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## **Trends and Challenges in Human Resources Development and their Integration on the Labor Market**

**Alexandru Robert MIHAILA, Catalin Ionut SILVESTRU, (Bere)  
Ramona Camelia SILVESTRU, Marian Ernut LUPESCU**

**The Bucharest University of Economic Studies  
mihaila\_robert@yahoo.com**

Taking into account the fluctuation in skills requirements demanded by the labor market at European level and the fact that Europe's education and training systems are diverse in structure, tradition and output, the member states, social partners and other stakeholders felt the need to have a common reference to increase understanding, transparency and comparability of qualifications.

Having transparent information on qualifications across Europe is essential to support recruitment, career management, lifelong learning strategies etc. This requires stakeholders (awarding bodies, member states authorities, employment services, education/training institutes, etc.) to cooperate with each other, to share information and to develop a common understanding of information relating to qualifications, occupational experiences and skills acquired.

In this paper, the authors propose to analyze both the recent trends in the integration of human resources into the labor market in Europe and to identify and explore the potential challenges in terms of integrating human resources into the labor market in Europe from the perspective of those involved.

The analysis will be conducted based on the information from recently adopted European recommendations (e.g. The European Qualification Framework for lifelong learning, proposed changes in the Euro pass recommendation) and key European project such as European Skills, Competences, Qualifications and Occupations (ESCO).

Answering the needs for integrated approaches regarding the qualifications and the labor market turns out to be visible at the European level, yet challenges are to be addressed in each member state with taking into account specific national context.

## *Introduction*

The European Recommendation on Upskilling Pathways: New Opportunities for Adults (2016) argues that in our days, “each individual must have a wide range of knowledge and skills, including a sufficient level of literacy, numerical and digital skills, to harness their full potential, play an active role in society, and fulfill social and civic responsibilities. Such knowledge and skills are also essential for access to and progress on the labor market and continued participation in education and training.”

According to European Skills, Competences, Qualifications and Occupations (ESCO), at European level, statistical data shows that even if the number of unemployed people exceeds 29 million, there are countries where it is very difficult to find skilled candidates at the level of their competencies in certain fields, such as health care, ICT, engineering and the green economy.

From this perspective, greater labor mobility within the EU may represent a solution to the imbalances presented above. At the same time, we need to keep in mind the frequent changes and the diversity of jobs required on the labor market, which attracts the need for continuous qualification and retraining of the human resource.

We also have to take in consideration that for achieving a set of common skills for the European workforce we have to take in account the differences existing in the educational system both as tradition, structure and learning outcomes.

## *Methodology*

The current analysis was conducted on two dimensions: one related to changes in the European recommendations, and one related to statistical descriptive overview related to Integration of the human resources on the labor market.

Thus, the changes related to recently adopted European recommendations take into account the European Qualification Framework for lifelong learning and the proposed changes in the Euro pass recommendation, together with changes resulted from key European project such as European Skills, Competences, Qualifications and Occupations (ESCO). Moreover, descriptive analysis is provided in relation to indicators considered relevant for integration of the human resources on the labor market, with briefly presenting trends in this respect, based on data at European level, using Skills panorama and CEDEFOP surveys.

## *European context reflected in recent recommendations*

In the Proposal for a Decision of the European Parliament and of the Council from 4<sup>th</sup> of October 2016 on a common framework for the provision of better services for competences and qualifications (Europass) and repealing Decision No. 2241/2004 / EC is stated:

- The Europass Qualification(s) Supplement will be issued by a competent national authority according to the models created by the European Commission and other stakeholders such as the Council of Europe and UNESCO.
- The Europass Qualification Supplement will be:
  - adopted by the relevant national authorities for completing and releasing supplements;
  - available through the Europass electronic tools (online);
  - provided in the official languages of the European Union;
  - subject to periodic review to ensure relevance and ease of use.
- All documents relating to Europass Qualifications Completions issued by authorized bodies will be issued free of charge in electronic format, in the national language and/or in the main language of the ERP, according to the procedures agreed between the issuing bodies and the National Coordinating Points for Competencies Skills Coordination Points and the procedures agreed by the Commission with stakeholders;
- The ESCO classification will directly support the functioning of Europass by providing a common reference language for the exchange of information and documents on skills and qualifications as well as for job search, job matching, the search for education opportunities and training and offering career counseling.

## *Integration of the human resources on the labor market: Indicators and trends*

The Recommendation on Upskilling pathways highlights the fact that vacancies from the labor market “require a growing level and a wider range of skills”. In the future, there will be fewer jobs of elemental nature, as CEDEFOP studies (CEDEFOP's European skills and jobs survey), (Changing nature and role of vocational education and training (VET) in Europe) show. Even jobs that traditionally require only a low level of qualification or no qualifications become more and more demanding. The justification of the Upskilling Pathways Recommendation takes into account the studies developed in justifying proposed changes, arguing for example, that “the vast majority of jobs will require a certain level of digital competence and an increasing number of elementary jobs require some essential or generic skills (such as communication, problem solving, teamwork and emotional intelligence)”, as shown also in CEDEFOP studies.

In this context, ensuring a common reference system, transparency and comparability of qualifications at European level is a must. To be able to do that, is necessary to establish a common language that would help bridge the communication gaps among different countries and between employment, on one hand and education and training, on the other hand. It increases the transparency of occupations, qualifications, skills, competences and learning outcomes. This transparency and common reference points will help people to exchange information with unambiguous and shared meaning, independent of the language or electronic systems used. By ensuring this transparency, it will be possible to find out the following aspects:

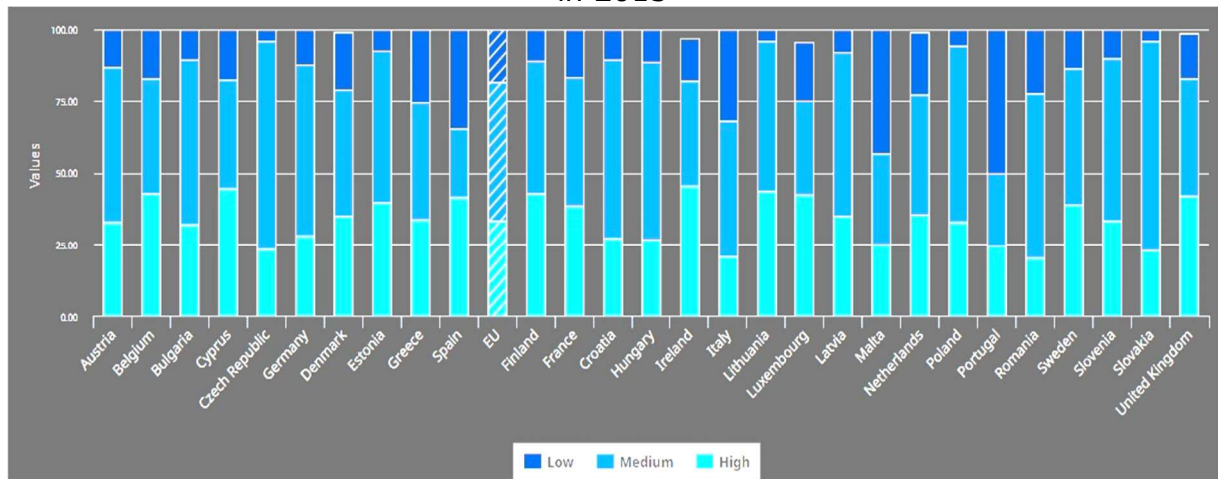
- the knowledge, skills and level of responsibility and autonomy that people gain as a result of a specific qualification;
- what qualifications, meaning the knowledge, skills and level of responsibility and autonomy, that are required or often requested when seeking work in a specific occupation.

Therefore, the 2015 Joint Report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020) sets transparency and recognition of skills and qualifications among its new priorities. The same report stresses that the European Qualification Framework (EQF) should be further developed in order to make qualifications more transparent and comparable. The report takes into account also recent evolutions related to need of integration of newly arrived migrants on the labor market, emphasizing the fact that existing transparency instruments could enable a better understanding of foreign qualifications in the Union, and vice versa.

To be able to identify the trends and challenges in human resource development and their integration on the labor market we need to have a better understanding of the skills requirements resulted from labor market evolutions. We will illustrate these evolutions by using a number of indicators that are known to have a high degree of influence on the subject.

As mentioned earlier, the level of qualification of employed population has a high impact on the outcome of any activity. Skills panorama portal, developed within the context of the New Skills Agenda provides illustration of the evolutions related to educational achievements, experienced in Europe in recent decades, such as significant increase in educational achievement levels, with around a third of EU employed population with tertiary education levels achieved, nevertheless, one needs to take into account existing variations among European countries (see figure 1). Reducing the number of low skilled adults remains however a challenge across Europe.

Figure 1. Share of employed population by level of qualification across countries in 2015



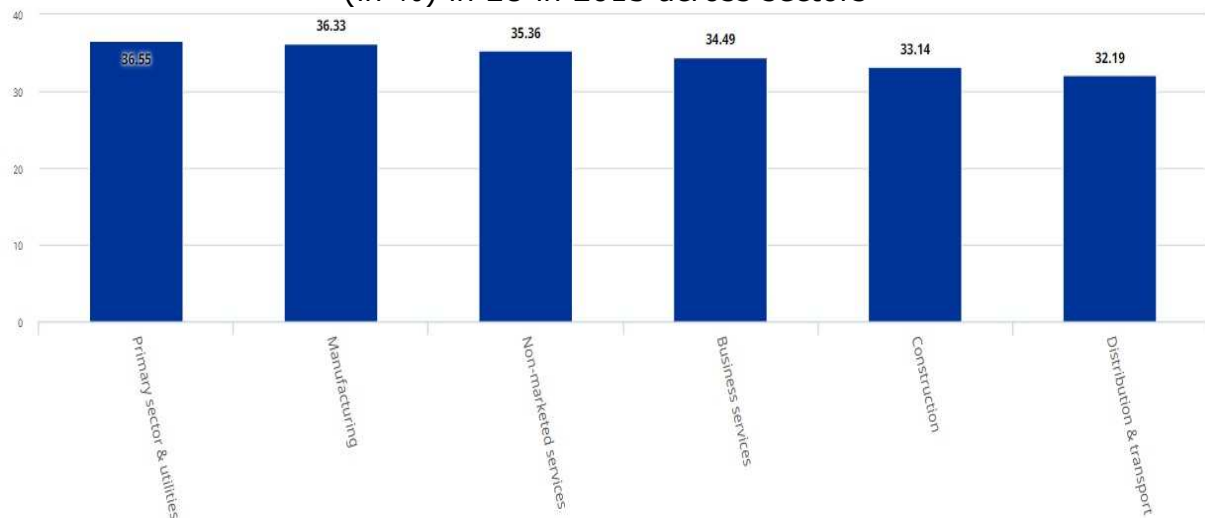
(Source: Skills panorama)

As shown in figure 1, countries like Sweden, Luxemburg, Denmark, Lithuania and Finland have a high level of qualifications for they employed population. On the other side, in countries like Portugal, Malta, Italy and Spain we find a high value of employed population with a low level of qualification.

At EU level, the average of the recorded values is: 18,16% for the employed population with a low level of qualification, 48,19% for the employed population with a medium level of qualification and 33,30% for the employed population with a high level of qualification.

Another situation that influences the quality of the human resource and its insertion into the labor market is reflected in the differences that arise between the learning outcomes formed in the educational environment and the set of skills and competences required by the labor market. In order to meet the requirements of their job, employees often have to develop their skills at the current job. Based on results of CEDEFOP's European skills and jobs survey, regarding employees who were asked if their skills (all of the knowledge, competences and experience gained during the time they have been working) have improved significantly compared to when they started their job with their current employer, across sectors, we find the following results across sectors (see figure 2).

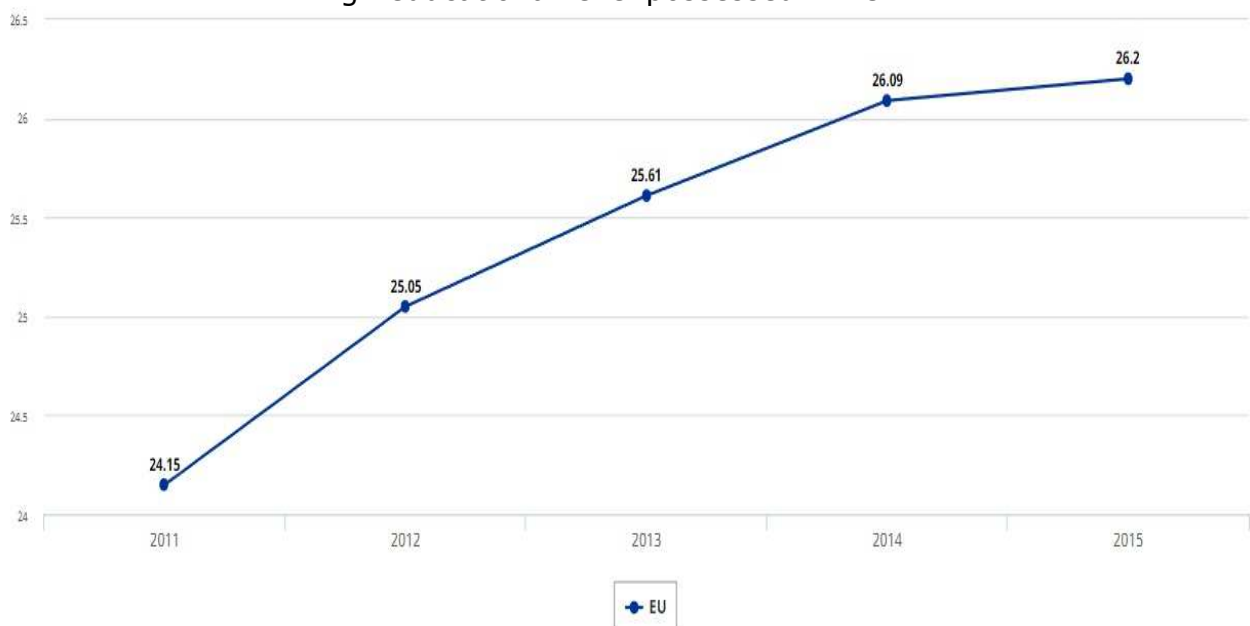
Figure 2. Employees whose skills have improved since starting their current job (in %) in EU in 2015 across sectors



(Source: Skills panorama)

The CEDEFOP’s Higher education mismatch indicator shows “the share of young (aged 25-34), tertiary education (ISCED 5 or 6) graduates employed in posts not included in categories of managers (ISCO 1), professionals (ISCO 2), or technicians and associate professionals (ISCO 3). When individuals with tertiary education attainment occupy jobs demanding lower skills (e.g. sales, crafts, agriculture, elementary occupations), there is concern that there is a waste of public resources in higher education. An overqualified tertiary graduate receives lower wages on average and has lower job satisfaction than a tertiary graduate employed in a matched graduate job.” (Source: CEDEFOP)

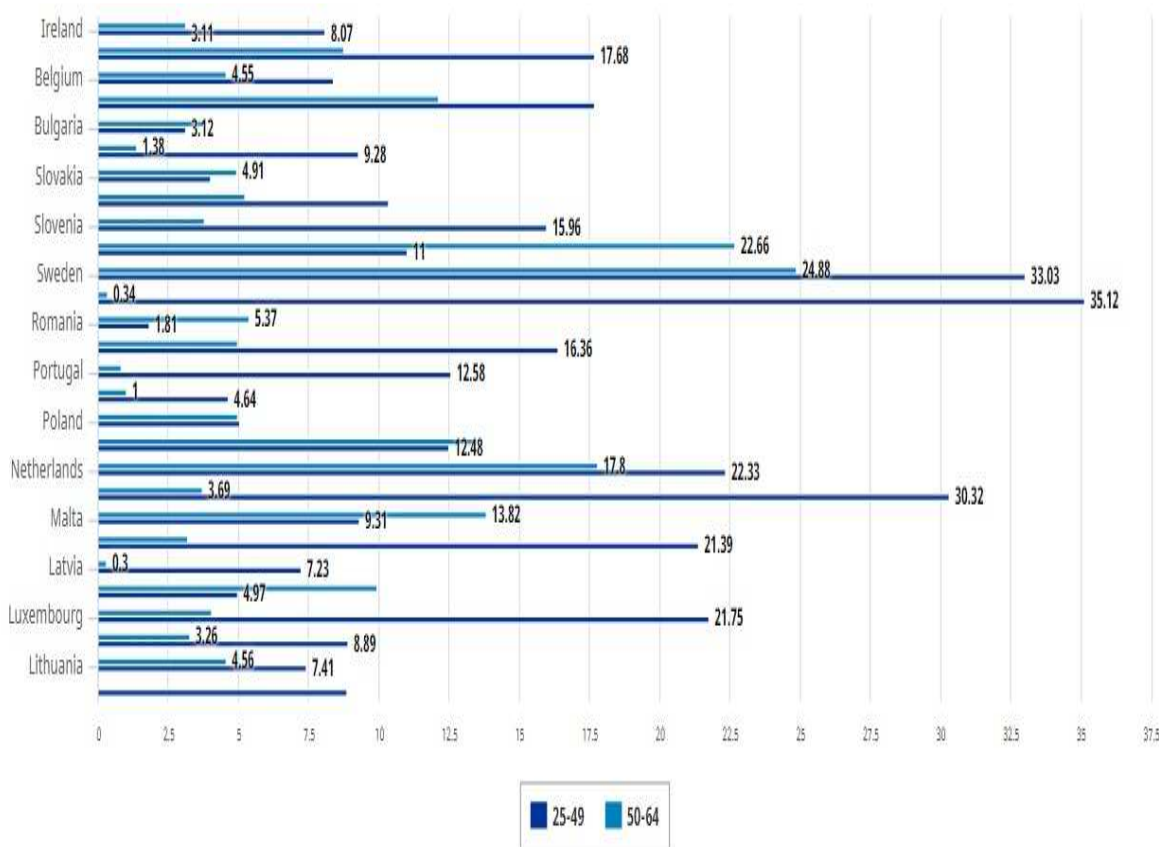
Figure 3. Time-trend (2011-2015) of education mismatch by age group 25-34 for high educational level possessed in EU



(Source: Skills panorama)

Although lots of people attain qualifications during their formal schooling, it is becoming very important for employees to continuously develop their professional skills over their working lives so they will be sure that all the skills that they possess do not become obsolete. Ensuring a proactive skills development environment for their employees represents a priority for any organization. We believe that we can better understand the extent of the skills development by ensuring appropriate measuring related to participation in education and training of employees.

Figure 4. Population in education and training by age group across countries in 2015

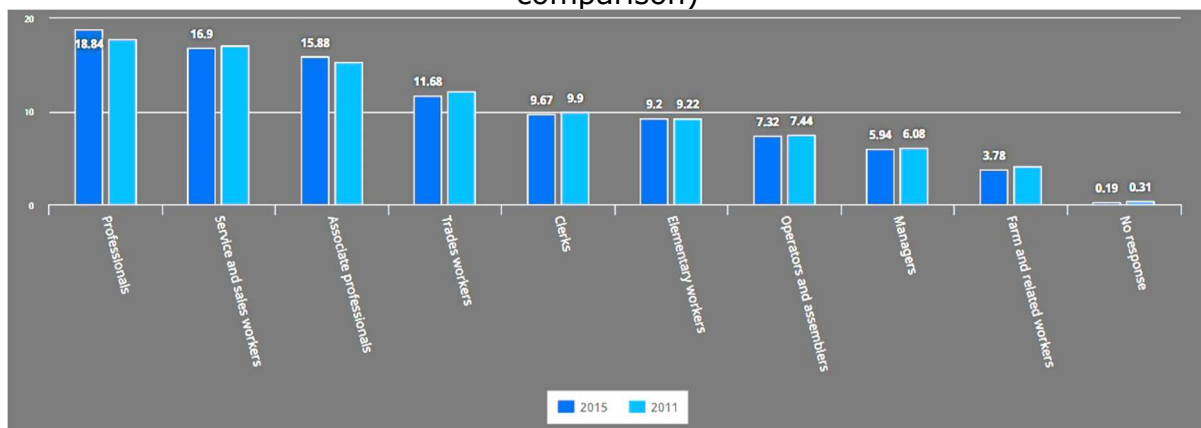


(Source: Skills panorama)

The differences among several countries can be easily observed, with countries like Sweden, Denmark, Finland or Germany, where the percentage of adults that are involved in training programs is higher than 30%, and with other countries, such as Bulgaria, Poland or Slovakia, where the percentage is under 5% for the 25-49 age group.

A comparative analysis of the occupational structure of employment in EU (reference years 2011-2015) highlights the preferences regarding the occupations in the EU countries. Preferred occupations at EU level are: Professionals and sales workers, Associate professionals Services and at the other end we find: Farms and related workers, Managers and Operators and assemblers.

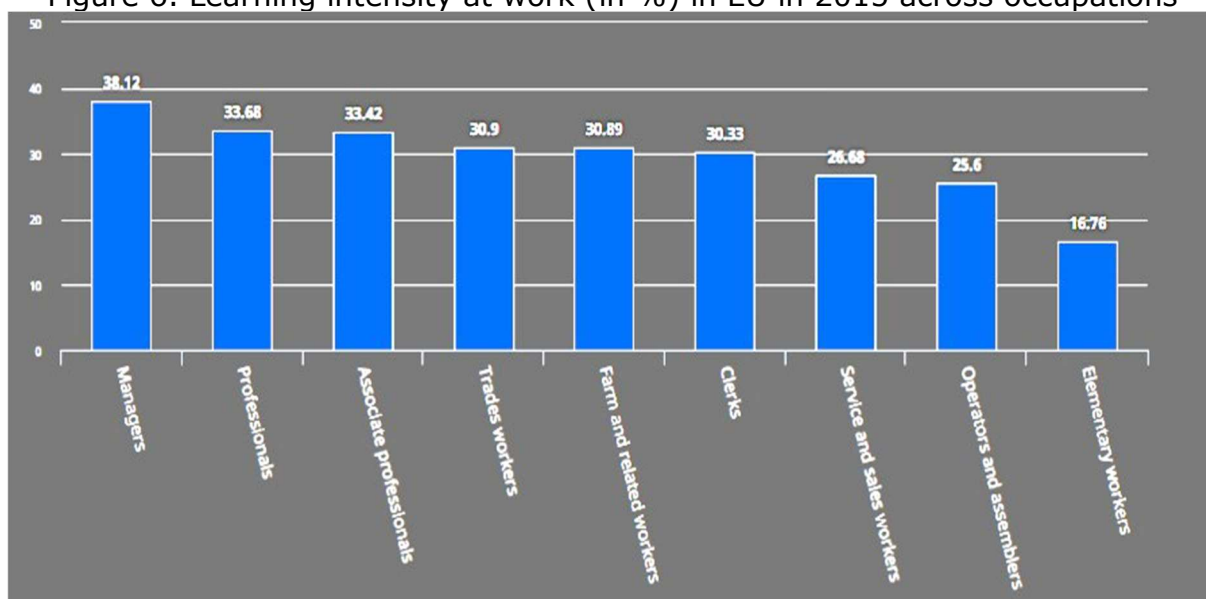
Figure 5. Occupational structure (%) of employment in EU (2011-2015 comparison)



(Source: Skills panorama)

A very important factor that influences the integration of human resources into the labor market is the harmonization of the competences formed in the educational environment with those demanded by the labor market. From this perspective, in most cases, in order to cope with the demands of the job, it is necessary to continuously train and/or improve the set of competencies previously acquired. At EU member state level, CEDEFOP's research highlights the need to continuously improve the set of competencies and skills, at occupational level. The Learning intensity at work indicator reveal the percentage of adult EU28 employees whose need to learn new things has increased a lot since they start their current job. The methodological approach in measuring this indicator focused on getting the respondents to "score whether their need to learn new things since the start of their current job has increased, decreased or stayed the same (where 0 means decreased a lot, 5 stayed the same and 10 means improved a lot). Scores above 8 (the highest quartile) were used to calculate the indicator."

Figure 6. Learning intensity at work (in %) in EU in 2015 across occupations



(Source: Skills panorama)



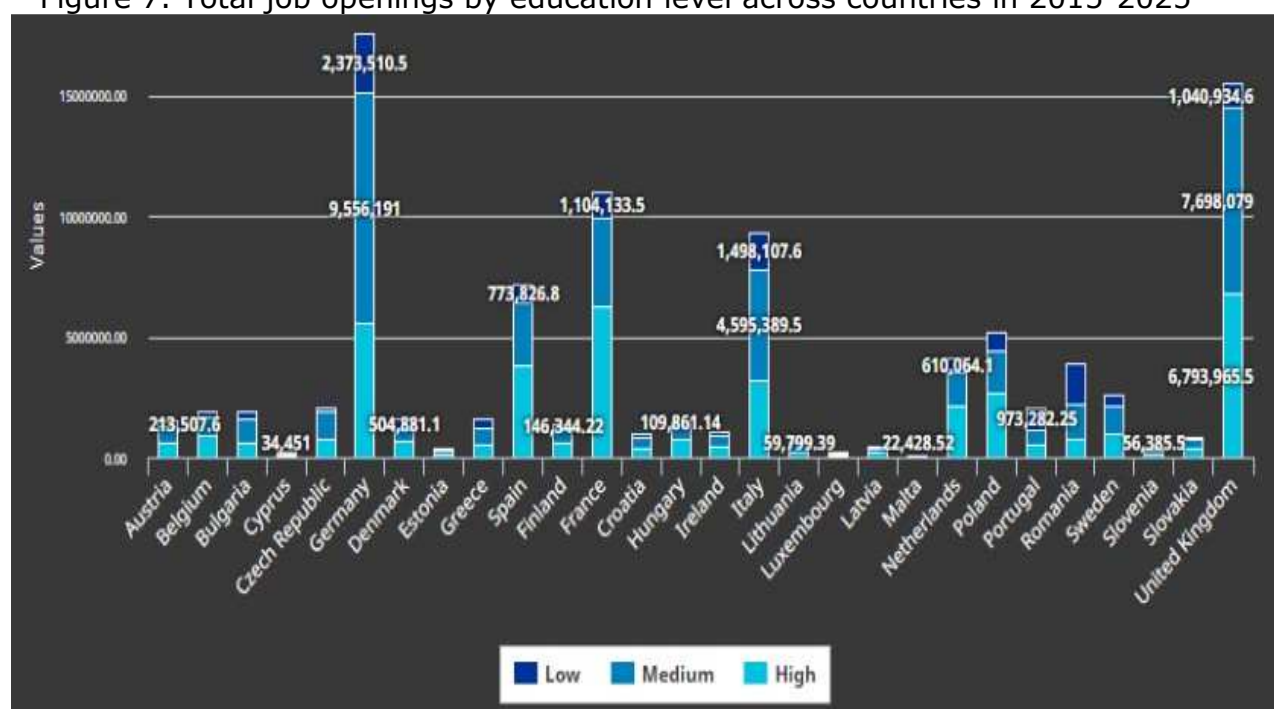
The research results show that for all the occupations the survey respondents said that the need to learn new things has increased a lot since the start their current job. The top 3 occupations are: Managers with 38,12%, followed by Professional with 33,68% and Associate professionals with 33,42%.

## *Trends for Future Jobs demand – forecast until 2025*

Assessing existing trends at European level was based on the Skills Panorama forecast, with using a timeframe until 2025. “Looking at the expected future employment growth for a particular job or industrial sector does not necessarily give a clear indication of how many people might be expected to work in that job in the years ahead.” Reasons for leaving job that were listed related to retirement, career change or disability. Yet, even in the context of negative employment growth in a specific sector requires replacement of current workers.

In CEDEFOP's European skills and jobs survey the future employment needs indicator provides “an estimate of the total job openings in each occupation in the period to 2025. This is the sum of future needs that will arise due to a) the need to replace existing workforce and b) the need to cover new jobs because the economy is growing – which, if demand for workers is shrinking, may be negative.”

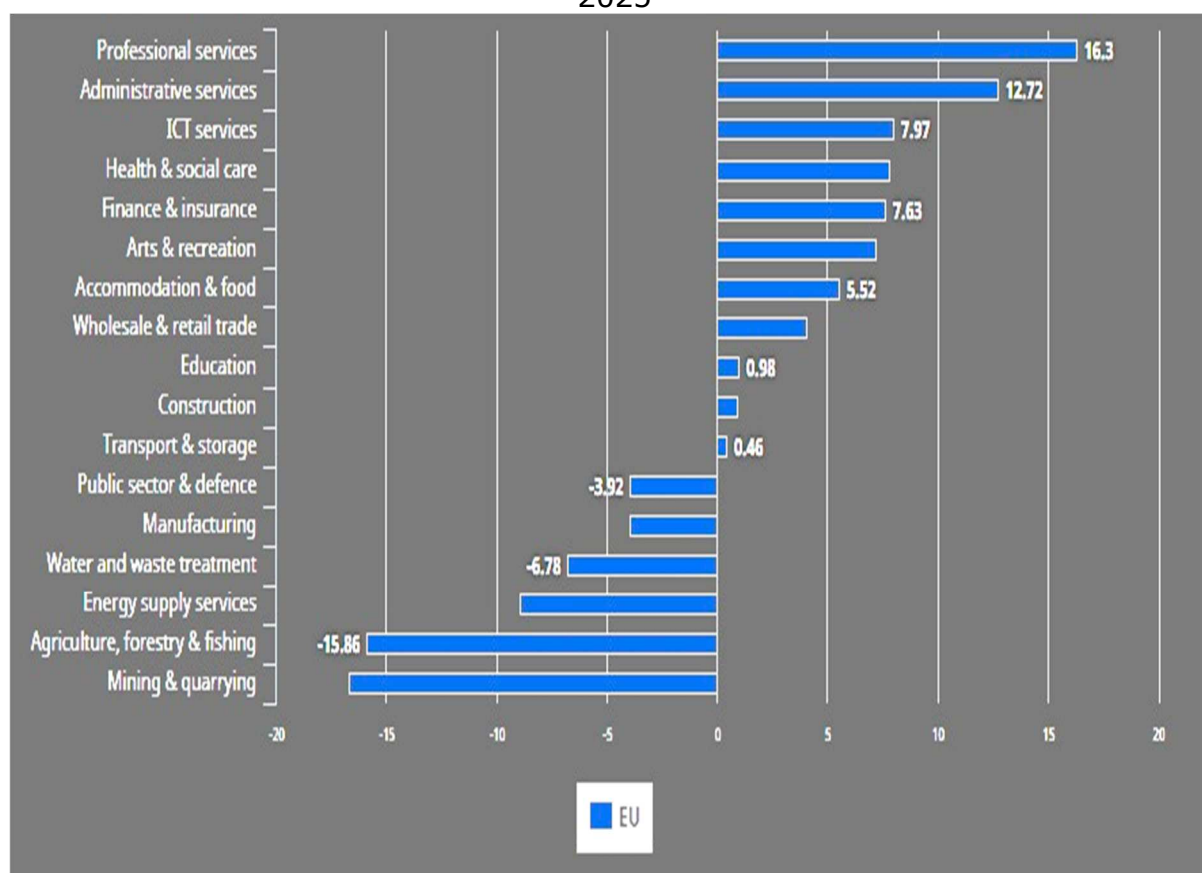
Figure 7. Total job openings by education level across countries in 2015-2025



(Source: Skills panorama)

Another important indicator, Future Jobs, describes “the demand for people to work in various types of jobs, along with information about the skills required. It provides data on employment by occupations; how it changed over time and is projected to evolve up to 2025. Information is also provided about the qualifications held by people in employment. The nature of jobs in Europe has changed over time – and so has the demand for skills. Some jobs have moved abroad, some have been automated, new jobs, requiring new sets of skills, have been created. The lion’s share of job opportunities between 2015 and 2025 are forecast to be to replace people who will leave the labour market, mainly to retire.”

Figure 8. Future employment growth (% change) across sectors in EU in 2015-2025



(Source: Skills panorama)

## Challenges

The skills required on the labor market, especially for newly appeared occupations, resulted from technological developments, challenge education and training providers in providing adequate study programs or training programs that would address the development of such skills.

Moreover, the changes in the paradigm related to integration of skills and reviewing the conceptual framework related to the European Qualification Frameworks and its harmonization in the national qualifications frameworks

may still raise issues related to ensuring appropriate levels of transparency and comparability of similar qualifications obtained in different countries, due to differentiations in registering the specificities of each qualification. The recent changes in ensuring a common framework for the registers for qualifications may prove beneficial in time, yet current challenges are due to ensuring that appropriate data is filled in these registers. In time, comparability will be ensured much easier by use of instruments developed at European level, such as ESCO, in its updated versions.

At national level, there may be stakeholders from various levels that show reluctance in addressing changes resulted from European Recommendations, such as the one related to EQF. Such reluctance may be due to possible loss of influence due to losing control over specific data (institutional changes), need to provide free access to data or adapting to changes in the paradigm of thinking and various mechanisms for coping with change may be required to be developed. In this sense, coordination among various stakeholders may be essential to reaching appropriate levels of change and implementation of appropriate measures that support easier integration of the human resources on the labor market.

The need to develop adequate mechanisms at national levels to ensure the appropriate upskilling of human resources also needs to be addressed, with taking into account specificities from national levels.

## *Conclusions*

Vacancies require a growing level and a wider range of skills. In the future, there will be fewer jobs of elemental nature. Even jobs that traditionally require only a low level of qualification or no qualifications become more and more demanding.

The vast majority of jobs will require a certain level of digital competence and an increasing number of elementary jobs require some essential or generic skills (such as communication, problem solving, teamwork and emotional intelligence).

Low-skilled persons with underlying core skills deficiencies may represent a very high proportion of the unemployed (especially long-term unemployed) and other vulnerable groups, e.g. elderly workers, economically inactive people and third-country nationals. Participation in lifelong learning of low-skilled adults remains four times lower than that of graduates of tertiary education.

Access to lifelong learning opportunities remains unequal between socio-economic groups and some groups in the working age population have more limited access, especially third-country nationals. Encouraging broad and inclusive inclusion is therefore a key factor in the success of skills upgrading measures. Efforts to get in touch with people who need support, motivation and lifelong guidance, especially those furthest from the labor market or education and training, are essential.

Ensuring coordination among the various stakeholders, both from labor market and from education and training is essential and would contribute to reducing the mismatch between education offer and labor market demands.

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