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Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO
Economic Policy Directorate

The Impacts of Digital Technology on Employment

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Agenda

1. Digitalisation – what's new?
2. New work paradigms
3. Success factors for mastering the change
4. Summary

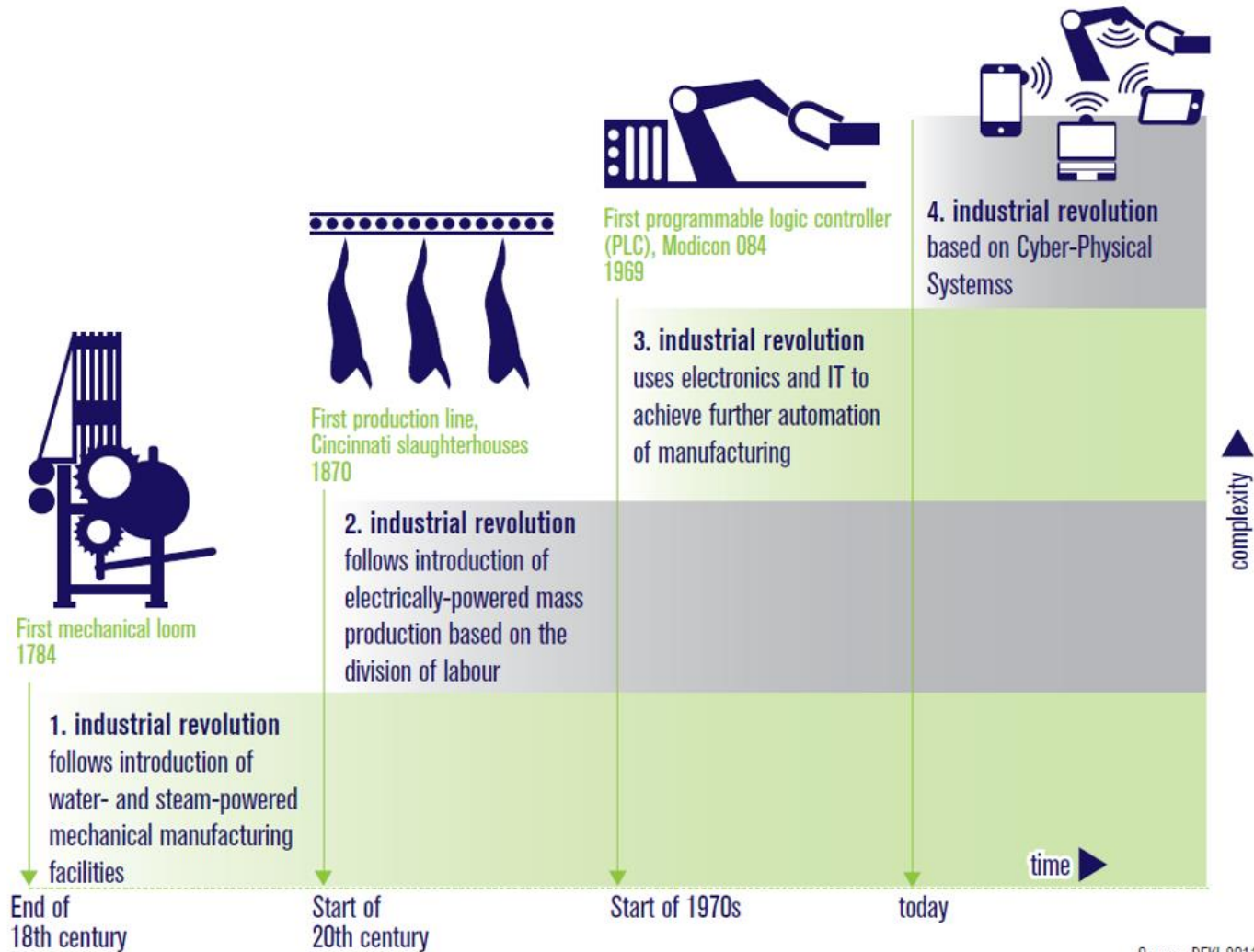


1.

DIGITALISATION – WHAT'S NEW?

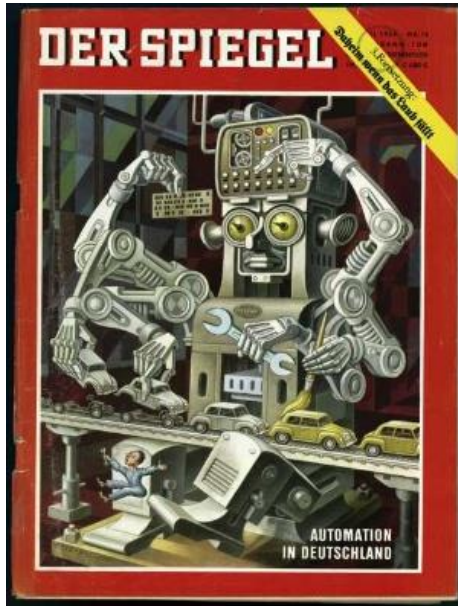


At the dawn of the 4th industrial revolution





Are our jobs disappearing?



1964



1978



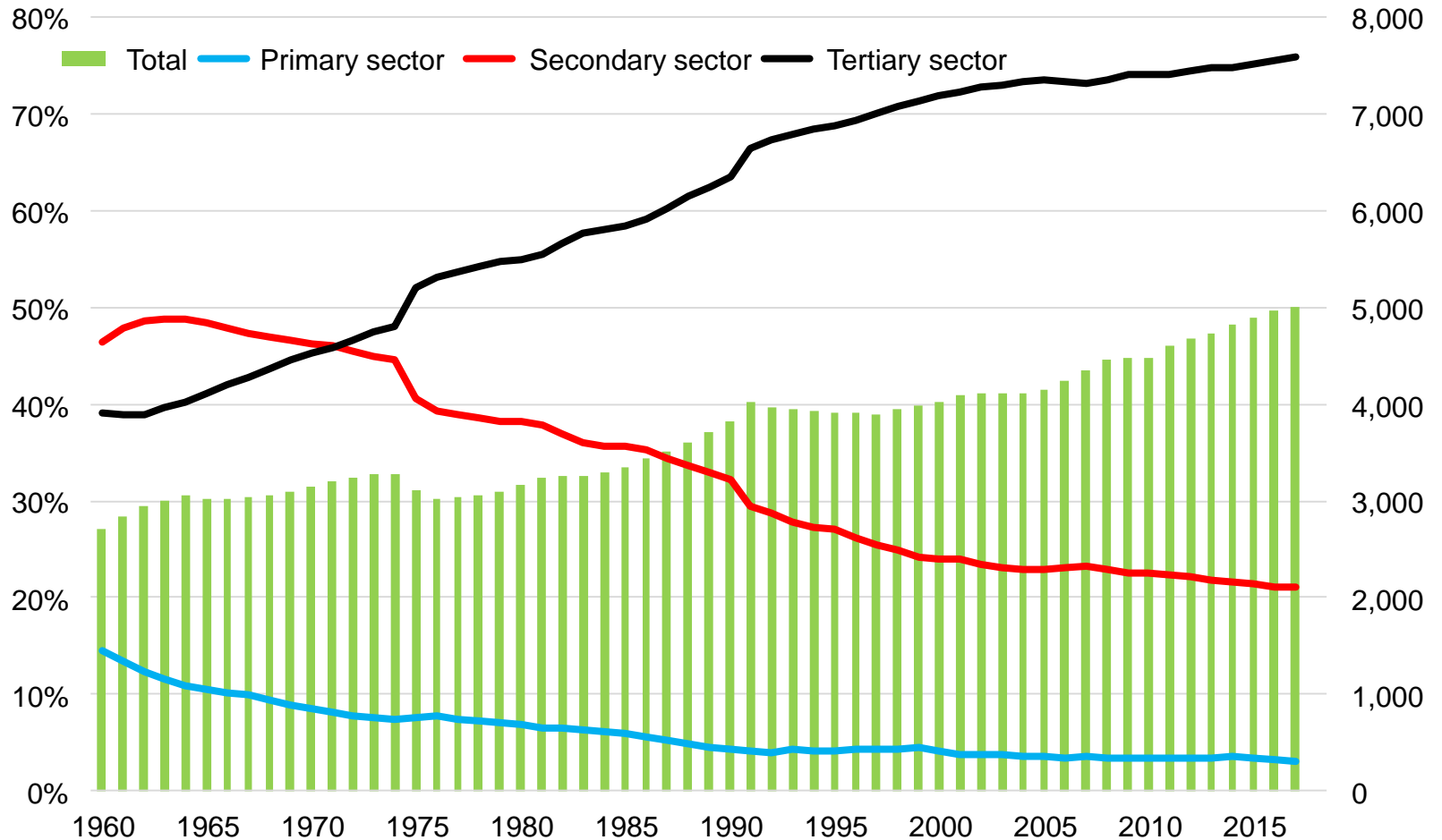
2016



Constant structural transformation – Switzerland

Number of people employed (in thousands, right axis)

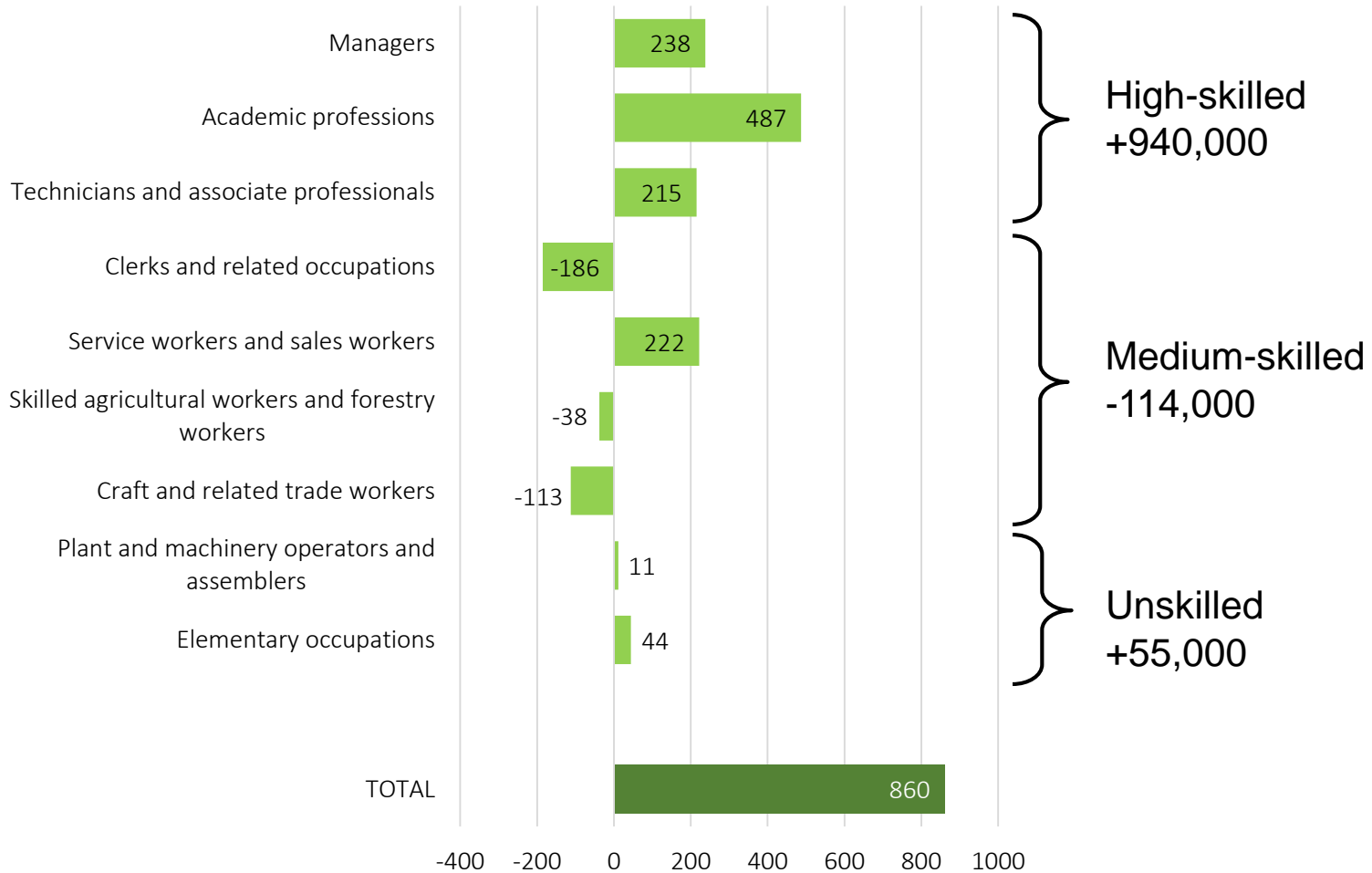
Proportion of total people employed in sector (in %, left axis)





Skills-driven growth in employment

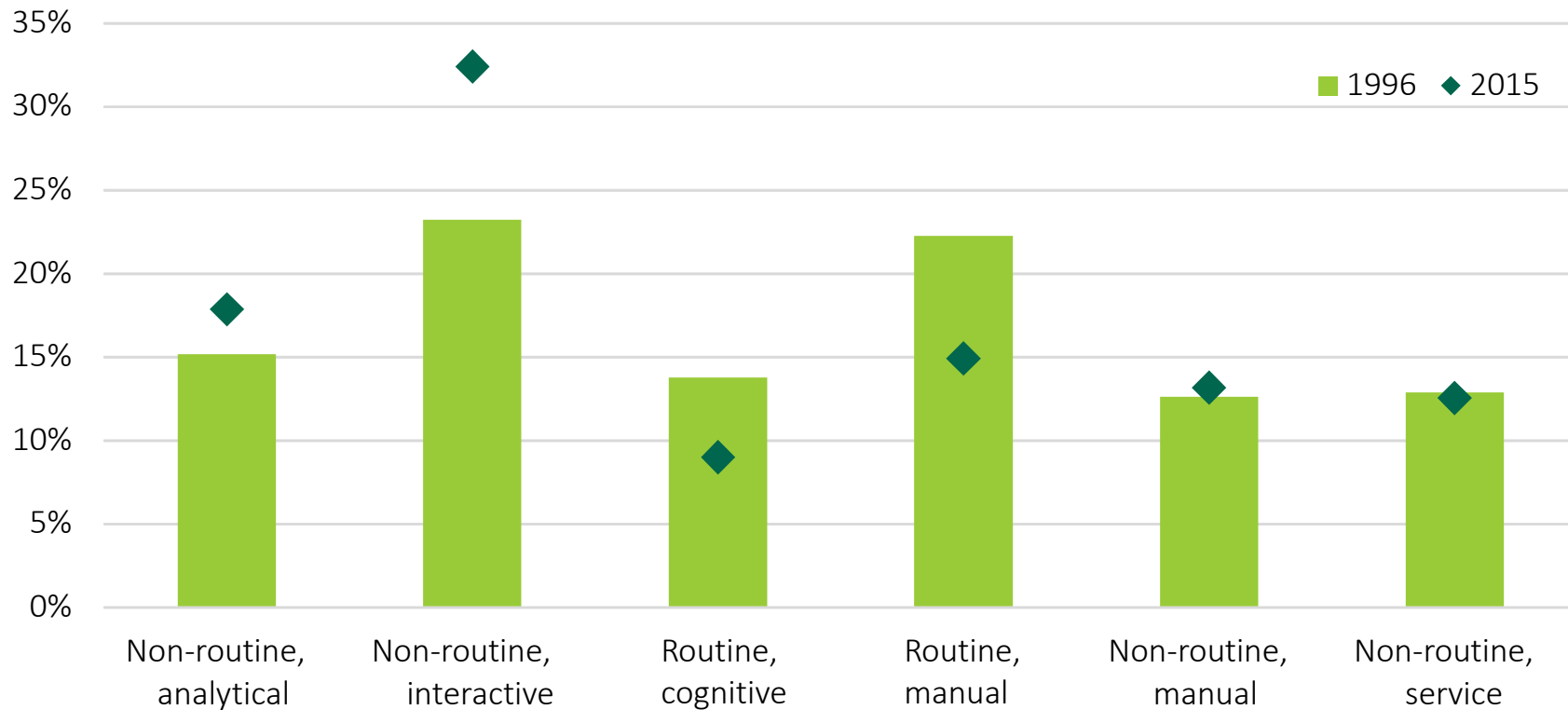
Employment trend, 1996-2017 (2nd quarter), in thousands



Source: FSO/SLFS, special analysis by SECO



Increase in non-routine tasks



Source: FSO/SLFS, JOBSTAT survey, Rütter Soceco



2. NEW WORK PARADIGMS



More flexibility in working arrangements



Location



Time



Operations



Rise of precarious employment relationships?

On-call work...



...sole practitioner...



...fixed-term contracts...



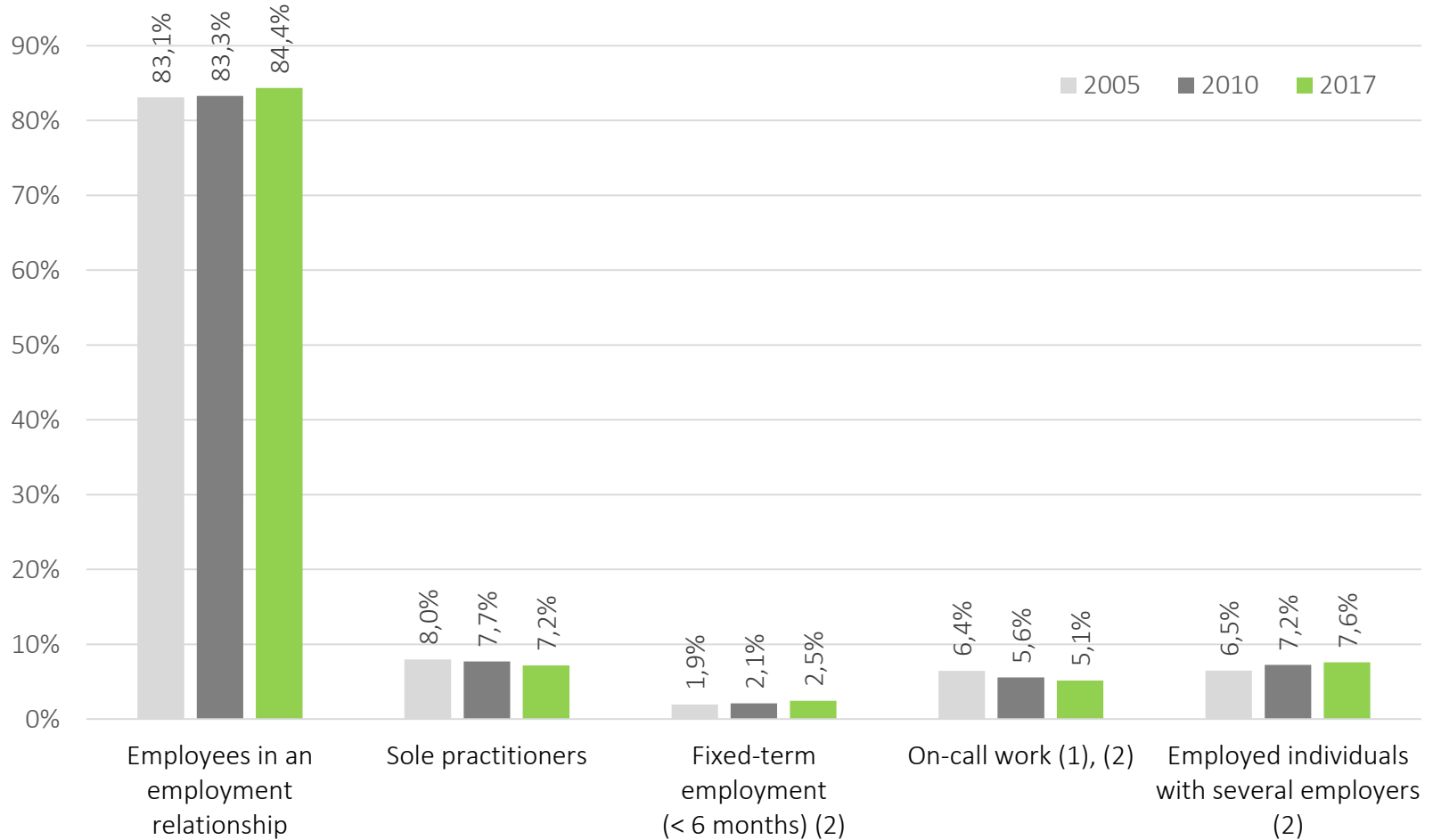
...at low wages?





Significance of new work paradigms

Proportion of workforce by form of employment 2005-2017



Notes: (1) most current figure 2016 annual average instead of 2nd quarter 2017, (2) subcomponents of employees in the employment relationship

Source: FSO/SLFS, special analysis by SECO



Complex distinction between self-employed and employed

Characteristics of employed activity:

- Tied to the business
- Part of a remote hierarchy
- Directed by others and bound by instructions
- Supervision
- No specific business risk
- Other...

Characteristics of self-employed activity:

- Substantial investments off one's own back
- Own business premises
- Freedom to organise working time
- Hiring of employees
- Bear business risk
- Acting for several individuals in own name and on own account
- Other...



3.

SUCCESS FACTORS FOR MASTERING THE CHANGE



Successful change is based on several pillars





Enabling unemployment insurance

Educational measures

- Courses
- Apprenticeship host companies
- Vocational training



Focus on education

Employment measures

- Programmes for temporary employment
- Motivational semesters (SEMO)
- Internships

Special measures

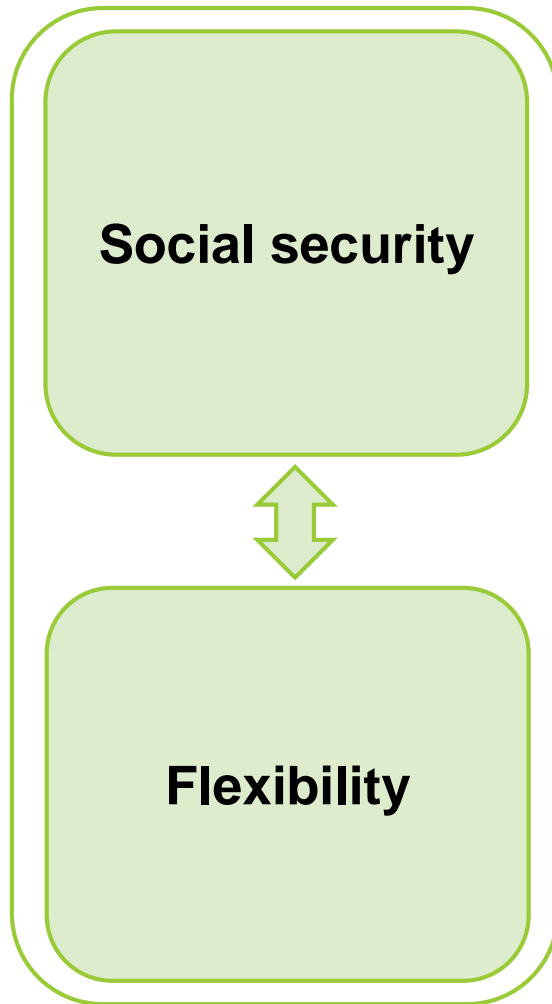
- Training allowances
- Back-to-work allowances
- Contributions to commuting costs, including weekly commuters
- Support in promotion of self-employment



Focus on education

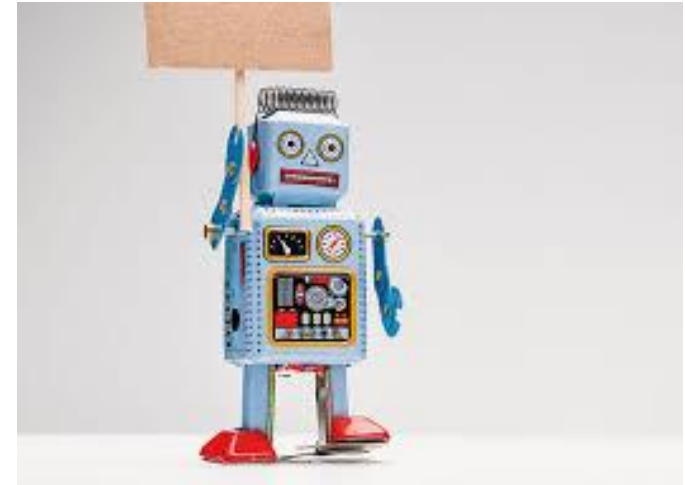


Challenge of flexicurity 4.0



- Objectives:
 - Well-conceived social security, focus on the employed with difficult circumstances
 - Cushion adverse shocks
- Challenge:
 - Does it cover non-standard/new work paradigms?

- Objectives:
 - Quantitative and price flexibility, market-oriented education
 - Enable structural change
- Challenge:
 - Distinction between the status of self-employed – employed?



4. SUMMARY



Swiss Federal Council focus areas

- Continuing education of low-skilled and especially older employees, targeted increase in basic skills
- Improved availability of data on new work paradigms and adult skills
- Monitoring and reporting on relevant trends in the context of digitalisation of the labour market – report in five years
- Analysis and recommendations related to making social insurance more flexible / social security law



Digitalisation a “moving target”

**“It is not our job to predict the future,
but to be prepared for it.”**

Pericles (circa 500 – 429 BC)

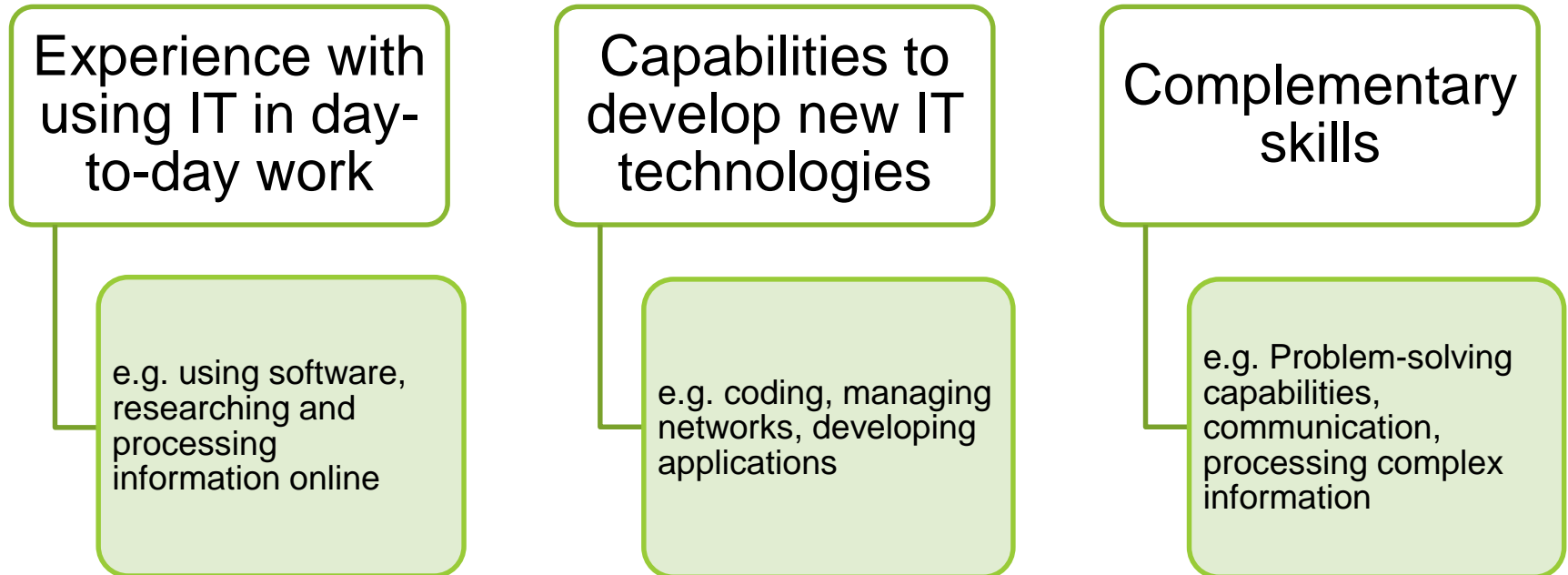




APPENDIX



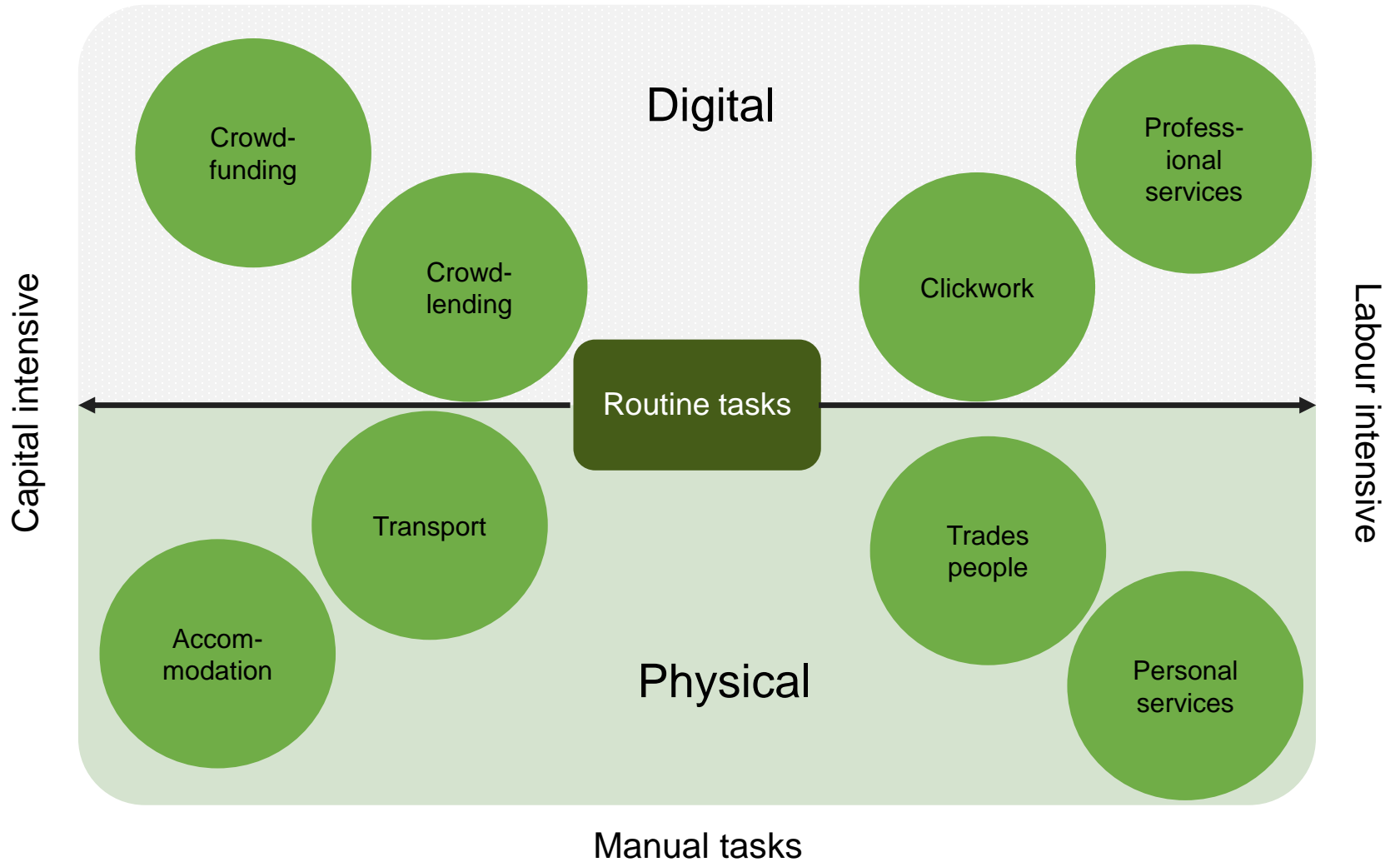
Effects on skills requirements





New work models

Cognitive tasks





Drivers of the “new” digitalisation

- Digital data and interconnectedness
(mobile internet, internet of things, big data etc.)
- Advances in automation
(adaptive manufacturing, 3D printers etc.)
- Online platforms and new business models

