

#ESJsurvey INSIGHTS

Skill shortages in the European Union

@Cedefop research shows that genuine skill shortages are only present in specific sectors and occupations and affect dynamic enterprises, while many firms face recruitment difficulties due to job offers of poor quality. Cedefop expert @K_Pouliakas notes that mitigating skill shortages is a joint responsibility of private and public actors since “countries with more responsive education and training systems have seen fewer companies faced with recruitment bottlenecks in the last decade”.

1.1. Matching skills with job openings

Employers having difficulty ‘finding the right skills or talent’ is commonly seen as an indication of skill mismatch in European job markets. Some 4 out of 10 EU firms report having faced such difficulty in 2013.¹ Higher than average recruitment bottlenecks tend to be reported in the manufacturing, ICT and health care sectors², for skilled trades workers, engineers, ICT professionals and workers in sales or marketing posts³. For some skill mismatch is also a reason why individuals, mainly young people, remain unemployed, even if they have a high level education.

Careful scrutiny of available data points out however that *genuine* skill shortages cannot be reported across the board.

TABLE 1 : **Difficulties in filling vacancies by type of bottleneck, employers that have recently recruited higher education graduates, 2010, EU28+TR, IS, NO**

Type of recruitment bottleneck	% of firms with difficulty filling vacancies
GENUINE SKILL SHORTAGES <i>Shortage of applicants with the right skills and ability to offer a competitive starting salary</i>	34%
UNCOMPETITIVE WAGE OFFER <i>Inability to offer a competitive starting salary</i>	29%
WEAK SKILL SHORTAGES <i>Shortages of applicants with the right skills & inability to offer a competitive starting salary</i>	24%
HRM BOTTLENECKS <i>Lack of offer of competitive graduate training and development program and slow hiring process</i>	13%

Source: Analysis of Flash Eurobarometer 307 microdata; Cedefop (2015a)

Genuine skill shortages, where employers cannot fill a job vacancy because job applicants do not possess the required skills even though a competitive job offer is made, arise more predominantly in specific industries and occupations. Cedefop shows that genuine skill shortages affected a third of EU firms that recruited recent higher education graduates in 2010 (Table 1). Firms experiencing genuine difficulties to hire skilled workers are typically those competing in international markets, operating in the private sector and in higher-end product markets, which are naturally dependent

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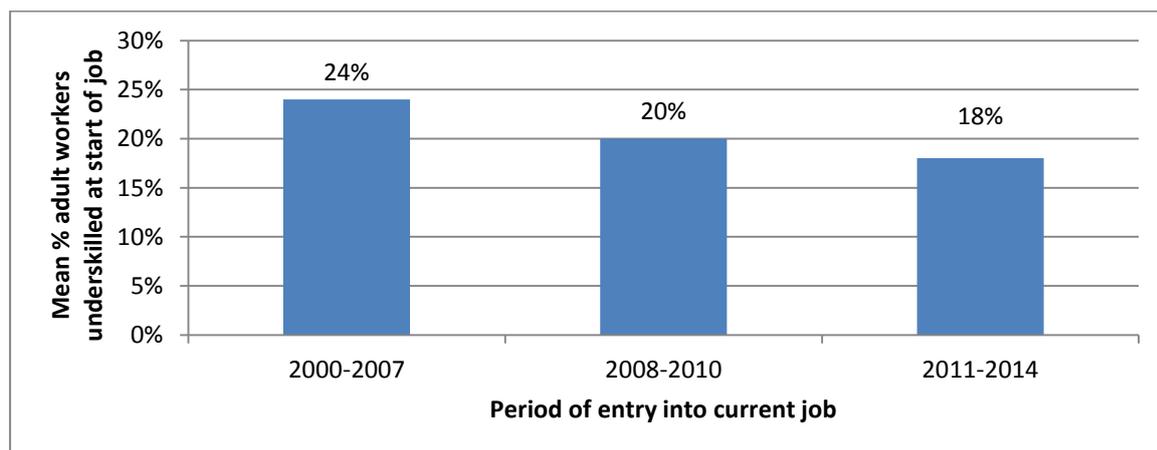
on highly competent staff. As Europe’s ability to remain a forerunner in the global competitiveness race is intrinsically linked to innovative EU firms meeting their skills needs, strengthening creativity, innovation and other key competences as part of educational curricula remains critical.

Nevertheless, when considering carefully the reasons for recruitment difficulties of firms, it becomes apparent that many employers cannot attract the right talent for reasons other than a generalised lack of skills on the part of job applicants.

Cedefop⁴ shows that many firms may find it difficult to fill their vacancies because they do not offer an attractive recruitment package, notably a competitive salary or an inherently stable contract, or due to poor image and location. Their HR strategy may be inefficient and the career prospects offered to potential job seekers limited.

Analysis of the determinants of recruitment difficulties in 58 countries across the world also confirms that recruitment difficulties are highly cyclical and, thus, affected by the recent economic crisis. Employers in countries with higher and increasing unemployment rates experience fewer difficulties filling available posts. Cedefop’s European skills and jobs (ESJ) survey⁵ has further revealed that collapsing property prices, which ‘lock in’ mortgage or home owners, and financial constraints are likely to limit the ability of individuals to engage in labour market mobility or to land a job matched to their skills.

FIGURE 1: Average share of adult employees (aged 24–65) who were under-skilled at the start of their job by period of job entry, 2014, EU28



Source: Cedefop European Skills and Jobs (ESJ) survey, Cedefop (2015b)

The ESJ survey highlights that in recent years job finders are more likely to possess the skills required by their jobs at entry, relative to those who began their jobs before the onset of the economic downturn (Figure 1). The prevailing trend in the data is thus one of recent job finders entering into jobs demanding fewer, rather than more, qualifications and skills than they have.

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1.2. Vacancy bottlenecks across countries

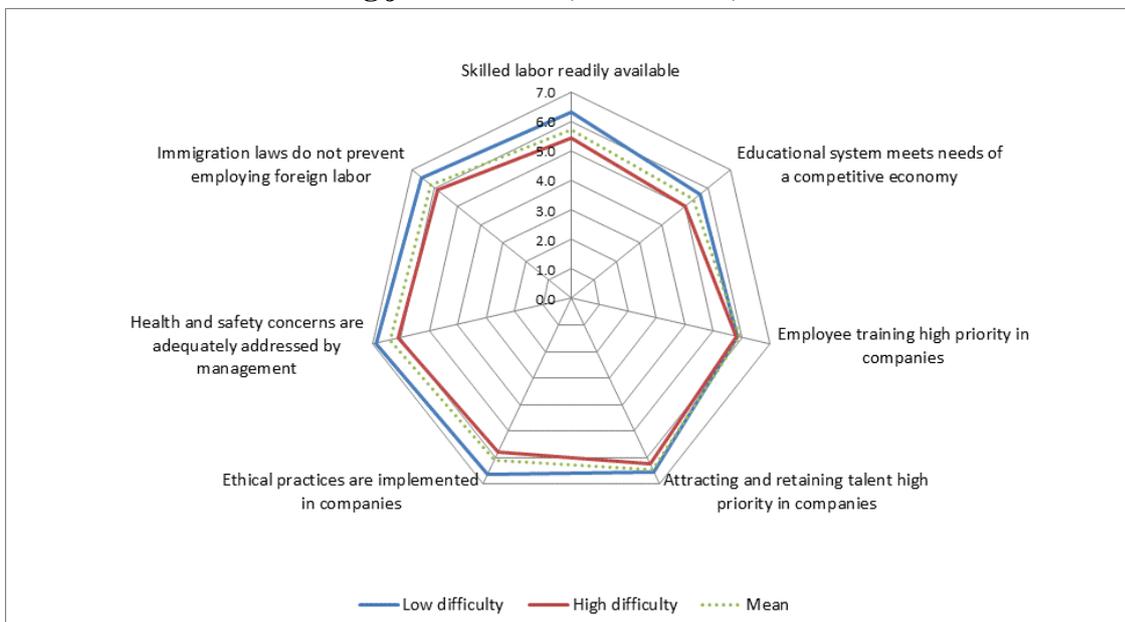
With evidence of skill shortages specific to some sectors and occupations and becoming less prevalent in the post-crisis period, does this mean that reforming vocational education and training systems has become less urgent? Certainly not.

While skill shortages may be subdued today, concerns about a lack of available skill are likely to become stronger once there is a return to higher levels of economic activity, as is already the case in some EU countries (Austria, Germany, Hungary and Slovakia).

There is also a strong structural component to skill shortages. Companies are less likely to have vacancy bottlenecks in countries with more responsive education and training systems (for instance, Finland, Denmark and Switzerland), or where the supply of skilled labour (including foreign labour) is in greater abundance (Figure 2).

But responsive VET systems cannot do it alone; the evidence also highlights the critical role of employers in addressing talent shortages. Talent shortages are smaller in countries where employers make a greater commitment to attracting and retaining talent and offer good quality jobs.

FIGURE 2: Difficulties filling job vacancies, 2006–2014, EU28



NB: Graph depicts mean indicator value for the groups of EU countries with hiring difficulties at the highest and lowest quartiles of the distribution.

Source: Cedefop (2015a) based on analysis of Manpower Talent surveys & IMD WCY data

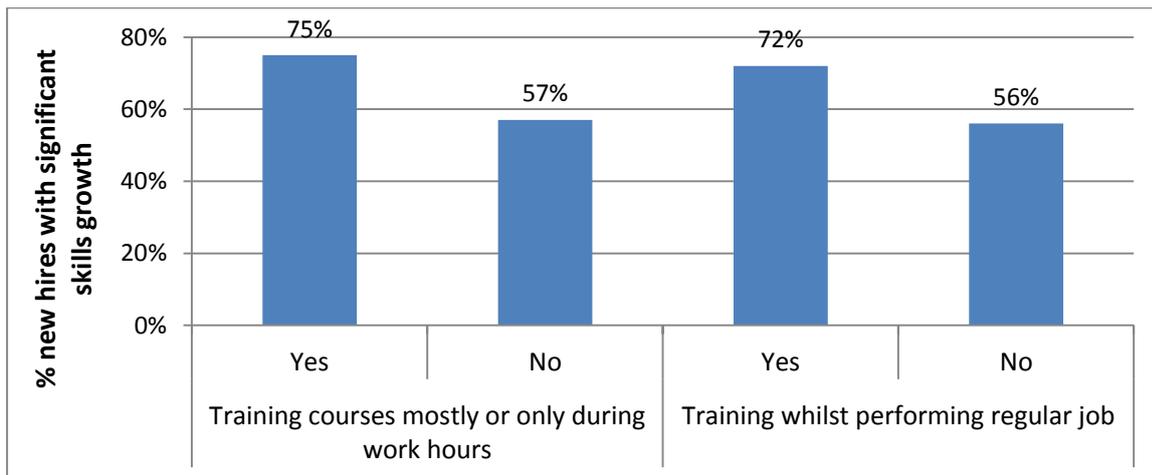
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1.3. Mitigating shortages: a joint responsibility of public and private actors

Tackling skill shortages in European economies depends critically on firms adopting a long-term view to hiring and managing talent via the offer of good quality jobs. The HR strategies of firms could better target individuals on the basis of their ‘potential’ rather than on accumulated prior work experience, also sourcing relatively unexploited talent (e.g. females, older workers, migrants), which tends to be largely overseen.⁶

Moreover, companies have much scope to offer more non-formal and informal training as part of the induction of newly hired employees (Figure 3). According to the ESJ survey about three quarters (75%) of newly hired adult workers who did some formal or informal training during work hours significantly improved their skills since the start of their job; only 57% of those with no training did.

FIGURE 3: Average share of new hires with significant improvement in skills since the start of their job by incidence of non-formal and informal training, 2014, EU28



NB: New hires are adult workers employed for less than one year with their current employer.

Source: Cedefop European Skills and Jobs survey, Cedefop (2015b)

Increasing participation of companies into *work-based learning* (WBL) training programmes is another well-established avenue of plugging skill gaps of new hires. Training that takes place directly in the workplace when studying (e.g. apprenticeships) is a particularly effective means of placing individuals into more skill-intensive jobs, which facilitate faster skill development. 16% of those who did not undertake any workplace learning as part of their studies failed to develop their skill further in their first job, in contrast to 11% of those who did, according to the ESJ data. Yet, the incidence of WBL is still low in some study fields and occupations.

Even though the mitigation of skills shortages is intrinsically dependent on private sector involvement, sometimes they necessitate State intervention. The ability of countries to prevent prolific skill shortages from arising is dependent on the speed with which they can put in place appropriate institutional frameworks and industry standards that can ensure a widespread

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availability of skills in high demand.⁷ This includes the design of new vocational programs or schools and the setting up of qualification frameworks and systems of validation and recognition of the sizeable stock of informal skills in European labour markets.

Effective skill anticipation systems, which can provide accurate and up to date labour market intelligence for the purposes of curricula reform, alignment of VET courses towards sectors and occupations with emerging skill needs and provision of high quality career guidance and counselling, are also crucial instruments for preventing future skill shortages.

Further reading:

Bessen (2015), *Learning by doing: The real connection between innovation, wages and wealth*, Yale university press.

Cedefop (2015a). *Skill shortages and gaps in European enterprises: Striking a balance between VET and the labour market*. Cedefop reference series, No. 102. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/3071>

Cedefop (2015b), *Skills, qualifications and jobs in the EU: the making of a perfect match?*, Cedefop reference series, forthcoming.

Cedefop (2015c), *Matching skills and jobs in Europe: Insights from Cedefop's European skills and jobs survey* <http://www.cedefop.europa.eu/en/publications-and-resources/publications/8088>

Enter the debate on the policy implications of the ESJ survey at:
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¹ See Eurofound 3rd European Company survey: <http://www.eurofound.europa.eu/surveys/ecs>

² European Commission (2014): <http://ec.europa.eu/social/main.jsp?langId=el&catId=89&newsId=2131>

³ Manpower talent shortage survey: <http://www.manpowergroup.com/wps/wcm/connect/manpowergroup-en/home/thought-leadership/research-insights/talent-shortage-2015>

⁴ Cedefop 2015a

⁵ The ESJ is a new European survey, carried out in 2014 in all 28 EU Member States, which collected information on the match of the skills of about 49,000 EU workers (adults aged 24–65) with the skill needs of their jobs. For more information, see <http://www.cedefop.europa.eu/en/events-and-projects/projects/analysing-skill-mismatch>

⁶ WEF (2014): <http://www.weforum.org/reports/matching-skills-and-labour-market-needs-building-social-partnerships-better-skills-and-bette>

⁷ Bessen, J. (2015): <http://yalepress.yale.edu/book.asp?isbn=9780300195668>