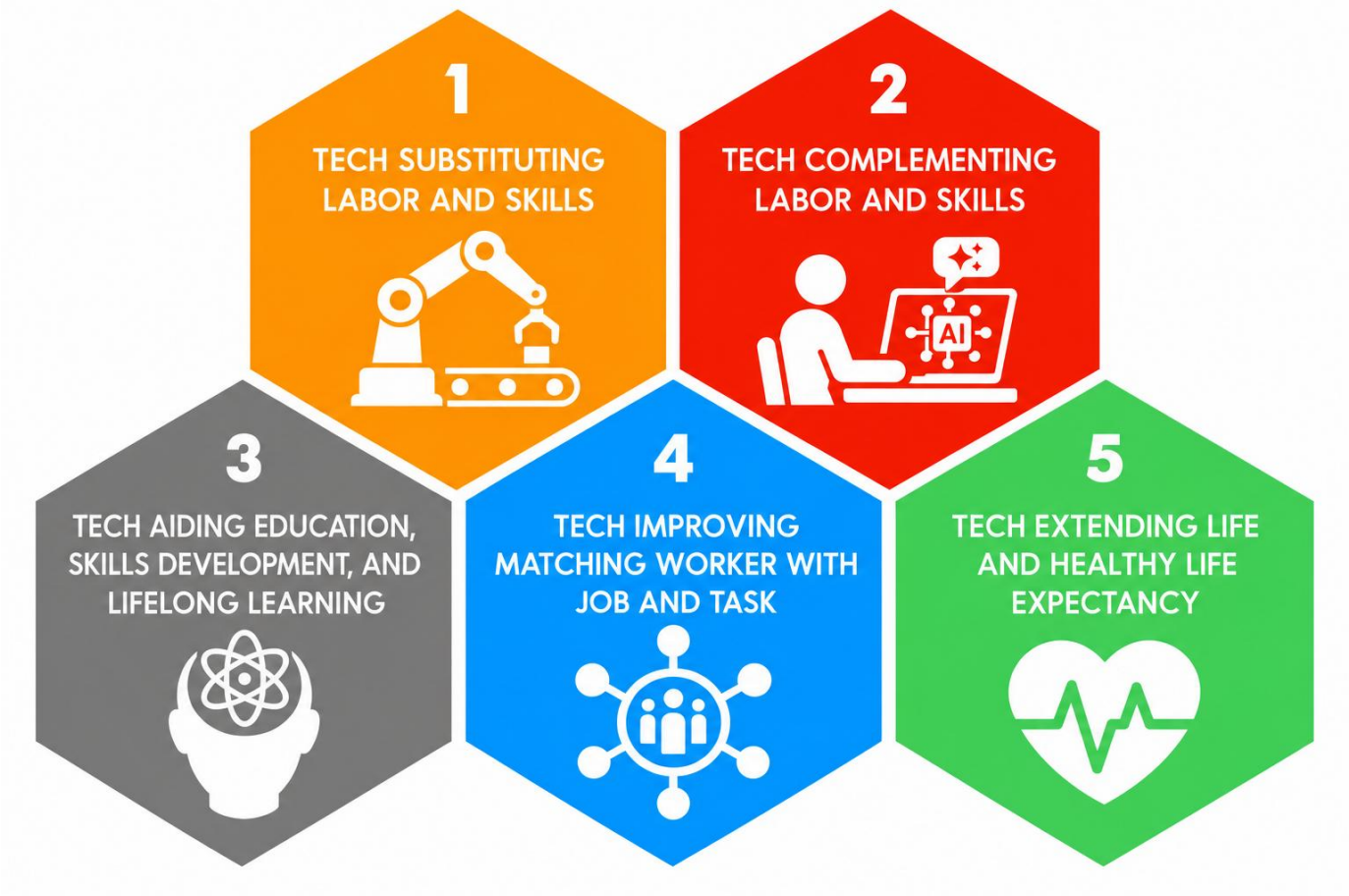


Aging Workforce and the Role of Technology: Evidence from Asia and the Pacific

Tech3 –Technologies enabling and supporting older workers (Session 3B)
Regional Population Aging Conference, Hangzhou Conference Oct 27-30, 2026

Aiko Kikkawa
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Asian Development Bank

Technologies can sustain productivity through five channels



Source: ADB (2020) Demographic Change and the Role of Technology. AEIR Theme Chapter

Expansion of “Age-Friendly” Jobs

U.S. (Acemoglu et al., 2022)

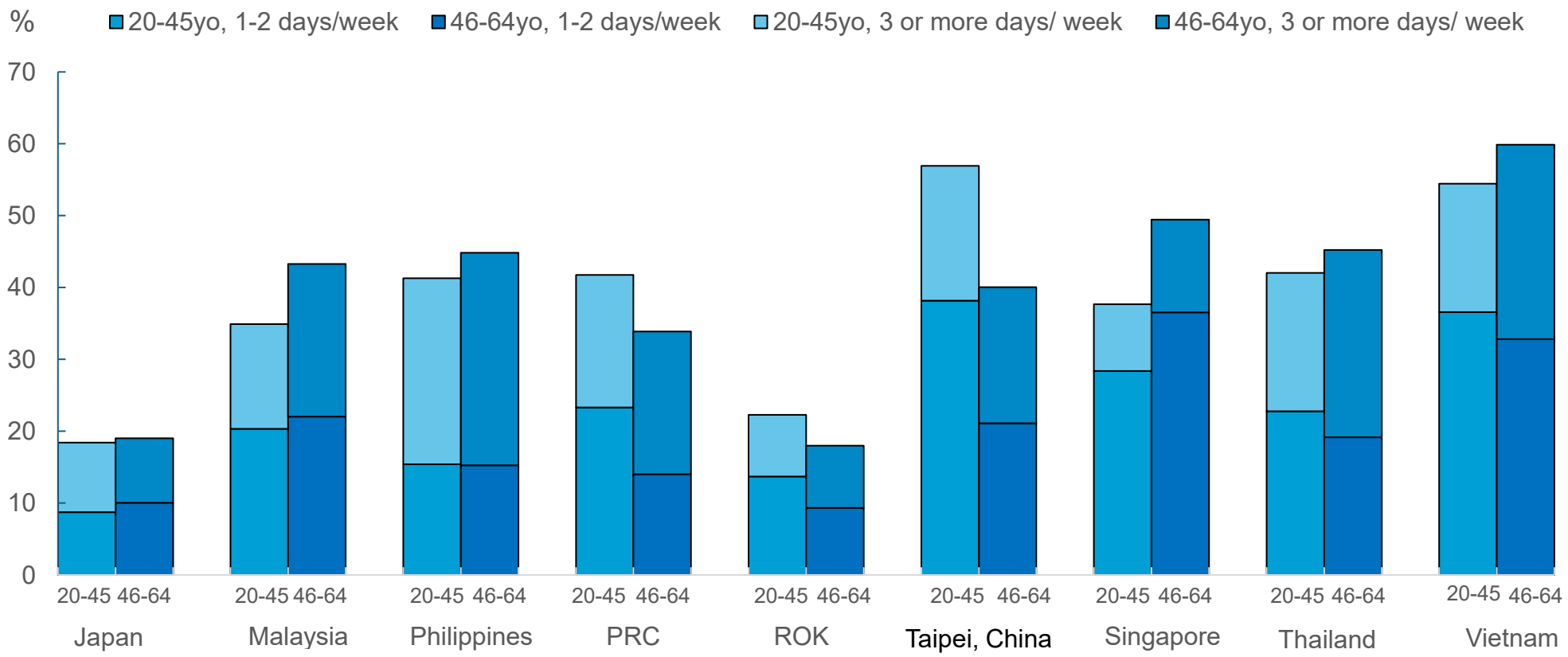
- Age-Friendliness Index (AFI) rose 8% (1990–2020)
- ~75% of occupations became more age-friendly, mainly via within-occupation improvements.
- Older workers did not capture most gains; benefits went to women and college graduates. Older, less-educated men were left behind.

Korea (Kim, Lee & Eggleston, 2025)

- AFI rose 4% (2000–2020), slower than U.S.
- Older workers again were not the main beneficiaries. Labor-market rigidities and large-firm dominance partly explain slower improvement.

Mature workers are actively adopting WFH options

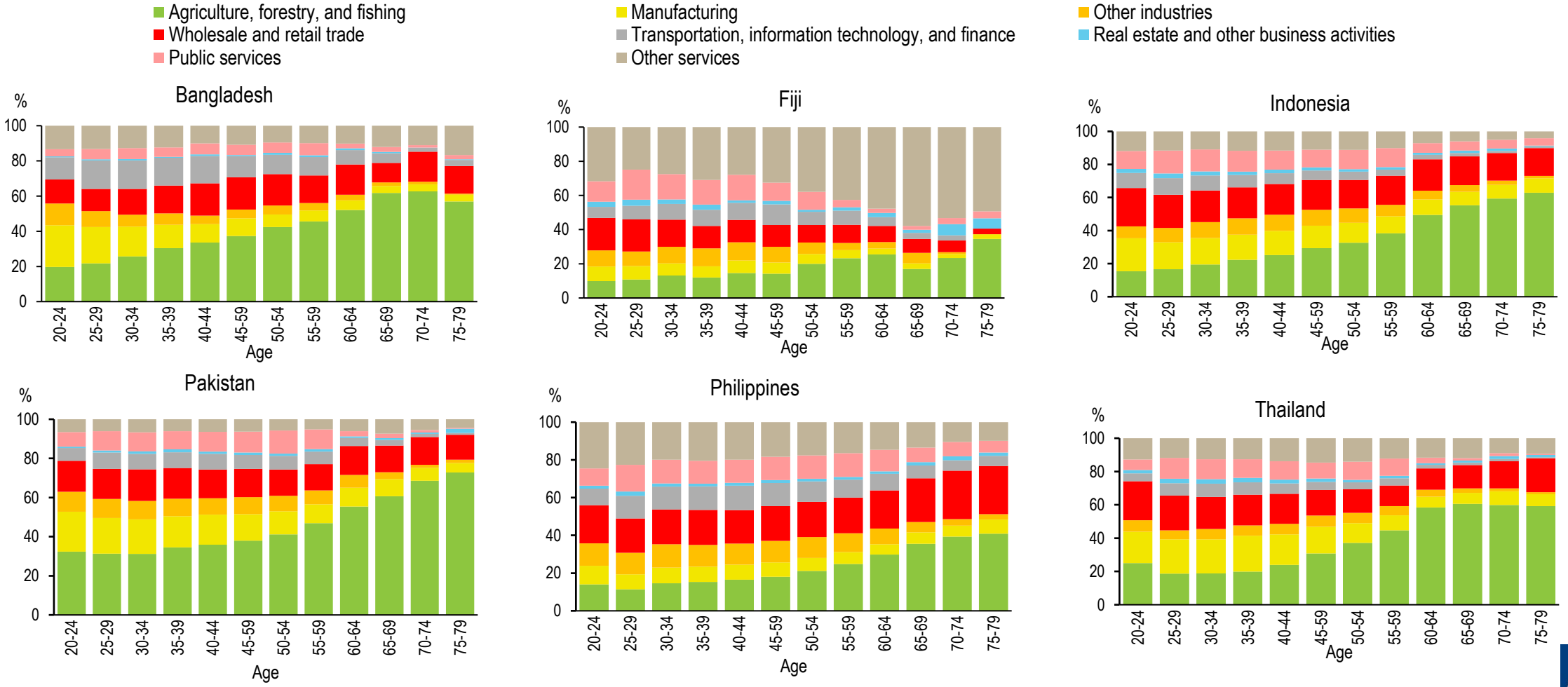
Fig 1. Share of Respondents Reporting Work from Home by Age and Frequencies



Source: ADB calculations using Global Survey of Working Arrangements (G-SWA) 2025

Agriculture and retail trade sectors employ large share of older workforce

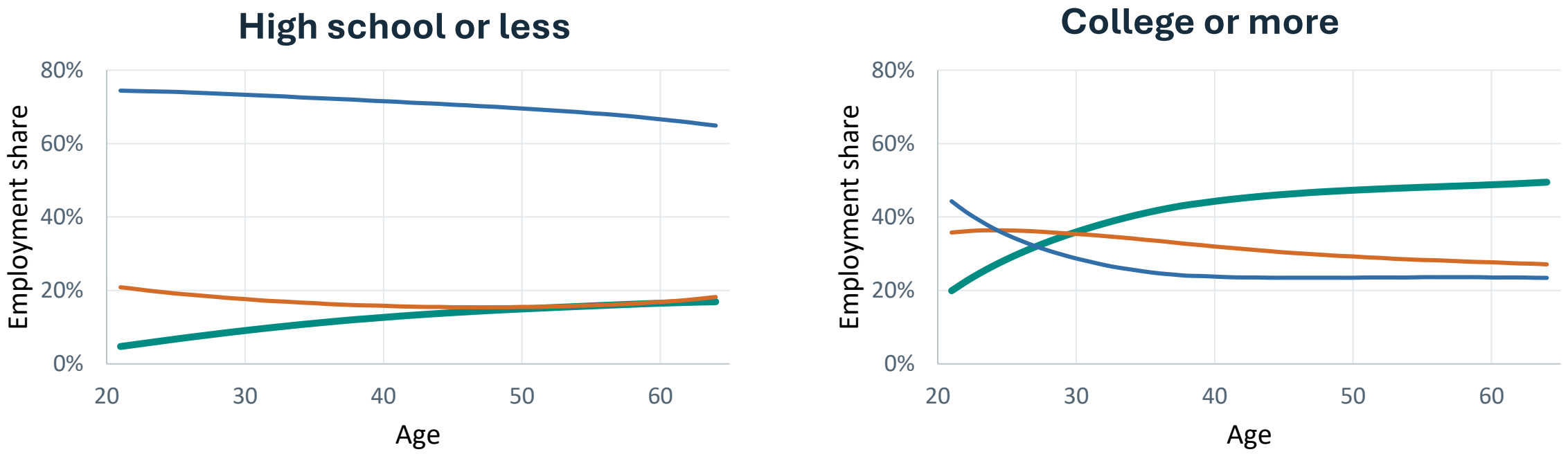
Fig 2. Share of Employment by Sector and Age



Note: As of 2024 for Bangladesh; as of 2015 for Fiji; as of 2024 for Pakistan; and as of 2022 for Indonesia, and Thailand.
Source: Asian Development Bank estimations using labor force surveys from national sources.

AI complementary occupations are more prevalent among mature and college-educated workers

Fig 3. AI Exposure and Complementarity of Jobs by Education and Age, U.S. Male, 2010–2019



HEHC: high exposure, high complementarity

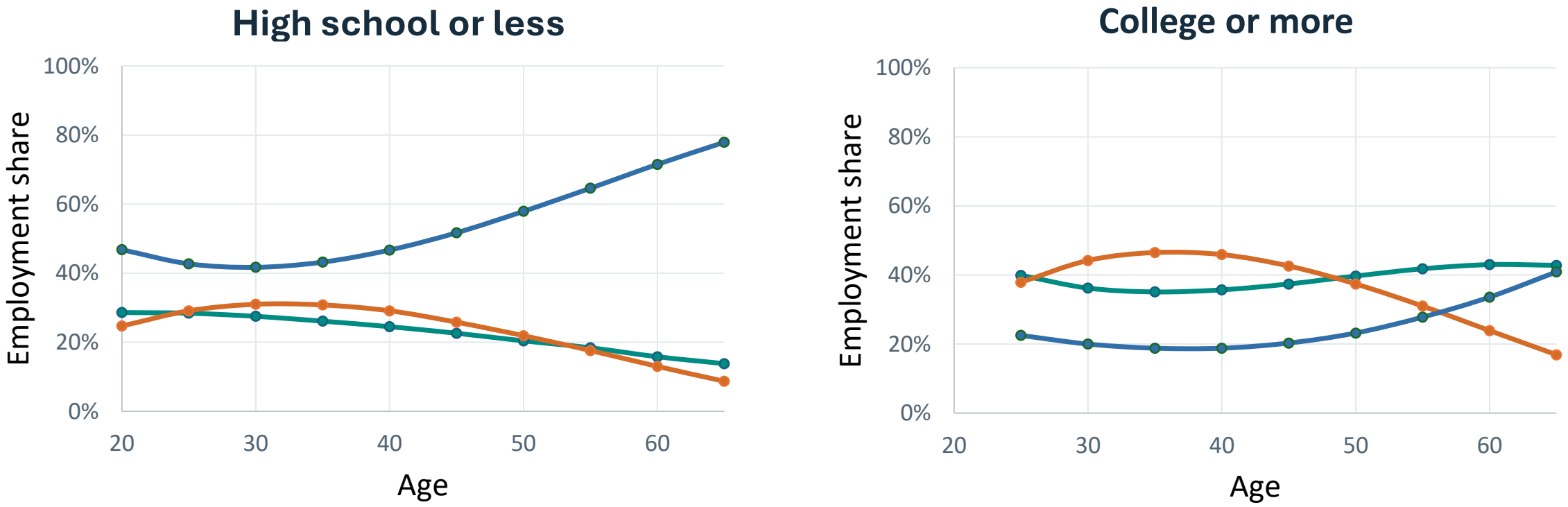
HELC: high exposure, low complementarity

LE: low exposure

Source: Pizzinelli & Tavares (2025)

Korea: High AI complementarity among educated older workers, but the benefits may not be shared by all

Fig 4. AI Exposure and Complementarity of Jobs by Education and Age, Korea, 2009–2022



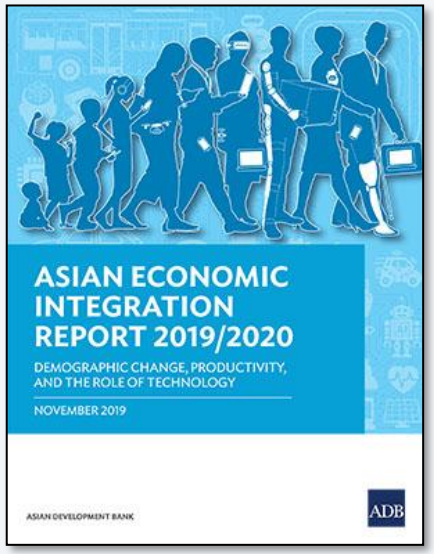
Source: Chang et al. (2025)

Key Policy Takeaways

- Tie technology incentives to inclusion
- Target training subsidies
- Support job redesign
- Ensure social protection programs adapt to the rapidly changing nature of jobs
- Reach smaller firms
- Evaluate interventions for learning

Thank you

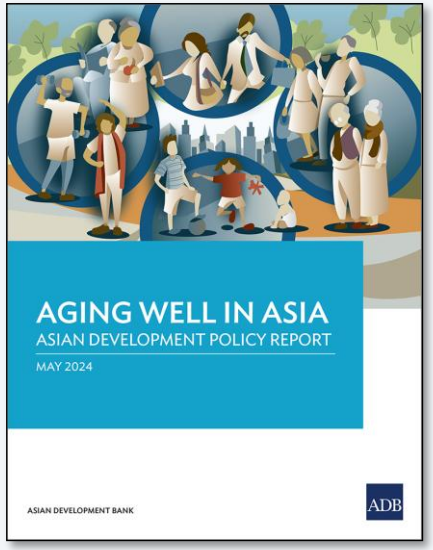
Further reading



AEIR 2019/2020

Asian Economic Integration Report 2019/2020: Demographic Change, Productivity, and the Role of Technology

Scan the QR code or click the link to download the report.



ADPR 2024

Asian Development Policy Report 2024: Aging Well in Asia

Scan the QR code or click the link to download the report.