ALL DIGITAL Week 2021

22 March 2021

REFLECTIONS ON POST-PANDEMIC DIGITAL SKILLS NEEDS
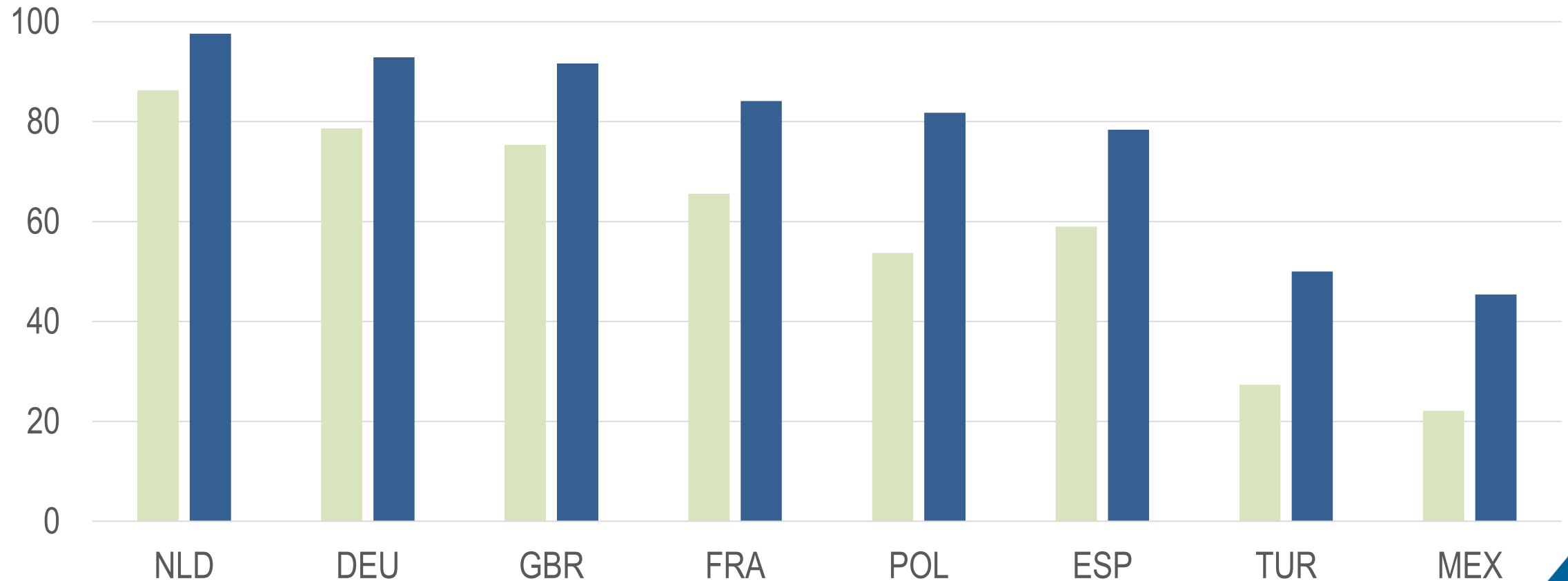
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OECD
BETTER POLICIES FOR BETTER LIVES

Digitalisation has been spreading fast
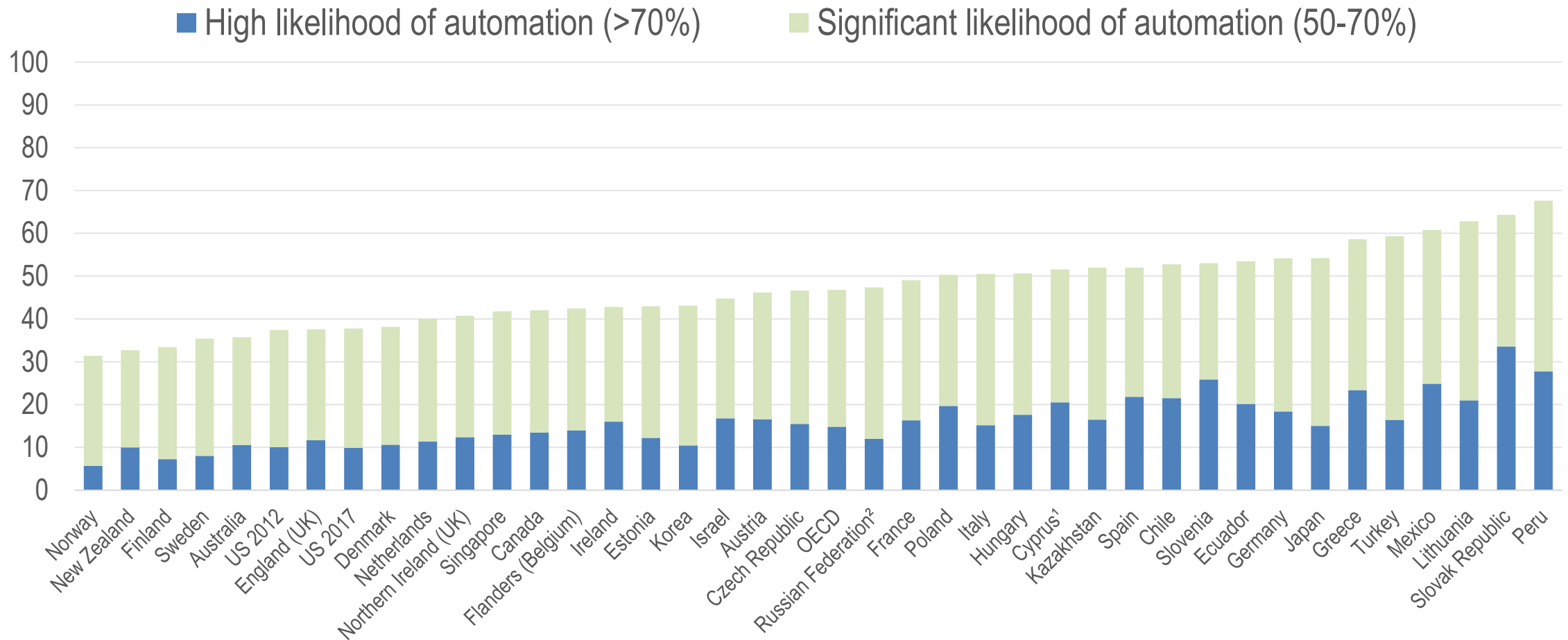
Percentage of households with computers, 2007 and 2017

And many tasks will be automated

Cross-country variation in job automatability, percentage of jobs at risk by degree of risk

Legend:
- High likelihood of automation (>70%)
- Significant likelihood of automation (50-70%)

With potentially distributional consequences

Share of jobs at high risk of being automated, by education

● Low-skilled   ● Medium-skilled   ● High-skilled
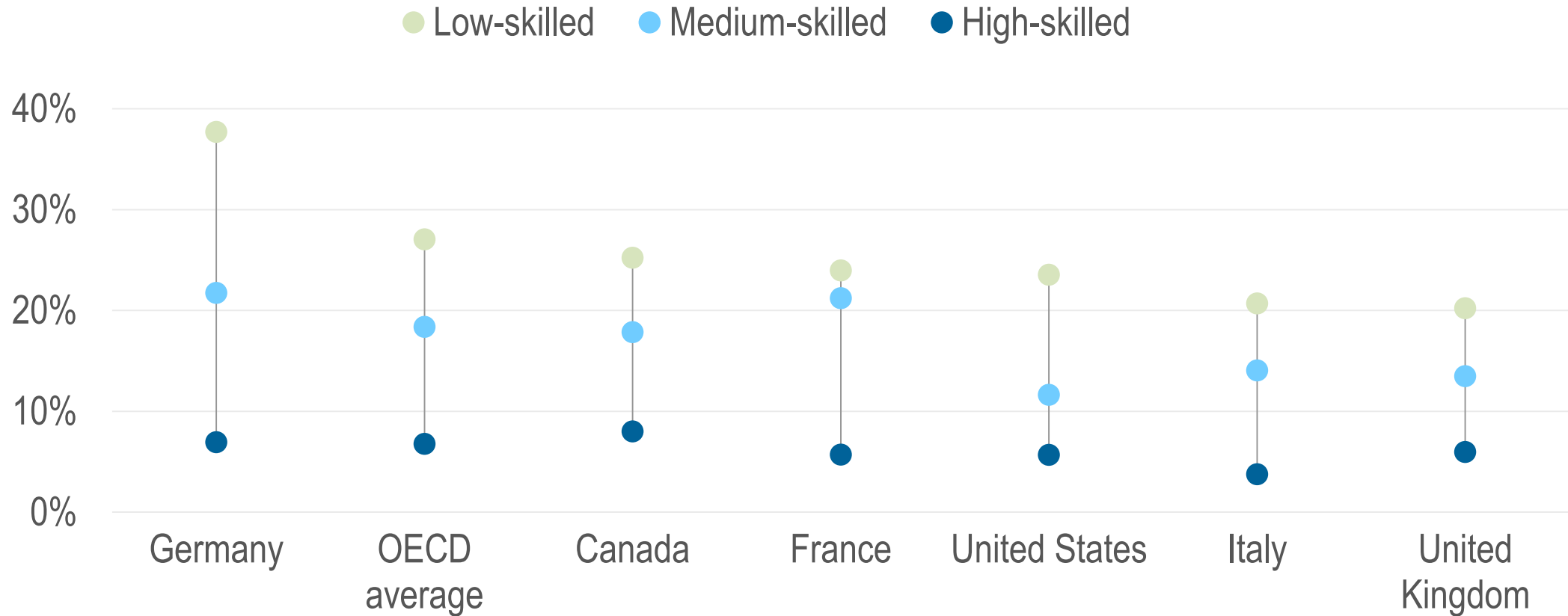
What do we mean by digital skill needs?

Complementary skills

General digital knowledge

Specialized digital skills
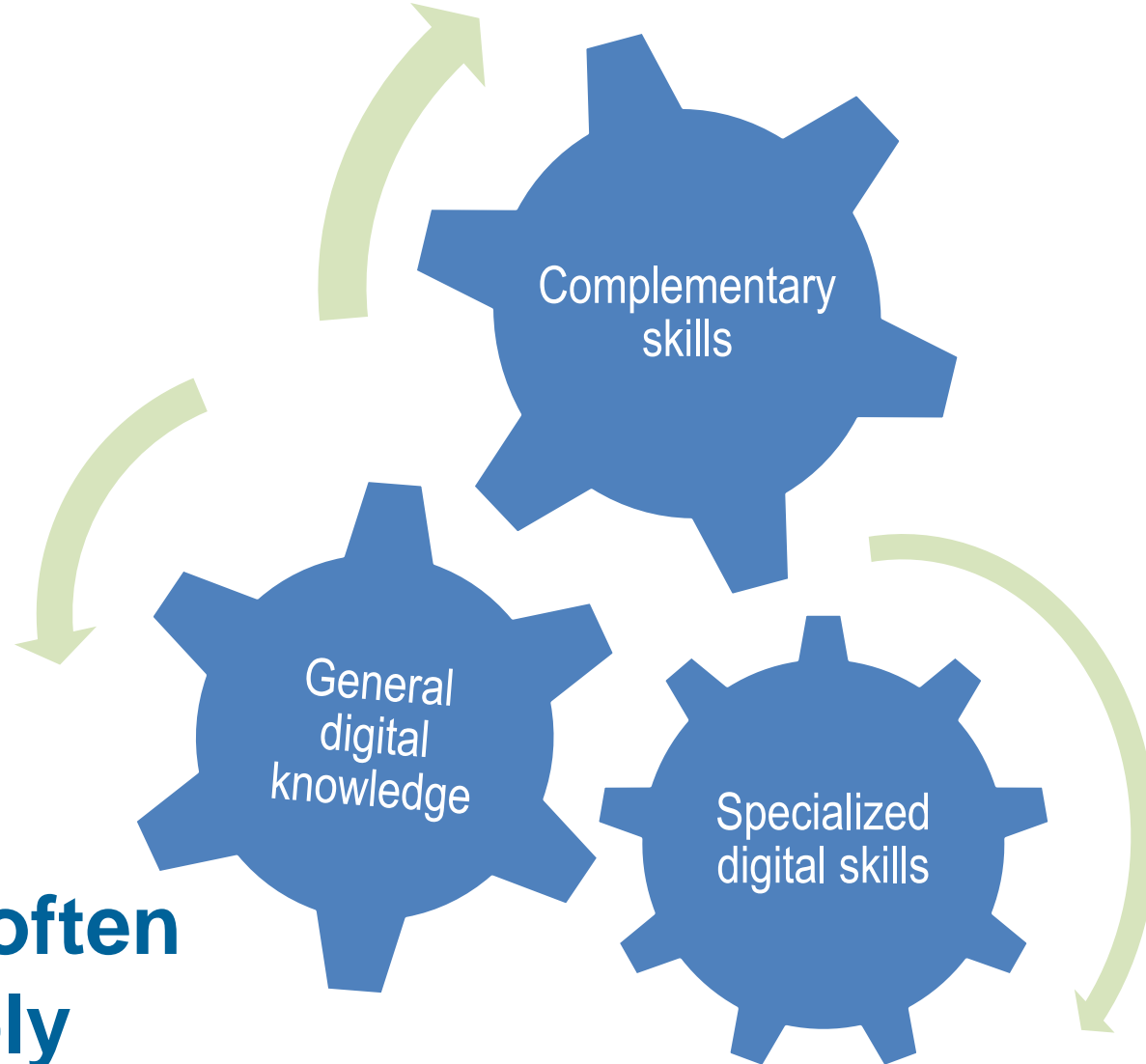
All three are often in short supply

Many countries have a critical shortage in specialist skills

Index of shortages in computers and electronics skills
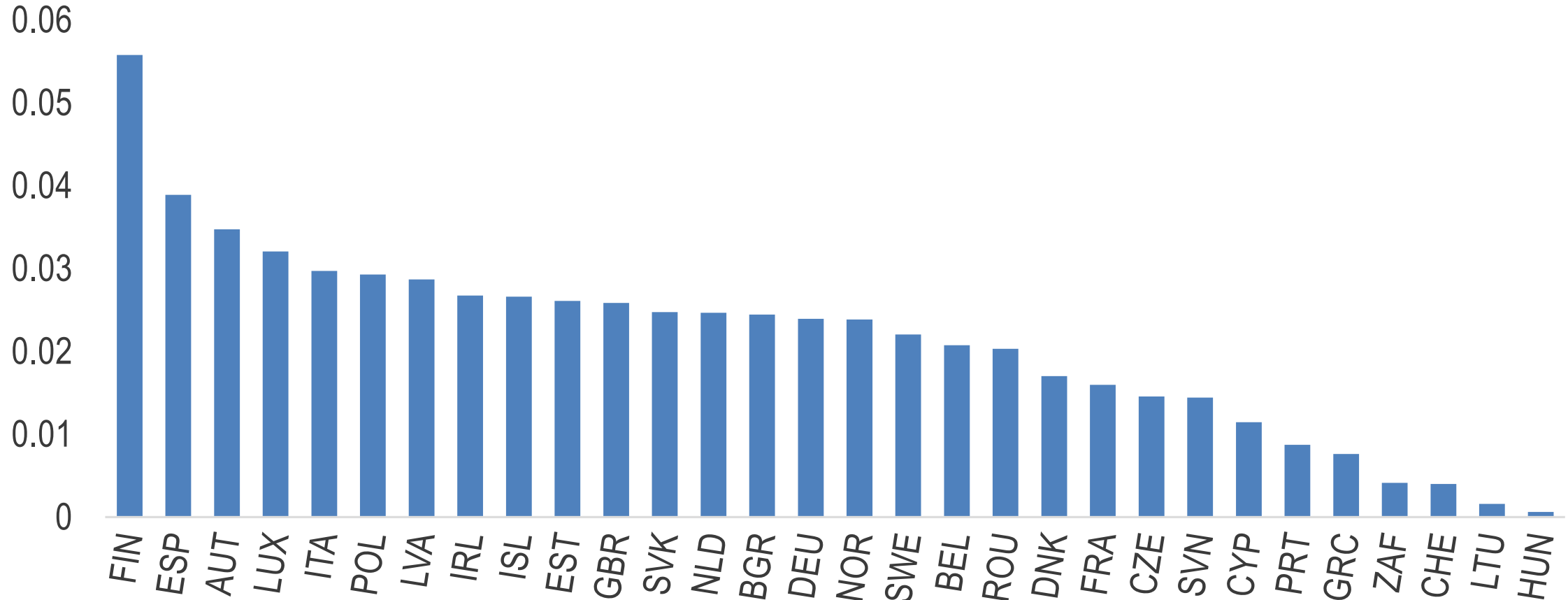
More basic and general digital skills are often lacking

Problem-solving skills in Technology-Rich Environments
Percentage of the working-age population (aged 15/16-64)

■ Failed ICT core or had no computer experience   ■ Lacks basic skills to fulfill simple tasks (Level 1 or below)
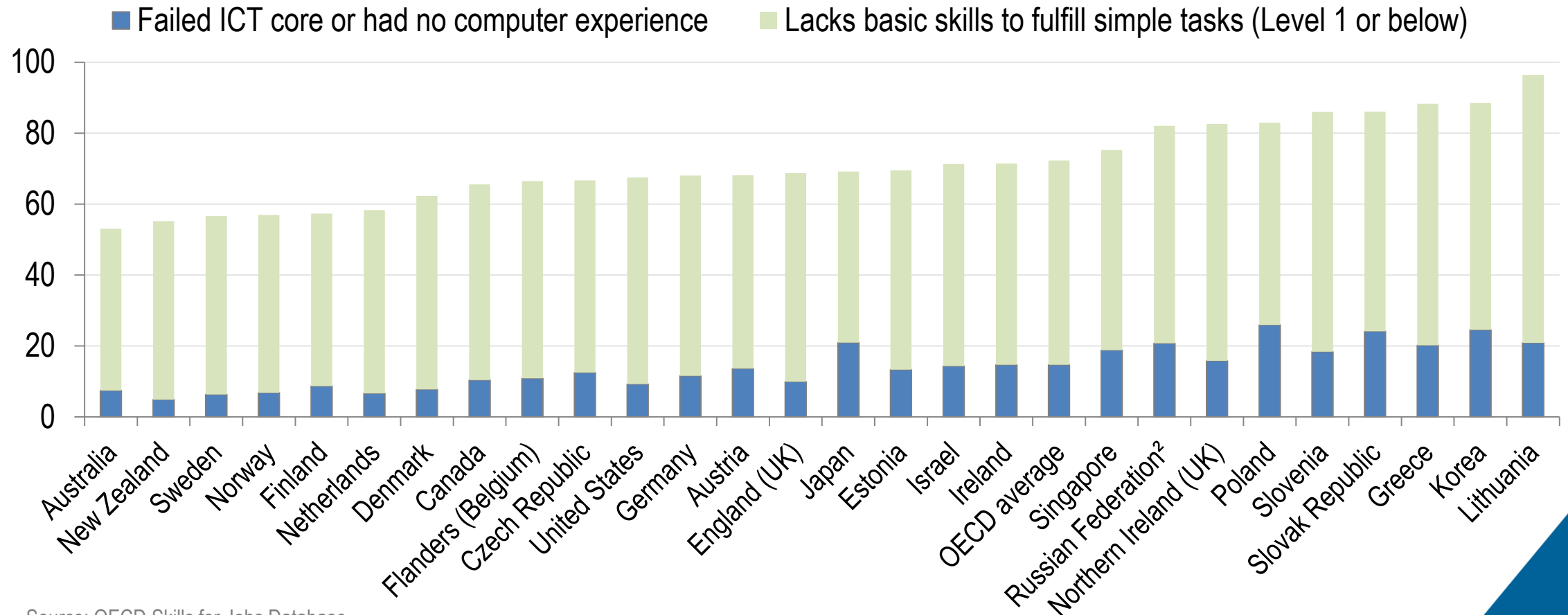
As are many of the complementary skills

Skills in surplus in most countries

Skills in shortage in most countries

Physical strength, peripheral vision, depth perception, stamina

Inductive and deductive reasoning, fluency of ideas

Manual dexterity, control precision

Dependability, leadership, initiative, cooperation

Engineering and technology, food processing, building and construction

Social perceptiveness

These trends have strengthened

Intensity of Shortages (+) and Surpluses (-)

Legend: ■ Initial year ▲ Final year

Shortages in cognitive skills have become more pervasive

Surpluses in routine and physical abilities have become more evident

Categories (left to right): Written Expression, Written Comprehension, Deductive Reasoning, Oral Expression, Inductive Reasoning, Originality, Oral Comprehension, Fluency of Ideas, Problem Sensitivity, Mathematical Reasoning, Speech Clarity, Glare Sensitivity, Gross Body Equilibrium, Peripheral Vision, Spatial Orientation, Response Orientation, Speed of Limb Movement, Depth Perception, Reaction Time, Gross Body Coordination, Arm-Hand Steadiness, Rate Control, Dynamic Strength, Stamina, Control Precision, Manual Dexterity, Extent Flexibility, Trunk Strength, Multilimb Coordination, Static Strength

Source: OECD Skills for Jobs Database

What has been the impact of Covid-19?

Share of total workers usually employed before the onset of the crisis

Legend: Work from home · Work in the usual workplace · Stopped working

Categories (x-axis): SWE, CAN, POL, DEU, FRA, AUT, ITA, AUS, GBR, USA, NZL
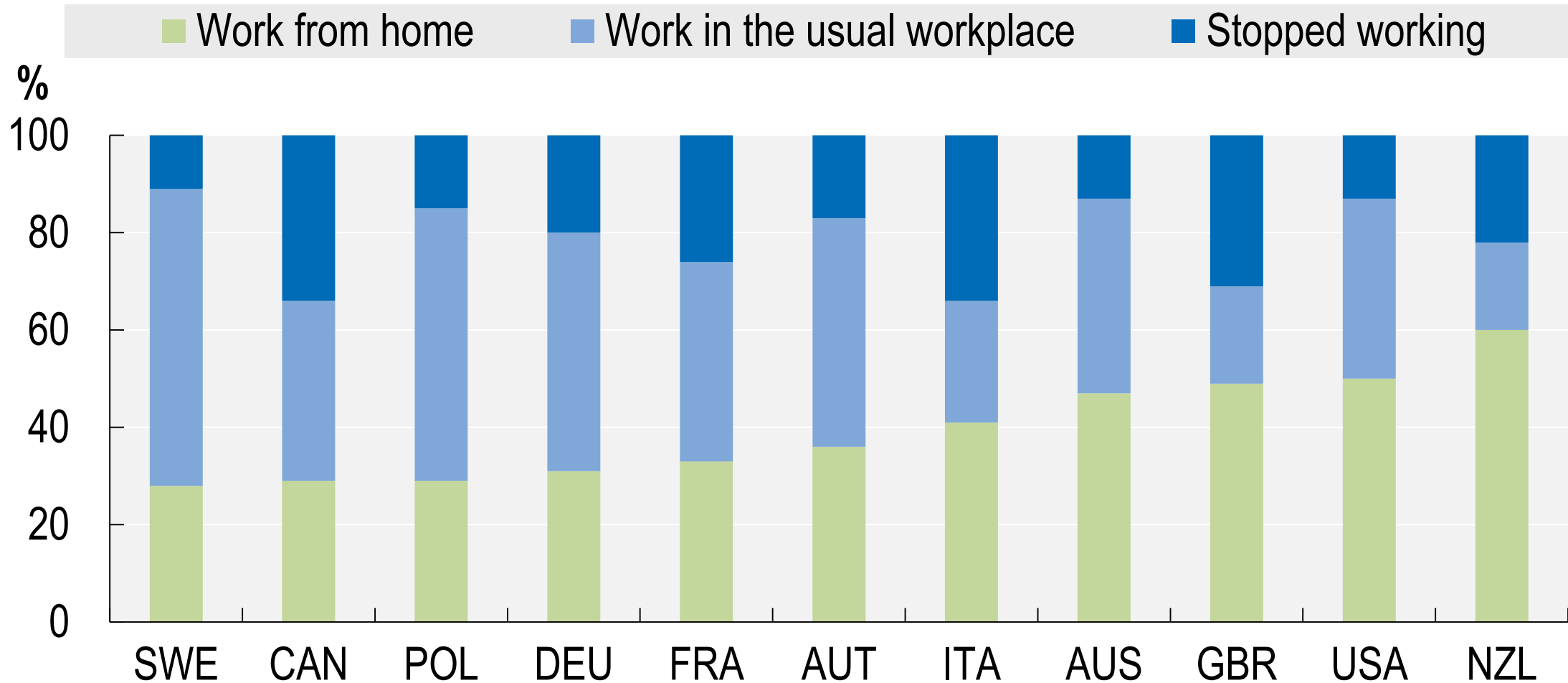
Access to teleworking varied by income

Share of total workers usually employed before the onset of the crisis by earnings quartile, mid-April 2020

Source: OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis
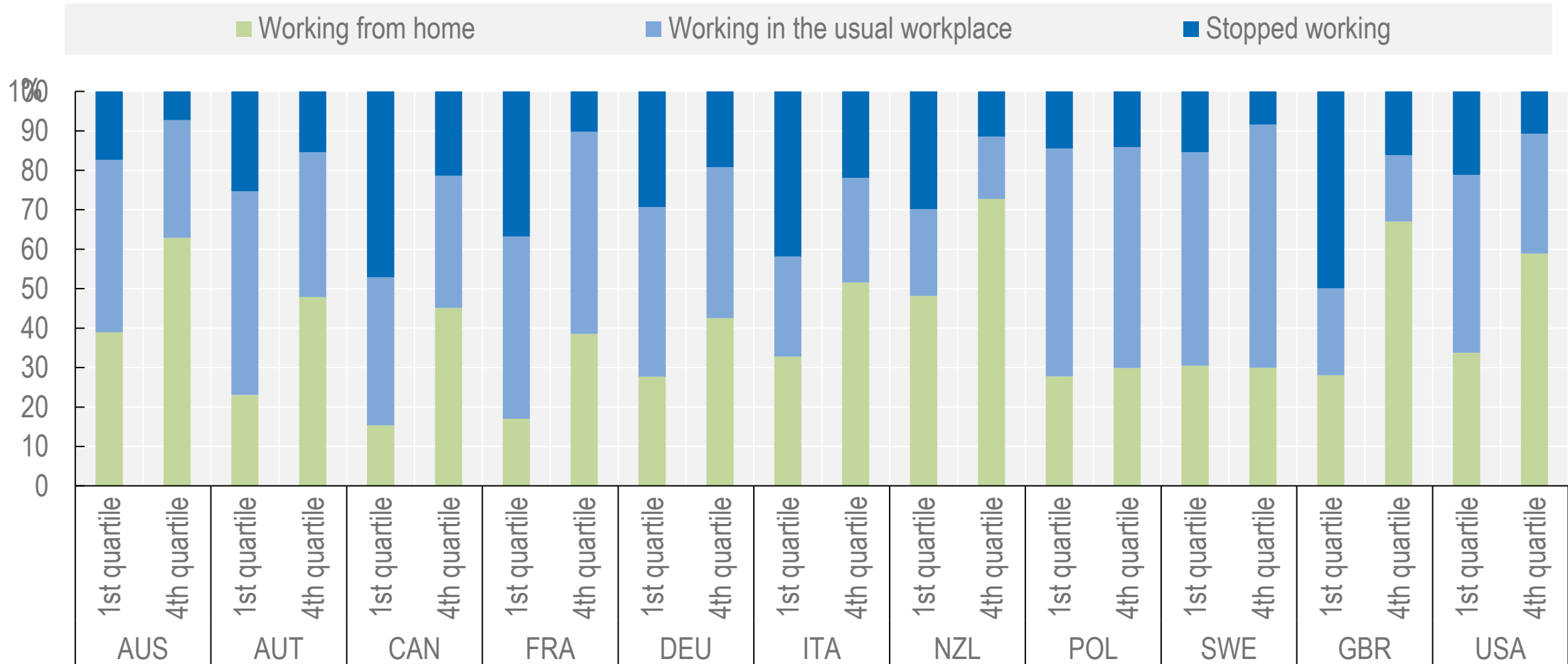
Youth have missed out on work experience

Many apprenticeships were cancelled, interrupted or put on hold and certification was disrupted

Internship were mostly cancelled or allowed online, missing out on much of informal learning

Work-based learning was disrupted as it was difficult to provide online
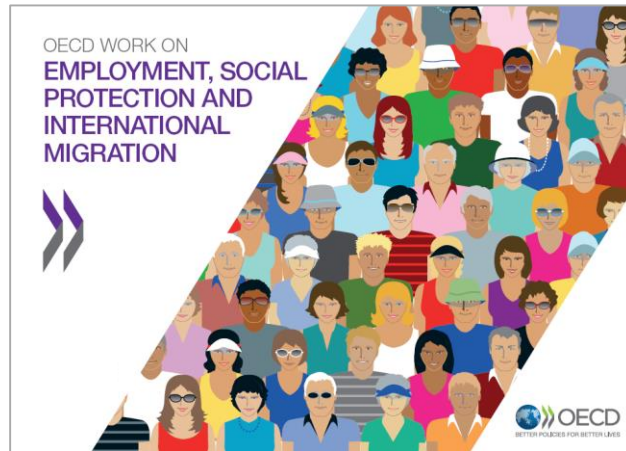
What needs to be done?

Raising training participation through tailored solutions for vulnerable groups

Reducing barriers to participation: covering direct and indirect costs and providing flexible solutions

Developing career guidance and advice and effective outreach

Aligning the training content more strongly with the skills needs of the labour market – e.g. digital skills

Improving the quality and impact of training provision

Certifying training to make it portable and modular

Thank you

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