

## Matching skills and jobs in the European Union

### SUMMARY

Skills mismatch (the discrepancy between workers' skills and labour market needs) is not only a problem encountered by jobseekers; it also affects employees working in positions below their levels of qualification or outside their fields of study, and concerns some groups of older workers that face difficulties in keeping their skills up to date.

According to studies, various solutions include adapting education and training more closely to labour market needs; providing flexible arrangements and appropriate facilities at the workplace; and enhancing labour mobility and lifelong learning. In order to better understand skills mismatch, the European Centre for the Development of Vocational Training (Cedefop) carried out in 2014 the first pan-European skills survey, the initial results of which were published in October 2015.

The European Union (EU) is dealing with the issue of skills mismatch in different ways, particularly by making recommendations to national and/or local authorities responsible for labour markets or for the content of education and training; enhancing the mobility of workers, for example through deepening international cooperation; implementing Community instruments such as the job search platform EURES; and facilitating the matching of skills and jobs through EU funding.



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- Types of mismatch
- Tackling skills mismatch
- European framework
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## Background

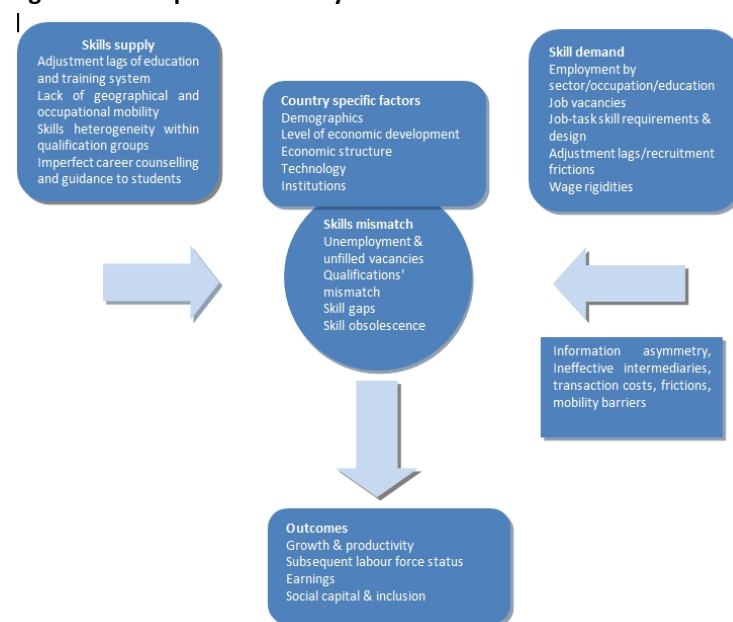
### Definition and types of skills mismatch

According to a widely recognised [definition](#), skills mismatch is 'the discrepancy between the qualifications and skills that individuals possess and those needed by the labour market'.<sup>1</sup> There are two main types of skills mismatch: vertical (i.e. the level of education required for the current job), where employees can be over-qualified or under-qualified; and horizontal (i.e. the type of education required), where employees might be over-skilled or under-skilled. [Qualitative mismatch](#) occurs when the qualifications or skills of workers are different from the qualifications or skills required for their jobs.

### Vulnerable groups

According to a [study](#) by the International Labour Organization ([ILO](#)) on skills mismatch in Europe, qualifications mismatch predominantly affects younger male workers working with non-standard contracts. Generally, young people and third-country immigrants suffer more from over-qualification, while older workers are more at risk of skills obsolescence.

**Figure 1 – Components and dynamics of skills mismatch**



Source: European Commission, [Employment and Social Developments in Europe](#), 2012, p. 352.

## Causes and effects of skills mismatch

### Causes

Skills mismatch is produced by different factors, such as technological progress (for instance, digital development), economic developments (for instance, industrial restructuring), or social changes (for example, demographic phenomena). **Technological factors** include the widespread use of information and communication technologies (ICT), which has triggered an increased demand for skilled workers that the existing ICT workforce cannot meet. Furthermore, technological changes have diminished the demand for manual tasks. **Economic and structural factors** include practices such as outsourcing the production of low-skill-intensive goods or sectoral restructuring. **Demographic factors** involve the trends affecting the age structure of the European workforce, which are a further barrier to an efficient matching of skills supply and demand. [EU labour force survey data](#) show that Member States with higher levels of skills mismatch share some common characteristics. They tend to have lower levels of public investment in education and training, which might be hindering their ability to respond to changing labour market needs. They also have lower expenditure on labour market programmes and more rigid and segmented labour markets. According to an [economics review](#), qualitative mismatches can arise due to mobility barriers within and across countries, regions, sectors and occupations, as well as asymmetric information exchanges between employers and employees.

## Effects

A [study](#) carried out by human resources consultancy [Randstad](#) highlights that persistent skills mismatch brings on economic and social losses. Increasing unemployment can lead to loss of a country's human capital and hinder its long-term growth prospects. Skills bottlenecks can lower company productivity. For instance, over-qualified workers are often less motivated by what they do and therefore resort more frequently to absenteeism. An [OECD study](#) shows that qualifications mismatches and the resulting unemployment can entail higher economic and welfare costs.

## The impact of the economic crisis

The economic crisis has increased unemployment in the EU and worsened the problem of skills mismatch, especially in certain Member States, regions and sectors.<sup>2</sup>

In 2014, Cedefop carried out a skills survey (see box above), which revealed that higher unemployment forces people to accept jobs below their level of qualifications and skills. For instance, 25% of the EU's highly qualified young workforce are over-qualified for their jobs; this tendency is twice as strong among those having graduated since 2008 compared to graduates from earlier years.

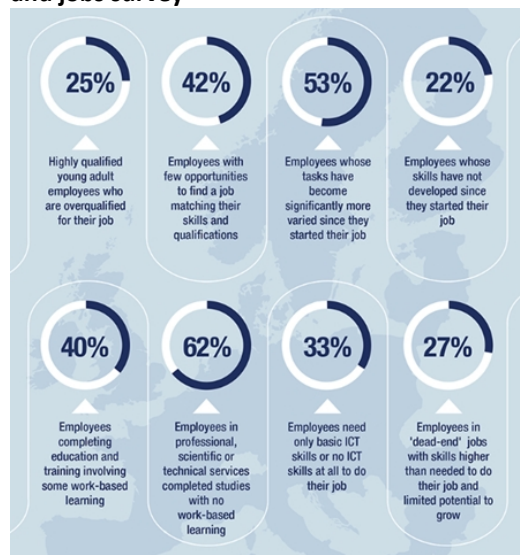
In order to better understand skills mismatch, in 2014 CEDEFOP carried out the first pan-European [skills survey](#) (eu-SKILL). Approximately 48 000 adult employees from the 28 Member States were surveyed in order to quantify the dimensions of skills mismatch and trace its development within individual careers. The first [results](#) of this global survey were published in October 2015.

## Types of mismatch

### Skills mismatch in searching/recruiting for a job

*What causes skill shortages?*

**Figure 2 – Results from 2015 Cedefop skills and jobs survey**



Source: Cedefop, [European skills and jobs survey](#), 2015.

According to a 2015 [Cedefop study](#), skills shortages can be genuine, whenever there is a real lack of workers possessing the required qualifications, despite the competitive salaries offered, as happens in 34% of cases. Yet, in 29% of cases, skills shortages appear because employers cannot offer competitive wages or sufficient job security. In 24% of cases, there is simultaneously a lack of applicants with the right skills and an uncompetitive starting salary. Finally, 13% of skills shortages are caused by a lack of graduate training and a slow hiring process.

### Bottleneck vacancies

An [overview report](#), drafted by research organisation SEOR for the European Commission, [defines](#) 'bottleneck' occupations as jobs where employers have had problems finding and hiring staff to fill vacancies in the past, and expect the

same in the future. According to the SEOR report, bottlenecks occur in all EU Member States, and not only in high-skilled occupations (for instance, in the culinary arts, healthcare, ICT, sciences and engineering), but also in skilled manual occupations (such as sales assistant work and machine tool setting). Because most bottlenecks are

structural, they can be eliminated through better alignment of education and training systems to labour market needs at national level and by encouraging job mobility.

### **Skills mismatch at work**

#### *Over-qualification*

Skills mismatch not only affects jobseekers, but also persons already holding a job. Cedefop's 2015 European skills and jobs survey (figure 2) demonstrated that 27% of employees are stuck in 'dead-end jobs', with skills higher than needed and limited potential to grow. A 2014 [Cedefop study](#) shows that over-qualified workers more frequently get wage penalties, have lower job satisfaction and a higher turnover than people with jobs matched to their qualifications.

#### *Obsolescence of work skills*

An [OECD study](#) reveals that older workers have greater difficulty in mastering new skills resulting from technological and organisational innovations, such as computerisation, and therefore need more retraining. The 2015 Cedefop survey results show that the tasks of 53% of employees had become progressively more complex since they took up their post, yet 22% of employees had not developed their skills further since that moment.

## **Tackling skills mismatch**

### **Possible solutions**

Dealing with skills mismatch is the joint concern of public and private actors. Measures include educational and training policies at national and local level, as well as corporate human resources strategies. Further possibilities are offered by Community tools and organisations, as well as by initiatives ensuring the mobility of persons, skills and qualifications. The key solutions may be summarised as follows:<sup>3</sup>

- Adapting education and training to the changing requirements of the world of work, as well as developing common strategies, tools and principles to improve this link;
- Improving lifelong learning in response to population ageing, which brings about a shrinking of the working population;
- Encouraging employers to take the initiative. For example, in the case of a genuine skills shortage employers could, in the short term, adjust their skills demand, for instance by hiring less qualified workers and upgrading them to the required level;
- Still at the employers' level, safer working conditions can attract workers possessing the required skills. Furthermore, flexible arrangements and facilities at the workplace (e.g. part-time work) can also contribute to filling employment gaps;
- Increasing the mobility of workers, for example by facilitating cross-border recognition of qualifications.

## **European framework**

The European Commission highlights the fact that the EU needs to overcome all forms of skills mismatch in order to make effective use of its human capital and prevent its waste. The Commission's 2008 communication, '[New Skills for New Jobs](#) – Anticipating and matching labour market and skill needs', points out that upgrading skills is not enough, and that it is essential to achieve a better match between skills supply and demand on the labour market. It focuses on removing administrative barriers to mobility, improving skills assessment and anticipation at EU-level (for instance, through the now defunct [Progress](#) programme and the [Lifelong Learning Programme](#), integrated in the [Erasmus+](#) programme in 2014) and the creation of more high-skilled jobs.

In the [Europe 2020 strategy](#) (Flagship Initiative: 'An agenda for new skills and jobs'), the free movement of workers is considered a key element in the development of a more integrated EU labour market, allowing worker mobility from areas characterised by higher unemployment to areas of labour shortages, and helping overcome bottlenecks and skills mismatches. Other important actions at EU level involve the provision of appropriate financial support via the structural funds, particularly the European Social Fund (ESF), but also the European Globalisation Adjustment Fund (EGF), the European Regional Development Fund (ERDF) and the European Agricultural Fund for Rural Development (EAFRD), as well as the creation of the European Skills, Competences and Occupations framework ([ESCO](#)).

The Commission's 2012 communication, '[Rethinking Education: Investing in skills for better socio-economic outcomes](#)', predicts that by 2020, 20% more jobs will require higher-level skills, and emphasises that education should contribute to the fulfilment of this demand. Key challenges are the further development of transversal and entrepreneurial skills, as well as the adjustment of the existing vocational and educational training (VET) systems to make them more capable of addressing skills shortages.<sup>4</sup> It is also essential to upgrade the skills related to subjects in the field of science, technology, engineering mathematics (STEM) and ICT, and to promote partnerships involving educational institutions, private and public actors, and other stakeholders.

The Commission's 2012 [Employment Package](#) demanded higher investment in skills to address skills mismatches on Europe's labour markets, and called for better anticipation of skills needs. It set the goal to improve the recognition of skills and qualifications and to broaden the use of skills-matching instruments, such as the European Network of Employment Services ([EURES](#)). Set up in 1993, EURES works to enhance cooperation between the public employment services of the European Economic Area (EEA) Member States (the EU-28 as well as Norway, Iceland and Liechtenstein) and the Commission, allowing for the exchange of information about vacancies and employment applications. It includes an [internet portal](#) and a network of employment advisers and contributes to approximately 150 000 placements per year.

The Commission upgraded EURES in 2012, to further reinforce it and to extend its coverage, and to provide more personalised job-matching services. In 2012, EURES was equipped with yet another portal – '[Your first EURES job](#)' – a mobility scheme for helping young Europeans aged 18 to 30 years old to find a job, traineeship or apprenticeship in other EU Member States. In 2014, the Commission presented a [proposal concerning the re-establishment of EURES](#), aimed at redesigning its decision-making procedures and range of services. For this purpose, the Commission advised that EURES should focus more strongly on management by setting objectives and results in terms of matching, placement and recruitment.<sup>5</sup>

On 10 September 2015, the European Parliament adopted a [resolution](#) entitled 'Creating a competitive EU labour market for the 21st century: matching skills and qualifications with demand and job opportunities, as a way to recover from the crisis'. The resolution focuses on qualitative shortages as a result of the mismatch between sectoral, occupational or skills requirements. Furthermore, it voices deep concern about the levels of youth unemployment in Europe and underlines in this regard the importance of dual education (combination of apprenticeship and vocational education) and a stronger connection between education and employment. Other important points

are the anticipation of future skill needs, the fostering of labour mobility, the exchange of best practices, as well as the importance of innovation and digital skills.

## Main references

[Matching skills and jobs](#) – Insights from Cedefop's European skills and jobs survey, 2015.

[The skill mismatch challenge in Europe](#), Cedefop, 2012, Chapter 6.

[Better skills, better jobs, better lives](#) - A strategic approach to skills policies, OECD, 2012.

## Endnotes

<sup>1</sup> [The skill mismatch challenge in Europe](#), Chapter 6, p. 351.

<sup>2</sup> A [survey](#) reveals that at the end of 2011, the ratio between available vacancies and unemployed people was 1:6 at EU level, ranging from two to four unemployed persons per vacancy in Austria, Germany, Belgium and Finland, to more than 20 in Spain and Greece.

<sup>3</sup> See also: [The skill mismatch challenge in Europe](#), Chapter 6, p. 386.

<sup>4</sup> On this topic, see also the EPRS briefing [Promoting entrepreneurship through education](#), Debyser, Ariane, 2013.

<sup>5</sup> See also the EPRS initial appraisal of the Commission's impact assessment, [Reform of the European Network of Employment Services \(EURES\)](#), Maniaki-Griva, Alexia, 2014.

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[eprs@ep.europa.eu](mailto:eprs@ep.europa.eu)

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