



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

# Future Jobs; Current Challenges Cedefop 2018 Skills forecast Launch event

*8<sup>th</sup> June, Residence Palace, Brussels*

**“Projected wage and task structure”**

**Donald Storrie**

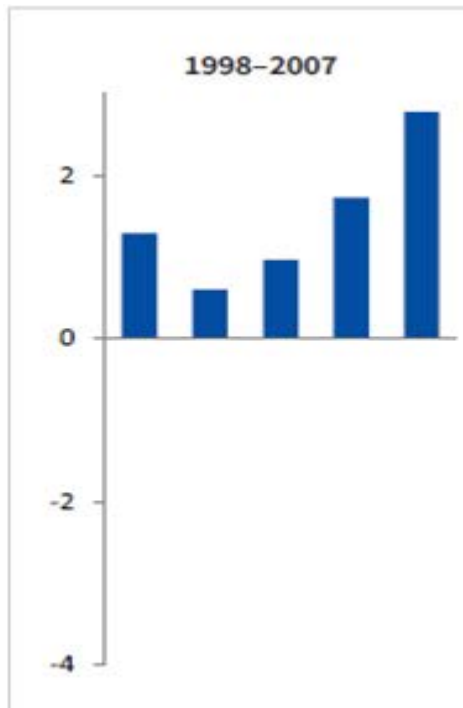
# To add to the CEDEFOP projections ..

1. Wages
2. Task content

## **Examining *composition effects***

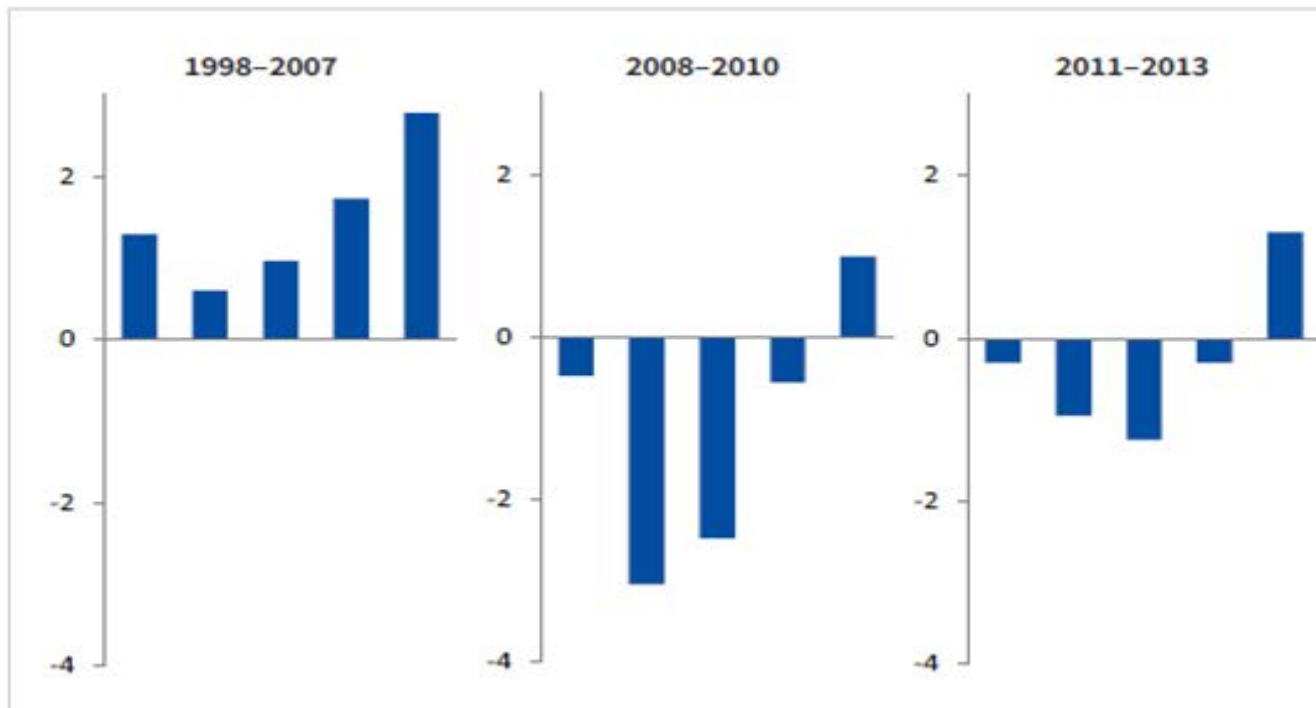
***ie impact of changes in occupations in sectors, not changes in the wage structure or the task profile per se***

# Recent employment growth by job-wage quintile, average annual percentage change



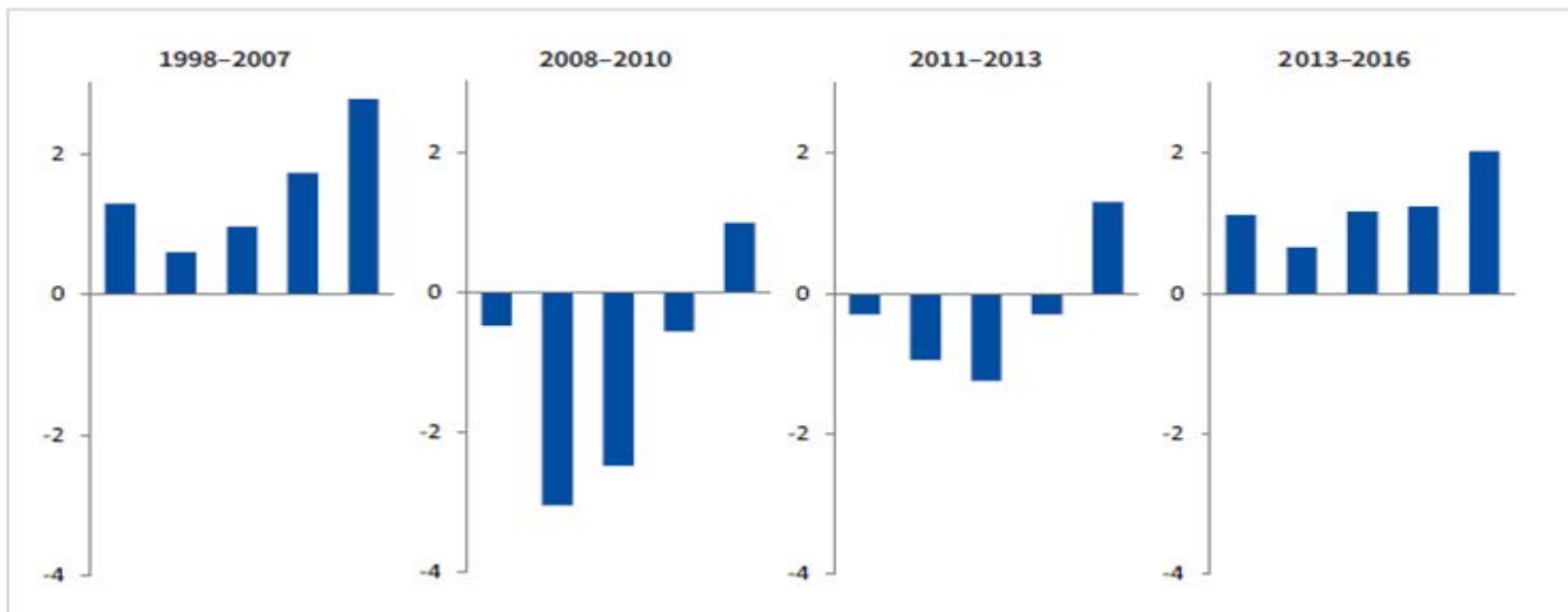
wage →

# Recent employment growth by job-wage quintile, average annual percentage change



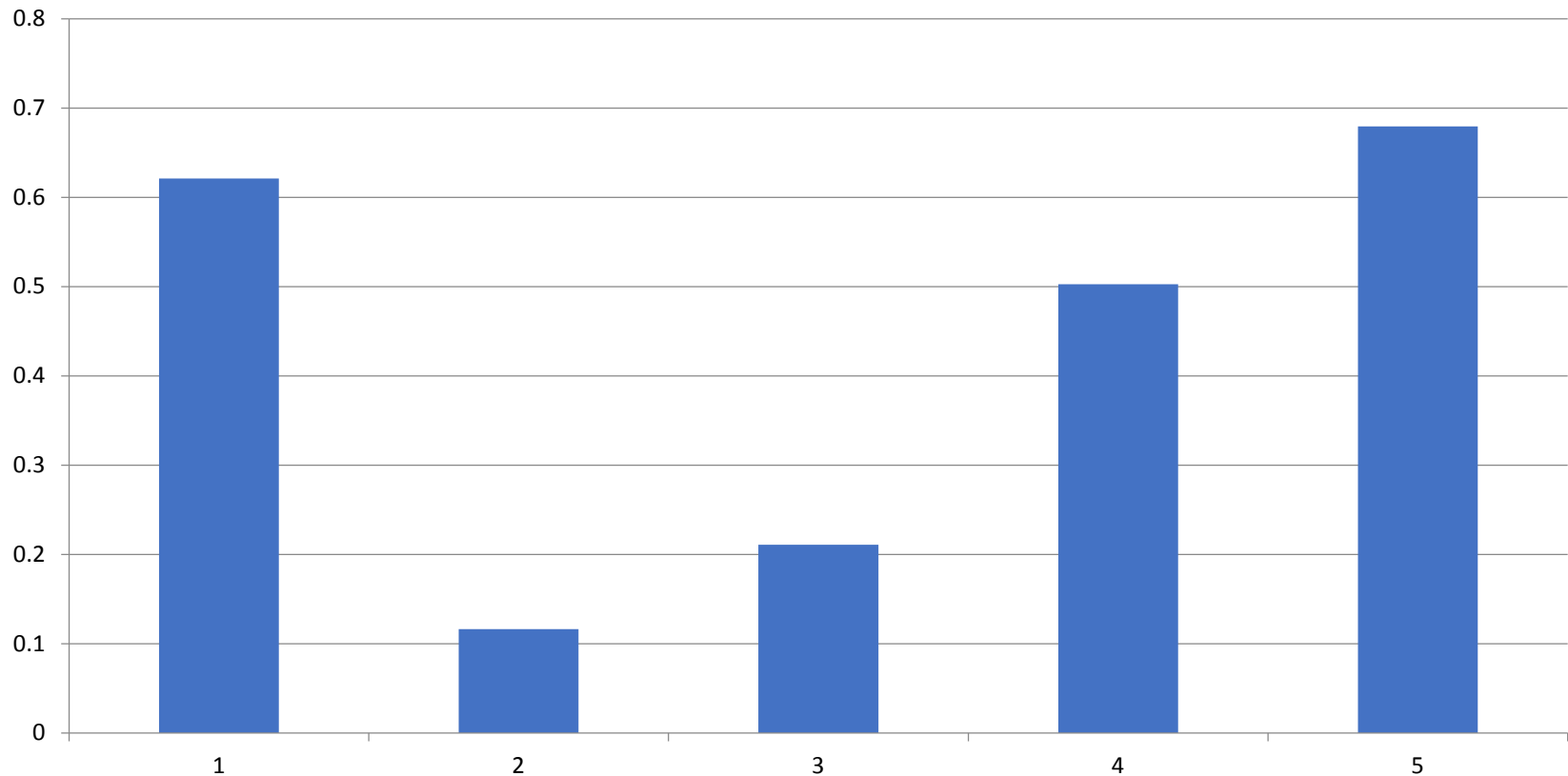
wage →

# Recent employment growth by job-wage quintile, average annual percentage change

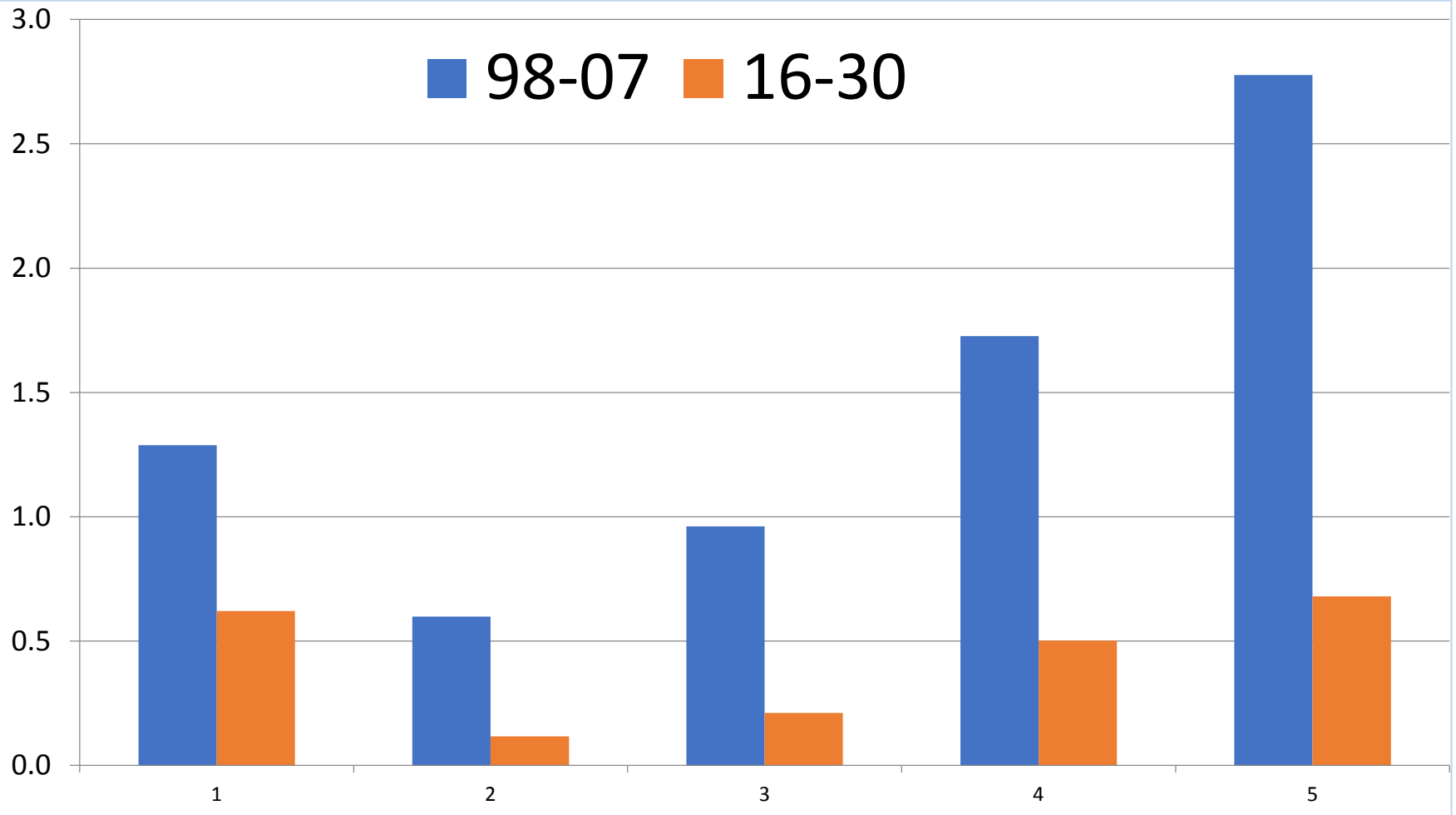


wage →

# Projected development of employment to 2030 by job-wage quintile, average annual % change



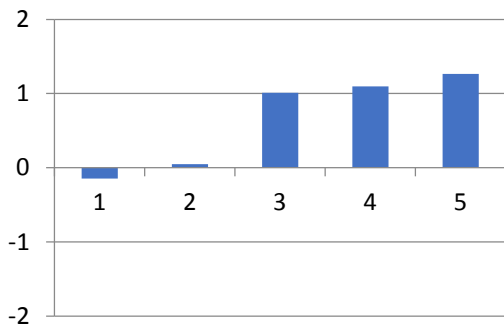
# Comparison of recent pre-recession & projected



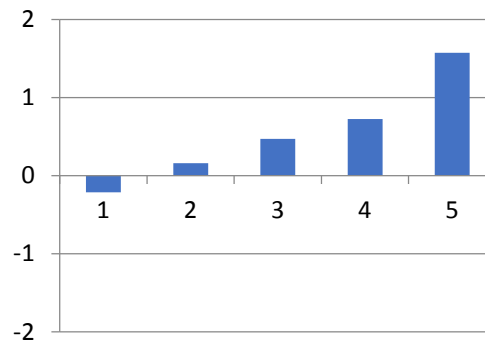
# Polarisation in European Union

but many (smaller) MS projected to upgrade, for example:

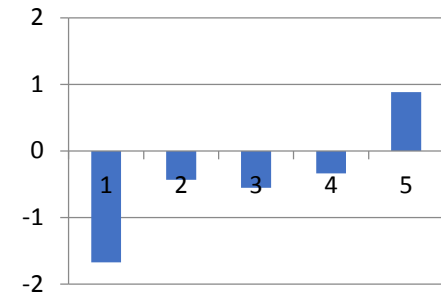
### Denmark



### Slovenia



### Latvia

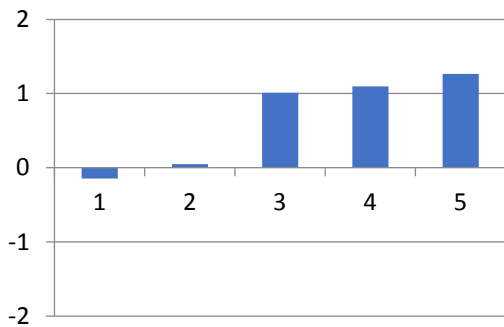




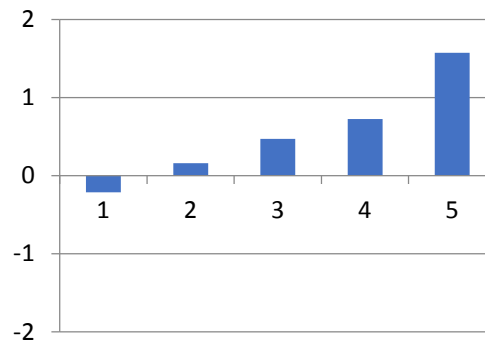
# Polarisation in European Union

but many (smaller) MS projected to upgrade, for example:

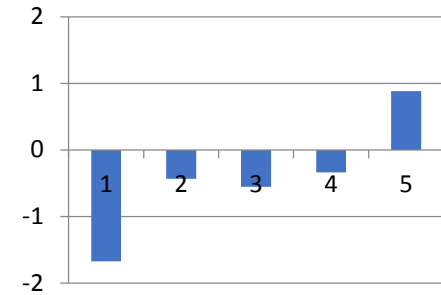
### Denmark



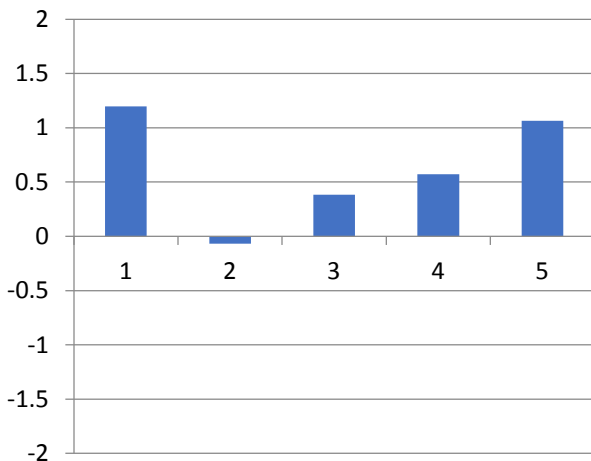
### Slovenia



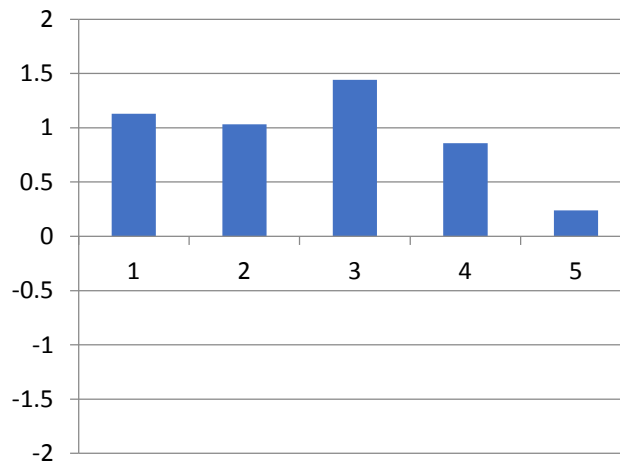
### Latvia



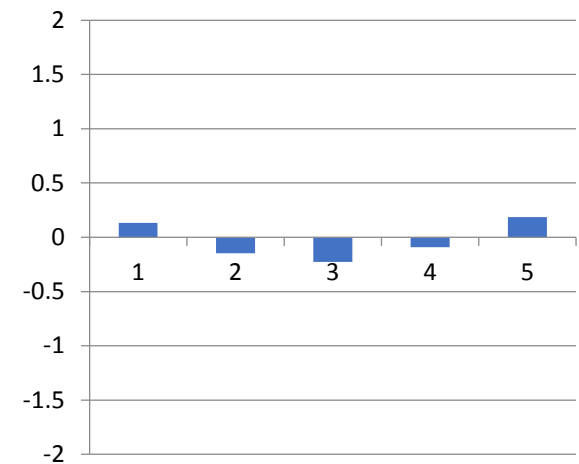
### France



### Spain

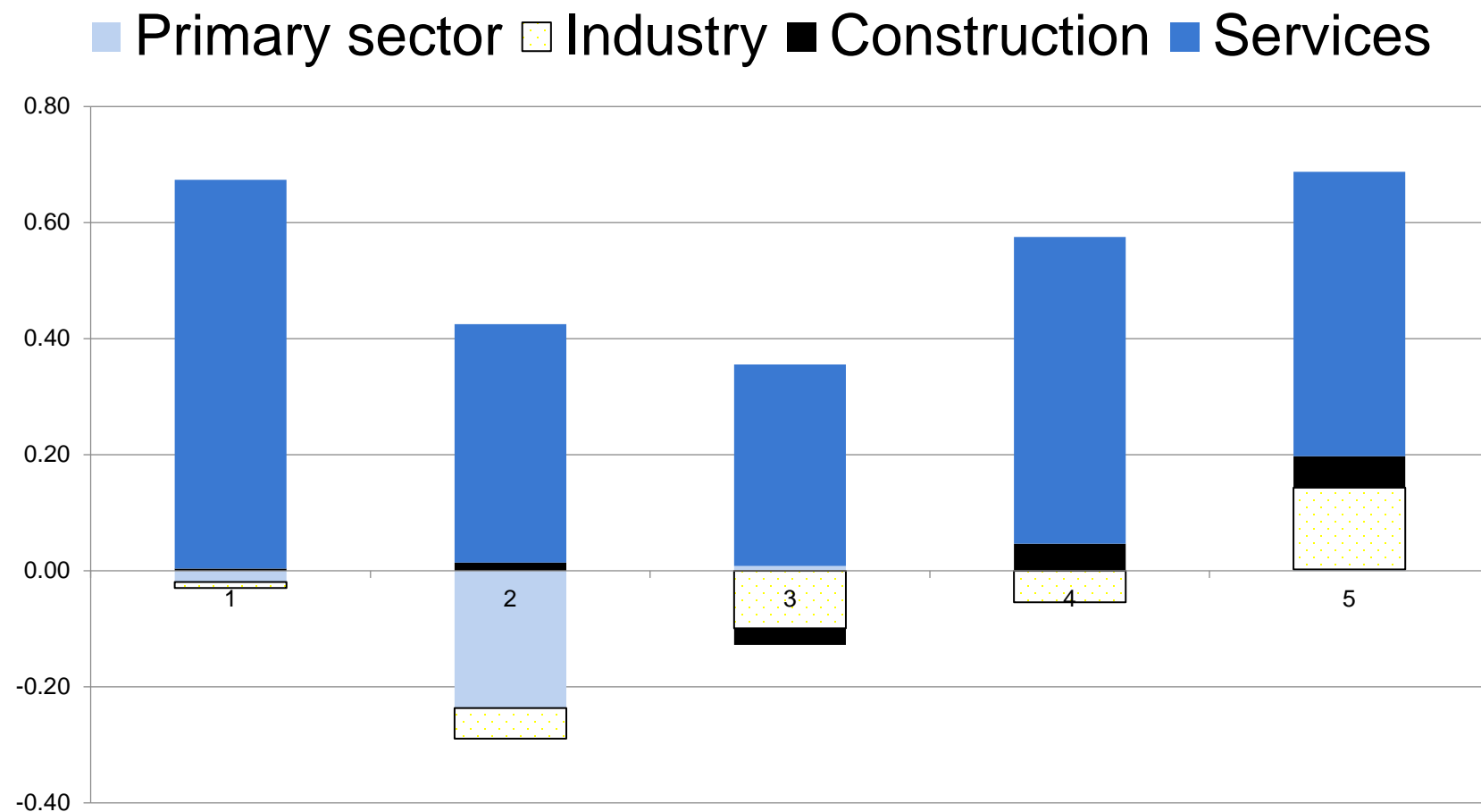


### Germany





# Projected employment growth to 2030 by job-wage quintile, by economic sector.



# Manufacturing top ten job growth 2013-2016 occupation in sector, for jobs > 100,000

Change		Level	Occupation	Sector
000"s	%	2016		
31.9	45.5	102.0	Bus & admin profs	machinery and equipment
<b>42.8</b>	41.1	147.0	Plant & machine operators	machinery and equipment
29.0	40.3	101.0	Science & engin. profs	fabricated metal products,
27.7	37.1	102.4	Production managers	machinery and equipment
22.6	28.8	101.0	Science & engin. associated profs	pharmaceutical products
<b>57.7</b>	28.3	261.4	Science & engin. profs	motor vehicles
<b>76.3</b>	27.6	352.9	Science & engin. associated profs	motor vehicles
25.0	25.1	124.7	Science & engin. associated profs	rubber and plastic products
19.6	23.8	102.1	Electrical trades workers	motor vehicles
20.4	23.5	107.2	Science & engin. profs	basic pharmaceutical products

# A classification of tasks according to their contents and methods

## Content:

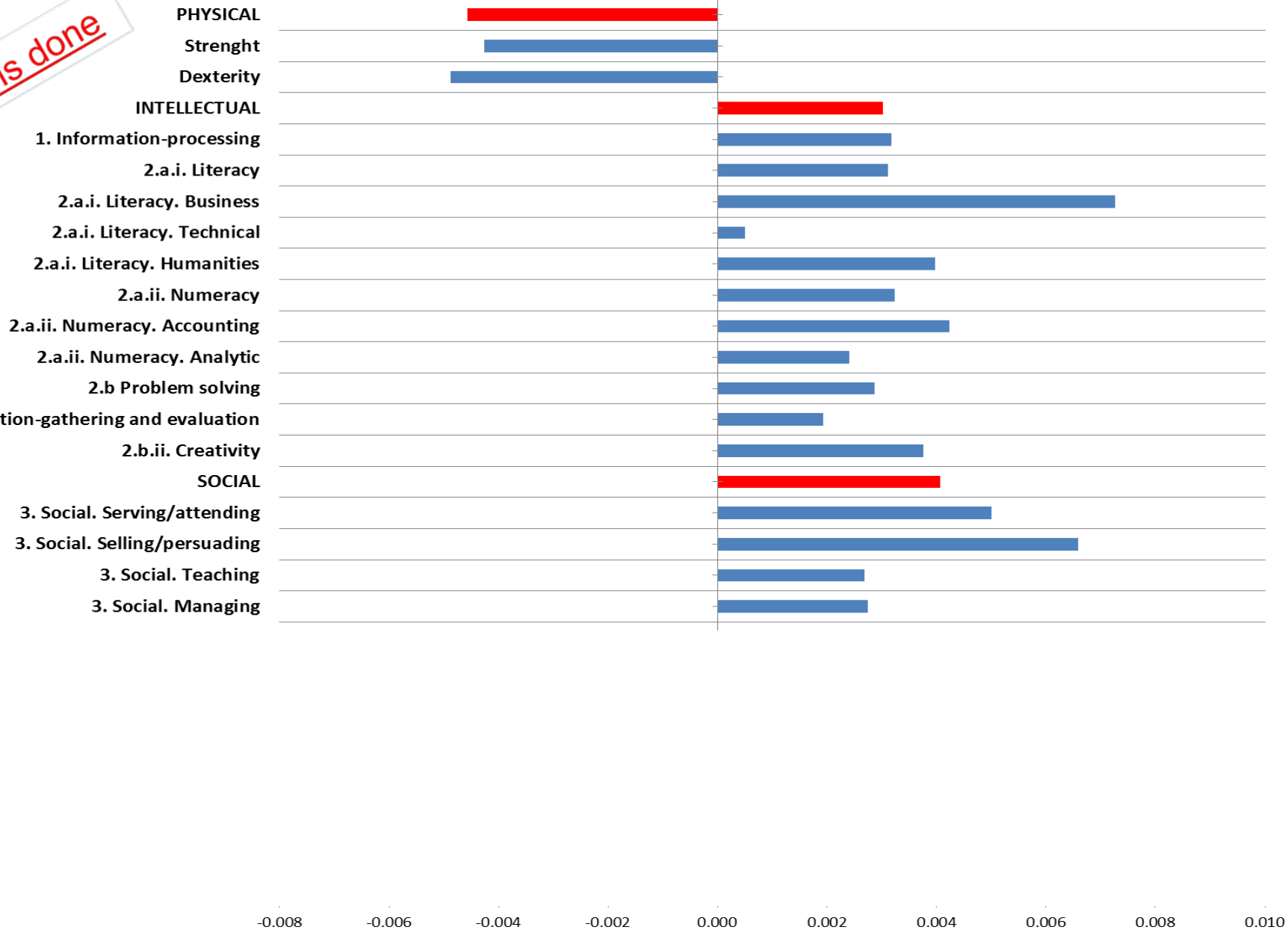
1. **Physical tasks:**
  - a. *Strength*
  - b. *Dexterity*
2. **Intellectual tasks**
  - a. *Information processing:*
    - I. Literacy:
      - i. Business
      - ii. Technical
      - iii. Humanities
    - II. Numeracy:
      - i. Accounting
      - ii. Analytic
  - b. *Problem solving:*
    - I. Information gathering & evaluating
    - II. Creativity & resolution.
3. **Social tasks:**
  - a. *Serving/attending*
  - b. *Teaching/training/coaching*
  - c. *Selling/influencing*
  - d. *Managing/coordinating*

## Methods and tools of work:

1. **Methods:**
  - a. *Autonomy*
  - b. *Teamwork*
  - c. *Routine*
    - I. *Repetitiveness*
    - II. *Standardization*
2. **Tools:** type of technology used at work:
  - a. *Machines (excluding ICT)*
  - b. *Information and communication technologies.*
    - I. Basic ICT
    - II. Programming

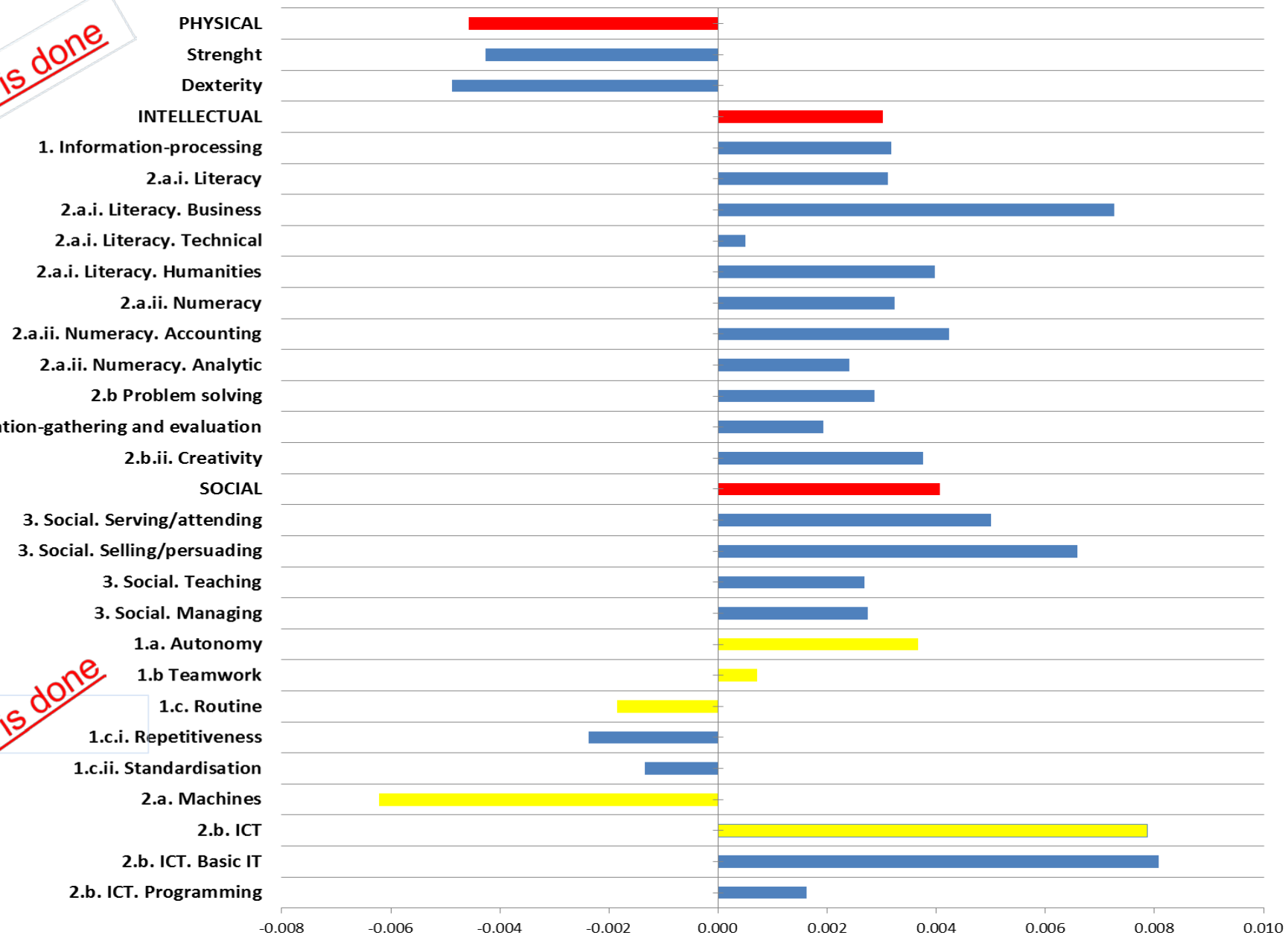
# Projected change in task indices up to 2030

What is done



# Projected change in task indices up to 2030

*What is done*



*How it is done*

# Key findings

## Wages

- a more polarised occupational structure in the European Union
  - growth at the bottom of the wage distribution.
- But strong upgrading in Slovenia, Czech Republic, Croatia, Latvia, Estonia, Hungary, Malta, Denmark and Finland

## Tasks

- less physical & more intellectual and social tasks
- more business literacy, selling/persuading and serving/attending.
- more ICT skills & some increase in autonomy & decrease in routine work.

- Upgrading of wages & more autonomy, less routine, more ICT, less physical and more social and intellectual tasks is strongest in EU13
- **Upwards convergence of the employment structure among Member States.**
- **But more polarisation within Member States**