Training and Re-skilling in the labour market: A (very brief) overview.

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Introduction

- Training/skilling – context
- What do we know about returns?
- Reasons for public policy intervention and risks.
- What can policy do?

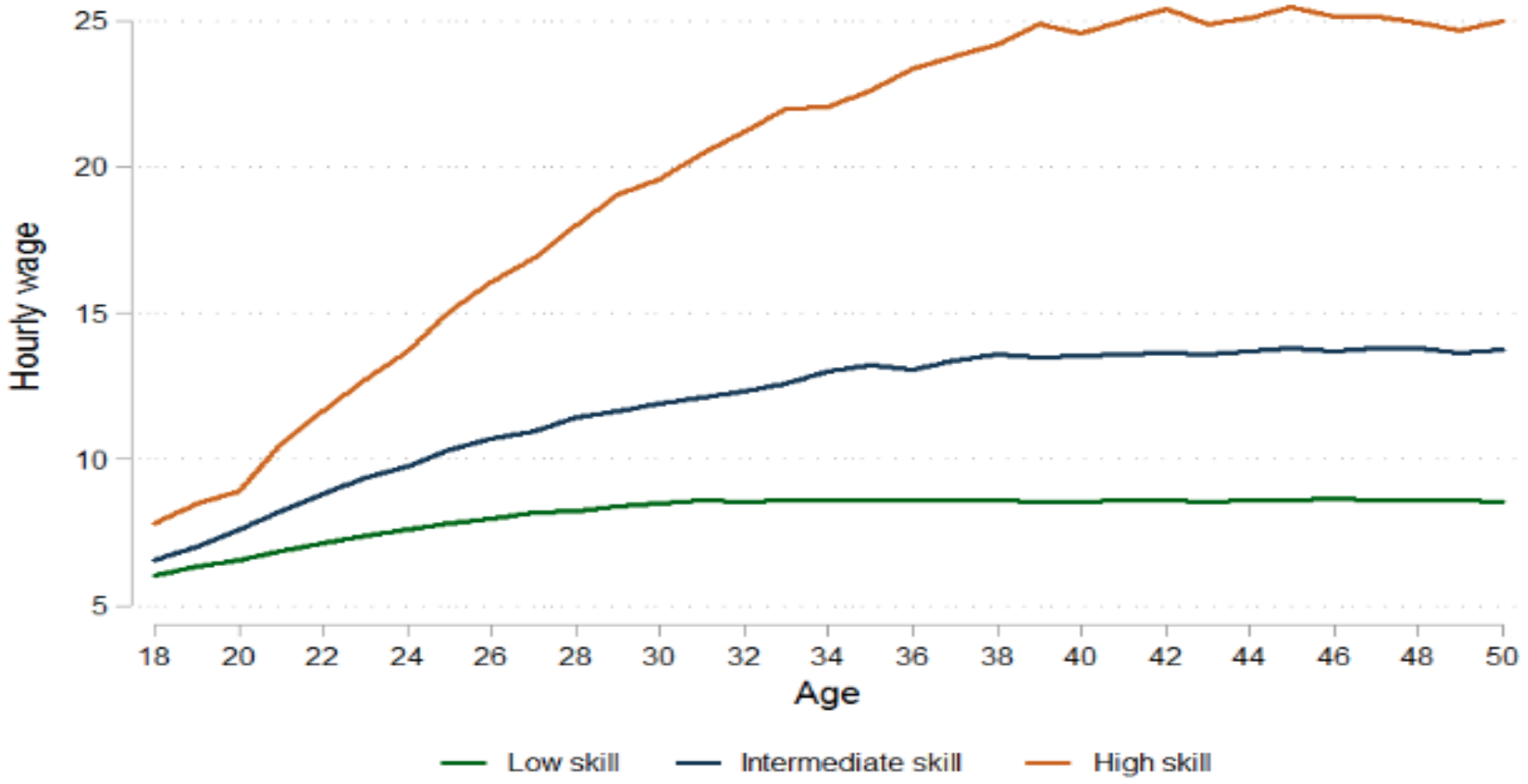
Training/re-skilling - context

- In recent decades, technological change has increased the demand for highly skill workers.

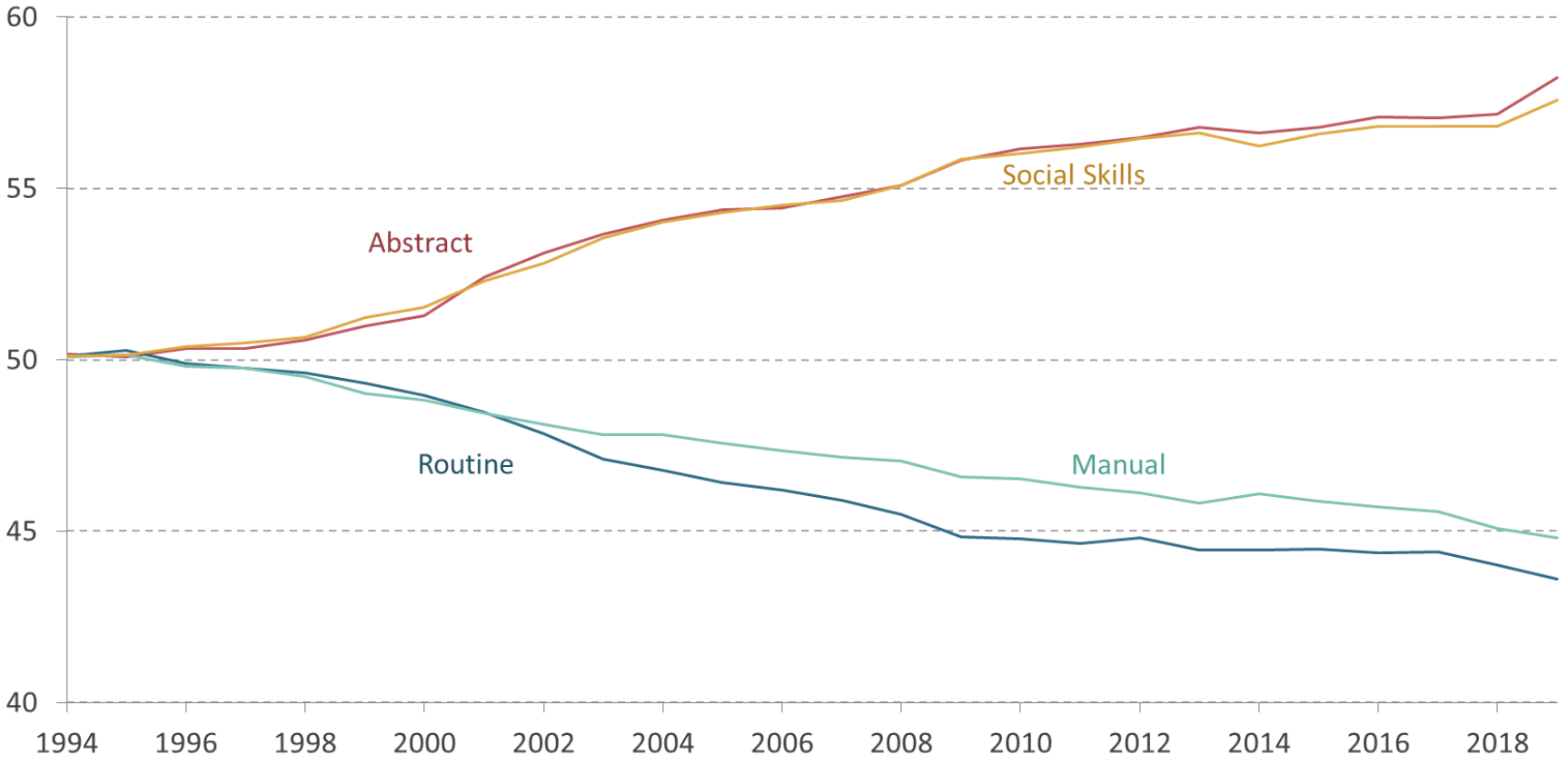
- This continues with recent waves of automation and digitisation – as shown in some of the Pillars reports (e.g. Falck et al.; Guo and Wiederhold). Also relevant in the context of transition to 'net zero'.

- Very wide inequalities in society driven by technological change and globalisation.

Pay progression by skill level in the UK (Aghion et al. 2020)

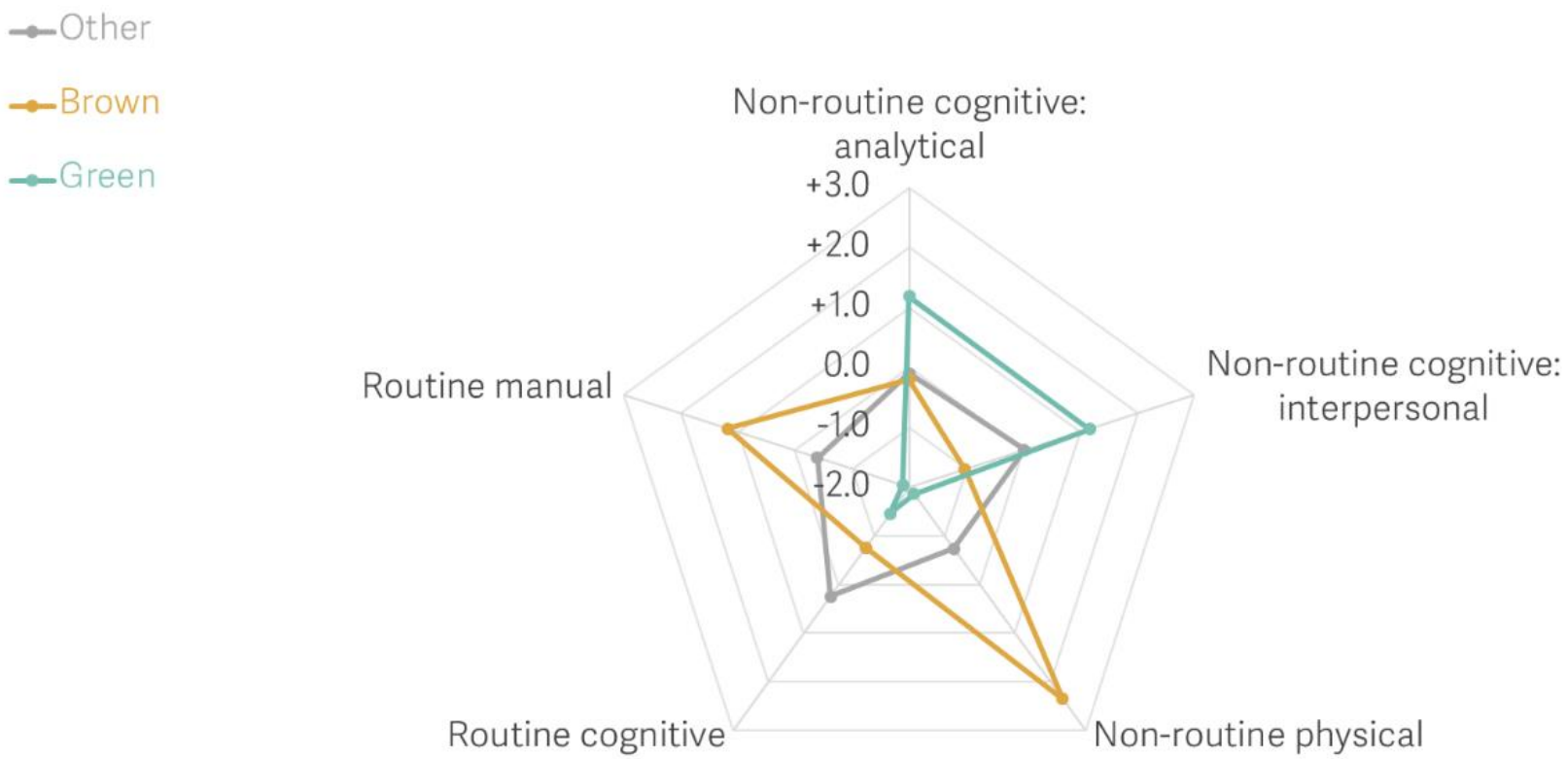


Abstract and social tasks are in increasing demand in the UK labour market, at the expense of demand for routine and manual tasks (Cominetti et al. 2022)



Analytical and technical skills are more important in net zero jobs versus brown/other jobs

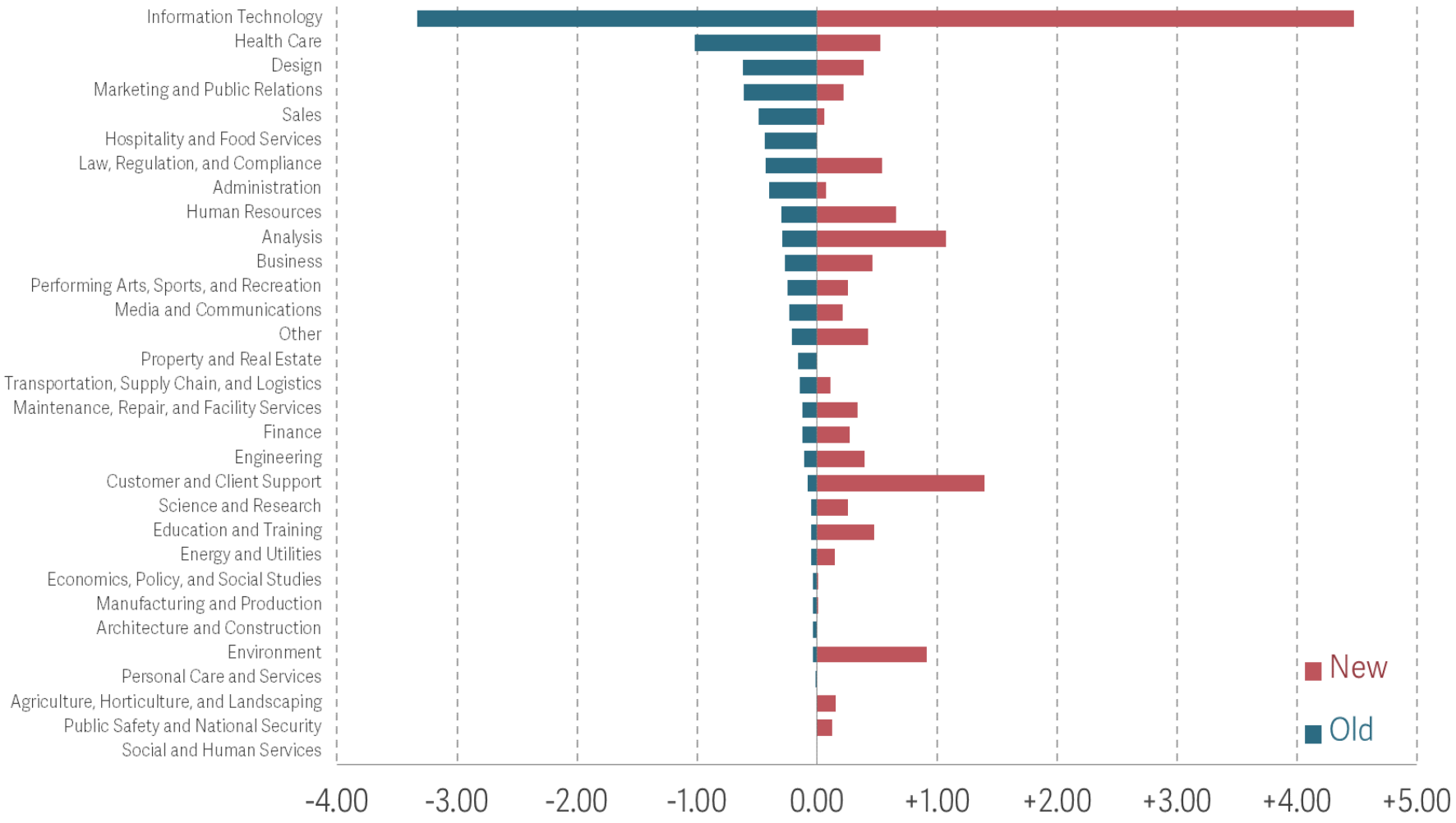
Average importance of different types of tasks (standardised): UK



Notes: The measures of task intensity are standardised across all SOC 2010 4-digit level occupations.
Source: Analysis of O*NET and ONS, Labour Force Survey.
M Broome et al., Net Zero Jobs: The impact of the transition to net zero on the UK labour market, Resolution Foundation, June 2022.

The turnover of new and old skills is largest in IT-related specialised skills

Changes in shares of skill mentions per vacancy: UK, 2016-2022



Source: Analysis of data provided by Adzuna Intelligence
Costa et al. (2023). Learning to grow: How to situate a skills strategy in an economic strategy
https://economy2030.resolutionfoundation.org/reports/learning-to-grow/

Evaluation evidence on the payoff to training or re-skilling include

- Evidence on returns to skills.
- Returns to formal education for adults.
- Evidence from programme evaluation (‘active labour market policies’; sectoral training programmes in the US).

Evidence on returns to skills

- Large body of work linking skills, tasks and technological change (e.g. handbook chapter by Acemoglu and Autor, 2011).
- Among college graduates, returns to skills are higher in fields that experience less technical change (Deming and Noray, 2020).
- Those in more technical fields have greater need of updating their skills to avoid their employment prospects deteriorating (Schultheiss & Backes-Gellner, 2023).
- In some contexts, training in interpersonal skills can lead to higher returns than training in technical skills (Barrera-Osorio et al, 2020).
- 'Soft skills' are particularly relevant for people in low-skilled occupations and can yield relatively high rewards (Aghion et al, 2020).
- Rising returns to digital and social skills in Germany (Langer and Wiederhold, 2023).

Returns to adult education

- Studies in the US evaluating the returns to attending community college as an adult include: Stevens et al. (2019), Carruthers and Sandford (2018); Jepsen et al (2014).

- Evidence from Nordic countries includes: Finland (e.g. Bockerman et al. 2017, 2019; Kauhanen and Virtanen, 2021); Sweden (e.g. Stenberg and Westerlund, 2008); Norway (e.g. Bennett et al. 2020).

- In general, earning returns are positive but very heterogenous by field and by gender; in some contexts, returns are higher for those with an initially lower level of education.

Reasons for public policy intervention directed at training

- A (partial) response to socio-economic inequality (under the assumption that training programs lead to better outcomes).
- Address barriers to training for people on low incomes – e.g. credit constraints, childcare services, information/careers advice.
- Address externalities (e.g. under-provision of general skills training by firms).

Risks - public policy intervention

- Do not provide the ‘right skills’ or do so in a vacuum (and therefore ineffective).

- Do not overcome the relevant barriers (e.g. financial incentives may not be sufficient on their own).

- Deadweight (comes from people not changing behaviour sufficiently in response to policies; public money paying for what firms/individuals would have previously paid for).

Amy Goldstein's "Janesville“ (retraining did not help in this case)

Janesville, Wisconsin residents waved off General Motors employees leaving their closed factory for the final time in 2008. Darren Hauck/Getty Images

Good example of effective policies: Sectoral training programs in the US

Discussed in review by Stantcheva (2021) and MIT Work of the Future report (2019)

- They are specifically geared towards the needs of the local employers and cooperate with them, including on design of training.

- Managed by community organizations or private agencies; entail training in specific occupational and soft skills; follow up with services after job placement to ensure employees get paid a sufficient wage; and closely involve employers.

- Short to medium run impacts on earnings of around 20 percent in 8 of 11 recent program evaluations (MIT Work of the Future report).

Insights from ‘what works’ evidence review (LSE ‘what works for local economic growth’ centre)

https://whatworksgrowth.org/policy-reviews/employment-training/evidence-review/

- Programme design features appear to be more important than macroeconomic factors.
- In-firm / on the job training programmes outperform classroom-based training programmes. Key design elements - employer co-design and activities that closely mirror actual jobs.
- Shorter programmes are more effective for less formal training activity. Longer programmes effective when content is skill-intensive.

Incentives directed at individuals and firms

- Individual-level incentives (subsidies, vouchers, Individual Learning Accounts; variation in price of college tuition). See review by Oosterbeek (2013): The Financing of adult learning (EENEE report).

- Firm-level incentives (human capital tax credits – in place in Austria and several US states).