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AI, Ageing workers and labour shortages – Implications for OSH and Policy

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Content

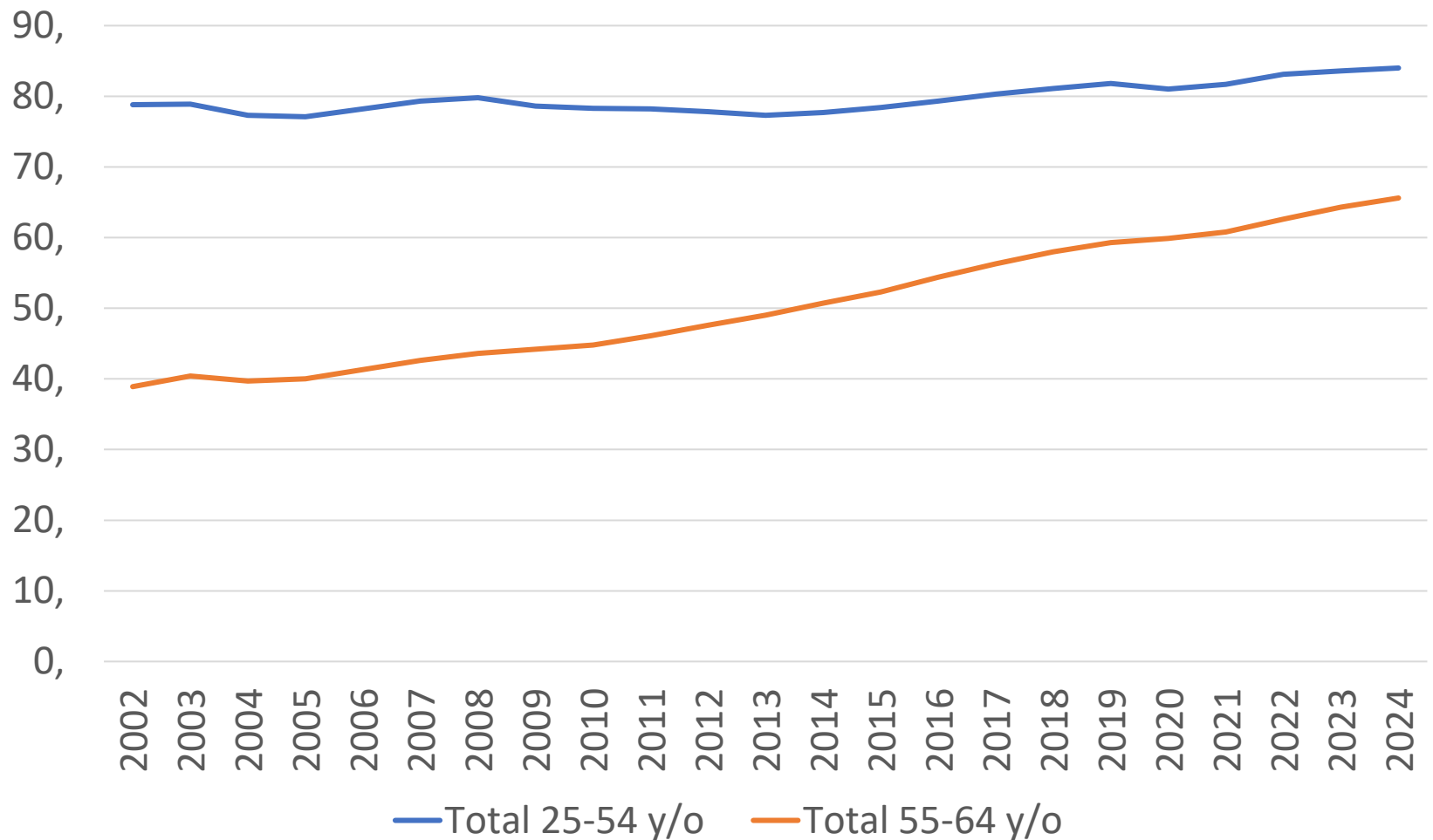
- AI and ageing workers: Will there be work for older workers?
- Labour shortages and population ageing: More older workers needed
- Older workers and implications for OSH policies

AI and ageing workers: Will there be work for older workers?

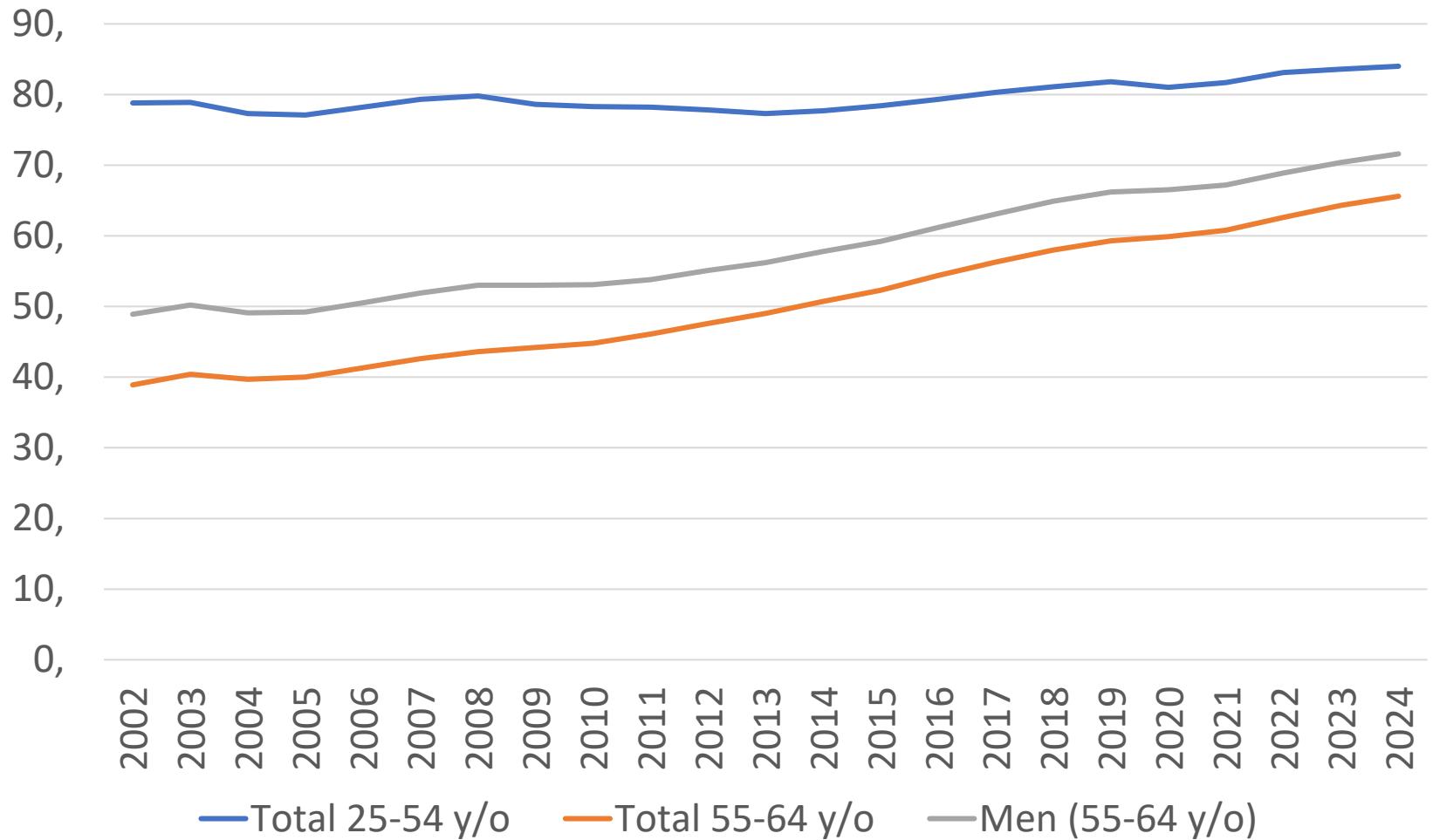
Let us go back 25 years in time

- No smartphones, no tablets
- No work from home, no Teams, fewer emails
- No card payments in Brussels
- No home delivery
- ‘Experience with MS office’ would suffice
- And few older workers
- Think about how this has changed.....

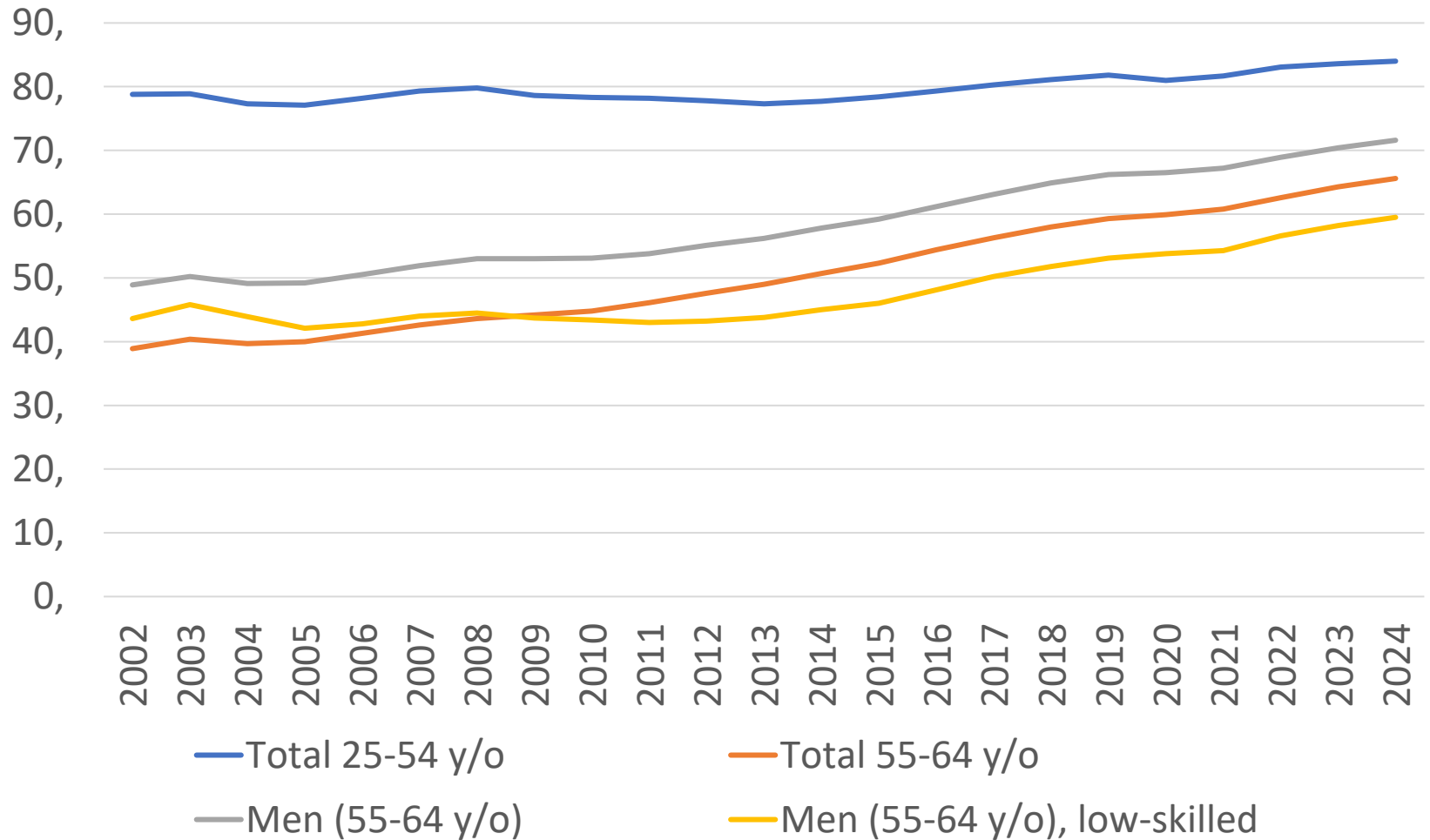
Older workers work more (EU27)



And it is not only women



Also so-called 'low-skilled'



This is not the whole story (of course)

- Many things are going on (changes to pension, early retirement rules)
- Policy! More age-friendly workplaces
- We don't know the counterfactual: Maybe digitalisation has caused job loss among older workers (relative to what it would have been).
- “These are not the same people”
- Key point: extensive digitalisation has not led to lower employment among older workers

Many further thoughts in the literature

- AI can offset age-related decline ([Aisa & Cabeza, 2025](#))
 - Facilitates longer working lives
- Entry-level jobs are most affected ([Brynjolfsson et al., 2025](#))
- We don't know, yet! ([Gimbel et al., 2025 – US data](#))
- Structural job change may not be 'higher than usual' ([Eurofound, 2025](#))

Labour shortages and
population ageing:
More older workers needed

Labour shortages are widespread and structural

- Participation and employment rates are at or above pre-pandemic levels, yet shortages persist.
- Even with technological advances, EU faces persistent labour shortages.
- Job vacancy rate: 2.2% (Q2 2025), down from 3.1% peak but above pre-pandemic levels.
- EU unemployment at historic low: 6.3% (August 2025).
- Shortages are structural, not just cyclical – many of the same occupations in shortage for years.
- Occupations: Health and long-term care, Construction, ICT, Hospitality, and Administrative services

What drives these structural shortages?

Three long-term drivers:

- Demographic ageing: shrinking working-age population
- Growing demand for health and long-term care
- Green transition: increase in investment in construction/retrofitting
- Digitalisation/automation: rising demand for tech skills
- Poor conditions/low pay: workers avoid hazardous/low-quality jobs.

We need older workers to work longer

- Or rather: we need older workers - *who can work* – to work longer
- AI unlikely to change this
- Solution:
- Extending working lives – keep workers healthy and productive longer.
- Activate other groups less represented in the labour market (women, people with disabilities, immigrants).

The link to OSH

- Firms with poor working conditions face higher turnover.
- Vicious circle: shortages → intensity → worse OSH → exits → deeper shortages.
- → Harder to integrate groups outside the labour market
- → Harder to extend working lives
- Opportunity: better OSH to attract and retain – thinking OSH as part of the solution to shortages.

Older workers and implications for OSH policies

How labour shortages worsen OSH

- Increased work intensity: more tasks, faster pace, longer hours; breaks eroded.
- Increase in physical/ergonomic risks: faster manual handling; maintenance and security checks may be postponed.
- Risk assessment and prevention time is diverted; psychosocial risks may be overlooked.
- Training/onboarding rushed; inexperienced workers in new roles.
- Safety protocols skipped/scaled down under time pressure.
- Reminder: ~25% of establishments don't do regular risk assessments.

OSH risks create more shortages

- \approx 3 million non-fatal workplace accidents/year in the EU \rightarrow >50 million lost days.
- Days lost to psychosocial 'accidents' comes on top
- Vicious circle: shortages \rightarrow accidents/illness \rightarrow absence/quit \rightarrow deeper shortages.
- OSH Prevention is a direct labour-supply policy.

Why older workers face heightened OSH risks

- 70% of healthcare workers aged 55+ report high physical demands.
- Greater susceptibility to MSDs; slower recovery from injuries; higher heat stress risk.
- Chronic conditions are more prevalent with age.
- Shortages place more strain on remaining (older) staff.

The opportunity – OSH as a labour-supply tool

- Retention: fewer early exits → experienced staff stay
- Attraction: better conditions to improve image of shortage sectors
- Extended careers: age-sensitive design and rehabilitation keep older workers active
- Faster integration: structured safety training reduces accident risk for newcomers

What we should work towards (1/2)

- OSH practitioners: include understaffing/fatigue in risk assessments; deploy ergonomic aids; protect training time.
- Workers' representatives: recognise chronic understaffing as an OSH hazard; safeguard voluntary overtime; uphold refusal of unsafe work.
- Employers: compete on job quality (pay, rosters, ergonomics, careers); strengthen supervision and safety culture; collaborate on training.

What we should work towards (2/2)

- Policymakers:
 - Include OSH in labour-shortage strategies with measurable targets
 - Use public procurement to reward good OSH
 - Improve data collection on the OSH–retention link
- Inspectorates:
 - Pay attention to labour shortage sectors
 - Check working time, training and supervision
 - Increase psychosocial-risk capability
 - Provide guidance for safe operations under staffing pressure
 - Work with social partners

Finally

View labour shortages as an:

- opportunity to improve OSH
- opportunity to get more people into paid employment

Many thanks for your attention.

Questions and remarks are very welcome!

Based on results from the H2020 Untangled Project, HEU WeLar Project, and work with **EU-OSHA**
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