Career Building in Fast-Changing Labour Markets

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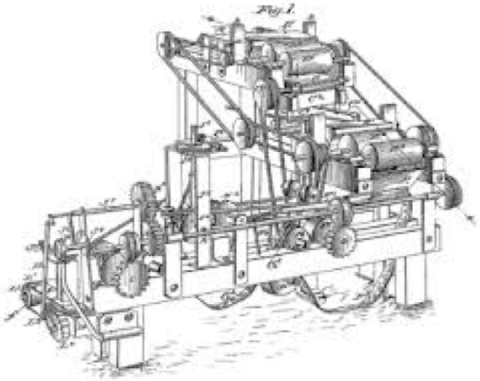
1. Changes in labour markets & skills demand
2. School to Work Transitions for Young People
3. Field choice & labour market signals

Changes in labour markets & skills demand

Production and skills

Human capital

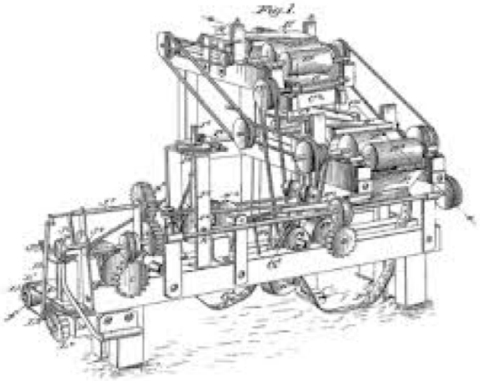


Physical capital/technology

Output
(goods & services)

Production and skills

Human capital



Physical capital/technology

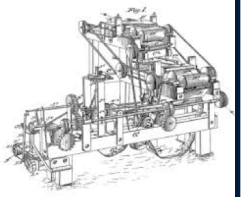
Skills

Tasks

Output
(goods & services)

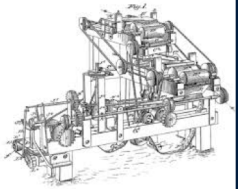
Human tasks & Machine task

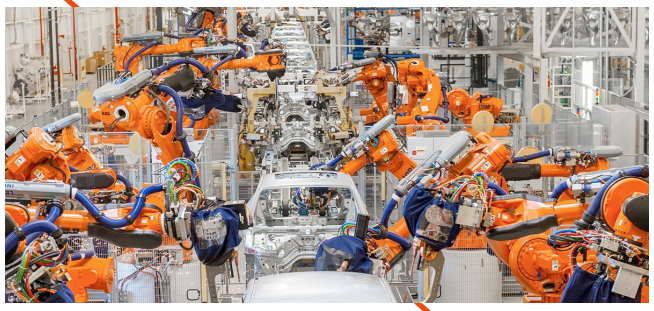
Technology can
complement human tasks



Non-routine analytical/creative tasks
Interactive tasks

Technology can
substitute human tasks





Routine cognitive
Routine manual tasks

Human skills & Machine task

Automation risk of occupations

50% **8%**

Automation risk of occupations

‘if-then’ tasks easily automated

High risk
Bookkeepers
Secretaries
Cashiers

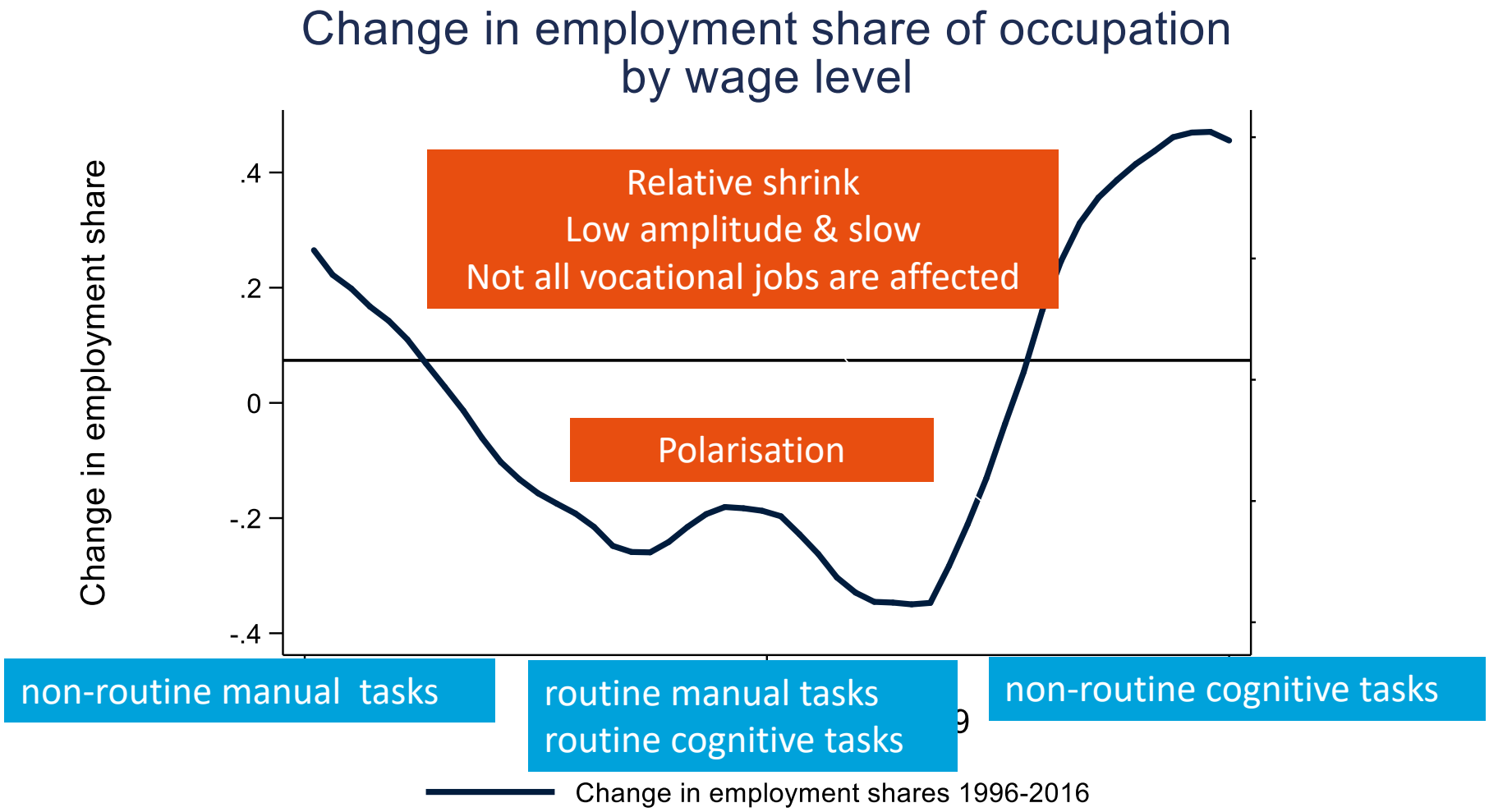
analytical & interactive tasks not easily automated

Low risk
Teachers
Healthcare
ICT

Automation will:

- Destroy jobs
- Create jobs
- Change tasks/skills

Middling jobs are disappearing



Source: EBB, SSB, OECD

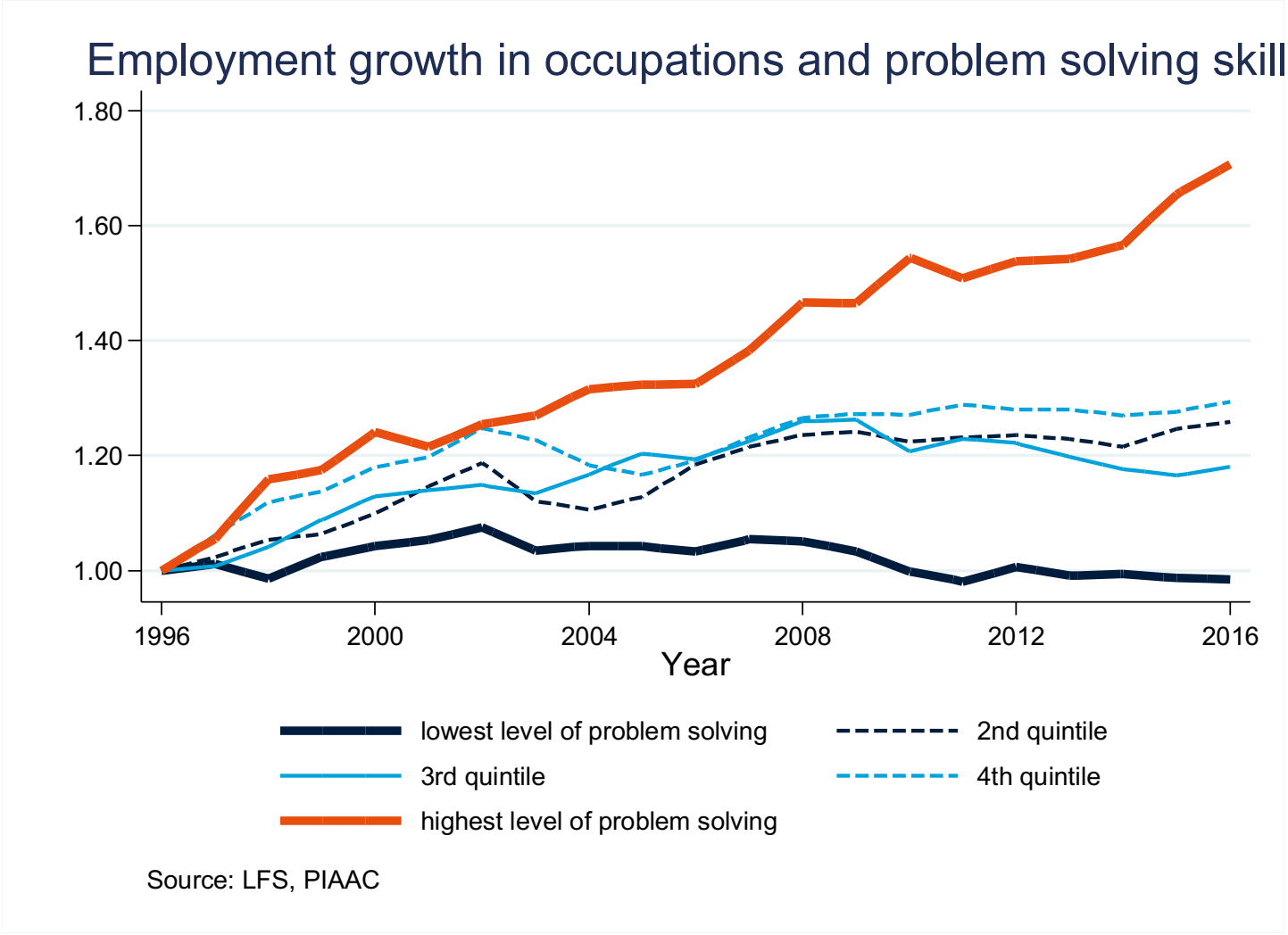
Occupational skills at risk of automation

Skills
Interpersonal interactions
Math
Literacy
Physical ability
Problem solving
Planning
Organisational knowledge
Computer

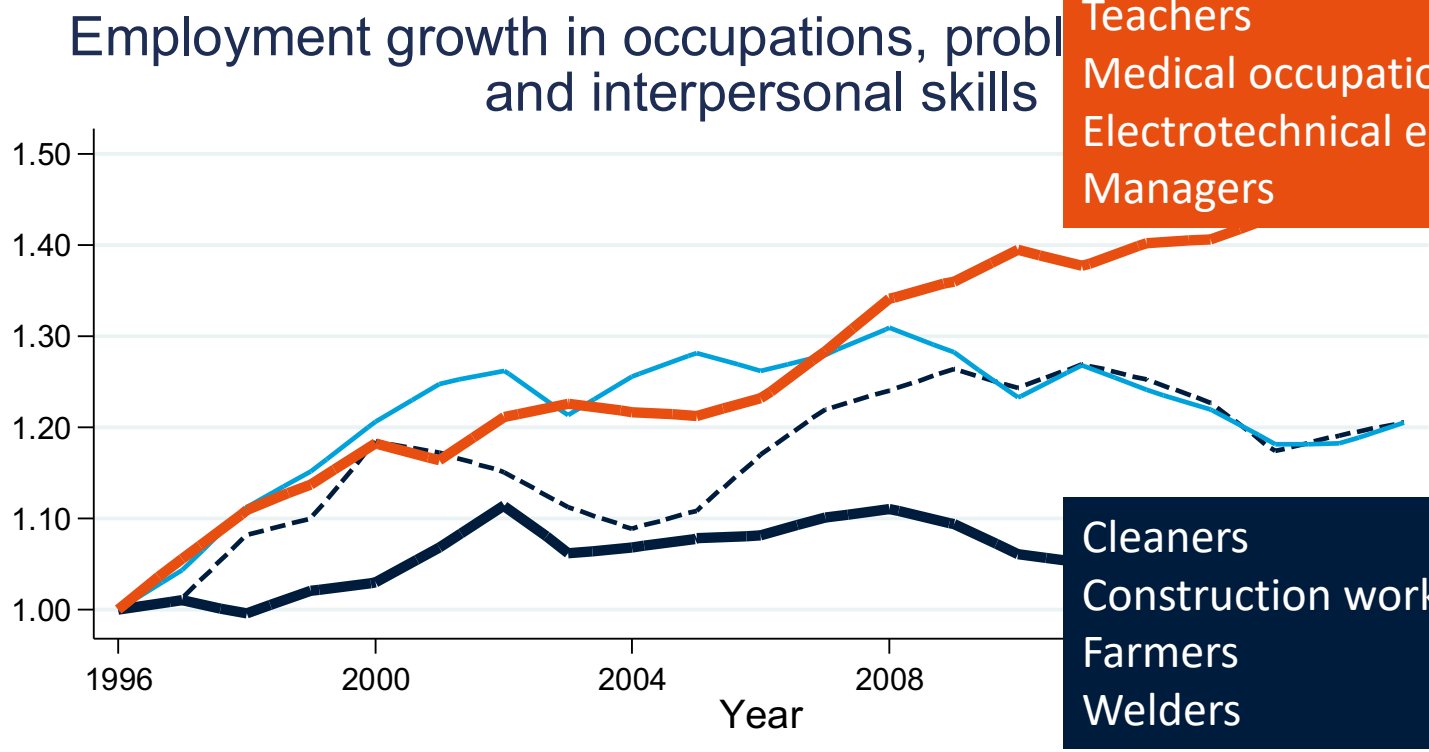
Occupational skills at risk of automation

Skills	Relation to automation risk
Interpersonal interactions	-
Math	0
Literacy	-
Physical ability	+
Problem solving	-
Planning	-
Organisational knowledge	0
Computer	-

Increasing complexity of work



High demand for hard and people skills



Teachers
Medical occupations
Electrotechnical engineers
Managers

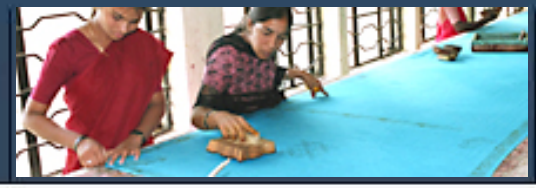
Cleaners
Construction workers
Farmers
Welders

Highest risk of automation

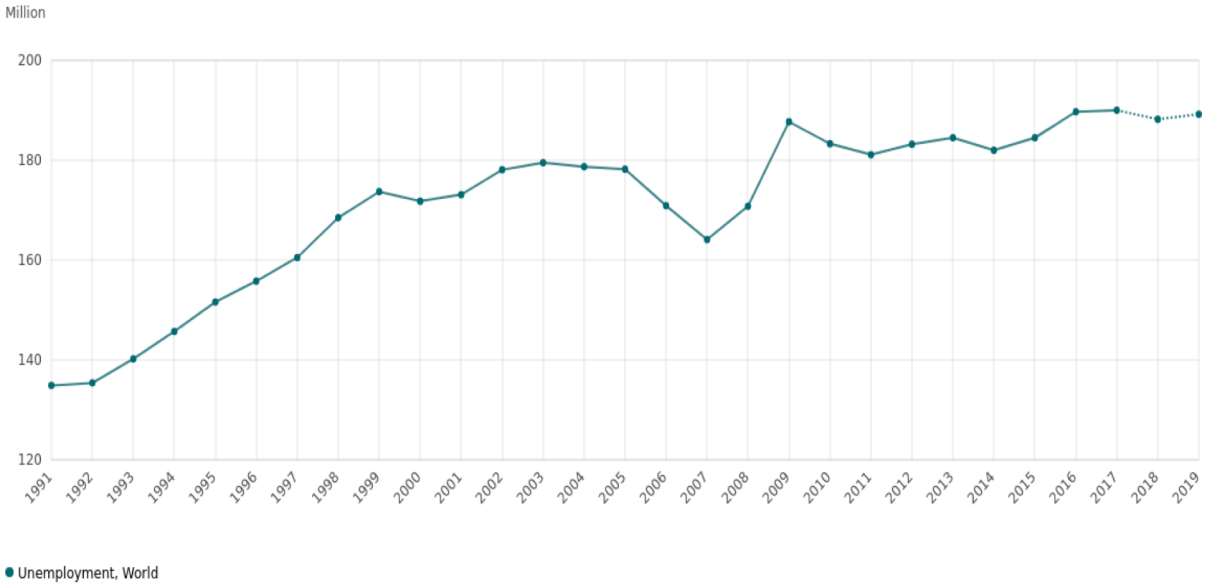
Lowest risk of automation

- low problem solving skills / low interpersonal skills
- low problem solving skills / high interpersonal skills
- high problem solving skills / low interpersonal skills
- high problem solving skills / high interpersonal skills

Source: LFS, PIAAC, NSS



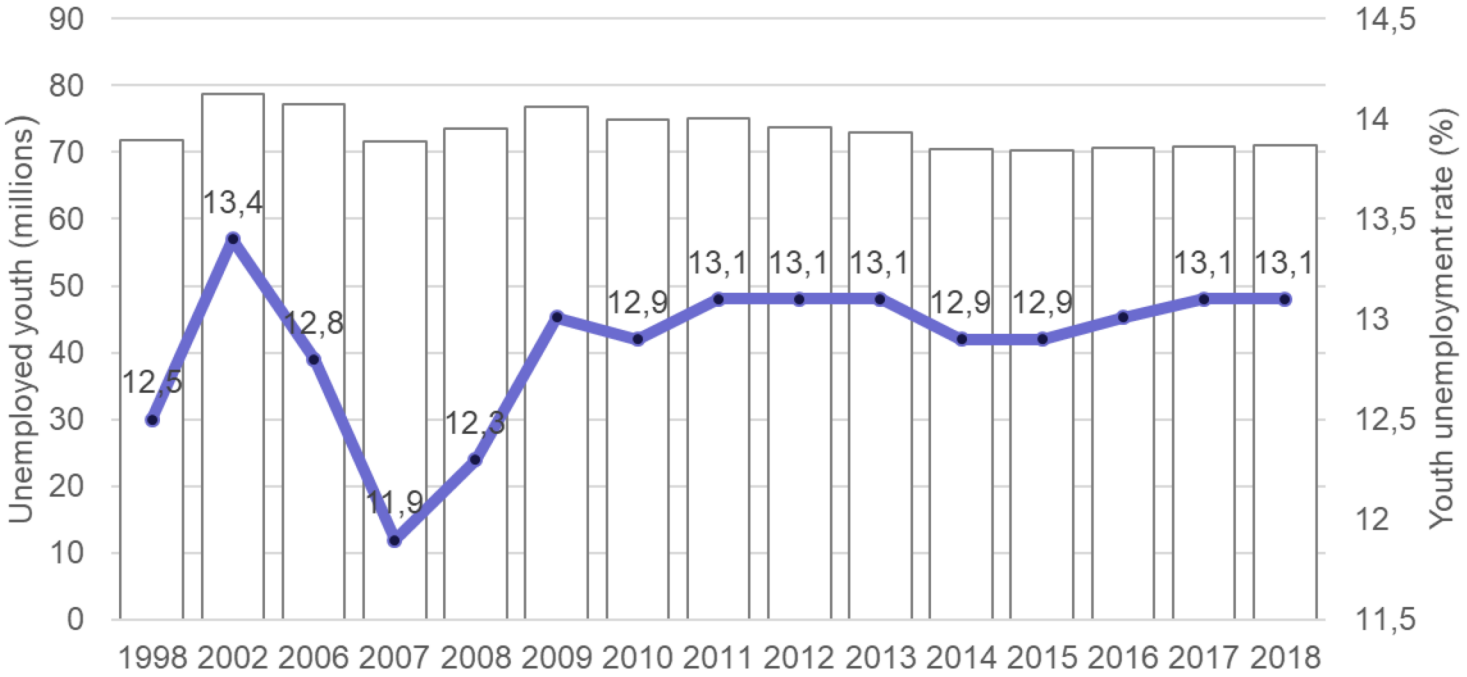
Global unemployment remains stubbornly high



This dataset is harmonized and may, therefore, differ from nationally reported data. Data for 1991-2017 are estimates while data for 2018-2019 are projections.
Source: International Labour Organization, ILO modelled estimates (ilo.org/wesodata)

ILO (2018) World Employment and Social Outlook

Global youth unemployment

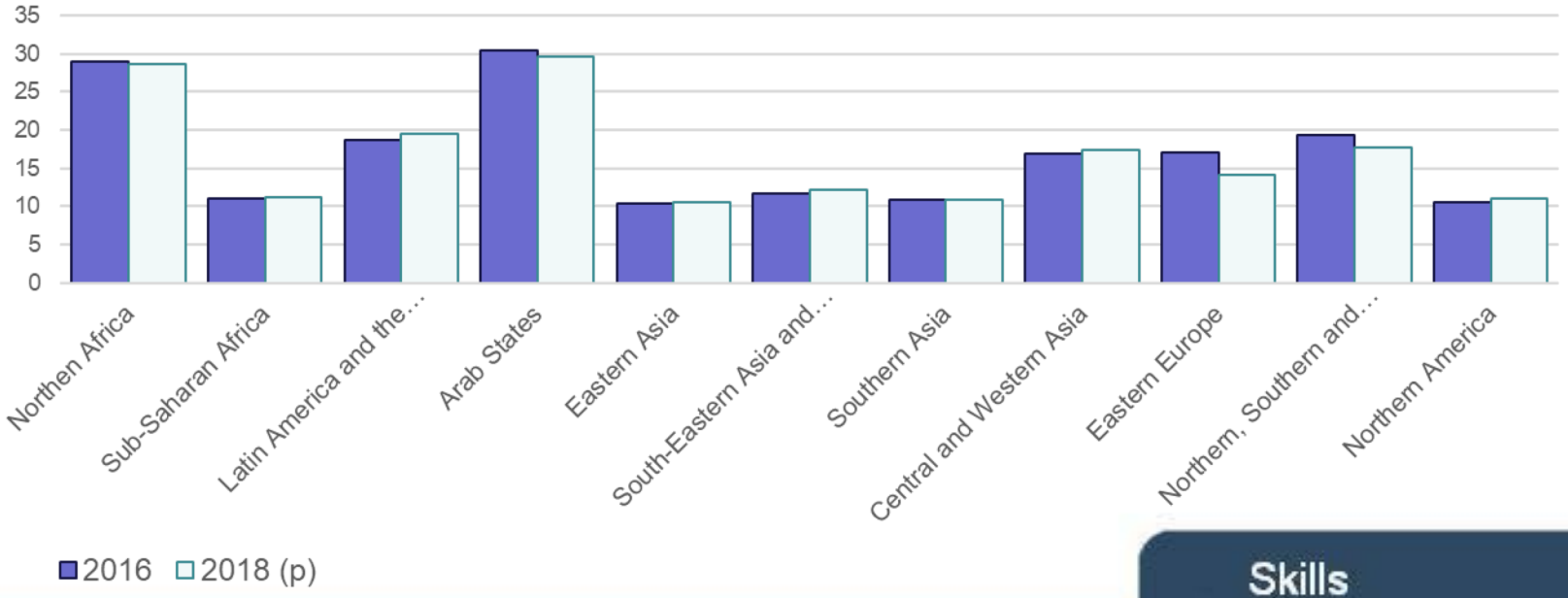


ILO (2017) Global Employment Trends for Youth

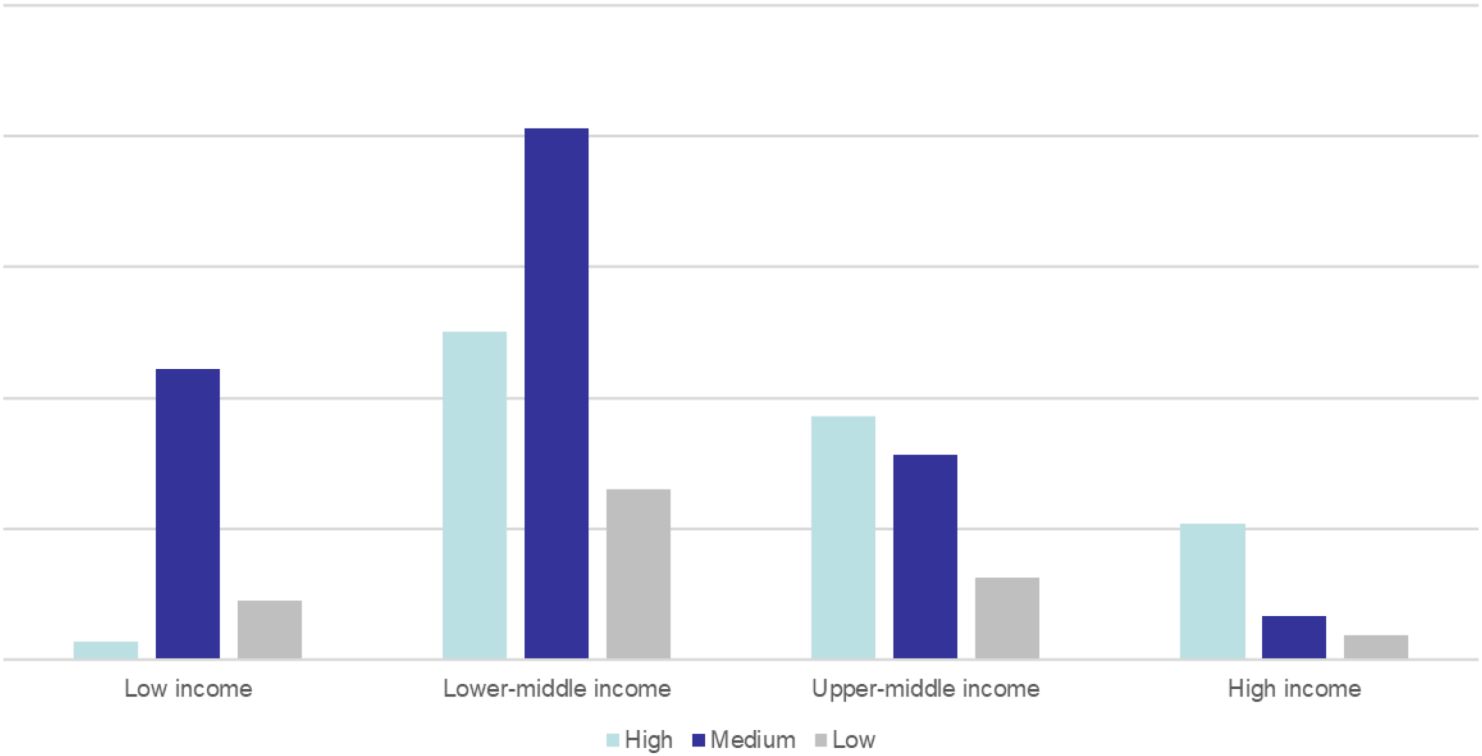
The **global unemployment rate** has remained stable at around 13 per cent **since 2009** but important regional variations exist.

Regional youth unemployment trends

- Unemployment in Northern, Southern and Western Europe keeps decreasing from record high 23.3% in 2013 to 17.8% predicted for 2018.
- Similar trend in Eastern Europe, from 18.0% in 2010 to a predicted 14.2% in 2018.
- Current female unemployment almost doubles that of males in Arab States (26.3 vs. 49.0%) and is 55% higher in Northern Africa (25.1 vs. 38.8%).

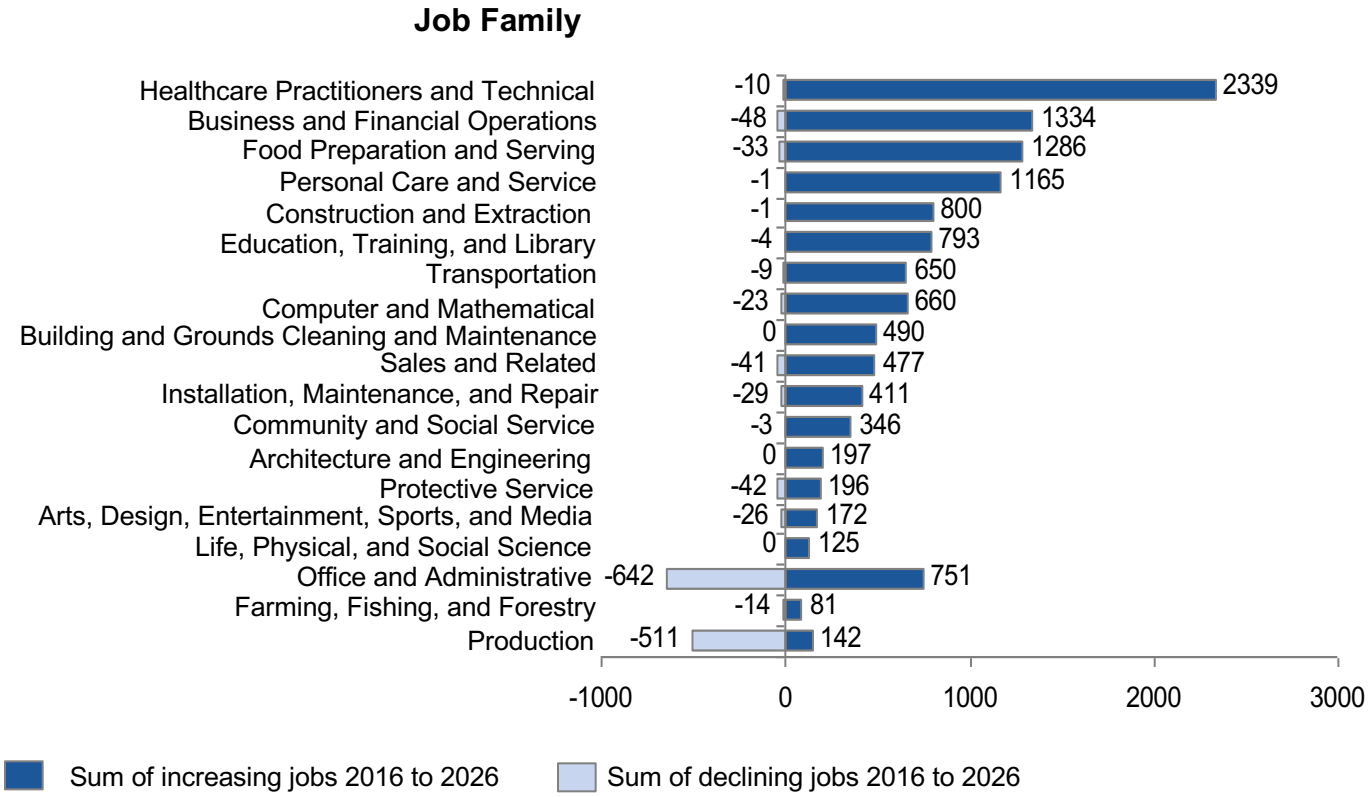


Employment growth by skill-level of occupations 2000-2022



Source: ILO modelled estimates, 2017

Projections for the US job market

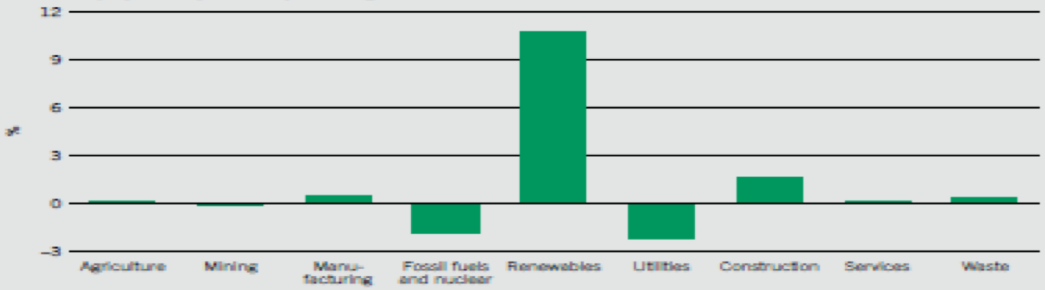


Note: The figures above exclude 4% of US employment, due to differences in SOC and O*NET job categorization
Source: US Bureau of Labour Statistics 2016

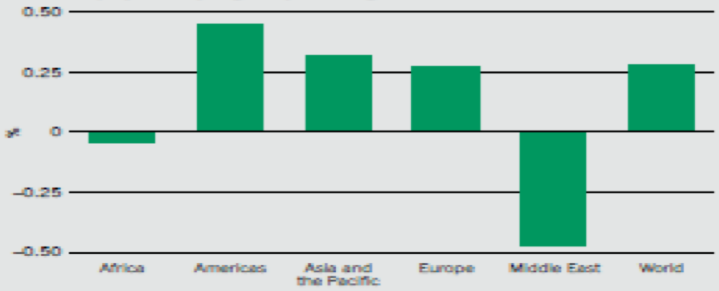
The transition to a low carbon economy

Energy sustainability and employment in 2030

Employment by sector (percentage difference)



Employment by region (percentage difference)

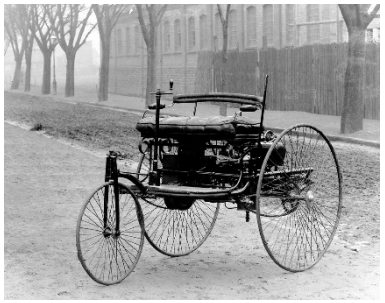


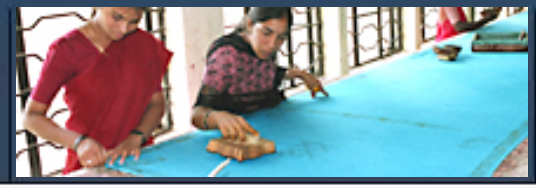
Notes: Percentage difference in employment between the sustainable energy scenario and the IEA 6°C (business-as-usual) scenario by 2030. Appendix 2.1 provides further methodological details on the data and methods used. Vertical scales differ by panel.

Source: ILO calculations based on Exiobase v3.

Drivers of change

- robotisation, machine learning and artificial intelligence
- the internet of things, big data
- 3d printing / additive manufacturing
- biotechnolgy
- change in work organisation
- globalisation
- demographic change
- migration and growing labour mobility
- the transition to a sustainable low carbon economy
- rising educational attainment



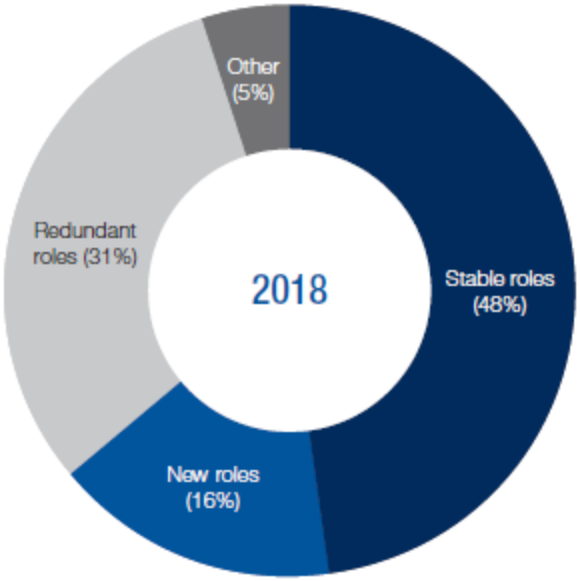


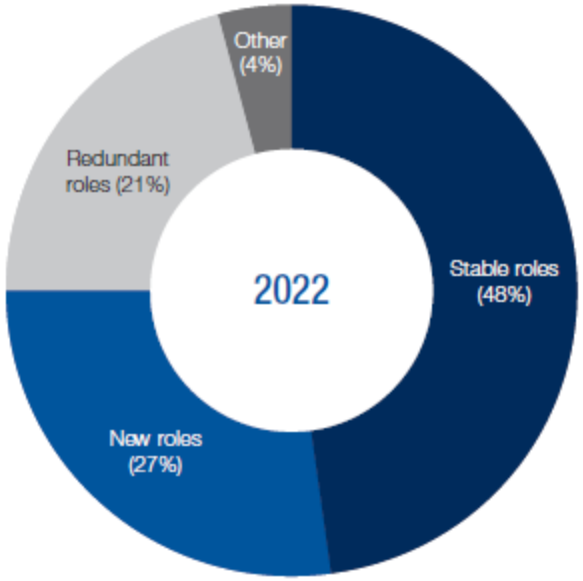
Are jobs at risk?

- almost 50% in advanced economies (Frey & Osborne 2015)
- around 56% in Asia (ILO 2016)
- a little more than 10% depending on how jobs are classified (OECD 2017)
- automatable ≠ will be automated
- jobs ≠ tasks and skills
- not likely any time soon in developing countries
- creative destruction
- opportunities exist: 1 tech job generate 5 indirect jobs

The Future of Jobs Report

A net positive outlook for jobs





Source: Future of Jobs Survey 2018, World Economic Forum.

Impacts on skills development

Which skills will secure jobs?

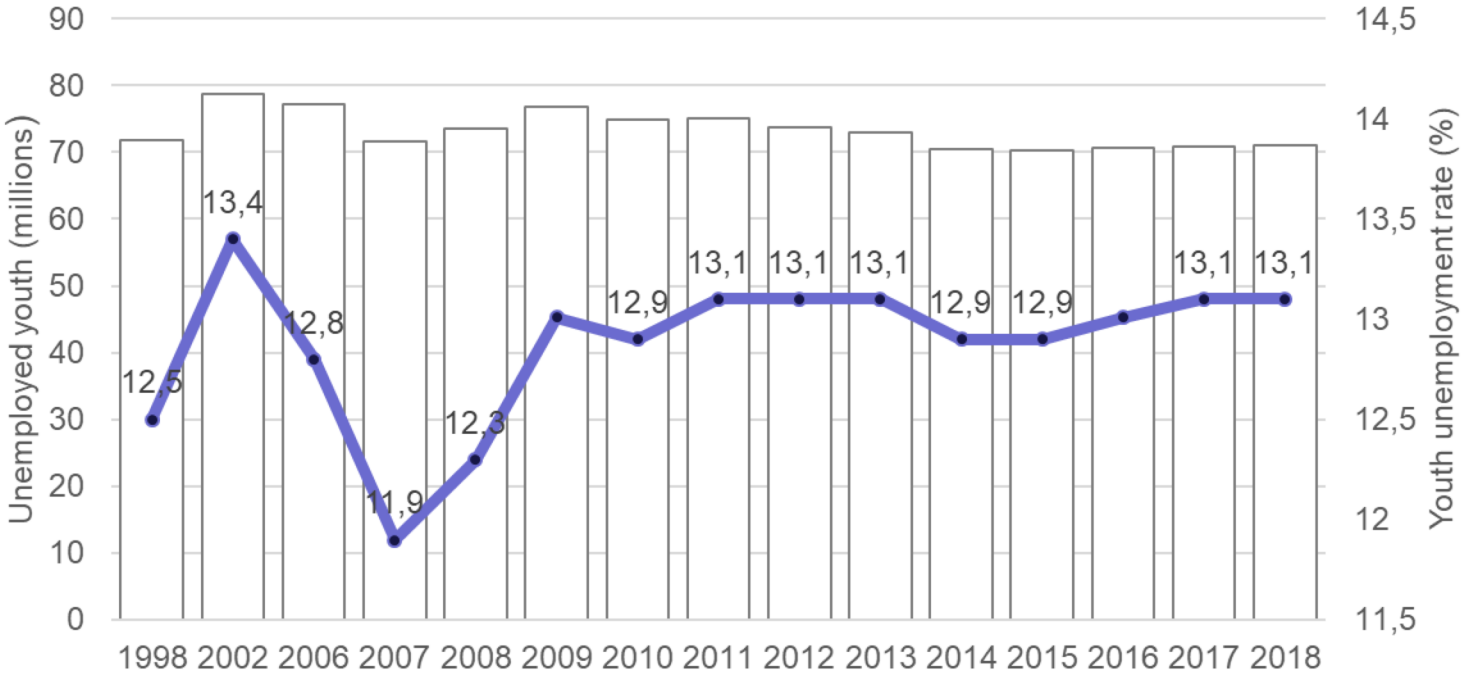
- STEM skills at all levels
- ICT and coding skills
- skills that help to adopt, operate and maintain technologies
- skills that help to create a business case, market and manage technologies adoption
- non-automatable high-manual dexterity tasks
- creativity
- social skills (interaction, care)
- learning to learn
- mitigate the negative impact of job losses

School to Work Transitions for Young People
What's Been Going on?

This presentation will…..

- present current global and regional youth employment situation; and
- present selected results from the ILO school to work transition surveys in 34 countries.

Global youth unemployment



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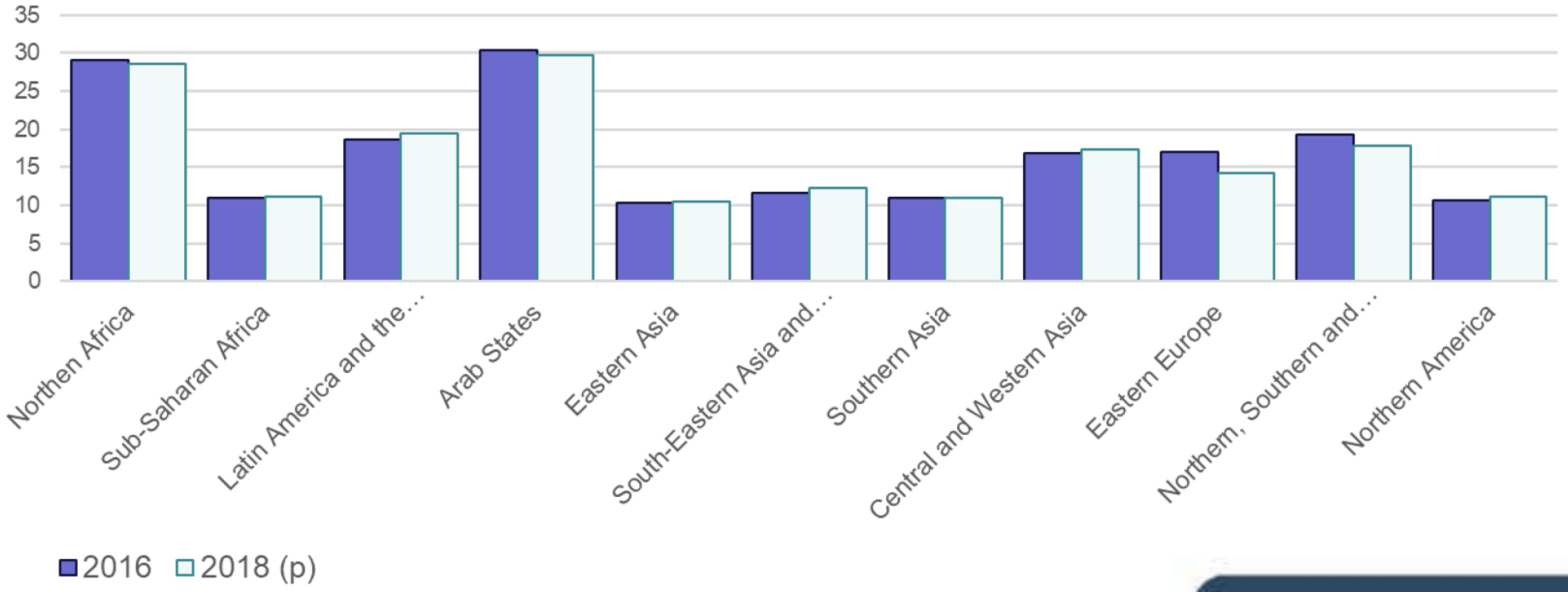


Source: ILO (2017) Global Employment Trends for Youth, Geneva.

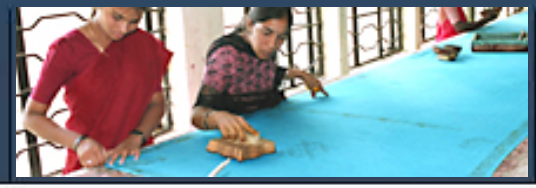
ILO School to Work Transition Surveys (SWTS)

- Work4Youth Project funded by the MasterCard Foundation and implemented by the ILO (2011-2017)
- Data generated through the ILO school-to-work transition survey (SWTS):
  - ✓ Household survey, nationally-representative sample of 3,000 to 5,000 youth aged 15 to 29 years
  - ✓ Standardized questionnaire but nationally-adapted with focus on household characteristics, aspirations and perceptions of youth, extensive details on conditions of work and self-employment, means of job search and history of economic activities
- Open access to data: micro data sets available at www.ilo.org/w4y

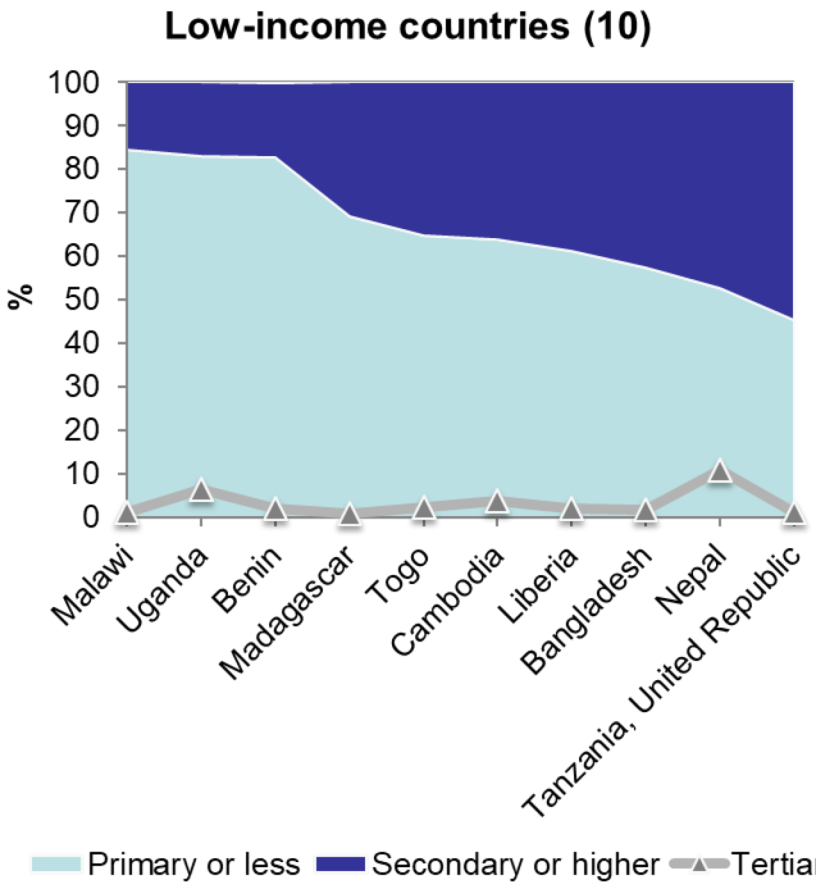
Surveyed countries

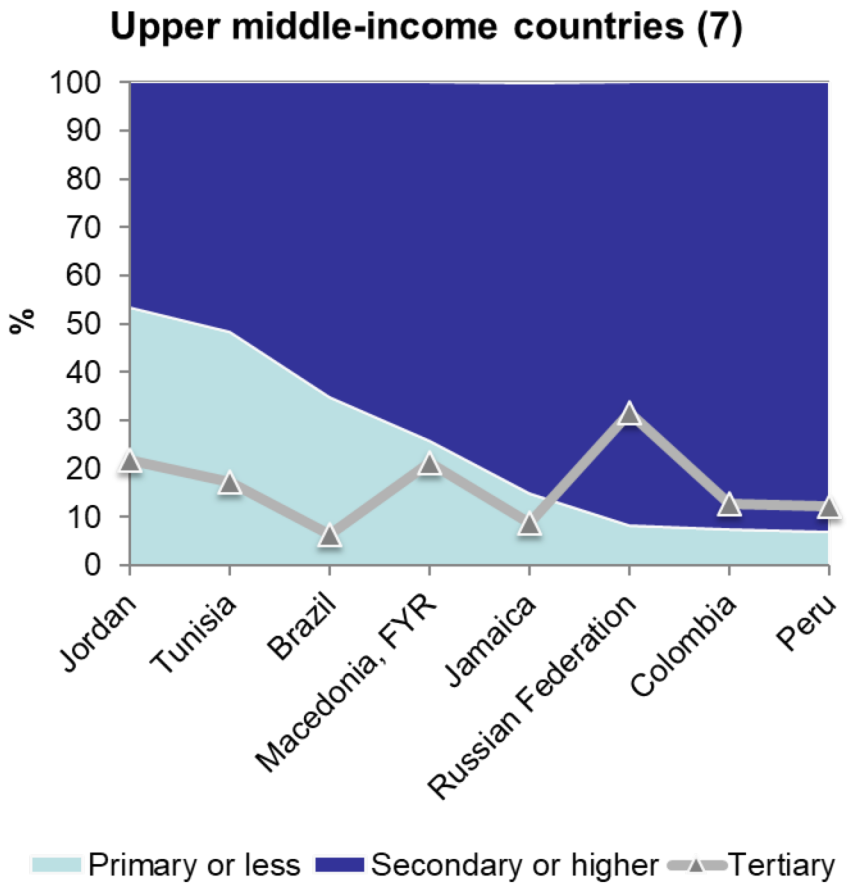
Asia and the Pacific	Eastern Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	Sub-Saharan Africa
Bangladesh	Armenia	Brazil	Egypt	Benin
Cambodia	FYR Macedonia	Colombia	Jordan	Liberia
Nepal	Krygyzstan	Dominican Republic	Lebanon	Madagascar
Samoa	Moldova	El Salvador	Occupied Palestinian Territory	Malawi
Viet Nam	Montenegro	Jamaica	Tunisia	Republic of Congo
	Russian Federation	Peru		Sierra Leone
	Serbia			Tanzania
	Ukraine			Togo
				Uganda
				Zambia

Blue font: One round only, 2012/13.
Red font: One round only, 2014/16.



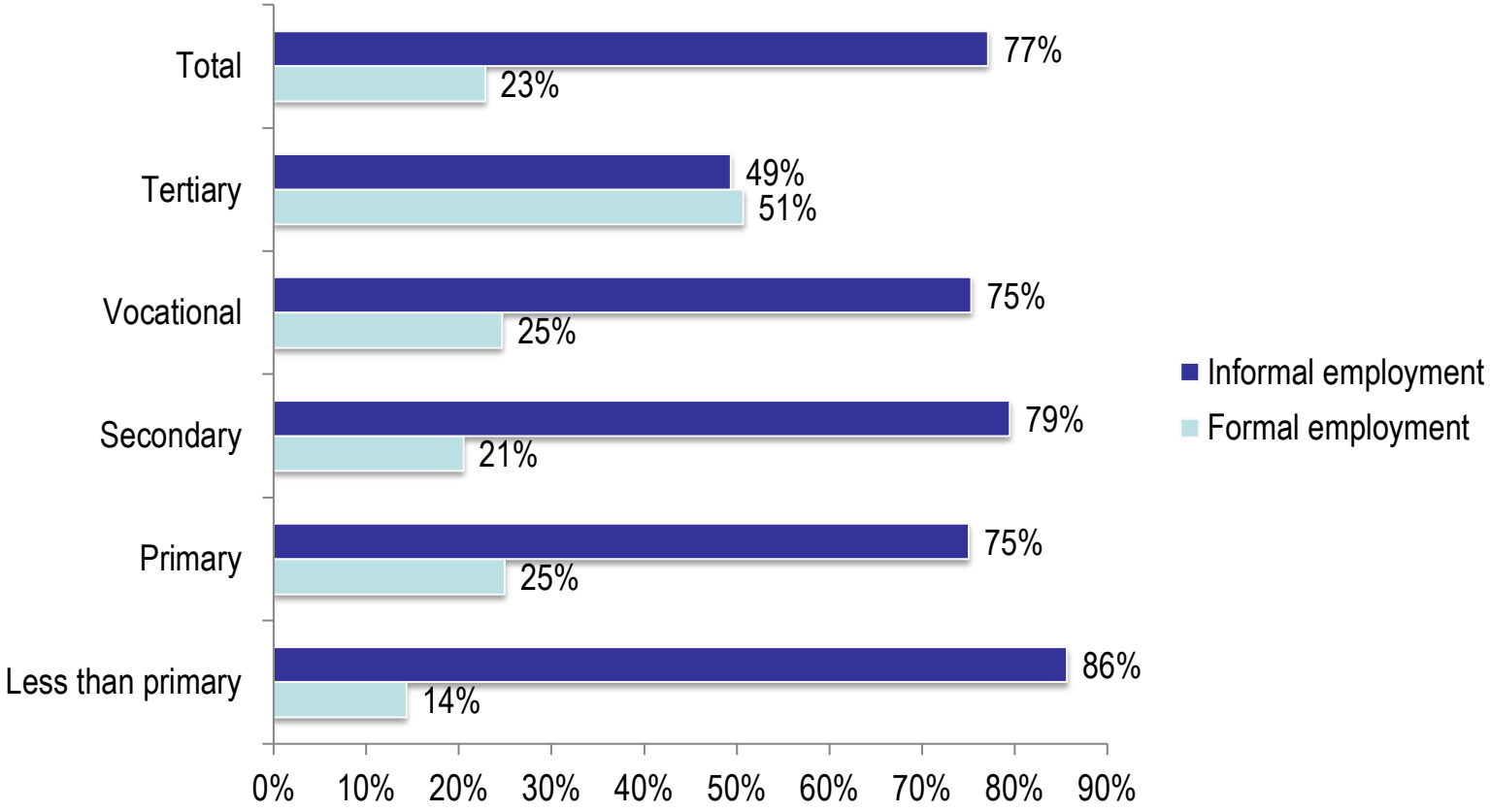
Still more to be done on education and training



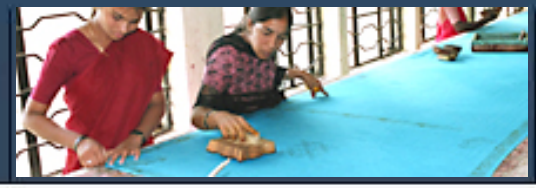


Source: ILO (2016)

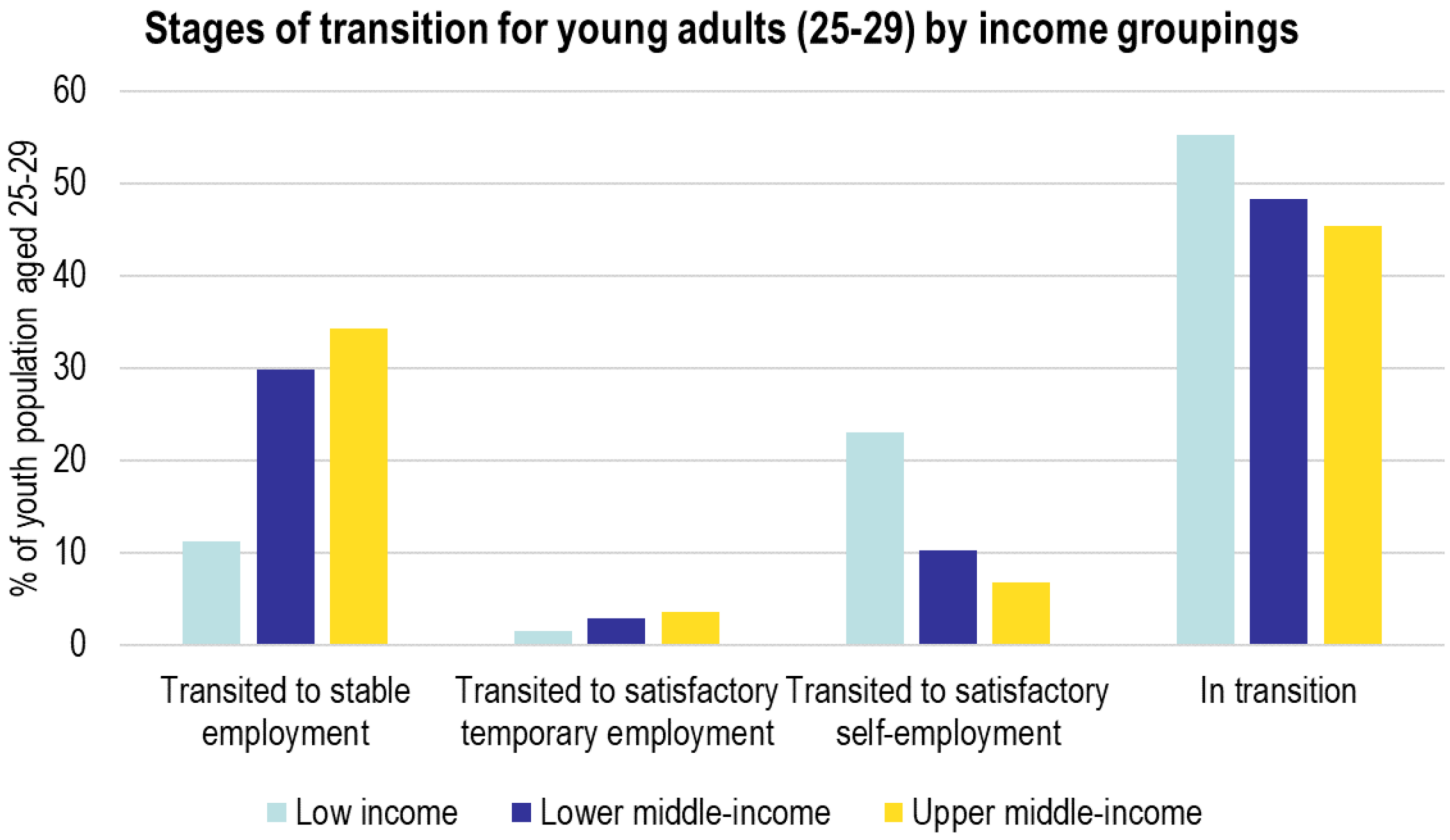
Shares of youth informal and formal employment by levels of completed education (20 SWTS countries)



Source: Shehu and Nilsson (2016) *Informal employment among youth: Evidence from 20 school-to-work transition surveys,* Work4Youth Publication Series No. 8 (Geneva, ILO).



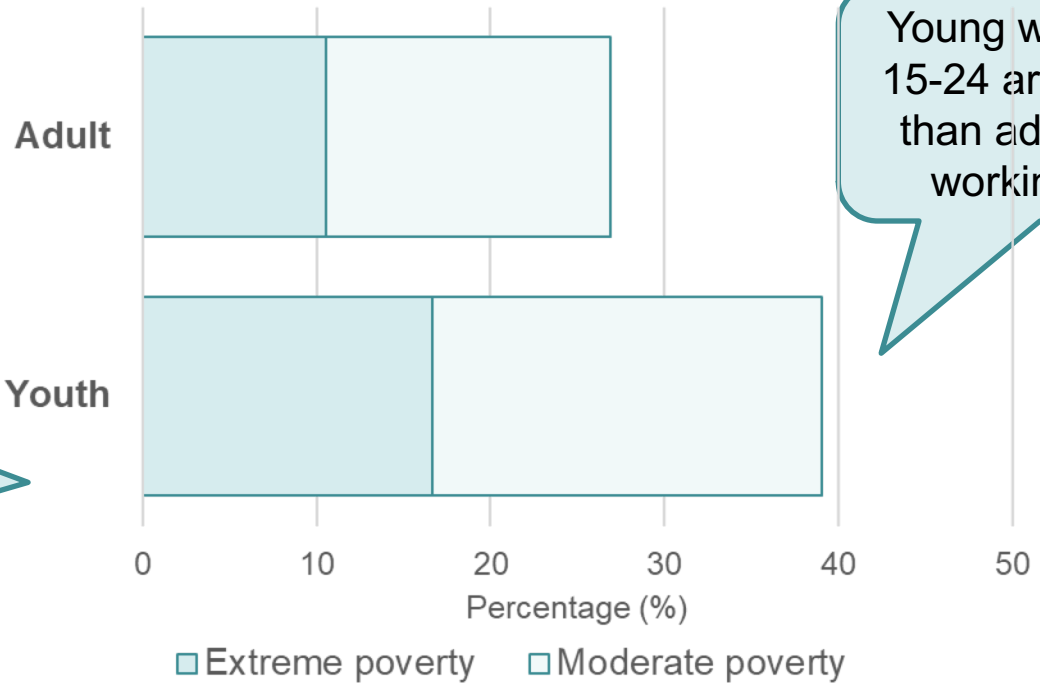
Pathways reflect the breadth (or narrowness) of youth labour market options…



Note: The residual category – transition not yet started – is not shown

Working poverty in emerging/developing countries

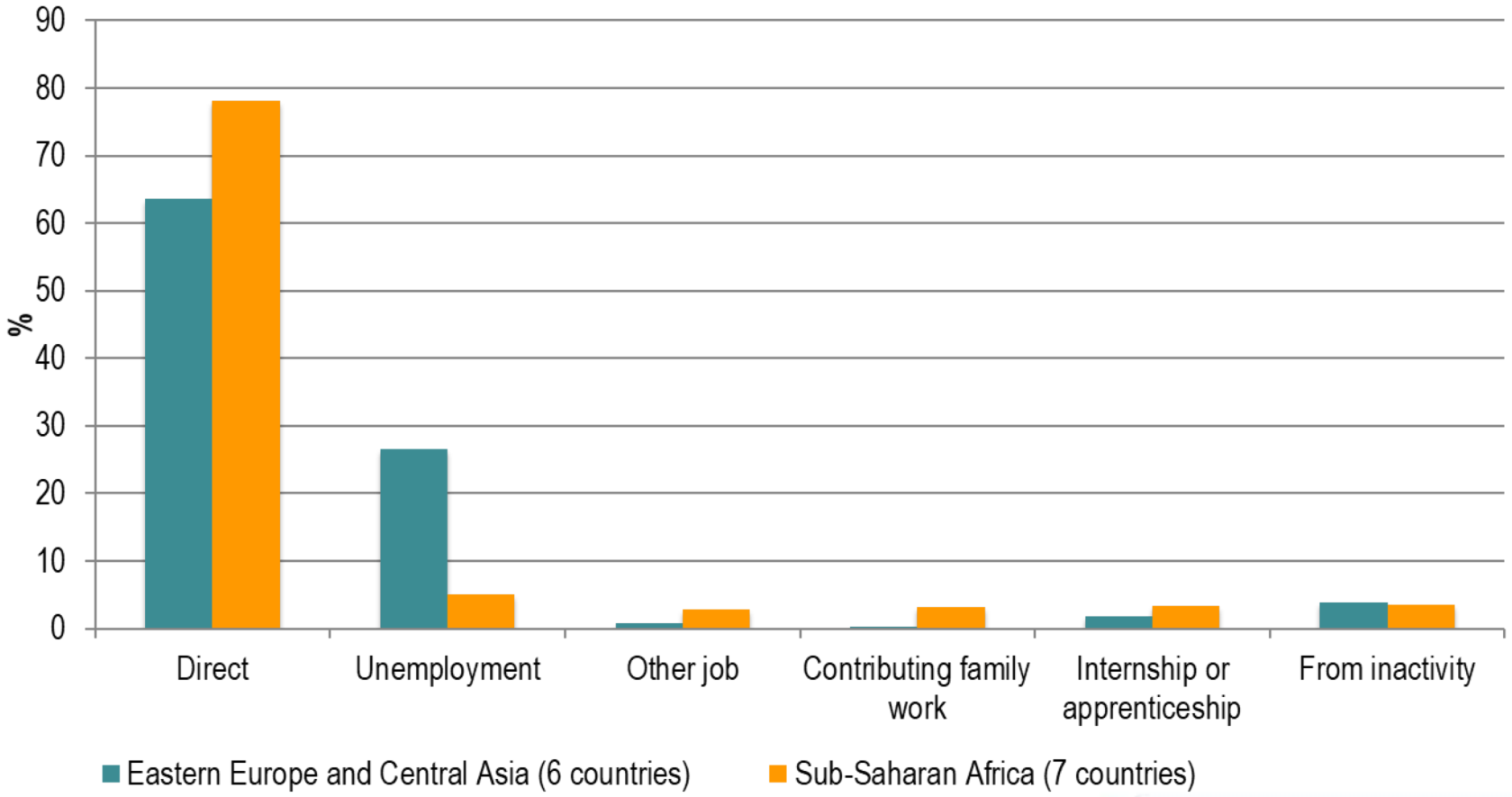
In 2017, 16.7% of working youth were in extreme poverty



Young workers aged 15-24 are more likely than adults to be in working poverty

ILO (2017) Global Employment Trends for Youth, Geneva.

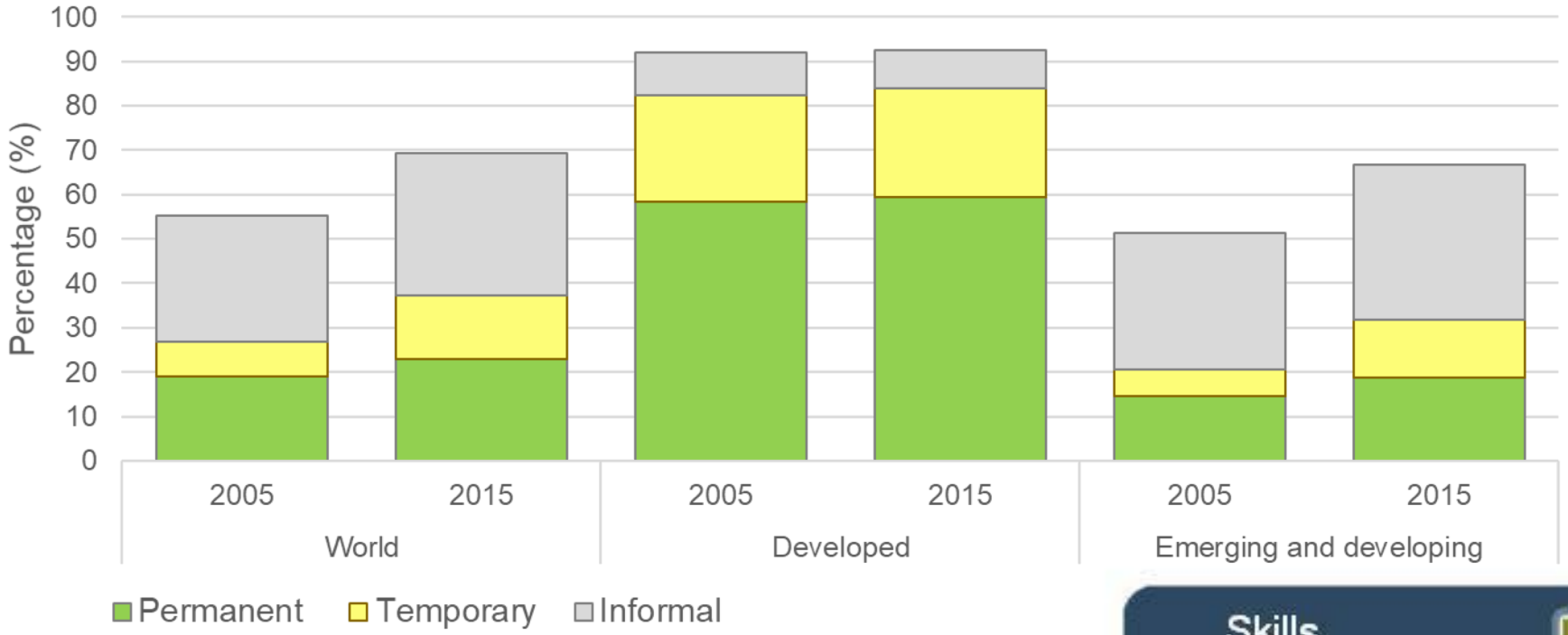
Pathways to decent work: What are young people doing before they 'successfully transit'?



The rise of temporary contracts

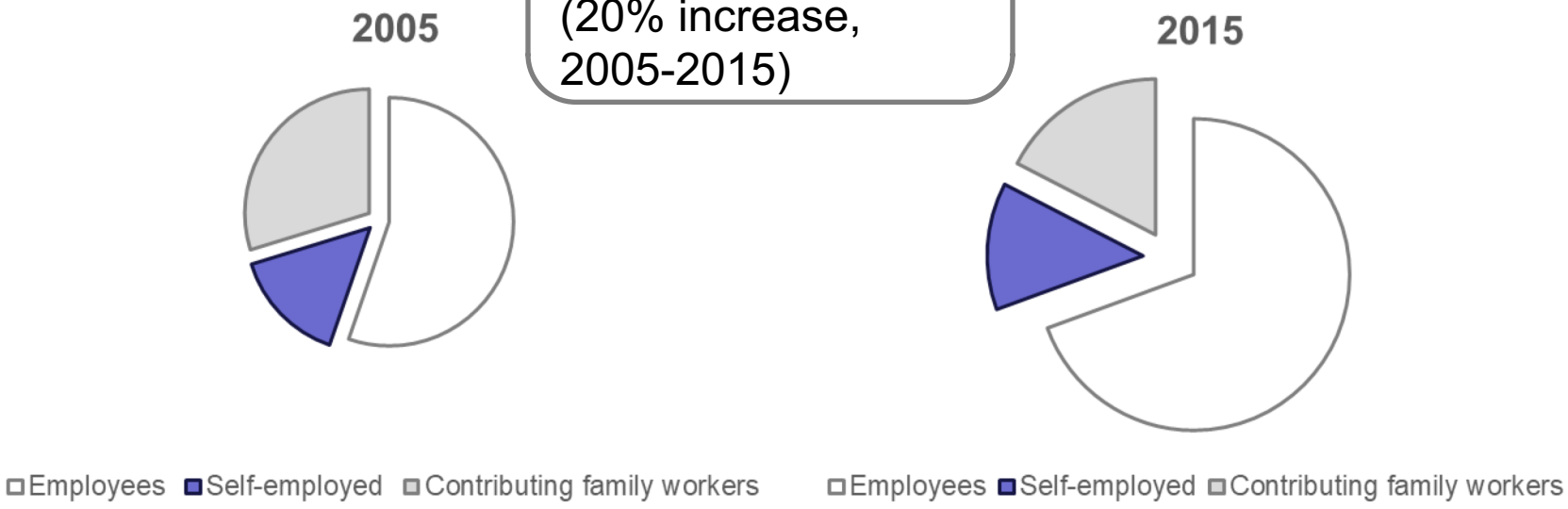
% increase:
Permanent: 21%
Temporary: 59%
Informal: 13%

% increase in temporary contracts:
Developed countries: 4%
Emerging and developing countries: 120%



Types of employment: a reduction in contributing family workers

Significant shift of young workers to wage employment (20% increase, 2005-2015)



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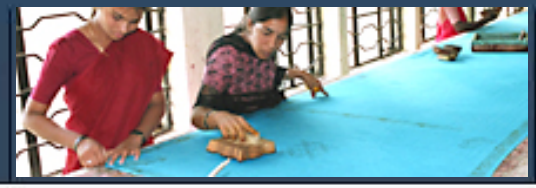
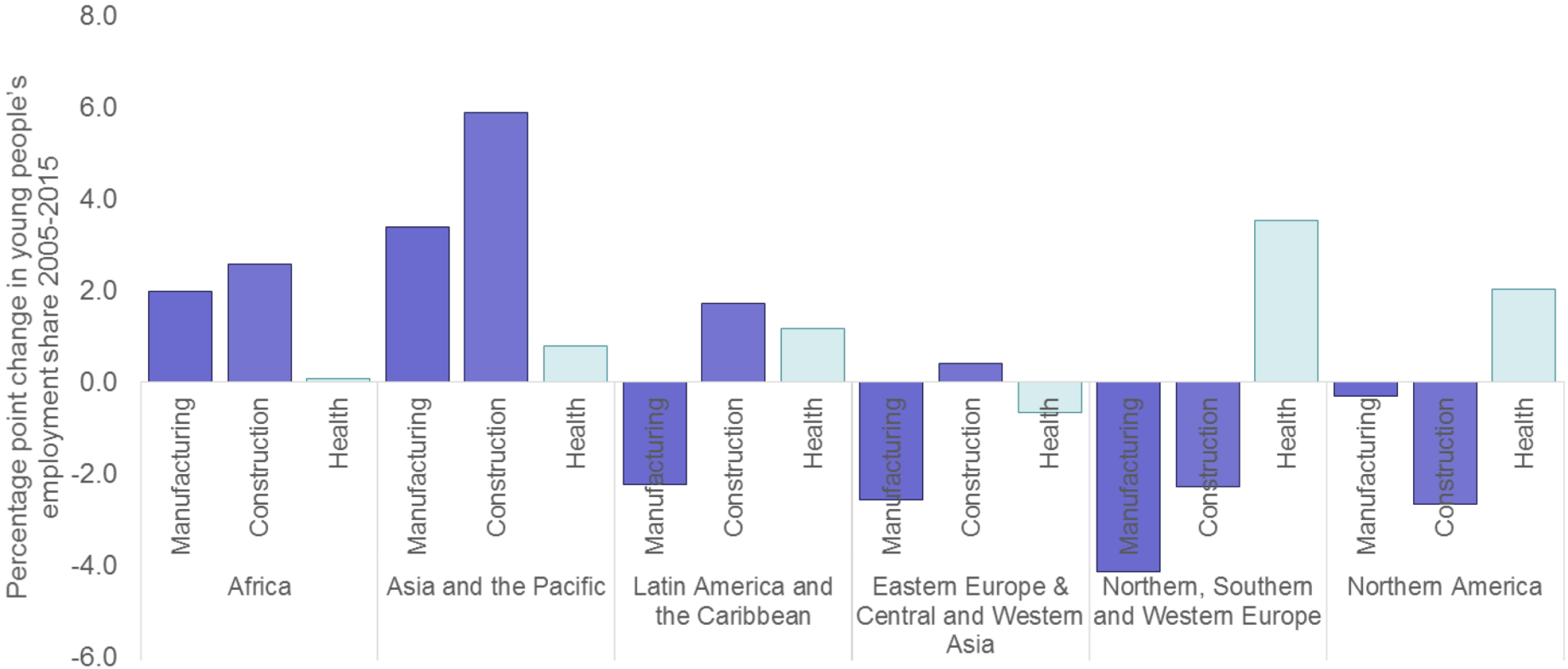


Different sectors provide opportunities in different regions



ILO (2017) Global Employment Trends for Youth, Geneva.

Summary: what have we learned about transitions?

- Pathways to work are diverse and determined by both external and internal factors:
  - state of the economy, informal/formal economy, rural/urban, demographics
  - level of education, household wealth, specialization, gender, networks
- Both the complexity and the duration of transitions can increase at higher levels of development (when too many are chasing too few 'good' jobs and support mechanisms exist to support youth in their job search)
- In general, transitions are becoming longer and with more steps
- As transition pathways become more complex, policy responses need to expand to support young people through a wider variety of options
- Need to even the playing ground so that more start off on an equal footing (concentrating interventions on the most vulnerable)
- More research on transitions in individual countries is required

youthSTATS

- YouthSTATS brought to light previously untabulated statistics from an inventory of over 150 household-based surveys run in over 70 countries
- YouthSTATS also includes the tabulated indicators based on all available SWTS, with disaggregation by sex, age, geography, level of education

youthSTATS was intregated into:
www.ilo.org/ilodata

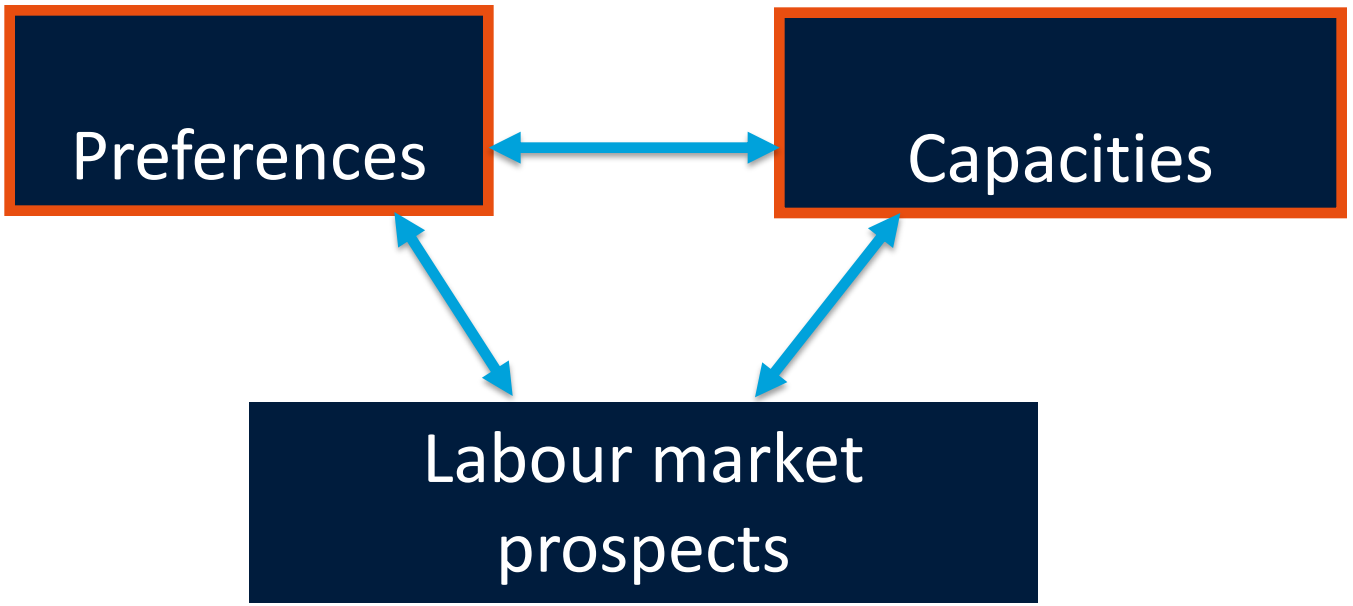
youthPOL

- Access to information on global youth employment policy measures is vital for policy makers seeking to promote decent work for youth
- Until now, this information has not been compiled, nor made publicly available. YouthPOL comes in to fill this need.
- The database collects and analyses policy measures designed specifically for youth and those for the wider labour market
- YouthPOL is a *work in progress*, with data added all the time. Currently there are data available from 20 countries, with 95 documents covered.

www.ilo.org/youthpol-eanalysis

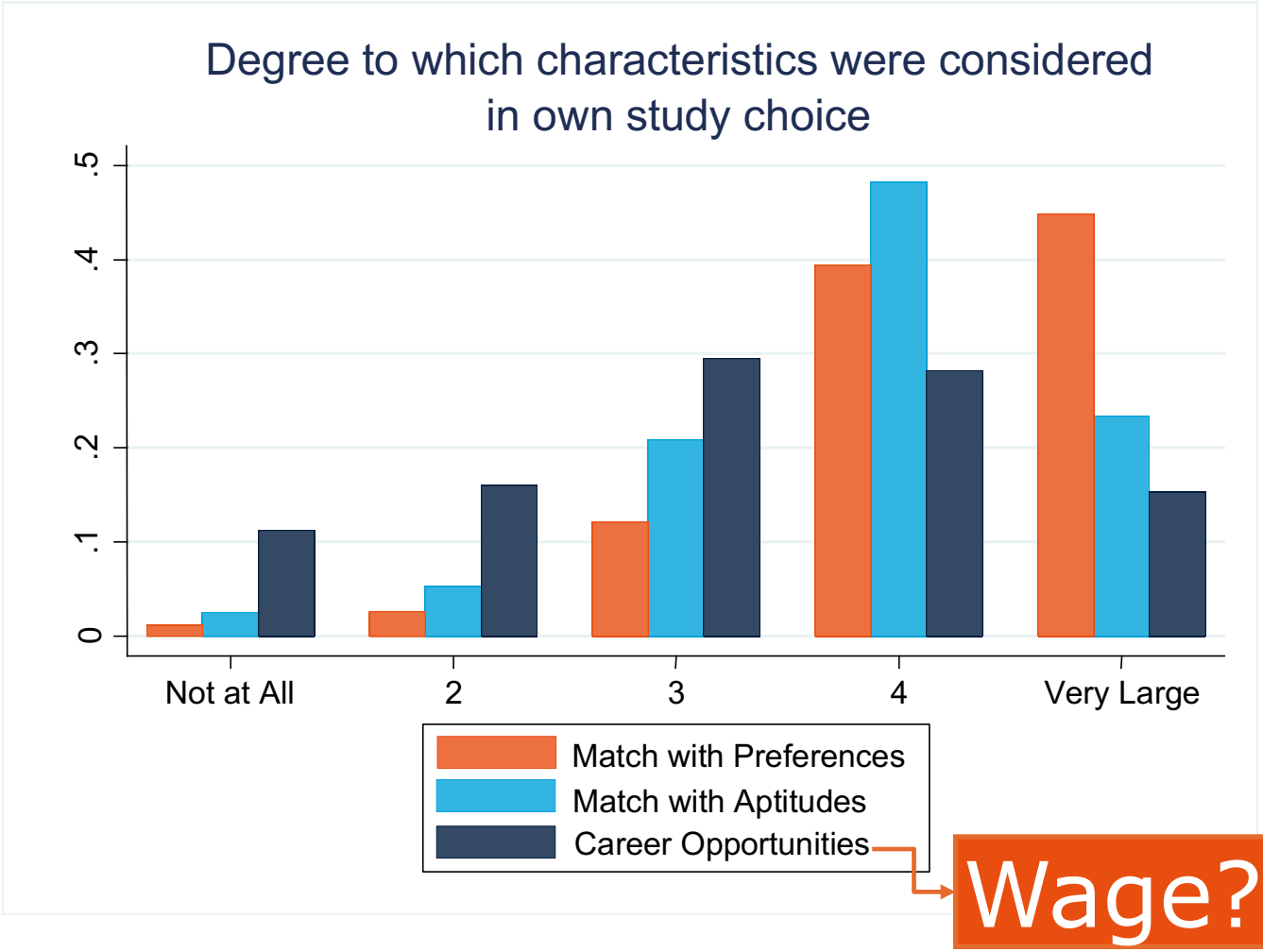
Field choice & labour market signals

Simple choice model for field-of-study choice



Do labour market prospects matter when choosing?

How did vocational educated youngsters choose their field of study?



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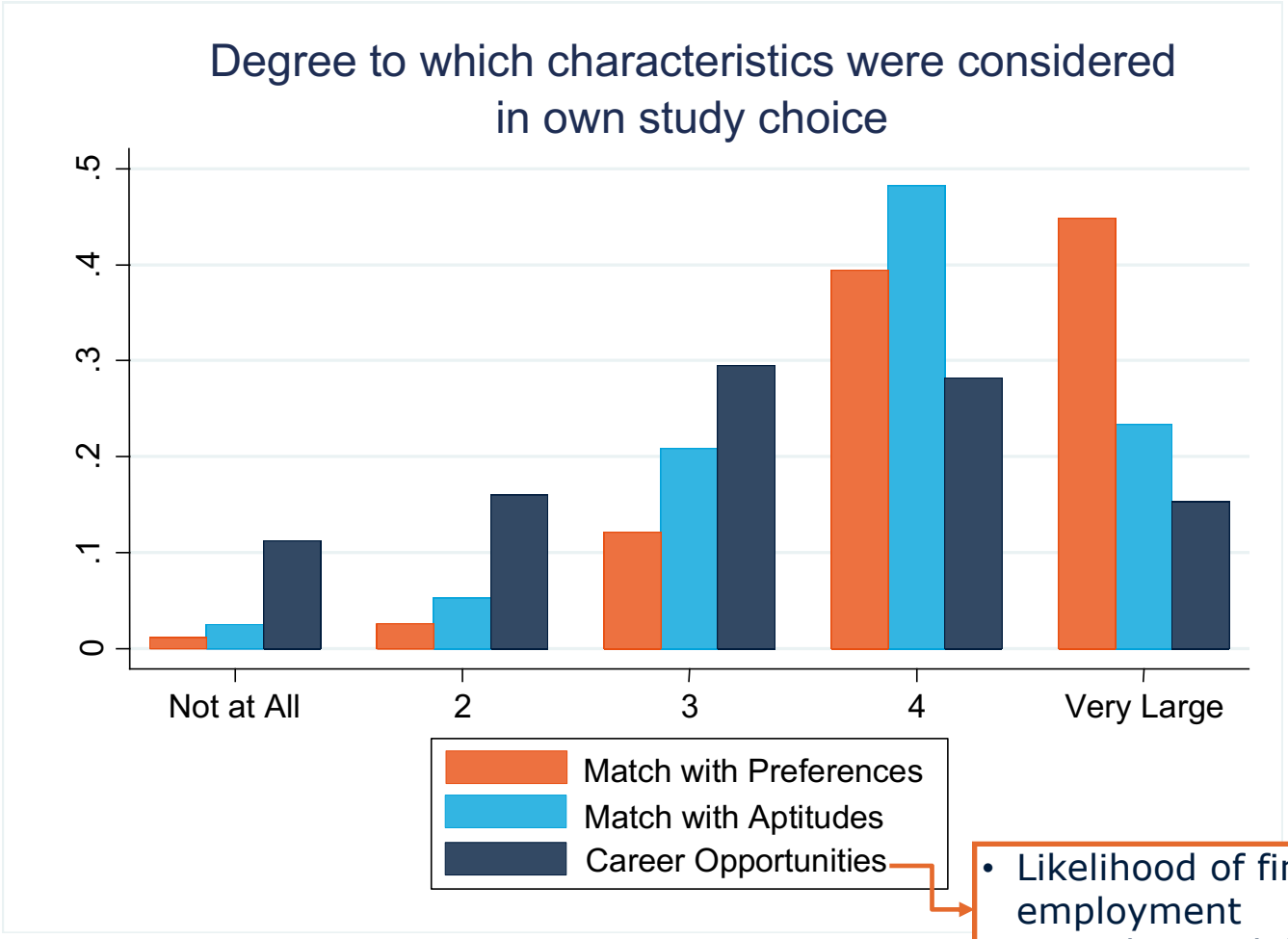

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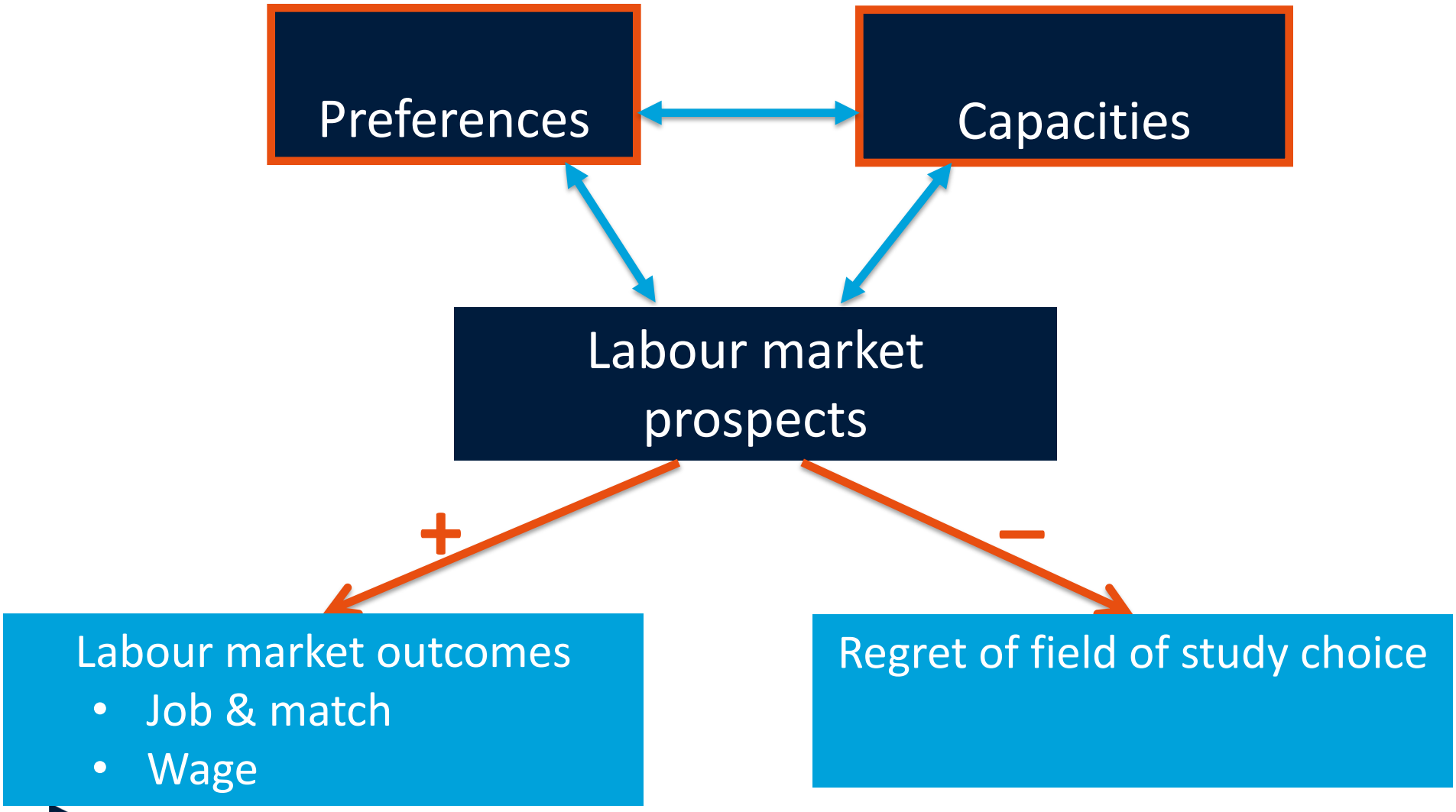

Choice experiment for field choice

- Choose between 2 mbo-fields that differ by 6 characteristics:
  - **Match with preferences & capacities**:
    - what one likes — poor / average / good
    - what one is good at — poor / average / good
  - **Labour market**:
    - entry unemployment — high / average / low
    - career prospects — poor / average / good
  - **School**:
    - travel time
    - quality internship supervisor

Choice experiment: findings

- Match with preferences is most important factor in choice
- Entry unemployment is second most important factor!
- Signal ‘poor’ has much larger effect on choice
- Trade-off between match with preferences and employment opportunities

Questions:

1) What measures do you consider the most needed for successful school-to-work transitions?

2) What lessons learnt from the Netherlands are the most applicable to other contexts?

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