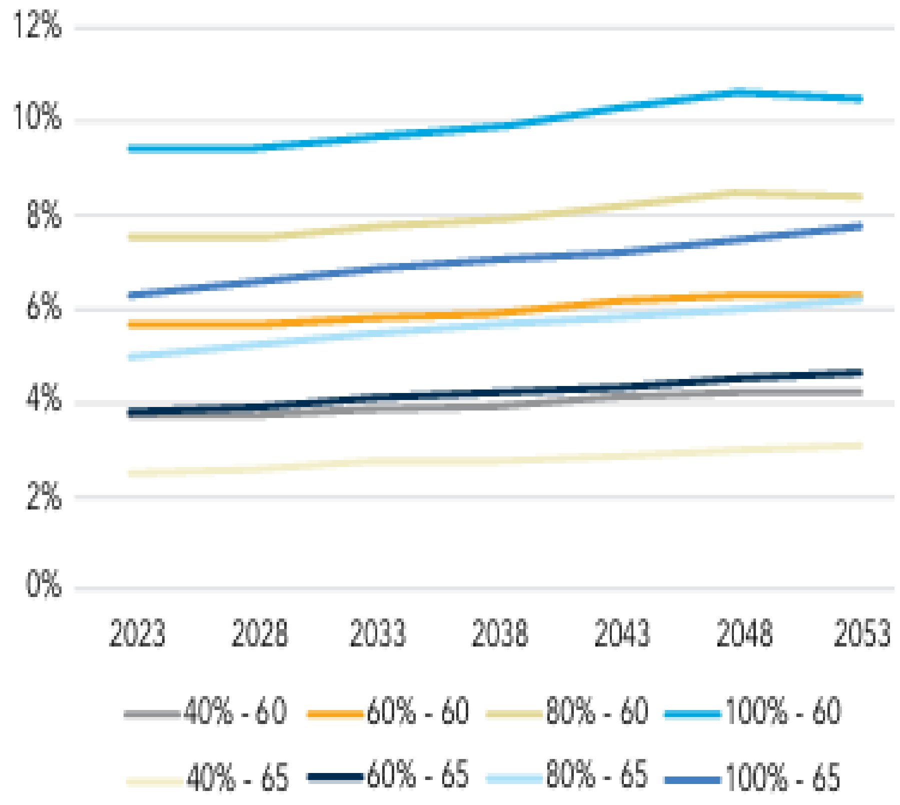
Source: Rongen et al,. forthcoming

Fiscal affordability highly dependent on coverage, eligibility age and benefit indexation rules

Social pension costs as % of total fiscal revenue with GDP pc indexation, various coverage scenarios, 60 & 65 eligibility ages



Social pension costs as % of total fiscal revenue with CPI indexation



Source: O'Keefe and Rongen, 2025

Policy conclusions…

- There is a strong case for a substantially expanded social pension in Malaysia
- Given projected fiscal costs, an expanded social pension would probably still need to be targeted rather than universal
- Coverage of around 40% of older people would be affordable (c. 0.6% of GDP) and roughly aligned with share of HH living below the Basic Expenditure of Decent Living (PAKW) standard set by the Malaysian government & 50% of median income threshold
- If real benefit levels are to remain adequate & fiscally affordable over time, the eligibility age should probably be increased to at least 65 at same time as coverage is expanded
- The indexation rule for benefit levels matters a lot for welfare & sustainability: pure CPI risks steady deterioration in real benefit levels while full wage indexation may be too costly