

SEARP

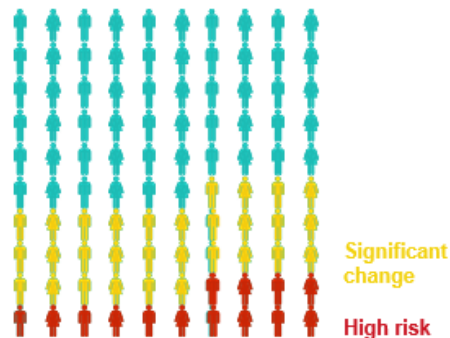
Educating learners for their future, not our past

OECD Southeast Asia Regional Forum 2021

Andreas Schleicher

With the labour market undergoing rapid, fundamental change – decision-making is more important, but also more difficult.

Jobs are at risk of automation

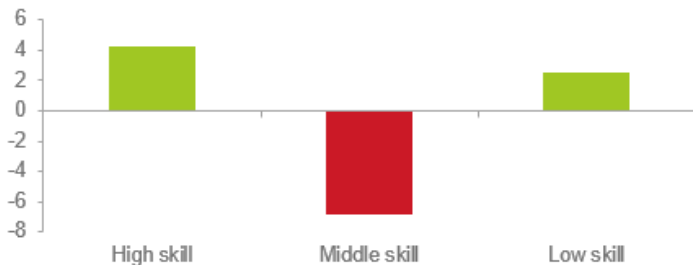


New forms of work are emerging



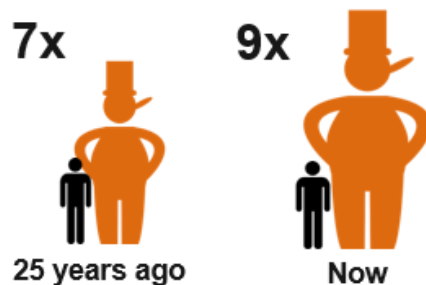
Labour markets are polarising

Percentage point change in share of total employment (OECD average), 1995 to 2015



Inequality is rising

Richest 10% v. poorest 10%



Digitalisation



Democratizing



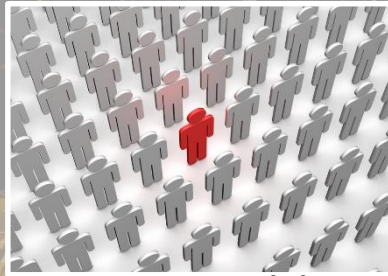
Particularizing



Empowering



Concentrating



Homogenizing

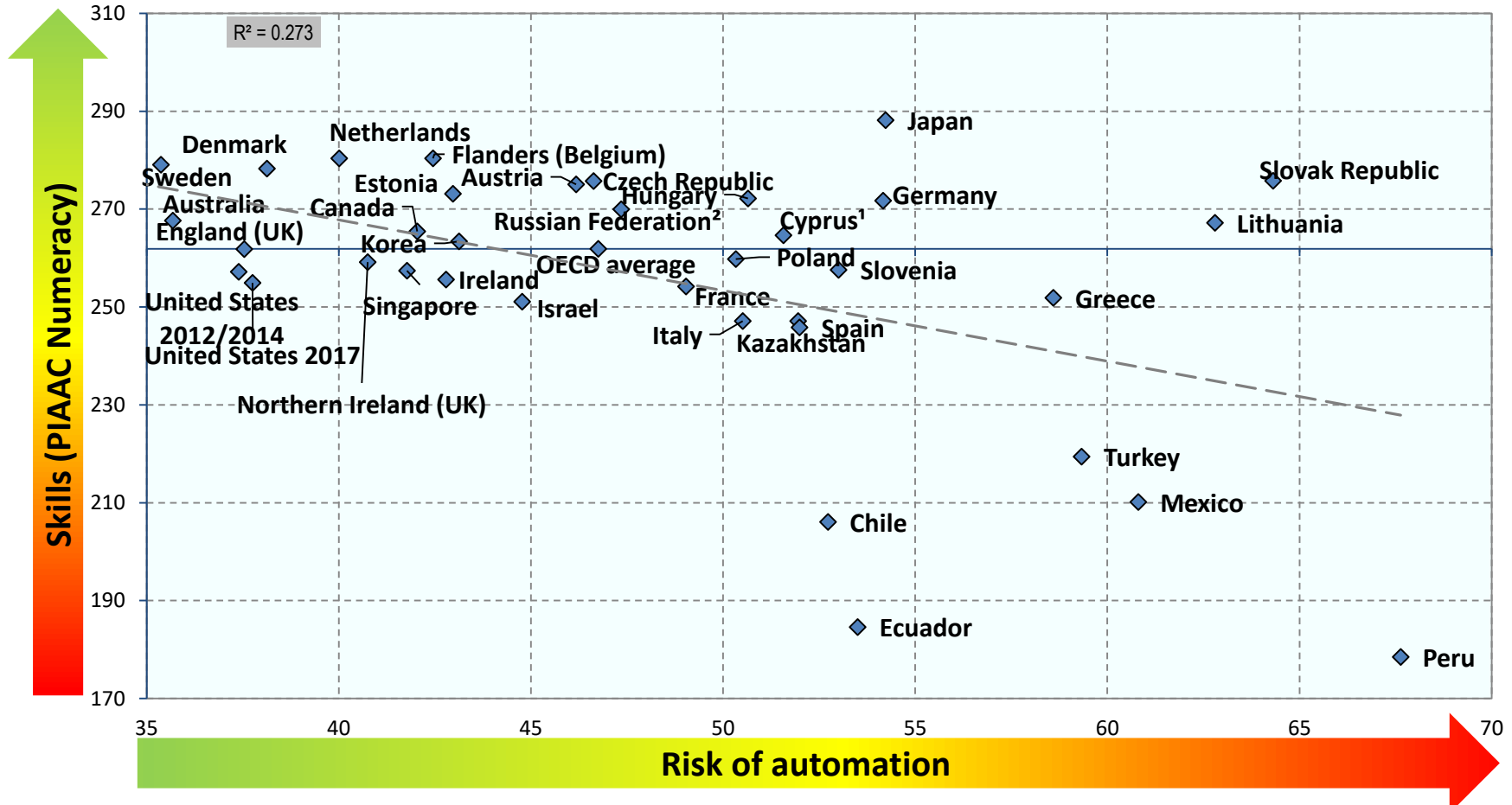


Disempowering

The new nature of the firm

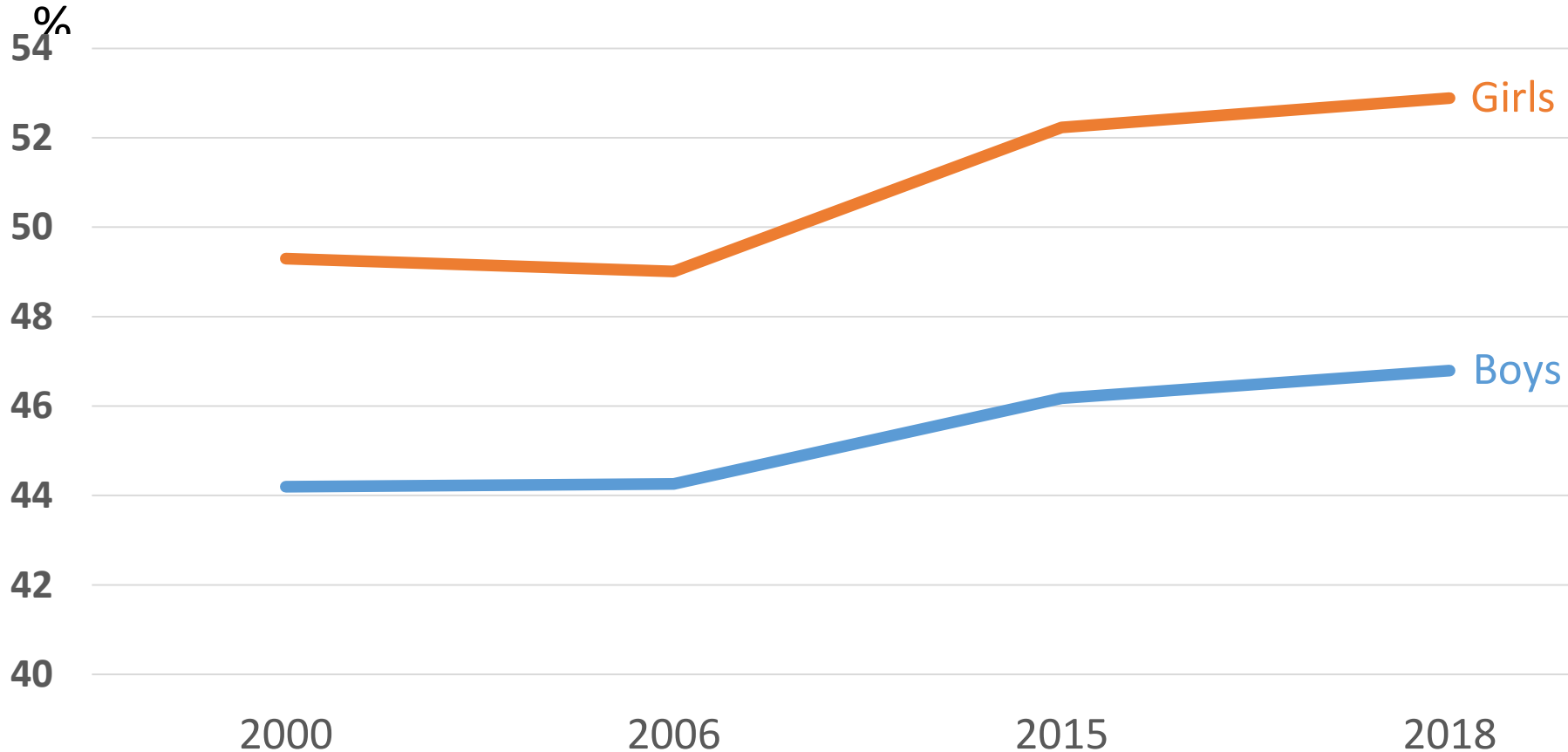
- Digital “**platform**” **technology** drives the (re)organisation of firms
- **Small units** of employment with global reach require re-think of what “small” means (employment or revenue to market share)
- Peer-to-peer markets are **blurring the distinction between a consumer and a business**
- Governments **work with platforms** to implement policies

Skills and the risk of automation



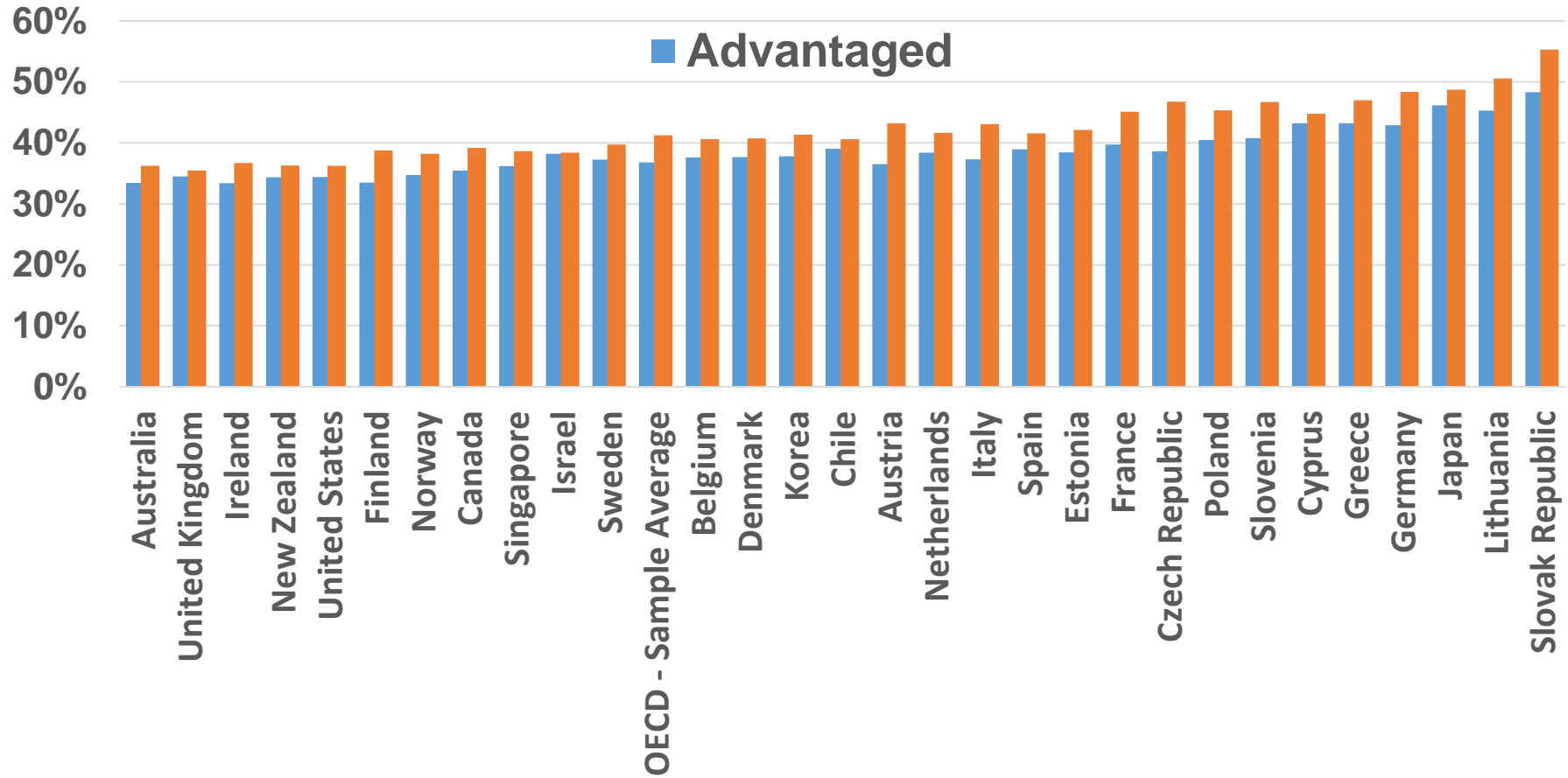
Concentration of occupational expectations by 15-year-olds

Percentage of students naming 10 most popular occupations (PISA)

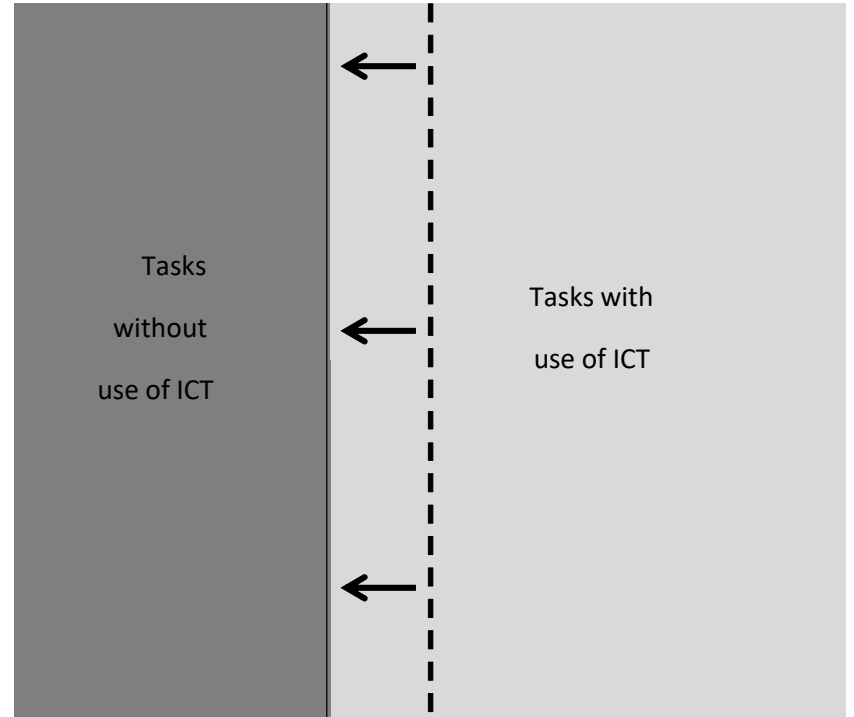
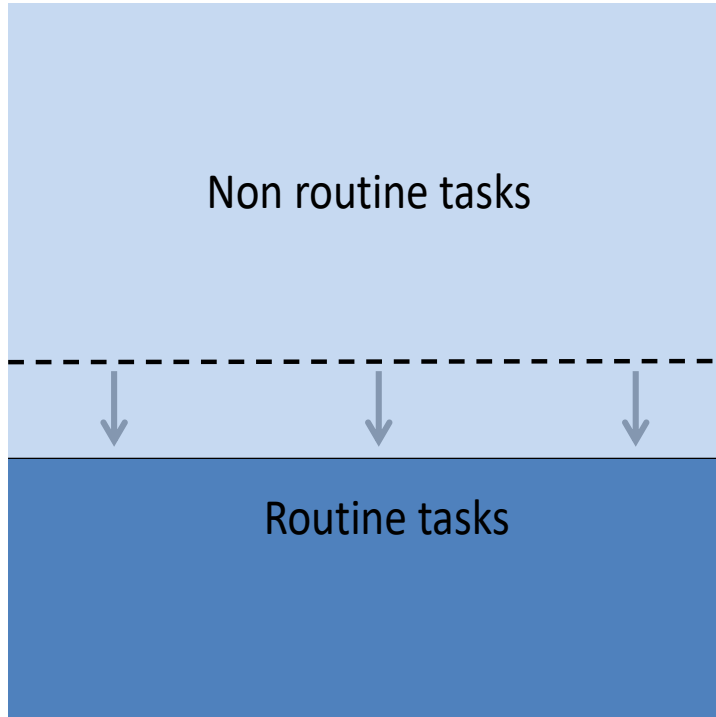


Source: PISA databases. Countries reporting career expectations in PISA 2000, 2003, 2006, 2015 and 2018.

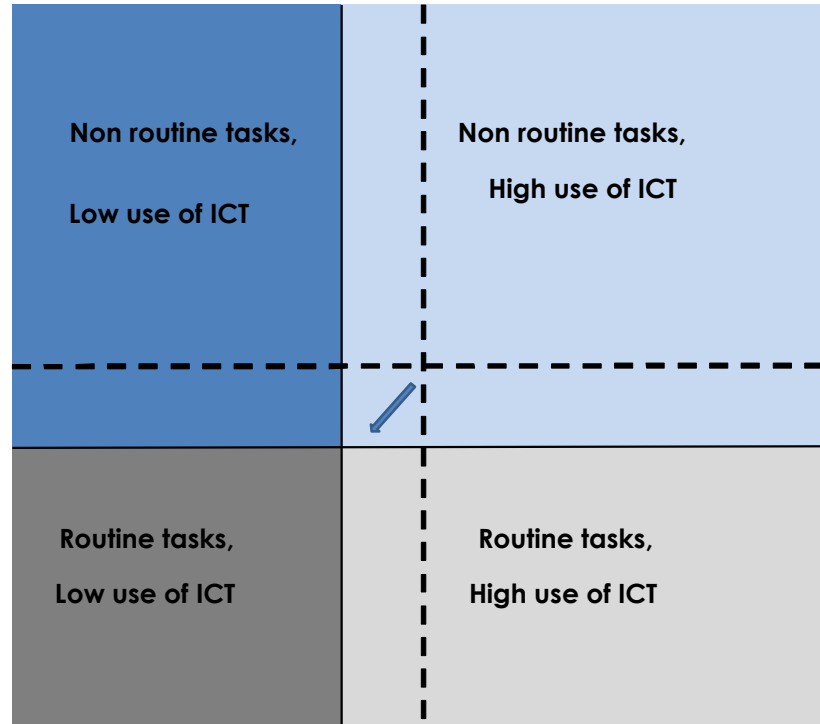
Many teenagers aspire to jobs that are at high risk of automation (PISA)



Two effects of digitalisation



Two effects of digitalisation



INSIDE: A 14-PAGE SPECIAL REPORT ON TECH STARTUPS

The
Economist

JANUARY 18TH - 24TH 2014

Economist.com

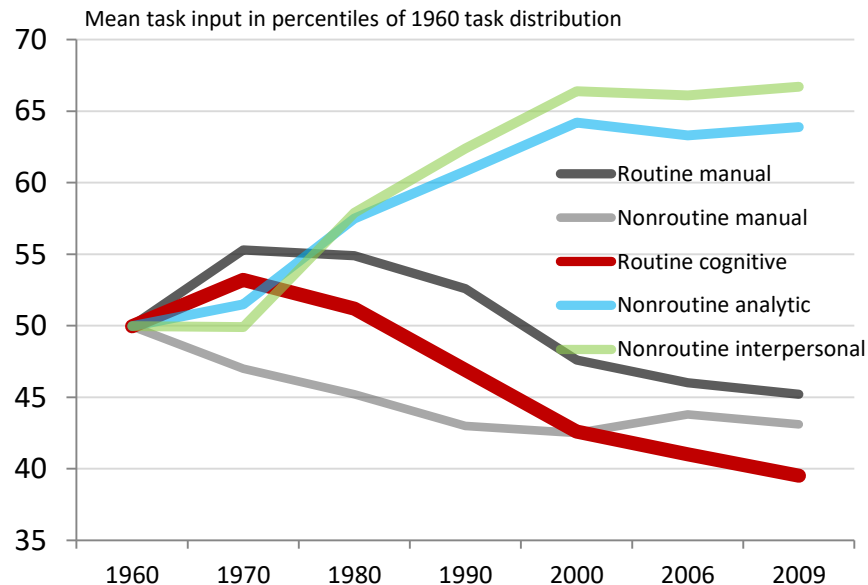
If the French ran America
China cracks down on microblogs
New opportunities for organised crime
Regulators go soft on Europe's banks
Google and the internet of things

Coming to an office
near you...

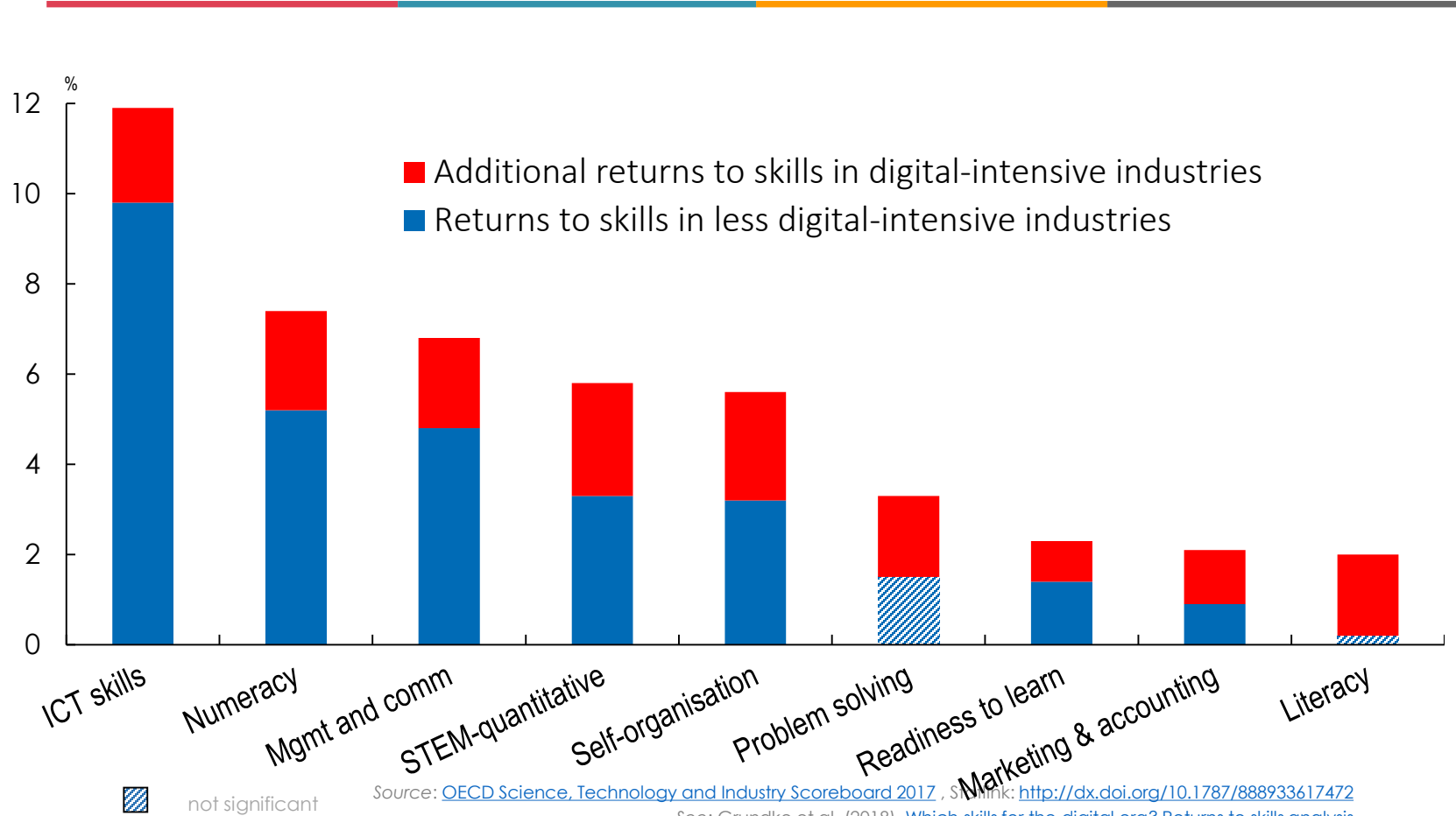
What today's
technology will do to
tomorrow's jobs



The kind of things that are
easy to teach are now easy
to automate, digitize or
outsource

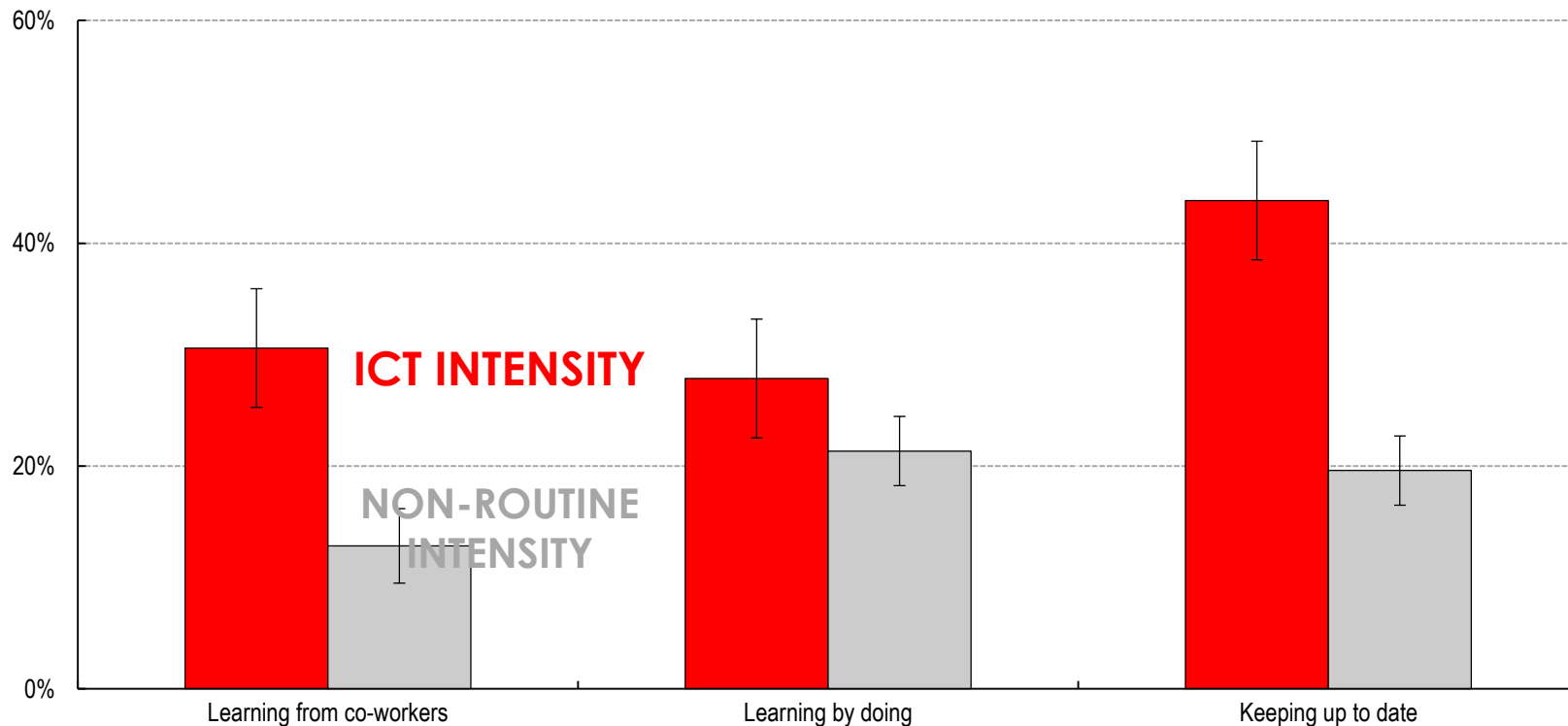


ADDITIONAL RETURNS TO SKILLS IN DIGITAL-INTENSIVE INDUSTRIES



ICT USE AND NON-ROUTINE INTENSITY ENHANCE FORMS OF LEARNING

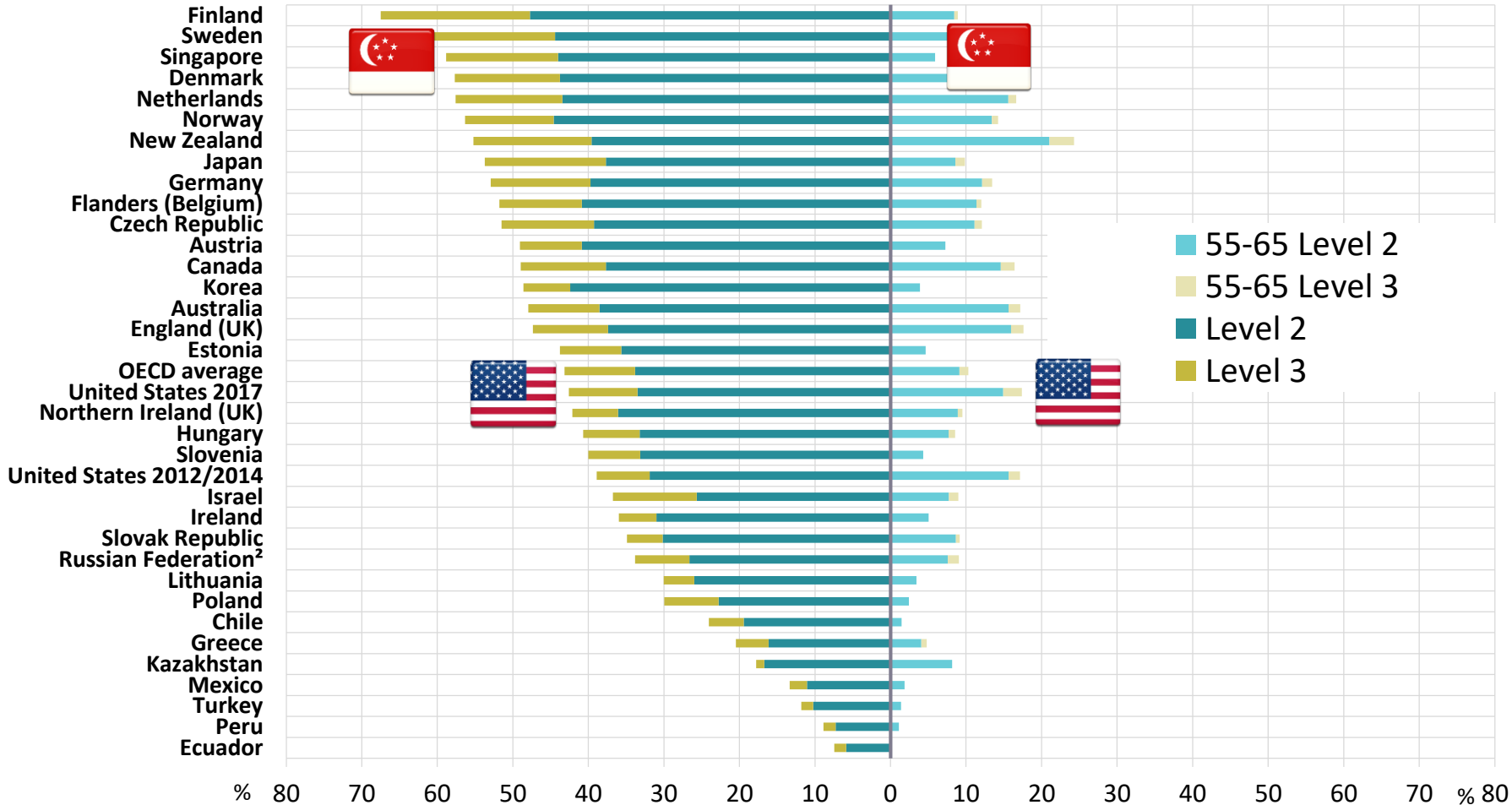
EXPECTED EFFECT OF INCREASE FROM 50TH TO 75TH PCTILE OF DIGITAL EXPOSURE
ON PROBABILITY OF LEARNING AT LEAST ONCE A WEEK



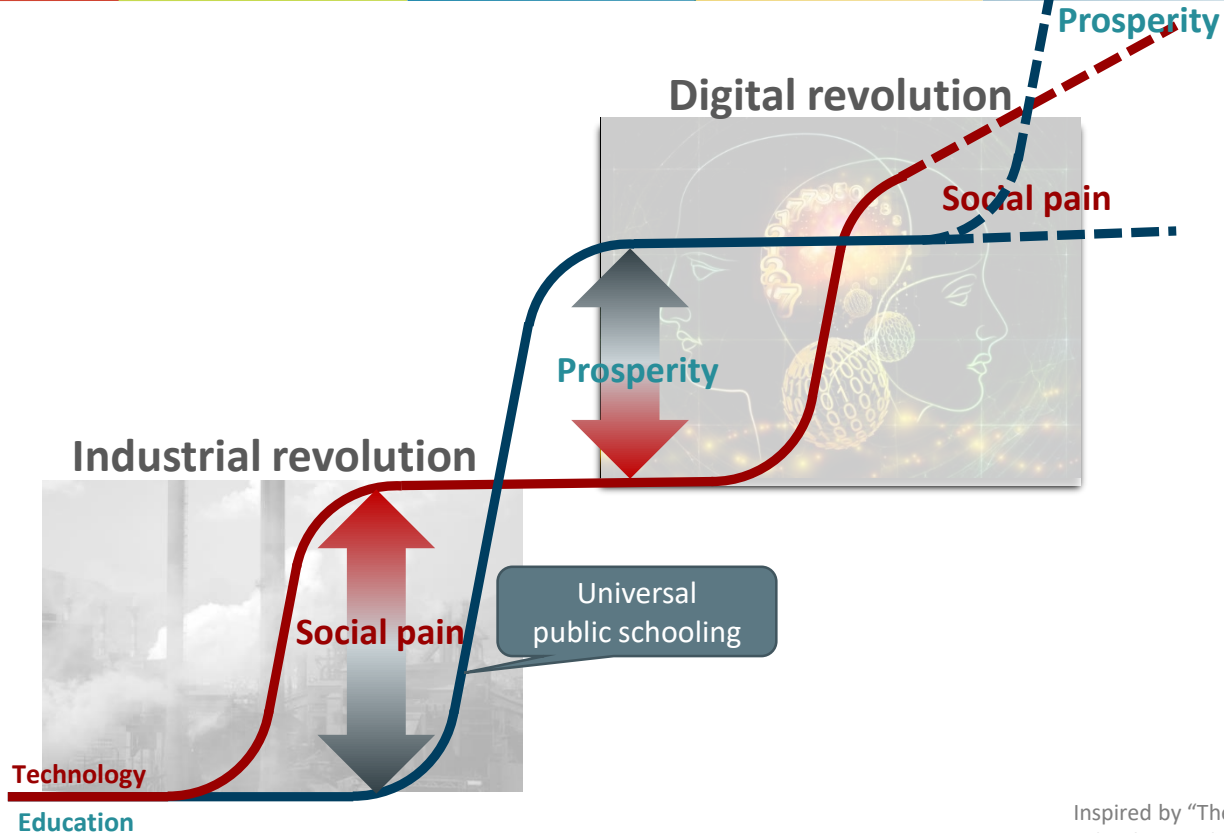
Skills to manage complex digital information

Young adults (25-34)

Older adults (55-65)



Education won the race with **technology** throughout history, but there is no automaticity it will do so in the future



Inspired by "The race between technology and education"
Pr. Goldin & Katz (Harvard)

Growth mindset and reading performance

Higher performance

Average reading score

$R^2 = 0.47$

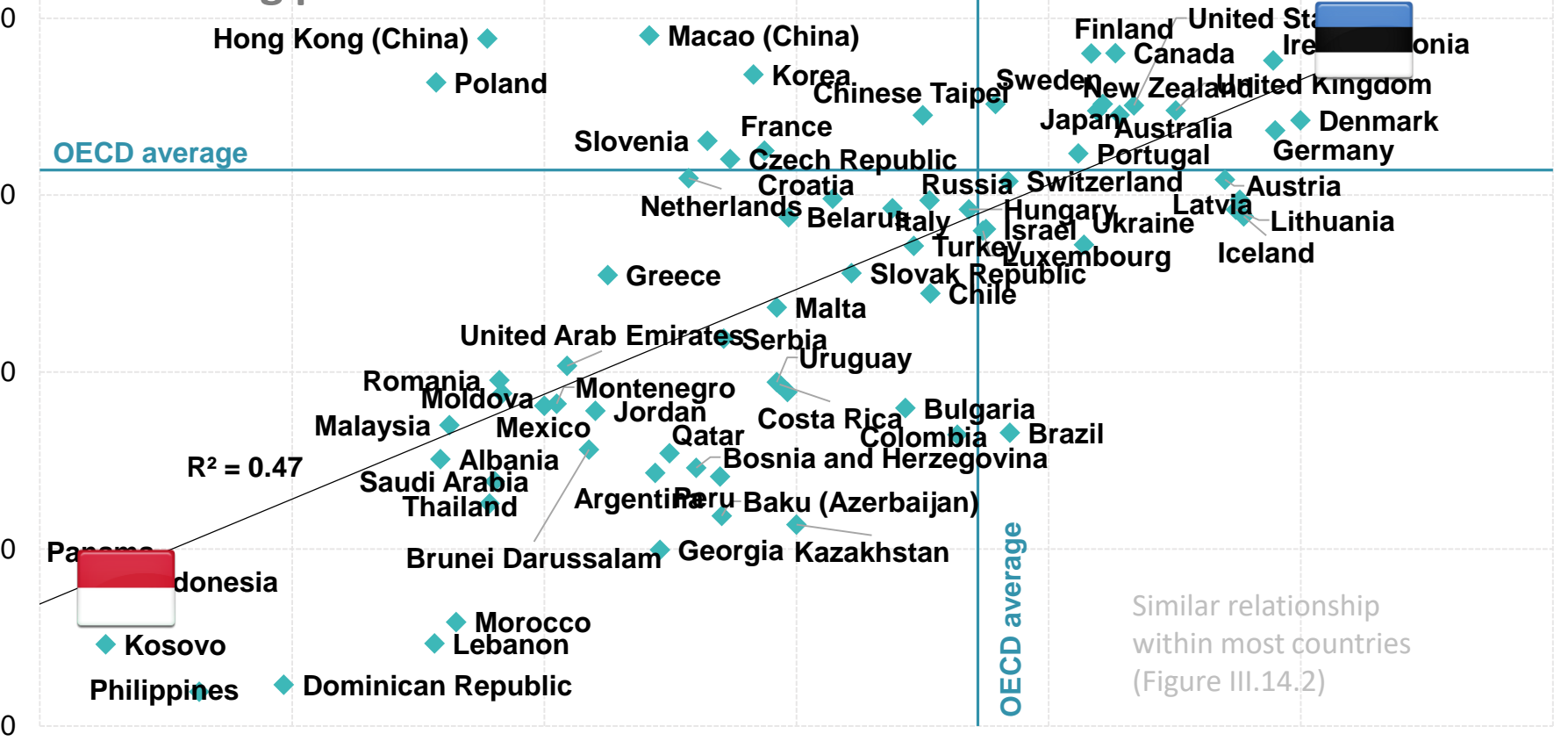
OECD average

OECD average

Similar relationship within most countries (Figure III.14.2)

More students holding a growth mindset

change very much (%)

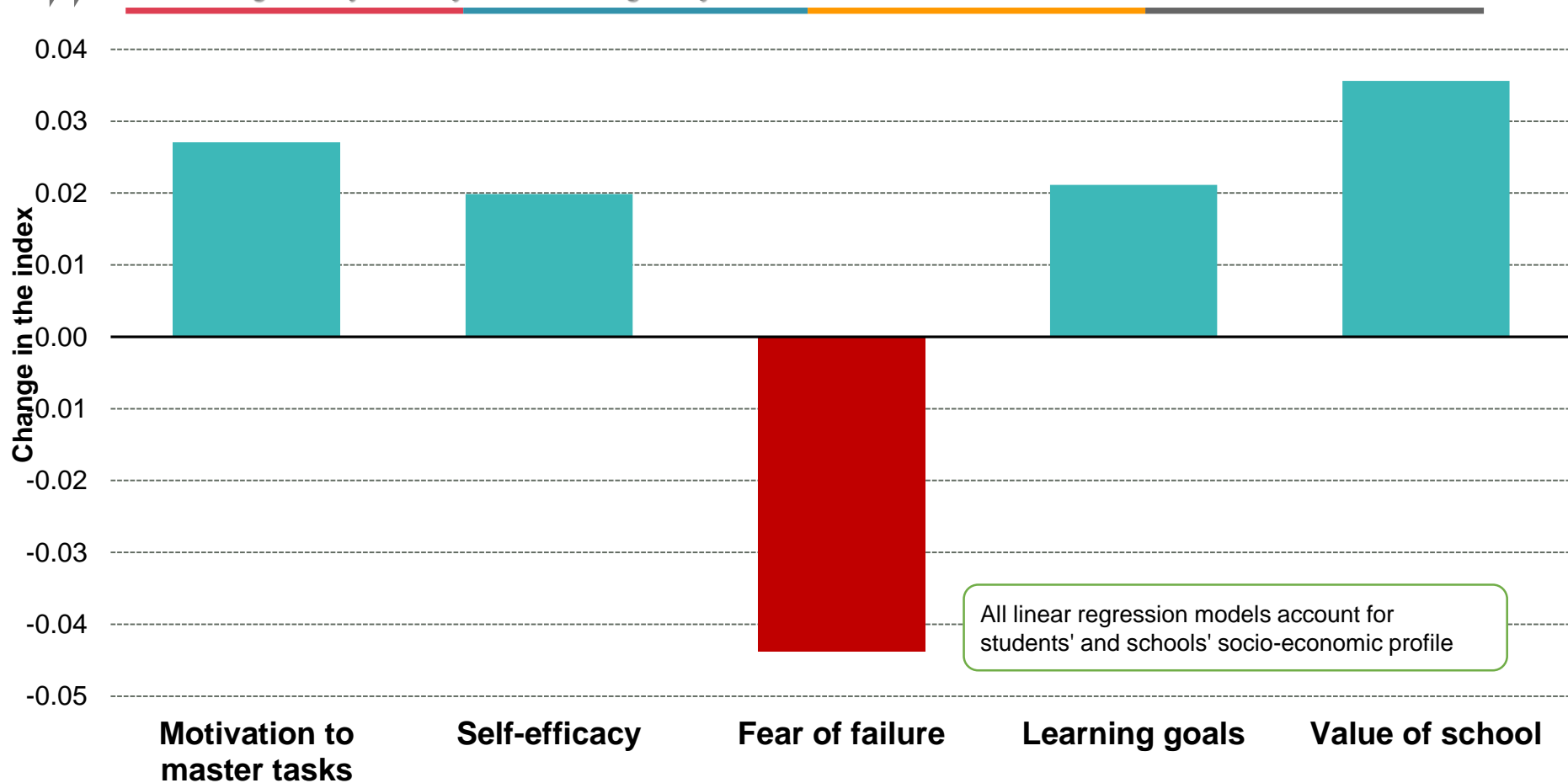




Growth mindset and student attitudes

Change in the following indices when students disagreed or strongly disagreed that "your intelligence is something about you that you can't change very much":

Fig III.14.5

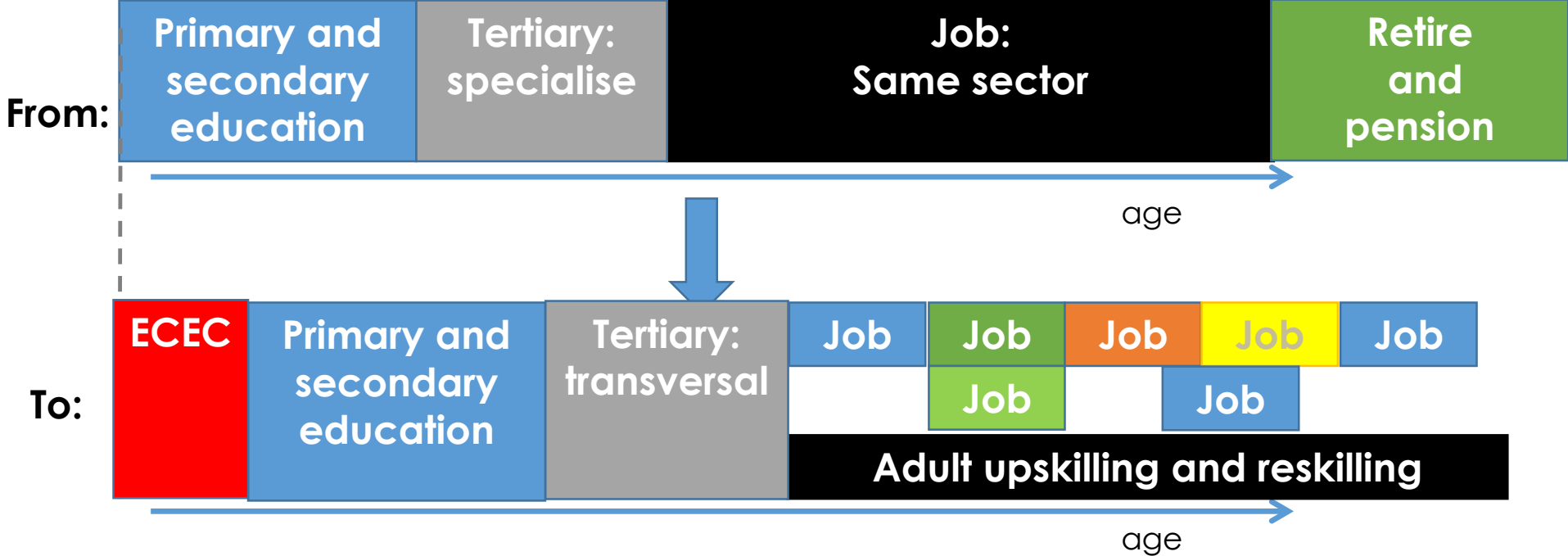


Transformative competencies



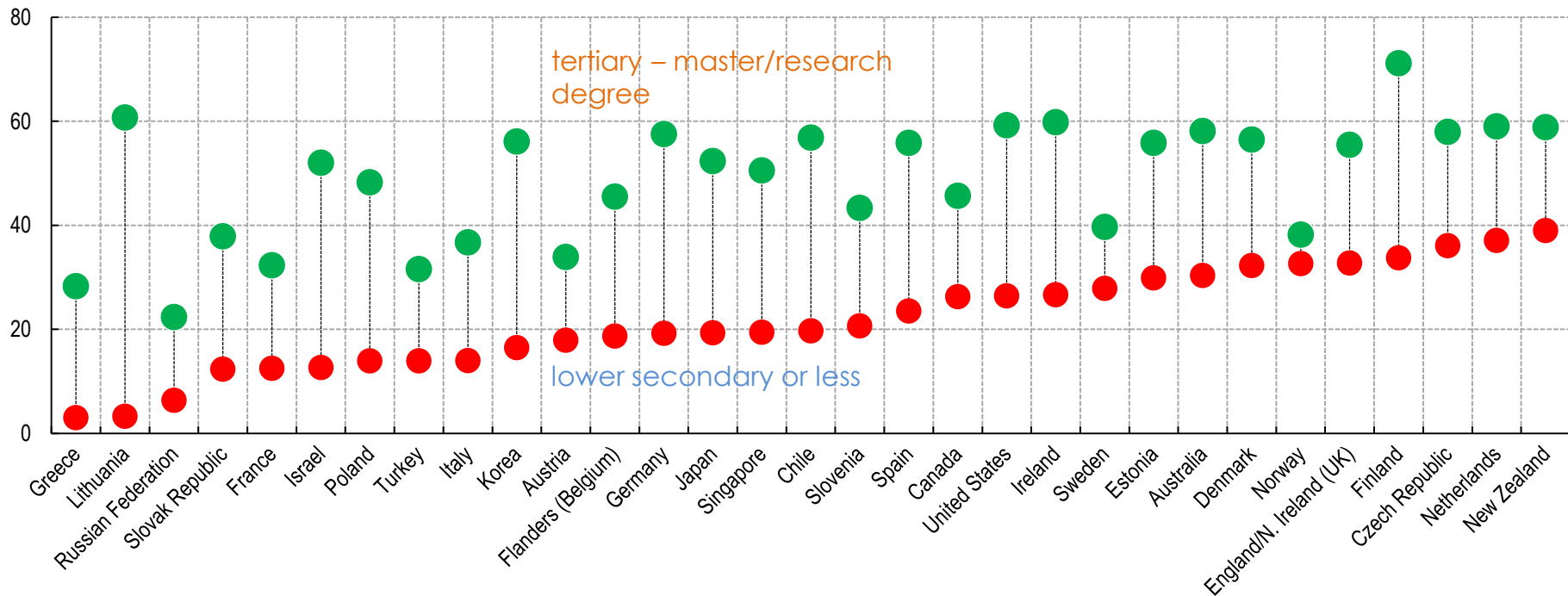
- Creating new value
- Taking responsibility
- Reconciling tensions & dilemmas

We used to learn to do the work, now learning is the work



But: Low-skilled are less likely to participate in training

SHARE OF WORKERS WHO PARTICIPATED IN ON-THE-JOB TRAINING IN THE PREVIOUS YEAR
BY EDUCATION LEVEL (%)



Firms as learning environments

- **How is the additional funding shared between Governments, employers and beneficiaries?**
- **What are the incentives?**
- **Who sets the standards?**
- **How are the levels of skills recognised?**
- **Who trains the trainers?**

Certifying skills in a digital world

- The digital transformation **expands and diversifies education, training and learning opportunities.**
- The **certification of skills becomes increasingly important:** employers need clear signals on workers' skills.
- Firms are increasingly testing skills on their own while relying less on diplomas. **How to certify skills and who should be in charge?**
- Preferred option: **Independent regulated systems for skills certification?**

People outside firms

- **Unemployed:** Government. Funding for unemployment benefits, used for training?
- **People at high risk of losing their jobs:** firms or Government?
- People who want to **change jobs**
- Gig economy

Some governance challenges

- **New forms of work: fewer taxes raised**
- **Ageing societies: higher expenditure in health and pensions**
- **Decentralised information: less control**
- **Link between education and jobs weakened: the role of Governments risks been diminished**
- **Need to predict rapid changes in skills demands and respond to them**

Global co-operation can make the difference



Measurement tools

Work on **education statistics** with the ASEAN Secretariat

Participation in **PISA** (and transition to CBA)

Participation in **TALIS**

Policy analysis

Curriculum reform

Evaluation and assessment

Developing **teachers and school leaders**



Thank you

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