



# LESS BRAWN, MORE BRAIN FOR TOMORROW'S WORKERS

## Cedefop's new skills forecast identifies parallel and contradictory trends and challenges

Work environments in the near future are expected to feature more autonomy, less routine, more use of ICT, reduced physical effort and increased social and intellectual tasks. Labour market skill needs will be shifting, and workers will have to supply new skills to match changing needs. An aging workforce, overqualification and job polarisation at the top and bottom of the skills scale will be some of the key challenges of the next decade, calling for action now.

Cedefop's regular skills supply and demand projections provide comprehensive information on labour market trends and skills development across Europe. Based on harmonised data and a single methodology, they have helped identify, prevent and offset potential labour market imbalances and supported policy-makers across Europe in making informed decisions <sup>(1)</sup>.

CEDEFOP SKILLS FORECAST 2018

### Key facts: EU28

**243 232 000**  
Employment in 2030

**6%**  
Increase  
from 2016

**0.4%**  
Growth per  
year

#### FASTEST GROWING SECTORS

Growth per year 2016-30

**Business & other services**

1%



**Distribution & transport**

0.6%



#### HIGHEST DEMAND OCCUPATIONS

Total job openings 2016-30

**11 984 600**

**Business & administration  
associate professionals**

**9 276 600**

**Sales workers**

**8 710 160**

**Cleaners & helpers**



**14 301 000**

Total job openings, 2016-30



**9%**

Created from  
new job  
openings



**91%**

Created due to  
replacement  
needs

**About 4 in 5 new job openings**

will relate to high-skilled occupations

## Europe's labour force to stagnate

Europe's working age population is expected to increase by 3.7% by 2030. The overall rise masks variations, however, with larger increases in some countries (Luxembourg, Ireland, Norway, Switzerland and Iceland) and falling numbers in others (Bulgaria, Latvia and Lithuania). A higher proportion of the working age population will be over 55. These older workers tend to have relatively low labour market participation rates, even if rates are higher today than in the past. This is why Europe's labour force will increase by just 1% until 2030, while the overall participation rate is expected to fall.

## Moderate job growth upholding employment

While these trends are expected to depress employment growth in the long term, job growth over the next 15 years is likely to outpace labour force growth and curb unemployment, in spite of economic uncertainties. Most countries are expected to see average modest employment growth of around 0.5% per year between 2020 and 2025 and to return to pre-crisis unemployment rates by 2030; southern European Member States may lag behind <sup>(2)</sup>.

Declining employment is projected for a number of countries including Germany, the Baltic States, Bulgaria and Croatia; one of the reasons is a decline in the working age population as a result of people's ageing or outward migration. It remains to be seen whether rising labour market participation rates and net migration will suffice to reverse the downward trend in employment rates.

## Varied sectoral employment growth

Production and trade in goods span the globe: this is one of the main drivers of recent and projected structural change in Europe. Over recent decades, the global distribution of labour has changed dramatically; global competition and market opportunities are likely to continue have an impact on the employment structure in Europe. Relative wages and productivity will play a key role in determining which jobs will remain and grow in Europe and which ones will be lost to foreign competition. Manufacturing is the main

sector affected by both global trade and automation <sup>(3)</sup>. In many manufacturing sectors, even though output will continue to grow, economic growth will be 'jobless' or even accompanied by job losses.

However, some high value-added sectors are expected to see substantial employment growth: these include electrical equipment, other machinery and equipment manufacturing, and motor vehicles. This last sector is especially expected to grow in several EU countries, such as France, Ireland, Romania and the Baltic States. Growth is less driven by internal demand than by the prospect of increased exports to rapidly growing markets such as China and Latin America. Employment is also expected to increase in computer, optical and electronic equipment but rates of increase are smaller in scale than for motor vehicles.

Service sectors will experience the fastest employment growth, notably legal and accounting services, research and development, advertising and market research, along with administrative and support service activities. The service sector is expected to grow especially in the newer Member States: employment in real estate, legal, accounting and consulting as well as architectural services is anticipated to increase significantly, particularly in Latvia, Lithuania, Poland, Slovenia, Slovakia, Bulgaria and Romania. Employment in the tourism sector is expected to grow in Greece, Spain and Portugal.

## Increasing job polarisation

Continued polarisation in job growth is expected, with rising numbers of new job openings at the top and bottom of the skills scale and a hollowing-out of middle level jobs.

The strongest growth is projected for high-skill occupations (managers, professionals and associate professionals), along with more moderate growth in certain occupations requiring fewer skills, including sales, security, cleaning, catering and caring occupations. Employment levels in medium-skill occupations, such as skilled manual workers and clerks, are projected to stagnate or even decline, as automation and offshoring take their toll.

<sup>(2)</sup> A modest recovery is expected in countries such as Greece, Spain, Lithuania and Cyprus, countering the extensive job loss caused by the various debt crises.

<sup>(3)</sup> As can be observed with the trade tariff disagreement between the US and the EU.

The bottom end of the skills spectrum is characterised by jobs resilience. Many of these jobs, not least personal services in both the private and the public sector (such as hotels and restaurants, caring and other proximity services), are little affected by expanding trade routes as they are linked to location. The face-to-face interaction of the person providing a service and the person benefiting from it also explains why these jobs comprise fewer routine tasks and have, so far, also suffered less from technological change and automation.

Tendencies towards a more polarised labour market appeared during the recession, with massive job losses in the middle of the skills scale, a moderate decline at the bottom and growth at the top. For the period to 2030, strong growth at the bottom of the scale is expected in a number of EU Member States, particularly Spain, France and the UK. The most pronounced polarisation patterns will be found in Germany, France and the Netherlands and, to a lesser extent, in Romania and Italy.

## Replacing workers who retire

The need to replace workers as they retire or leave the labour market will account for the bulk of job openings in the European economy. There is a need to replace workers across the board, even in sectors with declining employment prospects, such as agriculture, forestry and fishery, and despite polarisation. Replacement demand is proportionally highest in occupations and countries with older labour forces. The age structure of the primary sector working population will result in job openings in the coming years. Many of these jobs will require high skills levels, owing to the introduction of new technologies.

## Skills supply outpacing demand

The projections suggest that demand for workers qualified at the higher level will continue to grow, driven by shifts in the sectoral employment structure and skill-biased technological change. The EU labour market has long been transforming, moving from heavy industry to digital technology and services, and from a broad base of often low-skilled jobs to a knowledge economy requiring different and higher-level skills.

On the supply side, investment in higher education and training policies has boosted the number of highly

qualified workers. Cedefop's skills forecast suggests that this trend will gain further momentum, enlarging the pool from which workers can be drawn to meet future needs.

The interplay between supply and demand shows that the former is likely to outpace the latter in the years to come. Highly trained workers may find it easier than the less well-qualified to secure jobs, though they may end up in jobs below their qualification level. This phenomenon, often referred to as 'qualifications inflation', may give an often misleading impression of demand pressures.

## Less routine work, more ICT

Projections point to a general reduction in physical tasks and an increase in intellectual and social ones. These require communication skills, entrepreneurship and other key competences in areas such as selling/persuading and serving/attending/caring<sup>(4)</sup>. They also show a continued and considerable increase in demand for ICT skills as the pace of innovation in the application of information and communication technologies – productivity-enhancing technological change – is expected to accelerate further in the coming decades.

These shifts are most prominent in the Member States that joined the European Union after 2004, perhaps owing to a need to catch up and upward convergence in the employment structure in Europe.

## Strong policy responses needed

Policies boosting labour market participation rates of specific demographic groups and fostering longer working careers, including lifelong learning policies, will sustain an increasing labour force for a while. However, incentives to encourage childbirth and moderate inward migration are considered necessary by many analysts to ensure a stable labour force in the medium and long term. At the same time, retiring baby-boomers will vacate a large number of jobs, especially in occupations requiring lower and medium skills. Education and training systems need to take

<sup>(4)</sup> Within the new set of skill forecasts, Cedefop and Eurofound have collaborated to examine the tasks and skills content of the current and future European employment structure. These results are drawn from Eurofound's analysis.

this trend into account to ensure continuity of economic activities.

In parallel, the trend towards high value-added services in Europe is here to stay, all the more as the European labour force is becoming increasingly qualified and capable of meeting the relevant skill needs. At the same time, the shift towards services – a sector hosting many non-standard contractual forms of work, often without insurance – demands policies ensuring social protection and cohesion, especially in times of sluggish economic growth. This also extends to the fast-growing platform economy which gives rise to new forms of work and employment relationships.

EU Member States will have to improve their policy frameworks to encourage the worker mobility across the EU while meeting the challenges of digitalisation. In this context, Cedefop's anticipation of future key challenges for skills and labour markets informs not only education and training policies but also employment and social policies, such as the European Pillar of Social Rights. This EU priority policy area was launched in March 2018 and aims to ensure fair working conditions and welfare rights, to equip people with the right skills and to create more unity in European societies <sup>(5)</sup>.

Labour market bottlenecks demand a policy response alleviating their effects: one example is overqualification. Employment of highly skilled workers in jobs requiring medium-level qualifications is likely to raise overall productivity levels in the short term but may eventually lead to de-skilling and skills obsolescence and, in turn, to lower job satisfaction and loss of productivity. In parallel, policy-makers will have to promote social advancement of medium- and low-skilled workers, whose career prospects may be threatened as they compete for jobs with higher qualified workers and risk ending up in a vicious circle of dropping wages and productivity. To counteract this dangerous trend, which can backfire on the healthy development of European economies, the Council recommended that Member States offer low-skilled adults more upskilling pathways, to help them build stronger literacy, numeracy and digital skills <sup>(6)</sup>.

<sup>(5)</sup> *European Pillar of Social Rights – building a more inclusive European Union.*

<sup>(6)</sup> *Council recommendation of 19 December 2016 on upskilling pathways: new opportunities for adults.*

Politicians across the board are challenged to mitigate all these parallel, and sometimes contradictory, trends and risks. A broad and varied offer of vocational education and training provision is needed, ranging from tertiary level VET for jobs requiring the highest technical skills to up-to-date training provision matching the skills requirements of jobs at the lower end of the qualifications scale. At the same time, strong employment and social policies need to frame labour market developments if Europe wants to avoid an ever-widening gap between work-rich and work-poor people.