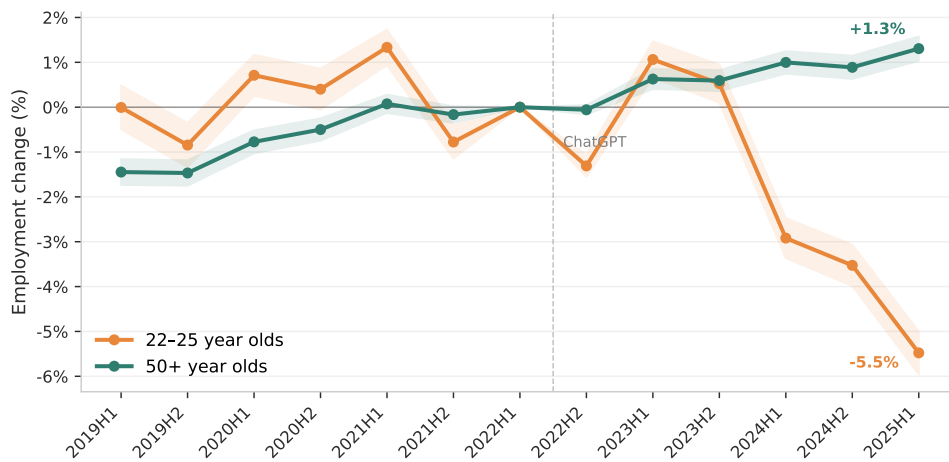


# Same Storm, Different Boats: Generative AI and the Age Gradient in Hiring

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**Key finding:** After ChatGPT’s launch, employment of **22–25 year olds** in AI-exposed occupations began declining relative to less exposed occupations, reaching **–5.5%** by early 2025, while employment of **workers over 50 rose by 1.3%**. The gap is accelerating.

**Employment in AI-exposed occupations after ChatGPT launch, by age group**



Note: Employer×quartile and employer×month FE. Ref. period: 2022H1. 95% CI shown.

## What we found

- The widely noted decline in job postings reflects **monetary tightening**, not AI: it begins with the Riksbank rate hike (April 2022), seven months *before* ChatGPT.
- Beneath this aggregate null, AI **appears to be reshaping who gets hired**: within the same firms, young workers in AI-exposed occupations are disproportionately losing employment. **This shift is invisible in posting data** and requires employer-level register data to detect.
- The effect **accelerates over time**: by early 2025, 22–25 year olds in high-AI occupations had lost **5.5%** of employment relative to low-AI occupations, up from near zero at launch. Workers aged 26–30 follow a similar trajectory (–4.9% by 2025H1). Meanwhile, workers over 50 *gained* 1.3%. The result mirrors US findings (Brynjolfsson et al., 2025) but contrasts with Finland, where the same firm-level design finds no displacement (Kauhanen & Rouvinen, 2026).

- The effect is **stronger for women**: the average post-ChatGPT effect for young women is –1.6%, more than double the –0.7% for young men.
- Caveat**: Pre-trend tests reject formally, but pre-trend magnitudes are small and work *against* the finding. A placebo test (fake treatment date July 2022) shows no effect at the placebo date; the acceleration is specific to the post-ChatGPT period.

## Policy implications

- AI appears to operate on employment composition**, not aggregate demand. Targeted interventions are needed alongside broader economic policy.
- Entry-level transition pathways**: vocational education (YH) and apprenticeships integrating AI tools.
- The silver lining**: young workers recover faster from displacement than older workers (Athey et al., 2024), making early intervention particularly promising.
- Monitoring employment **composition**, not just volume, is essential for timely policy response.

**Data & method:** Monthly employer declarations (arbetsgivardeklarationer, AGI) from Statistics Sweden, covering every employment relationship in Sweden, 2019–June 2025. Outcome: employment positions by age group and occupation. AI exposure measured using the DAIOE index (Engberg et al., 2024). Difference-in-differences with employer×quartile and employer×month fixed effects, following Brynjolfsson et al. (2025). SEs clustered by employer×quartile. DAIOE is constructed from pre-2022 work content, fixed across the sample period.

Code: [github.com/Magnus-L/canaries-sweden](https://github.com/Magnus-L/canaries-sweden)

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