

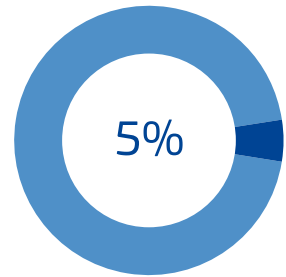


## ANALYTICAL HIGHLIGHT

# PROSPECTS FOR Handicraft and printing workers

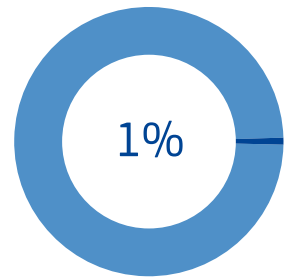
- Handicraft and printing workers form a small occupational group, accounting for 0.5% of the EU-28 workforce.
- The number of handicraft and printing workers has fallen consistently since 2003 and is forecast to continue declining from 2013 to 2025 although at a much slower rate.
- Many handicraft and printing workers need to be highly-skilled in particular production methods, materials and tools.
- The increasing use of new materials will mean that workers have to understand their application and potential use, especially within specialist and niche markets.

▼ Figure 1a – Handicraft and printing workers share of craft and related trades workers occupational group, EU-28, 2013



Source: Cedefop forecasts (2014)

▼ Figure 1b – Handicraft and printing workers share of total employment, EU-28, 2013



Source: Cedefop forecasts (2014)

### WHAT DO THEY DO?

Handicraft and printing workers<sup>1</sup> carry out skilled manual work, with specific tasks according to what is being produced. They can be divided into two broad subgroups of occupations based on the products they create.

The first group consists of handicraft workers (such as jewellery makers or potters) who typically make and repair precision and musical instruments, jewellery, pottery and porcelain ware. These workers apply various techniques to shape glass, ceramics, wood, leather and other materials.

The second group includes those employed in printing trades, such as printers, pre-press technicians and binding workers. Among other activities, these workers compose and set type prior to printing, as well as operating printing presses, binding and finishing printed products and operating screen printing equipment<sup>2</sup>.

### Employment outlook

In 2013, around 1.2 million people EU-28 workers were employed as handicraft and printing workers across the EU-28. This equates to only 1% of all EU-28 employment and 5% of the wider occupation group<sup>3</sup>, illustrating that handicraft and printing workers form a relatively small occupational group (see Figures 1a and 1b).

The number of handicraft and printing workers in the EU-28 shrank by around a third from 2003 to 2013, reflecting both changing technology (e.g. the decline of traditional, labour-intensive printing processes) and the continued outsourcing of process manufacturing.

The 2014 European Vacancy and Recruitment Report (EVR<sup>4</sup>) identifies handicraft workers as one of the top-25 occupations for employee decline from 2011 to 2012. It was one of the main declining occupations in Italy, which has traditionally been a centre for high-end handicraft production.

Unlike many other manual occupations working predominantly in the manufacturing sector, handicraft and printing workers saw significant falls in employment from 2003 to 2008 (-14.0%) and from 2008 to 2013 (-22.5%). There were double digit percentage falls in employment levels in most industrial sectors over the last decade, including the business and other services sector, where around one in ten handicraft and printing workers is based.

While the number of handicraft and printing workers declined from 2003 to 2013, the share of these workers with medium- and high level qualifications increased. This reflects that job losses were especially acute among less-qualified handicraft and printing workers.

▼ Table 1 – Share of Handicraft and printing workers by qualification level compared to all occupations, EU-28, 2013

	Low	Medium	High
Handicraft and printing workers	32.8%	56.6%	10.5%
All occupations	21.2%	48.1%	30.7%

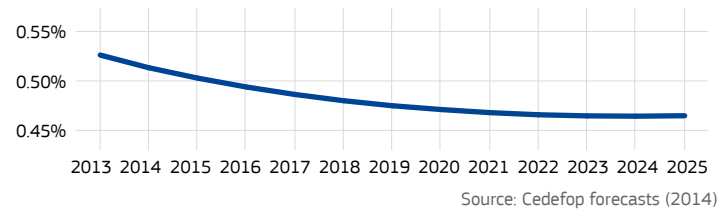
Source: Cedefop forecasts (2014)

### A look into the future

Figure 2 shows that handicraft and printing employment as a share of all EU-28 employment is set to continue to fall from 2013 to 2025; although employment share will stabilise somewhat in the later years within this period. This reflects that the rate of decline in the number of handicraft and printing workers is predicted to be much slower in the coming years than it has been over the last decade.

The size of handicraft and printing workforce in manufacturing is set to contract by just under -14% up to 2025, but this will be counteracted by an increasing number of jobs in the business and other services sector. Overall, the number of handicraft and printing workers is expected to decline by -9% compared to growth of 3% for all occupations across the EU-28.

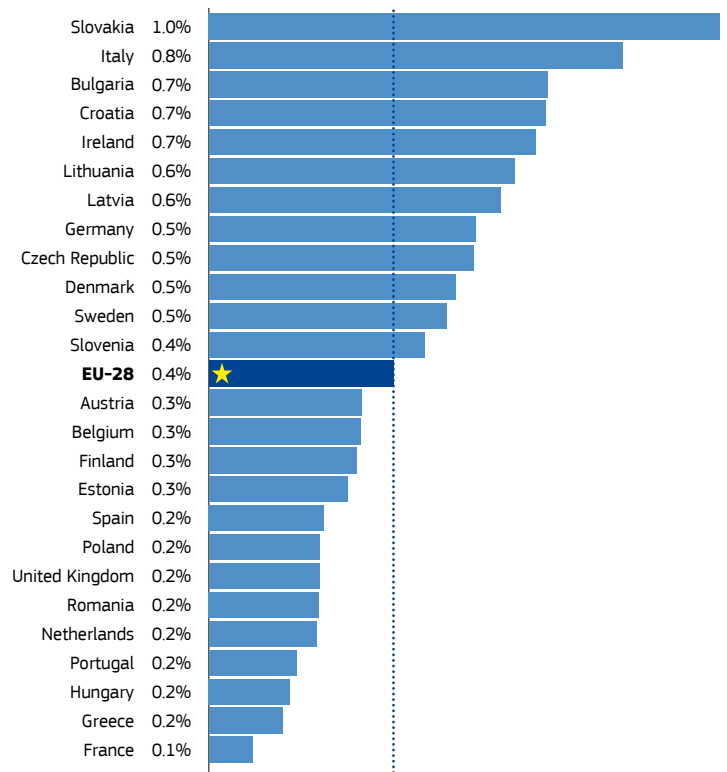
▼ Figure 2 – Future share of Handicraft and printing workers, EU-28



Although the overall number of handicraft and printing workers is expected the decline from 2013 to 2025, it is also forecast that over 40% of existing employees will leave the workforce due to retirement or for other reasons (in line with the average for all occupations). There will therefore be some handicraft and printing job openings in all EU-28 countries. As Figure 3 shows, in no country are handicraft and printing workers expected to account for more than 1% of all job openings.

There is expected to be a further increase in the share of handicraft and printing workers with higher level qualifications, reflecting in some cases the increased technological sophistication of some jobs in this area.

▼ Figure 3 – Share of Handicraft and printing workers in total job openings by country, 2013-2025



## Skills challenges

Many handicraft and printing workers require high levels of knowledge of the particular materials they are using (e.g. jewellery, musical and other precision instruments), production methods, processes and tools (designs, uses, repair and maintenance). They also require<sup>6 7 8</sup>:

- **Problem solving, judgement and decision making skills:** Identifying the strengths and weaknesses of different approaches and determining appropriate solutions.
- **Design skills and creativity:** Understanding design principles, techniques and their application; developing, designing, enhancing and creating products and processes.
- **Monitoring and quality assurance:** Assessing the performance of people and manufacturing processes; quality assurance and control of final products.
- **Engineering and technology:** Understanding, utilising and applying engineering principles and technology.
- **Active learning, listening and comprehension:** Understanding oral and written information, its correct interpretation and implications.
- **Numeracy skills:** For analysis and processing of information and data, as well as time management.

Technology is a key driver of the skills of handicraft and printing workers, both in terms of the technology used in production and maintenance of handicraft goods and in terms of the wide applications of materials, such as glass (for example, in fibre optic cables, aircraft/spacecraft windows, lenses and glass fibre). As globalisation creates a wider market, opportunities will arise in niche and bespoke markets requiring greater engineering, technological and design skills, as well as customer service and quality assurance<sup>9</sup>.

Printing is a good example, where technology, globalisation and environmental drivers are changing the occupational profile and skills needs of printers. Processes require more recycled material and more efficient production processes. 3-D printing and 'printed electronics' (as the twin drivers of customised products), and the 'internet of things' will create different printing processes and skills requirements<sup>10 11</sup>. ■

- 1 Defined as ISCO-08 Group 73 Handicraft and printing workers
- 2 International Labour Organization (2012), International standard classification of occupations structure, group definitions and correspondence tables: ISCO-08 Volume 1
- 3 ISCO Major Occupational Group 7 – craft and related trades workers
- 4 European Commission (2014), European vacancy and recruitment report
- 5 Cyprus, Luxembourg, Malta excluded due to data restrictions
- 6 FBH, wmp consult and ibw (2011), Identification of future skills needs in micro and craft(-type) enterprises up to 2020
- 7 O\*Net
- 8 DG Employment, Social Affairs and Equal Opportunities (2009), Investing in the future of jobs and skills scenarios, implications and options in anticipation of future skills and knowledge needs for the printing and publishing sector
- 9 Proskills UK (2010), The sector skills assessment 2010 for the process and manufacturing sector
- 10 Luk Bouters (2011), New skills for the printing industry appeal for new approaches in education
- 11 DG Employment, Social Affairs and Equal Opportunities (2009), investing in the future of jobs and skills scenarios, implications and options in anticipation of future skills and knowledge needs for the printing and publishing sector



Please quote this Analytical Highlight as:  
**EU Skills Panorama (2014) Handicraft and printing workers**  
**Analytical Highlight,**  
 prepared by ICF and Cedefop for the European Commission