



European Foundation
for the Improvement
of Living and Working
Conditions

The tripartite EU Agency providing knowledge
to assist in the development of better social,
employment and work-related policies

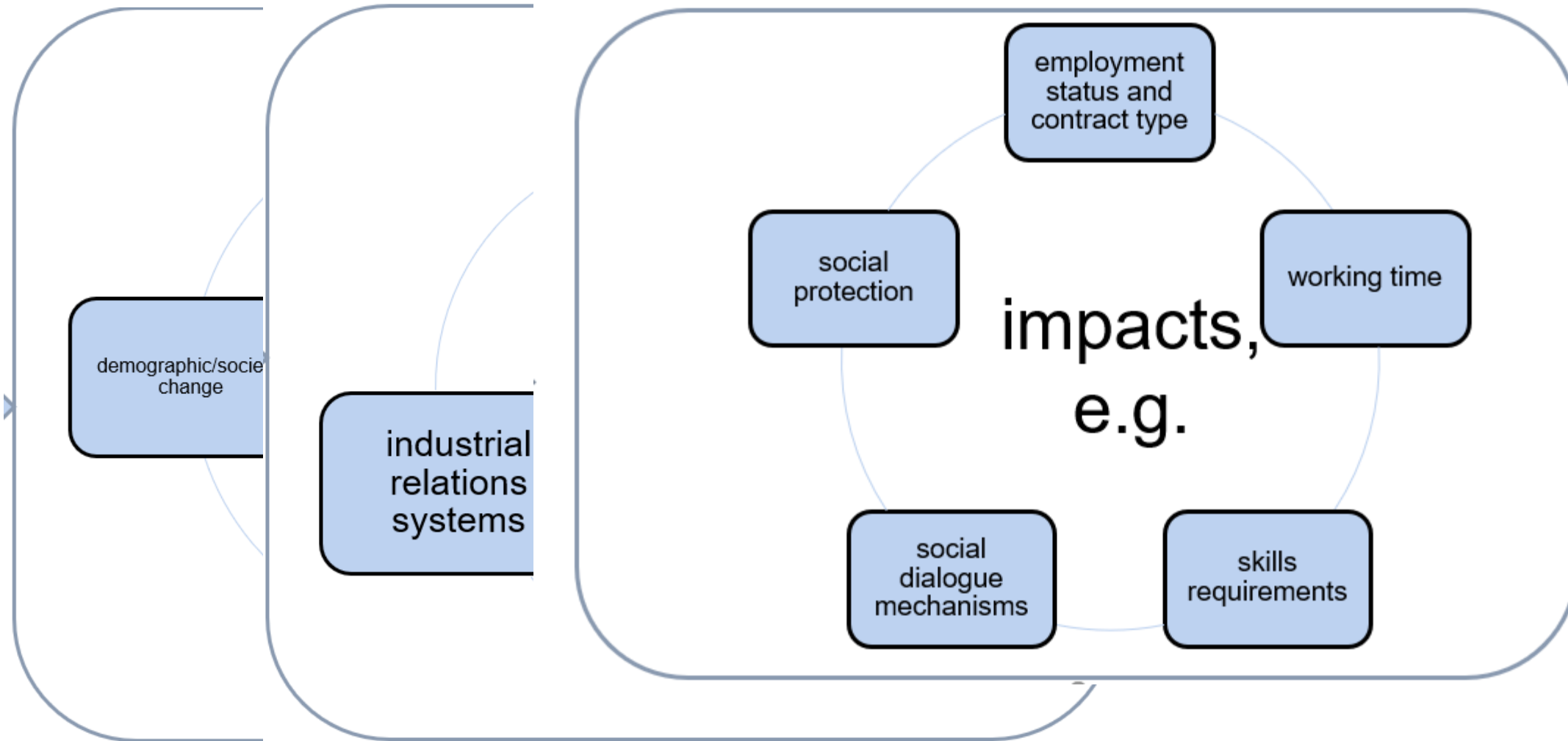
What is changing at work?

The effects of digitalisation on the quality of working life
Eurofound national level seminar

Barbara Gerstenberger, Eurofound

26 November 2019

What is behind the change?



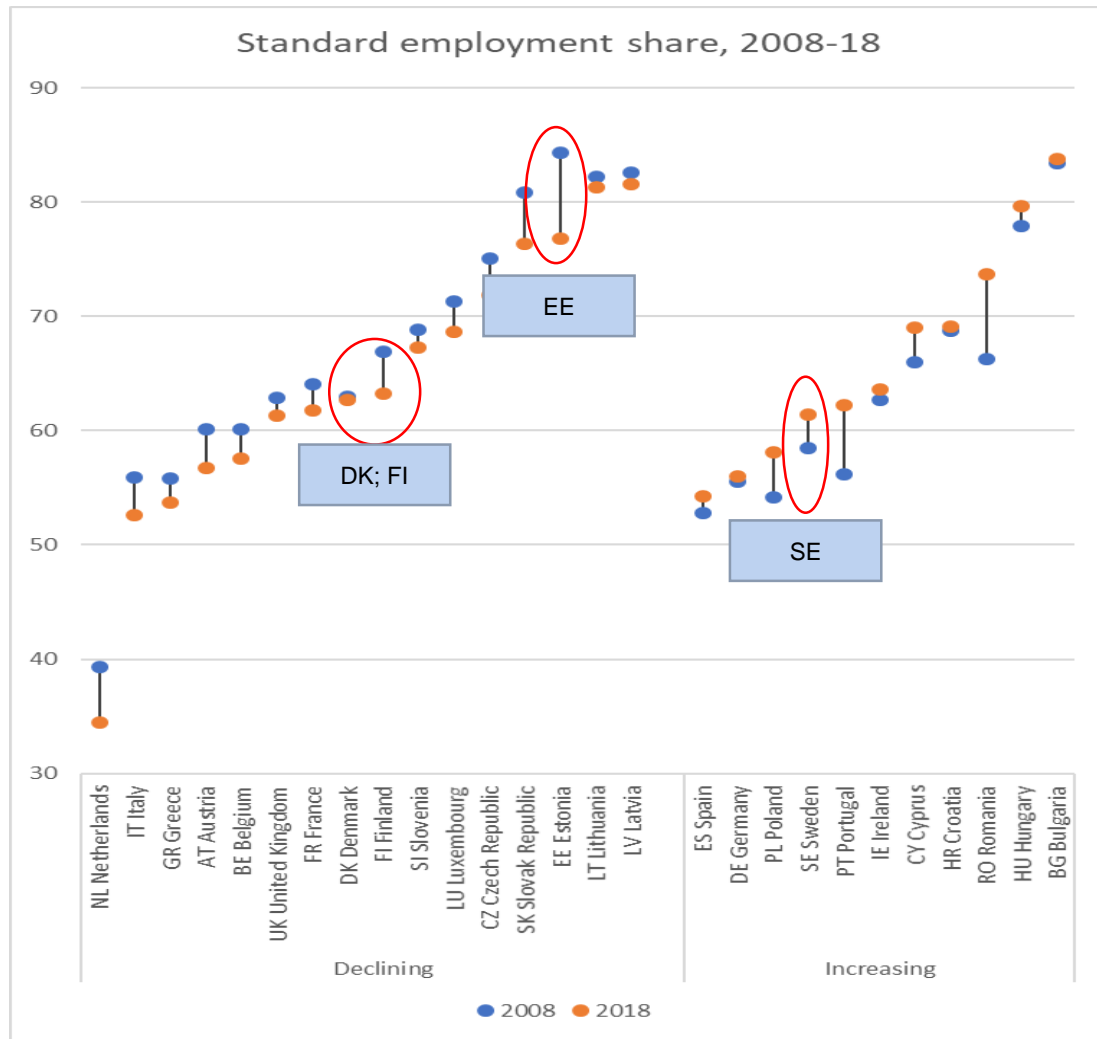
Composition of the workforce

Are workers different?

More - more women, more older workers, more higher educated, more service sector workers

EU28	2018, %	change 2008-2018, ppts
Employment rate (20-64)	73.2	+2.7
Gender employment gap (15+)	8.0	-2.5
Older worker (>=55 yrs) share (15+)	19.4	+5.7
Graduate share (15+)	34.9	+9.3
Services share (15+)	71.4	+4.2

Standard vs. non-standard employment



What the aggregate data do not show...

- Increase in short-hours part-time work
- Higher levels of involuntary part-time of men
- Shortening duration of fixed-term work
- High share of involuntary fixed-term work
- Increase in part-time self-employment
- Increase in own-account workers
- ‘Compound’ non-standard work
- New forms of employment

Changes in the task content

Are workers doing different things?

Eurofound taxonomy of tasks

Content

1. Physical tasks: physical manipulation and transformation of material things:

a. Strength

b. Dexterity

2. Intellectual tasks: manipulation and transformation of information and the active resolution of complex problems:

a. Information processing (literacy – business, technical, humanities - and numeracy – accounting, analytic)

b. Problem solving (gathering and evaluation of information, creativity and resolution)

3. Social tasks: interaction with other people:

a. Serving/attending

b. Teaching/training/coaching

c. Selling/influencing

d. Managing/coordinating

Methods and tools

1. Methods: forms of work organisation used in performing the tasks:

a. Autonomy

b. Teamwork

c. Routine (repetitiveness and standardization)

2. Tools: type of technology used at work:

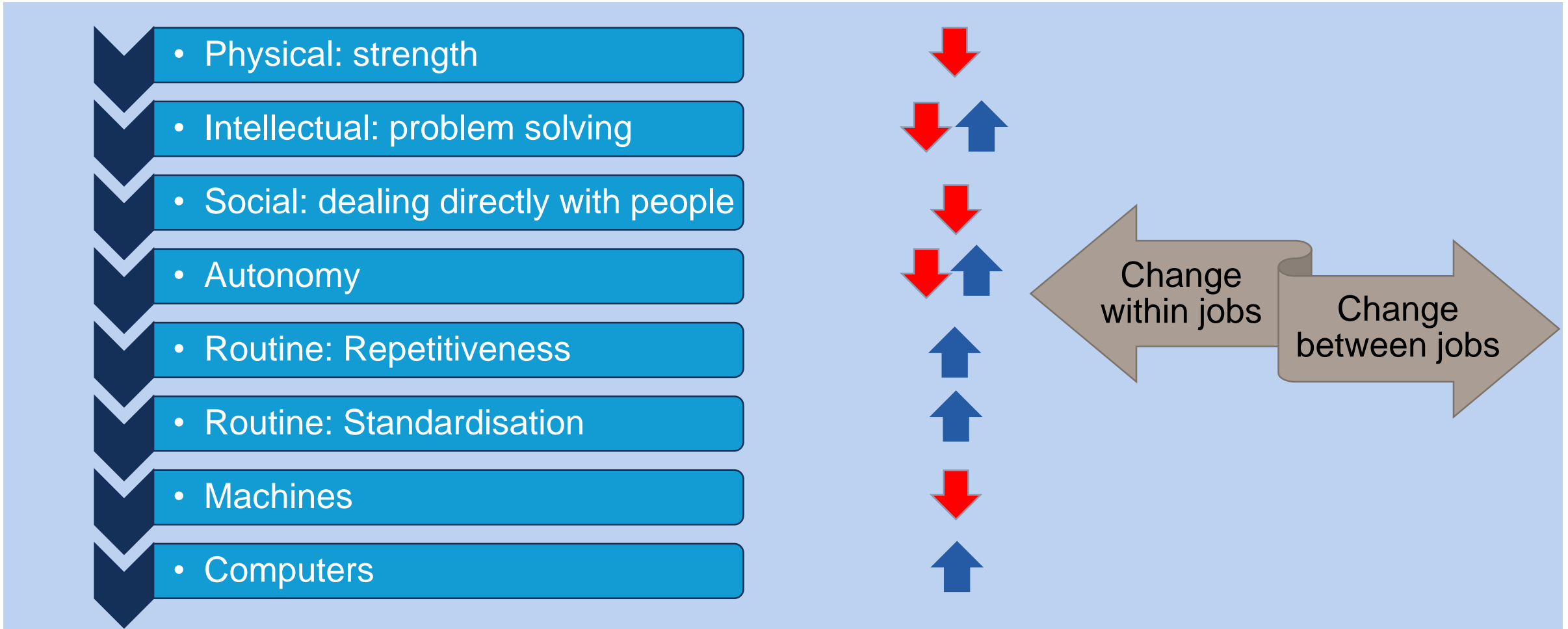
a. Machines (excluding ICT)

b. Information and communication technologies (basic ICT and programming)

Task indexes from EWCS

INDEX	DESCRIPTION
Physical: strength	Tasks that primarily require the exertion of energy and strength.
Intellectual: problem solving	Tasks that involve finding solutions to complex problems: information gathering and evaluation of complex information, and resolution.
Social: dealing directly with people	Tasks that require dealing directly with people who are not employees at the workplace such as customers, passengers, pupils, or patients.
Autonomy	The extent to which the worker is free to carry out the task as they need.
Routine: repetitiveness	The extent to which the task is repetitive and monotonous.
Routine: standardisation	The extent to which the work depends on numerical production targets or performance targets, and meeting precise quality standards.
Machines	The exposure to vibrations from tools or machinery and the extent to which the pace of work depends on machines.
Computers	Use of computers and internet.

Changes in tasks: 1995 - 2015



A sectoral perspective

- The most clear trends of decline in social interaction, increase in standardisation and computer use are found in services.
- **Financial intermediation, real estate/renting/business activities, public administration** show more consistent patterns:
 - Social interaction: -29% ; -23% and -20%
 - Standardisation: +41%; + 20 and +24%
 - Computer use: +33% ; +67% and +107%

Trends in job quality

Have jobs become better?

Job quality indices



Physical environment

- Posture-related
- Ambient
- Biological and chemical



Work intensity

- Quantitative demands incl. emotional
- Pace determinants and interdependency



Working time quality

- Duration
- Atypical working time
- Working time arrangements
- Flexibility

Social environment

- Adverse social behaviour
- Social support
- Management quality



Skills and discretion

- Cognitive dimension including computer use
- Decision latitude
- Organisational participation
- Training



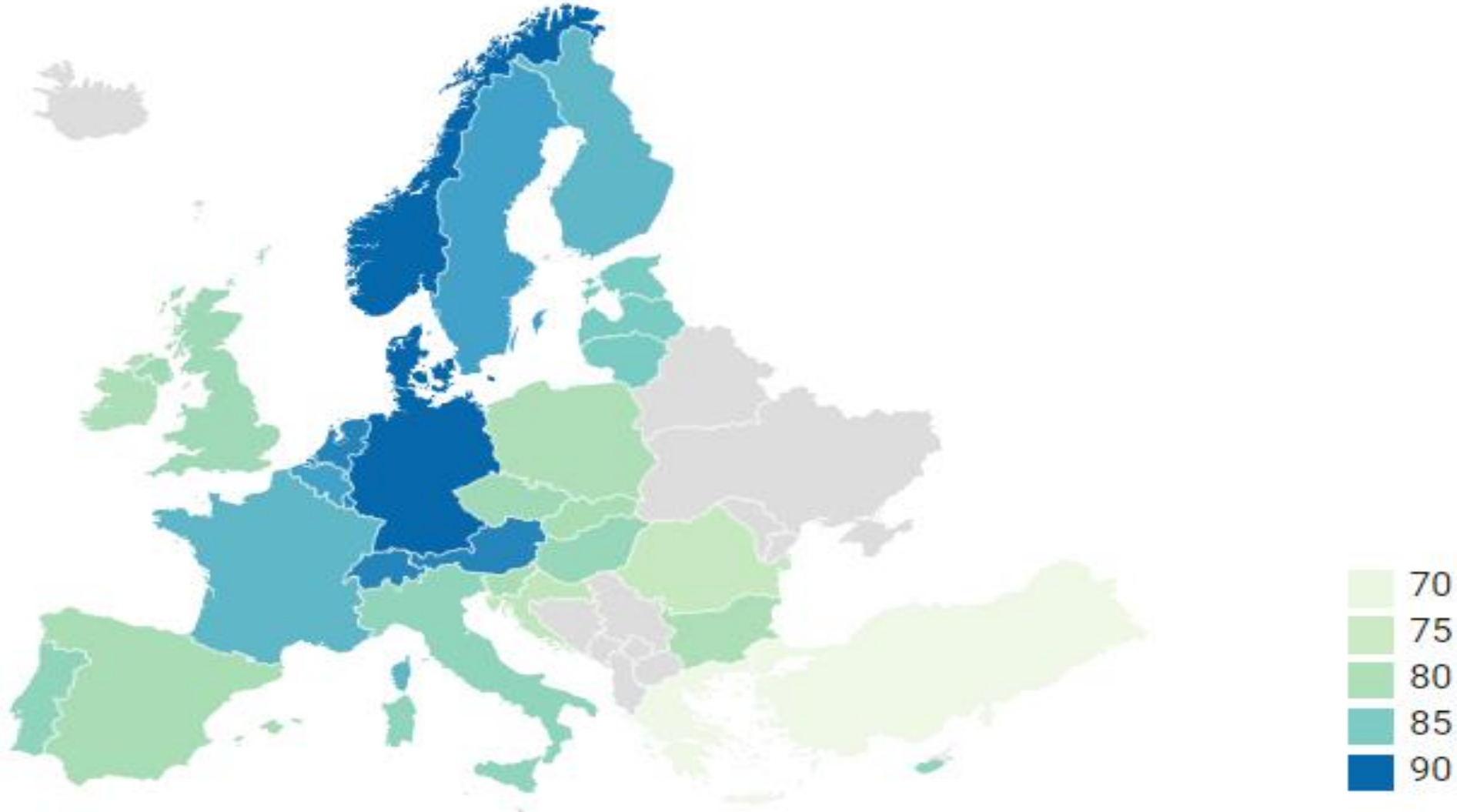
Prospects

- Career prospects
- Employment status
- Job security
- Downsizing



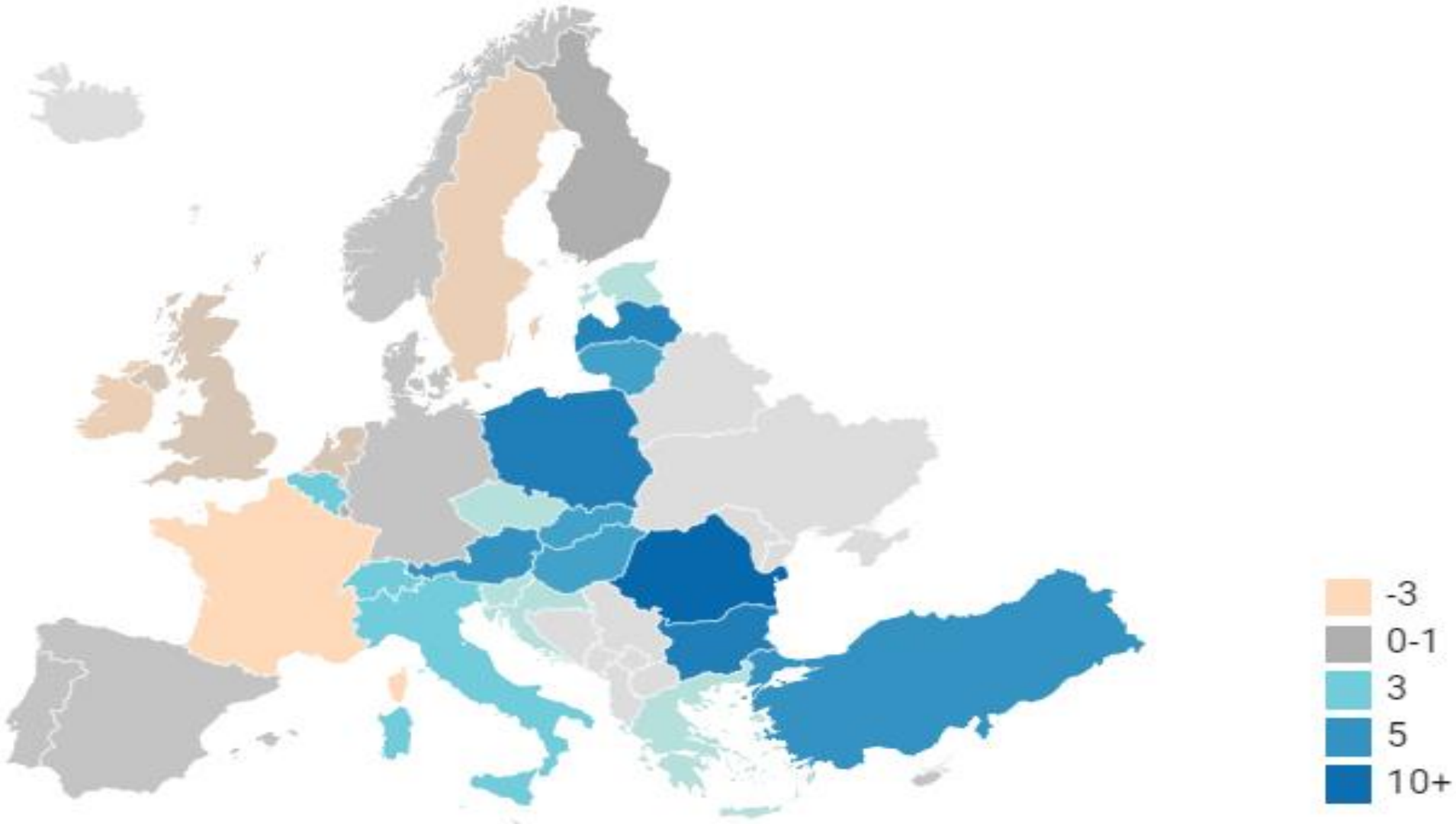
Earnings

Working time quality 2015



Source: Eurofound - European Working Conditions Survey 2015

2005-2015



Source: Eurofound - European Working Conditions Survey 2005, 2010, 2015

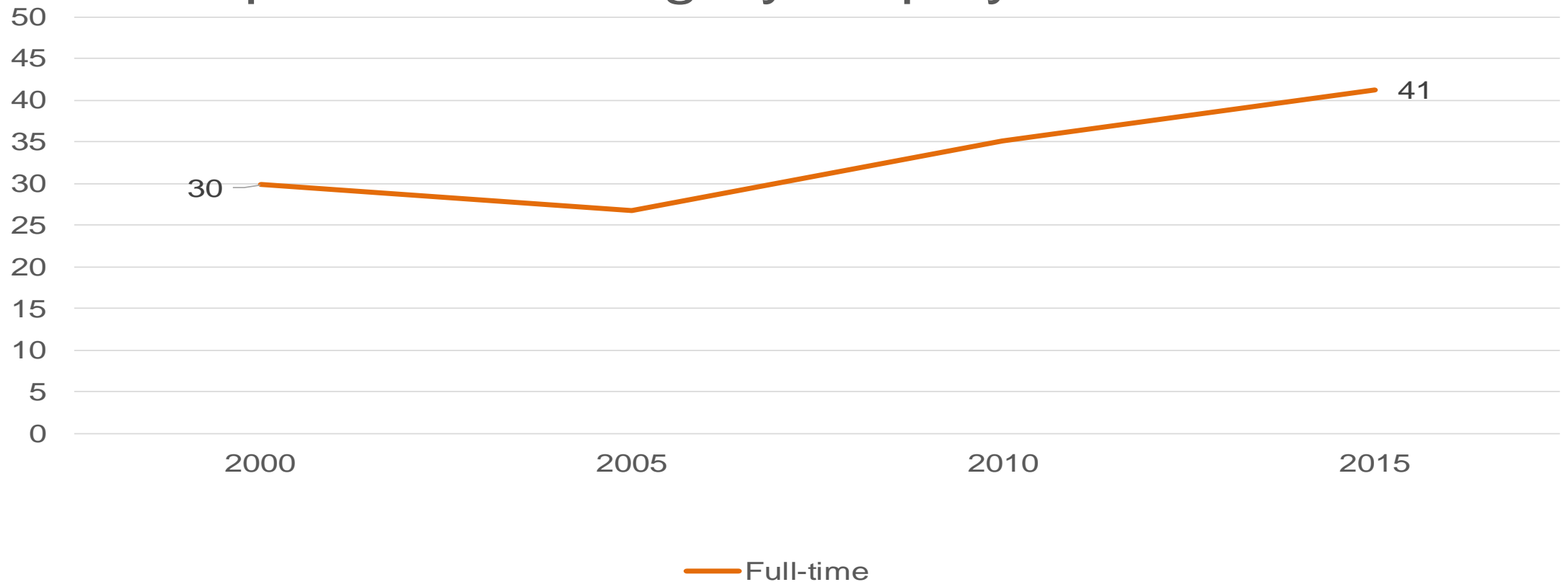
Skills and discretion

Uptake of training by employment status

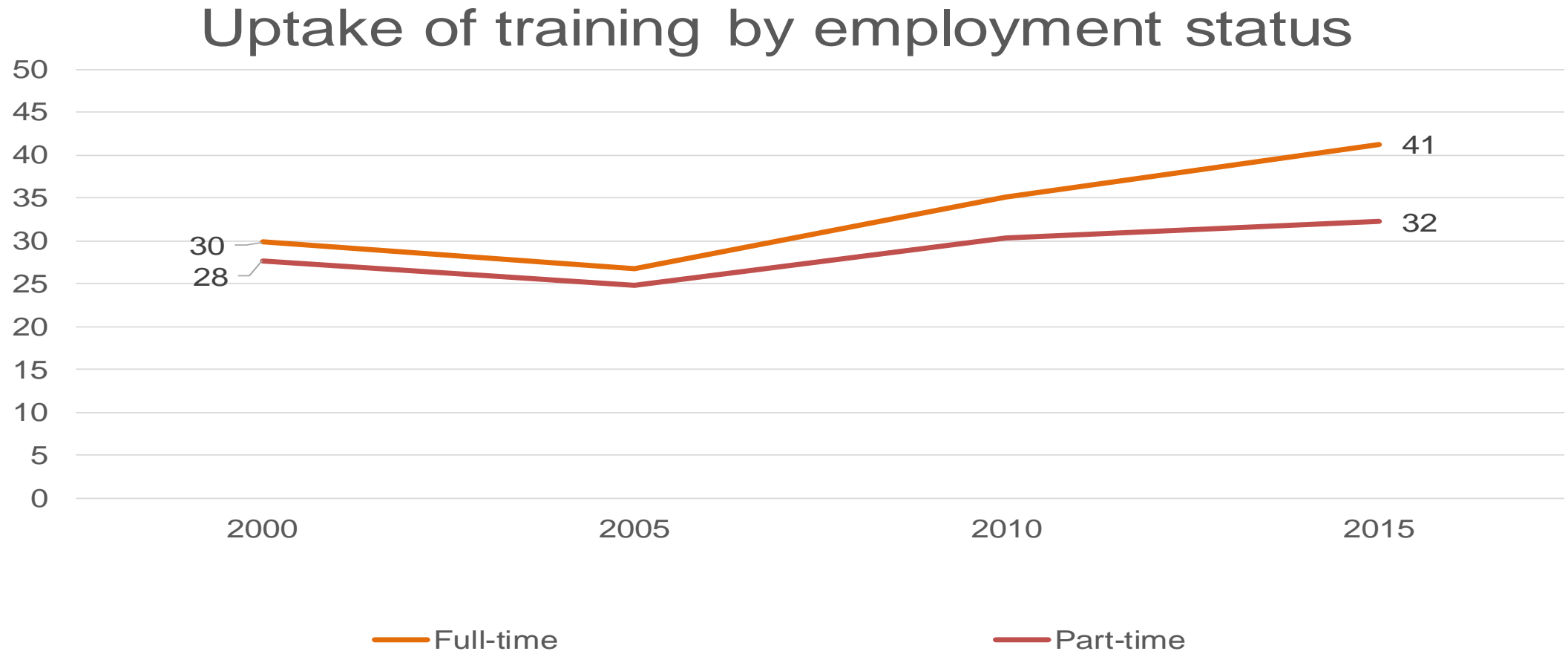


Skills and discretion

Uptake of training by employment status

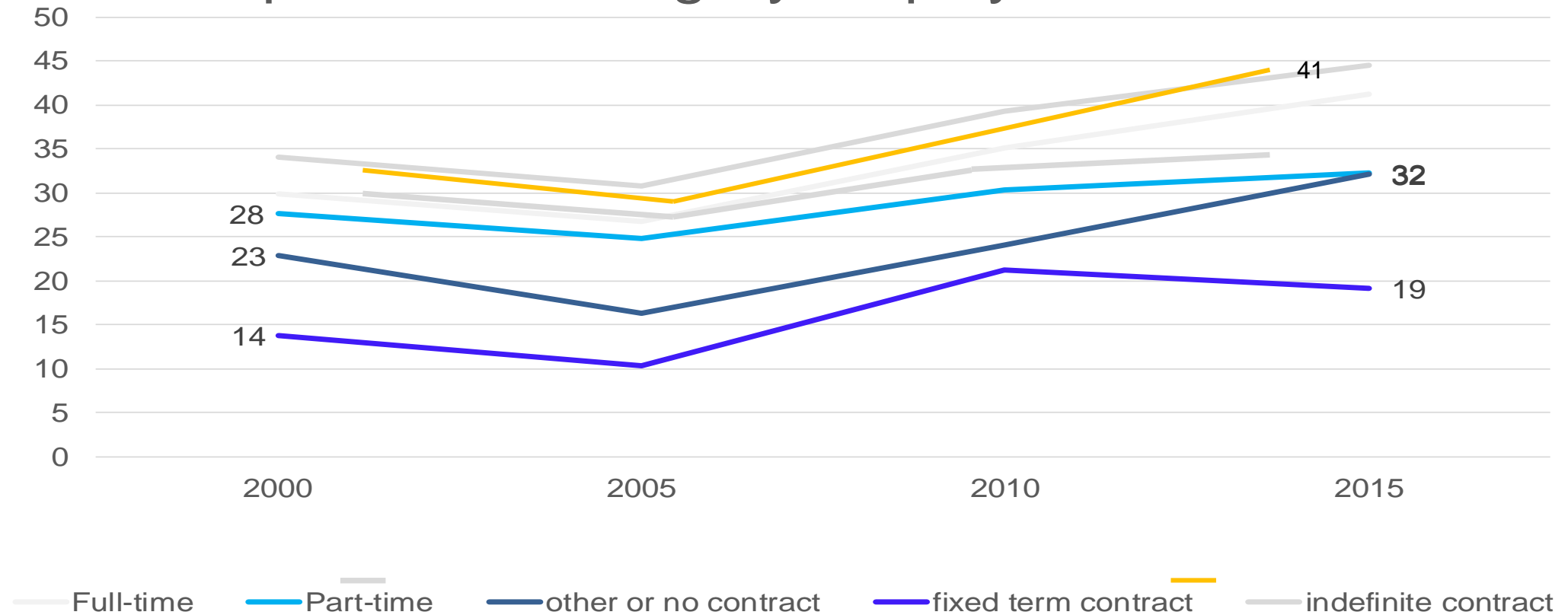


Skills and discretion



Skills and discretion

Uptake of training by employment status



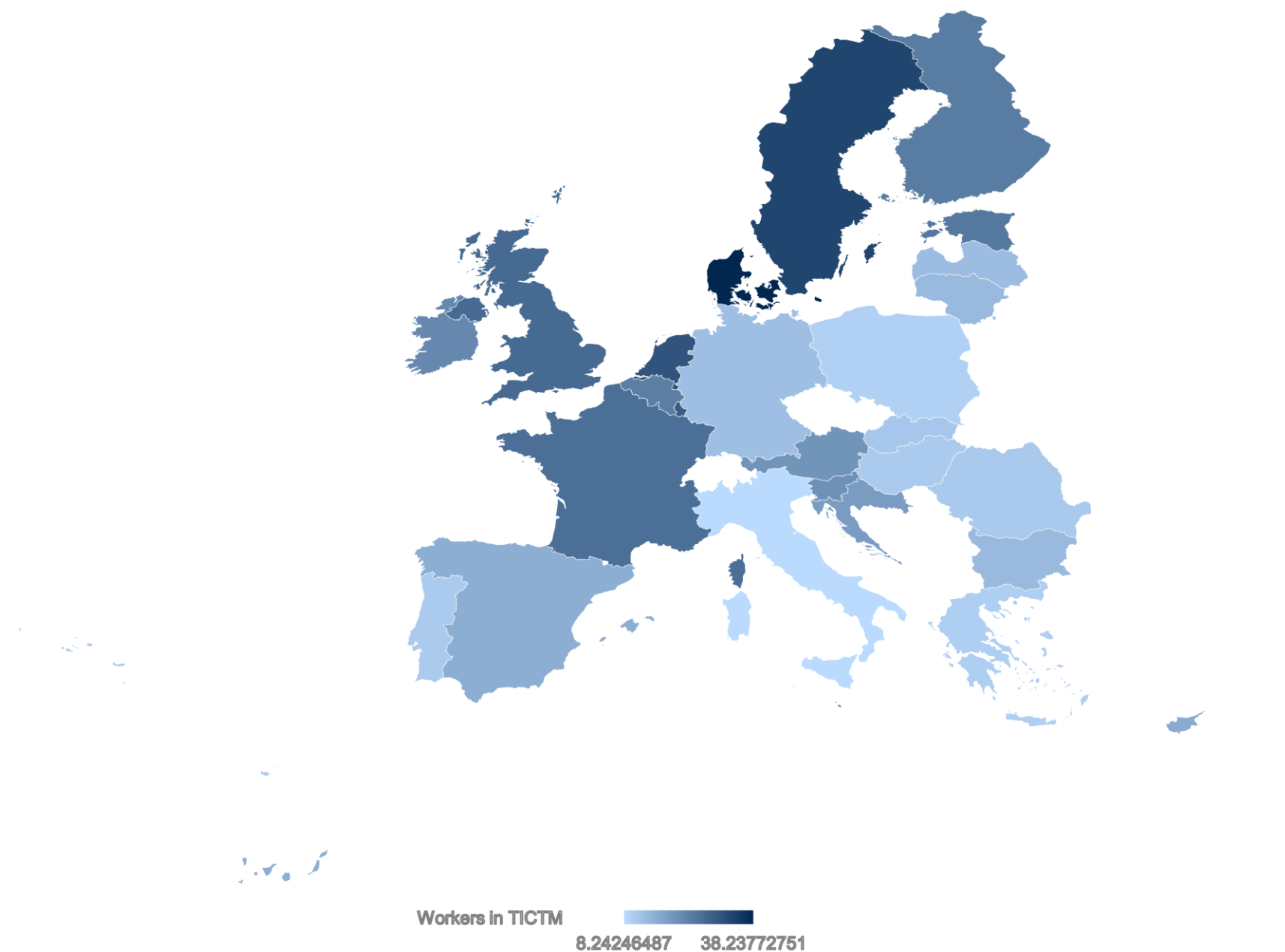
Place of work

Is work still done at the employer's premises?

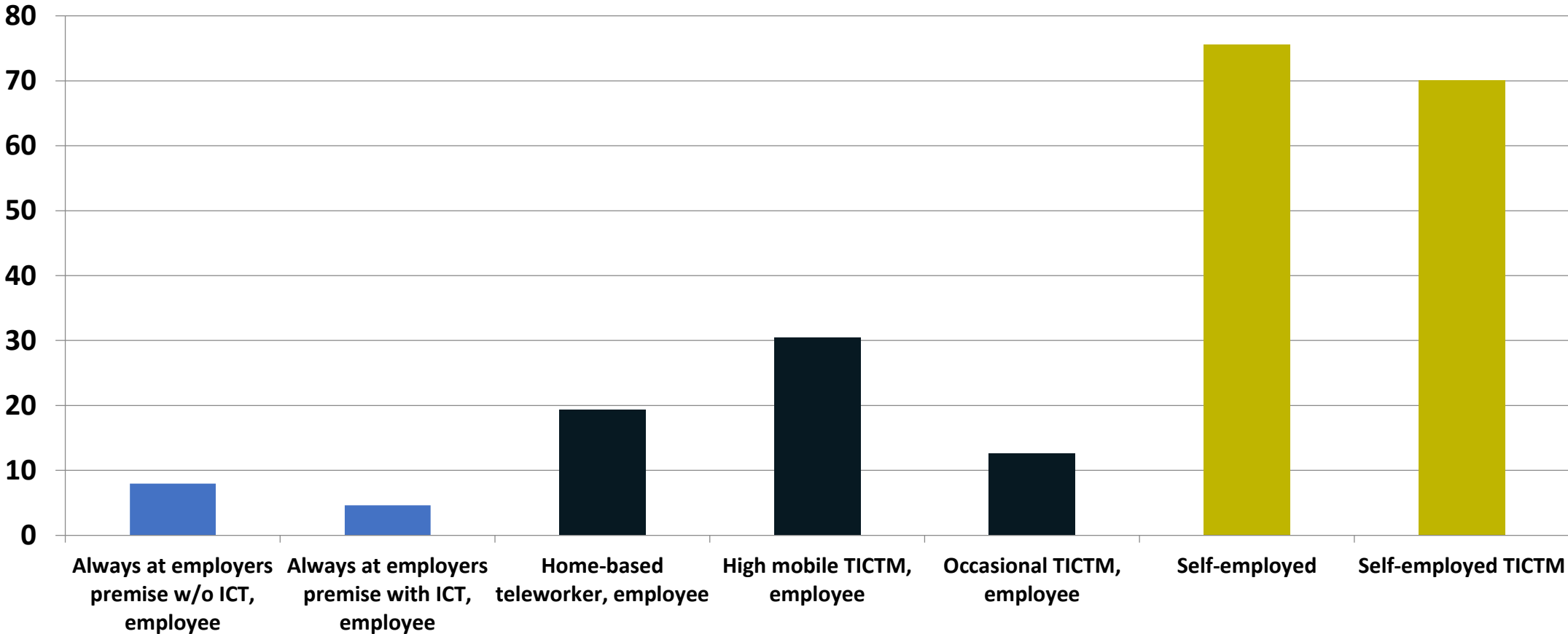
Share of remote workers is estimated at 38% in Denmark

In Italy it is 8%

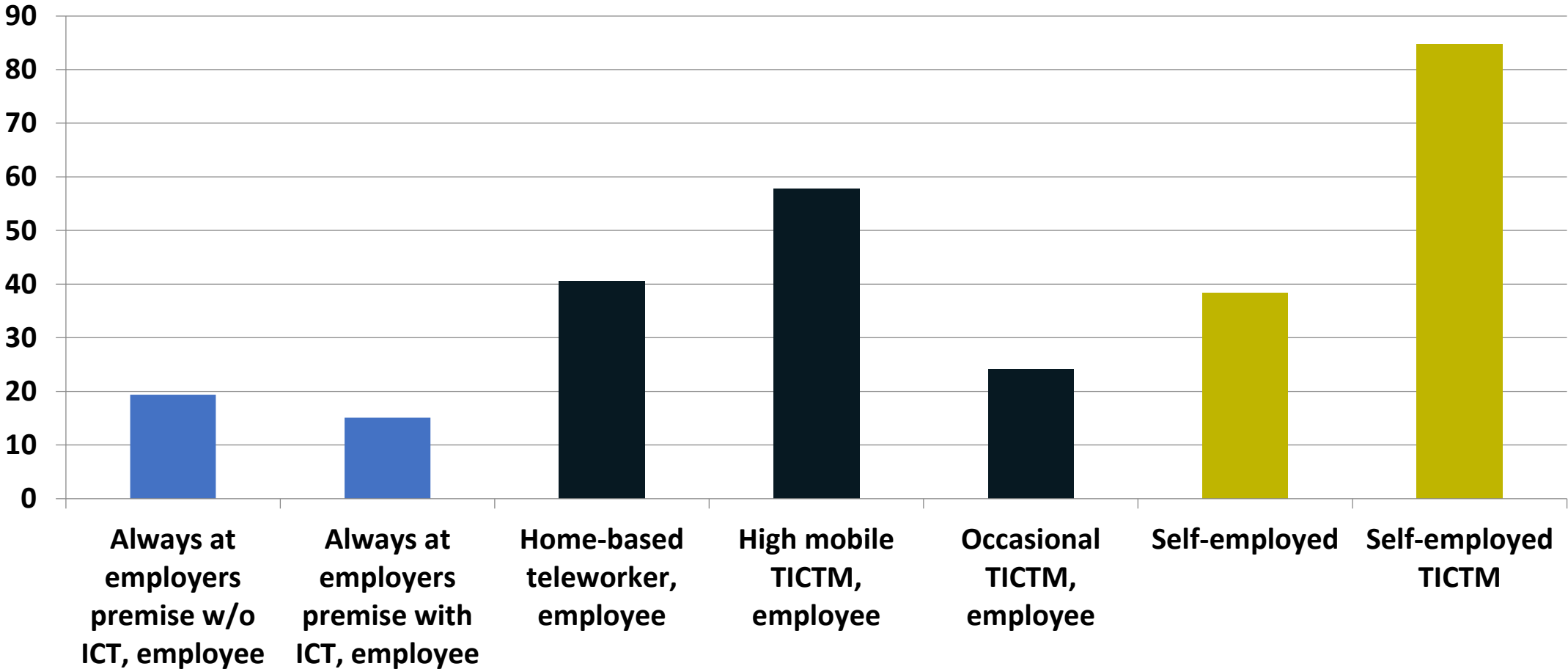
(EWCS 2015)



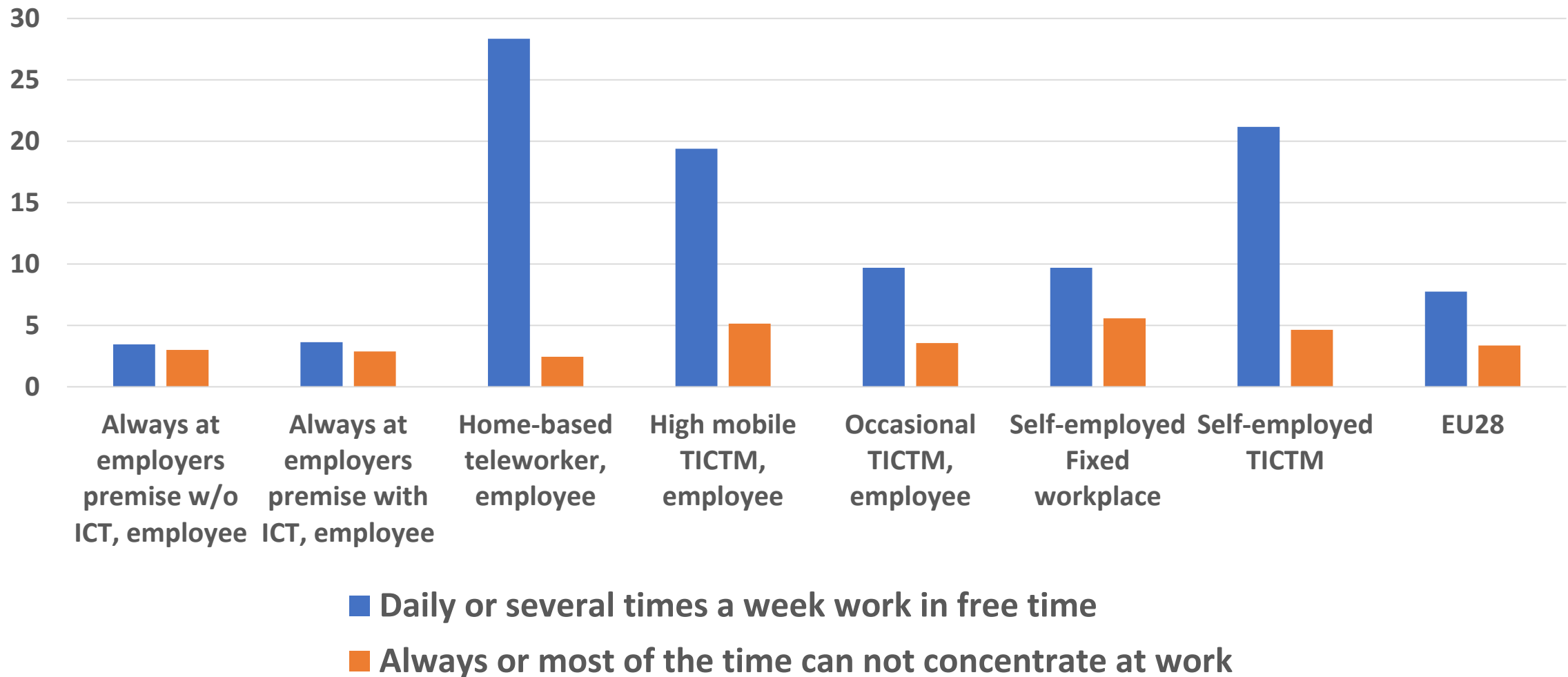
Share of workers reporting working more than 48 hours a week



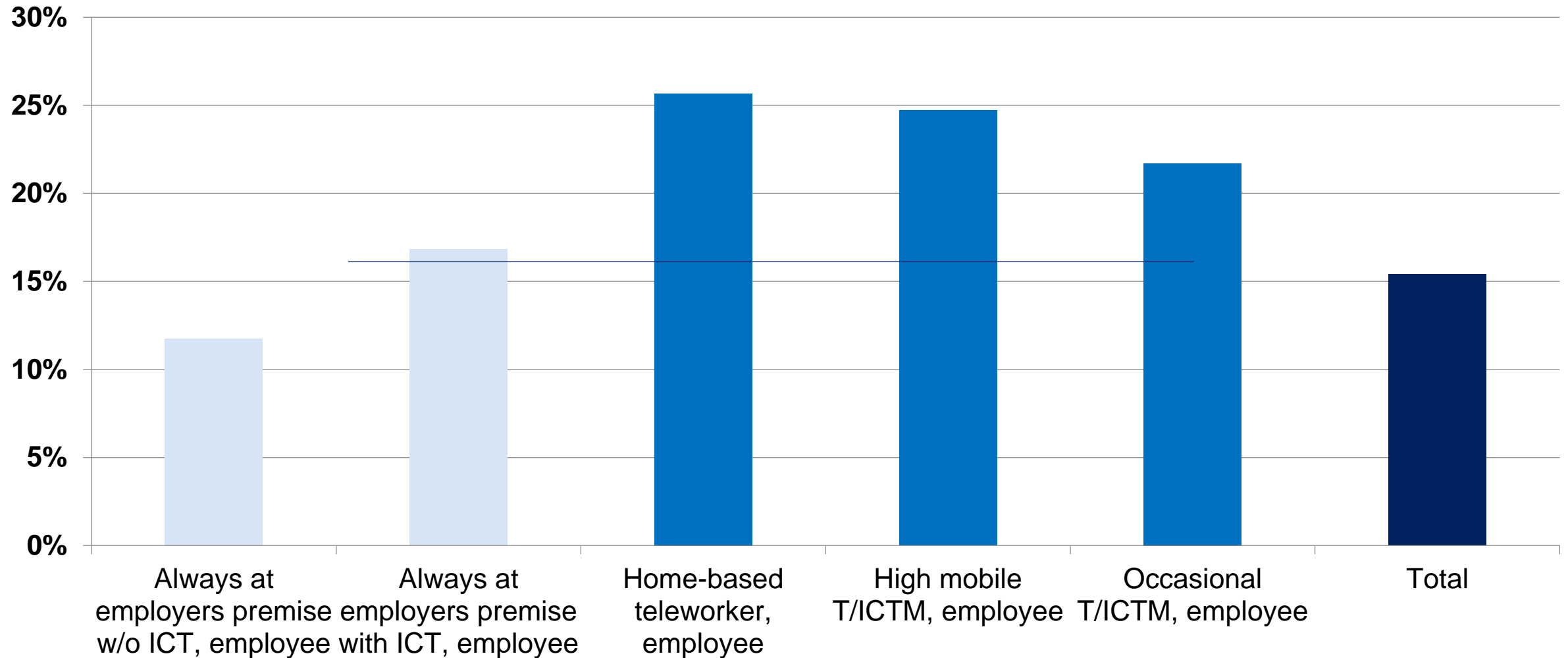
Share of workers reporting less than 11 hours of rest between working days



Blurring and 'overtime' – Share of workers (EWCS 2015)



Workers experiencing anxiety during the last 12 months



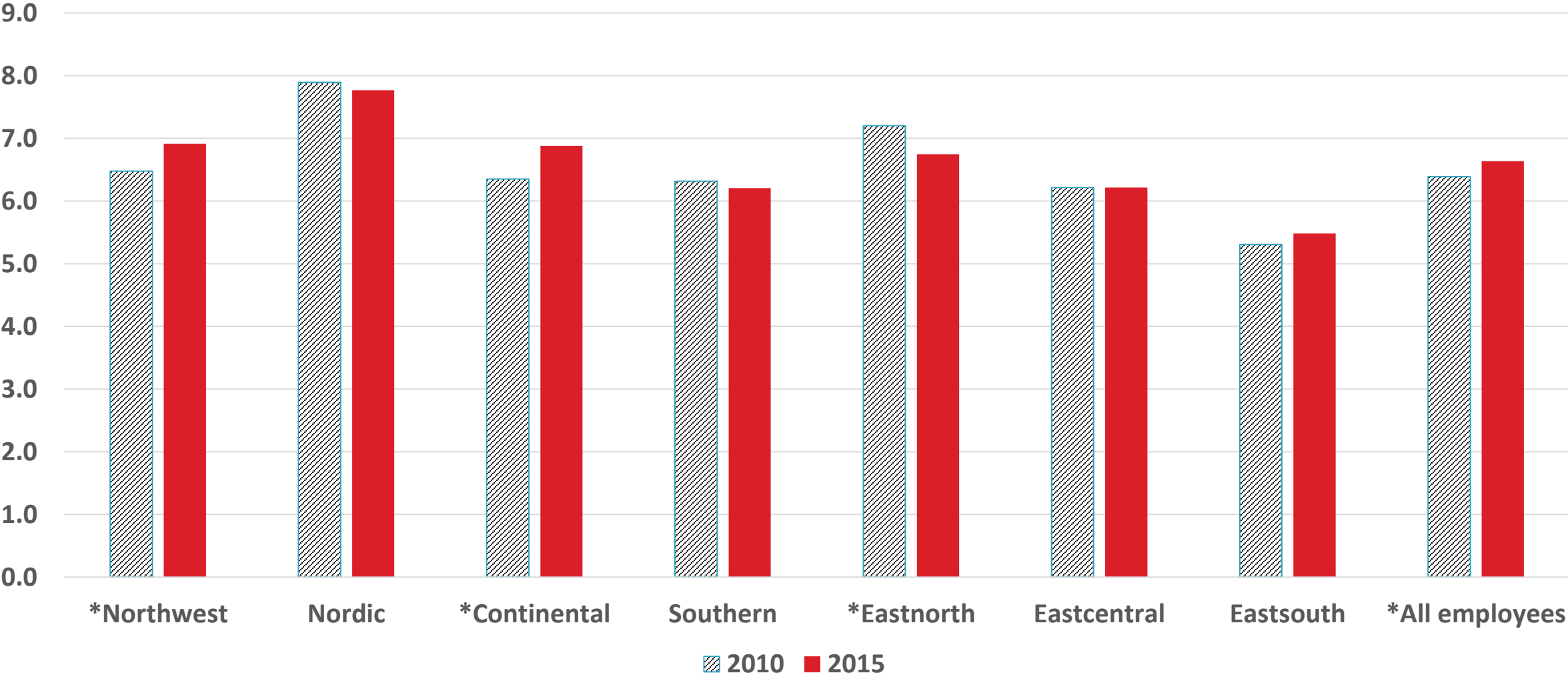
In summary: working time patterns in TICTM and effects

- Long hours and less rest periods
- Risk of working in free time; working time impinging on non-working time
- Both related to an 'always on' culture of work
- Good effects for work-life balance (teleworkers) but increased risk of poorer balance for high mobile workers
- More likely to report stress and other health conditions (for example eye strain, headaches, anxiety and fatigue)

Engagement

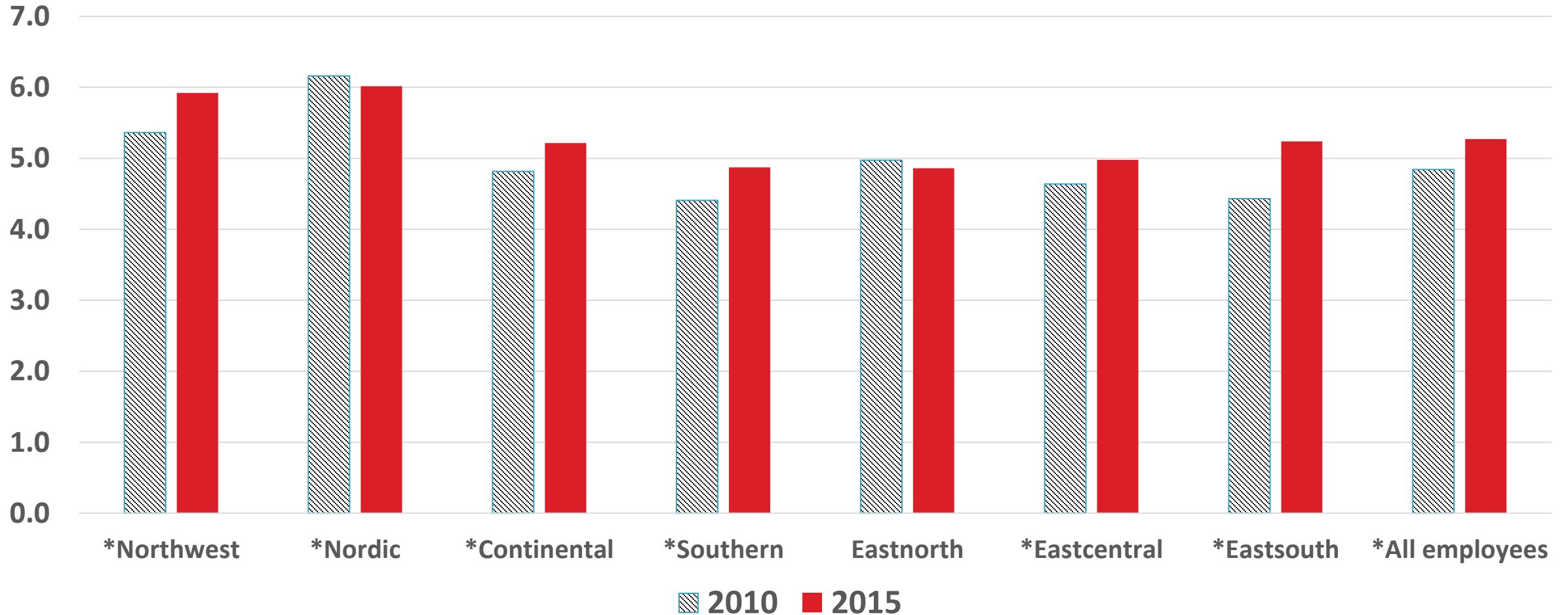
Are workers more involved?

Task Discretion by EU Region 2010-2015

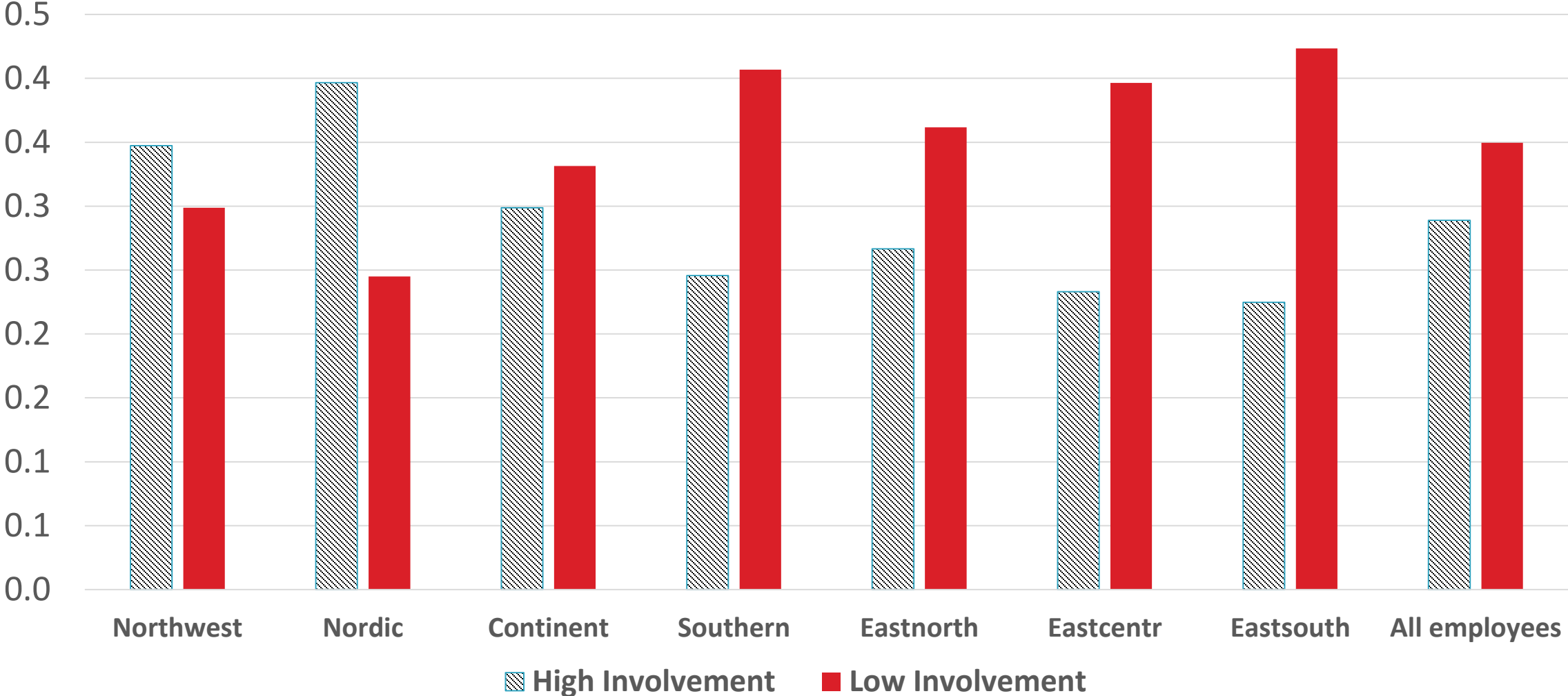


Source: Eurofound – European Working Conditions Survey 2010, 2015

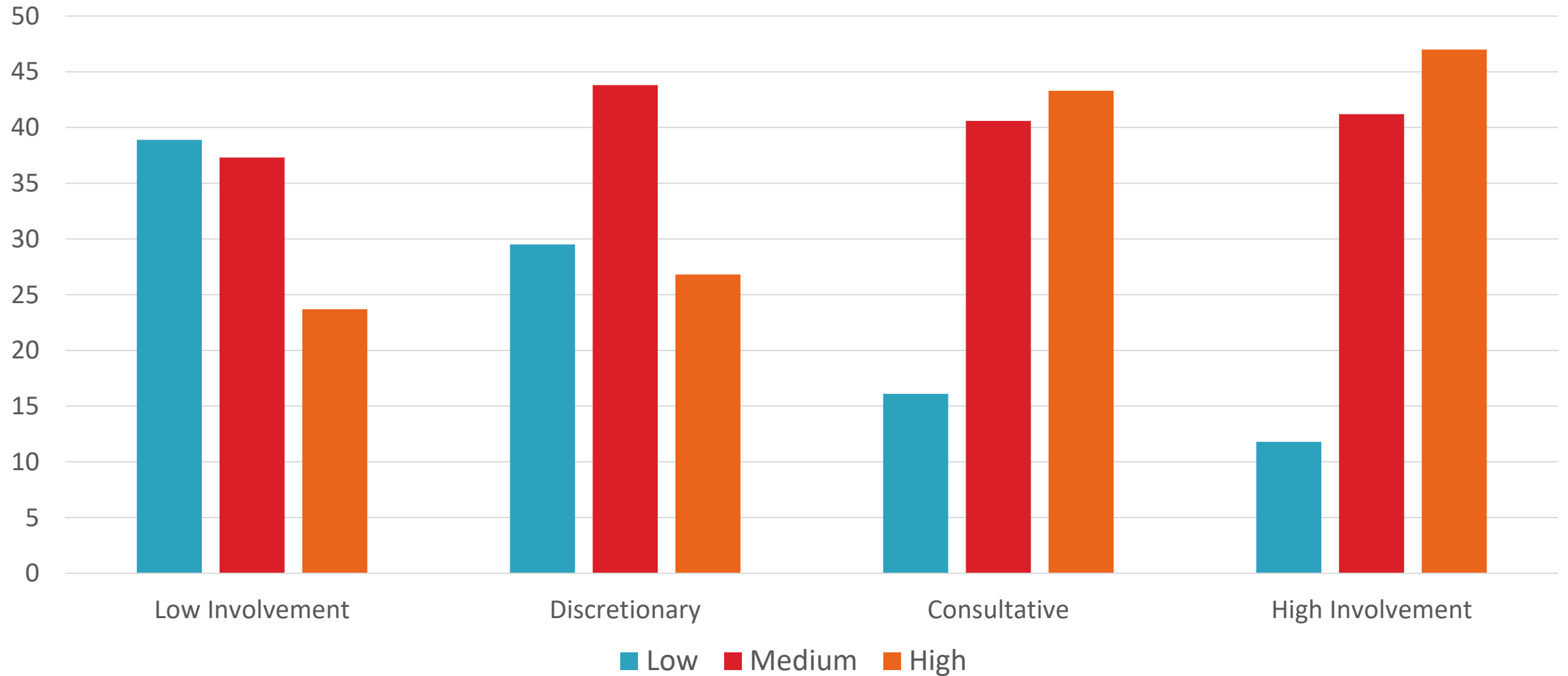
Organisational Participation by Region: 2010-2015



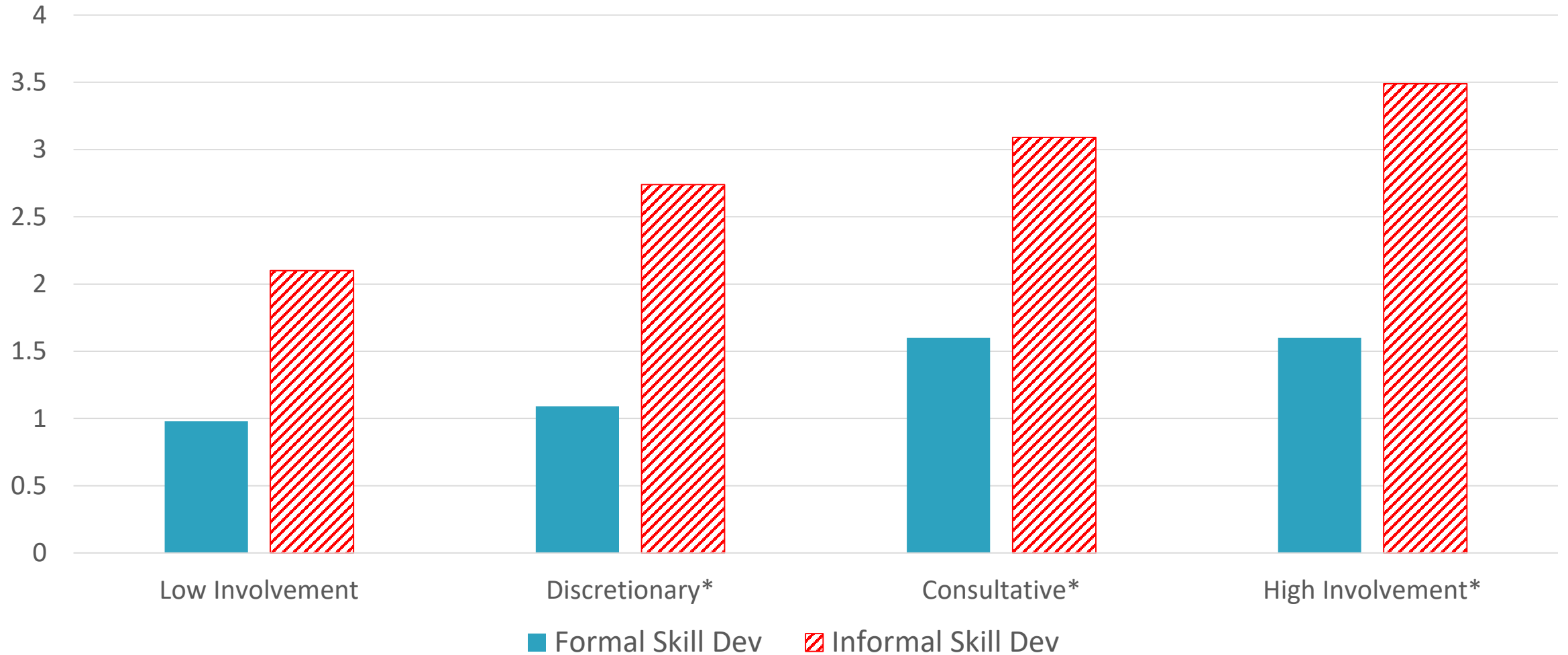
Types of Employee Involvement by Region



Types of Involvement and Work Engagement



Employee Involvement and Skill Development



In summary

- The composition of the workforce is changing and ‘compound’ non-standard forms and new forms of employment are emerging
- The task content of jobs is changing with fewer routine jobs but more routine tasks
- Job quality is developing in the right direction for most dimensions, but not all workers are benefitting to the same degree
- The workplace is increasingly outside of the employer’s premises which brings advantages but also has inherent risks
- Workers are given a greater say at work on average, but the advantages of higher employee involvement for engagement and skills development are not reaped by the majority of workplaces