



# EVOLUTION OF EUROPEAN SKILLS SYSTEMS PERFORMANCE 2015 TO 2022

The European skills index shows how **national skills systems responded during a challenging period**



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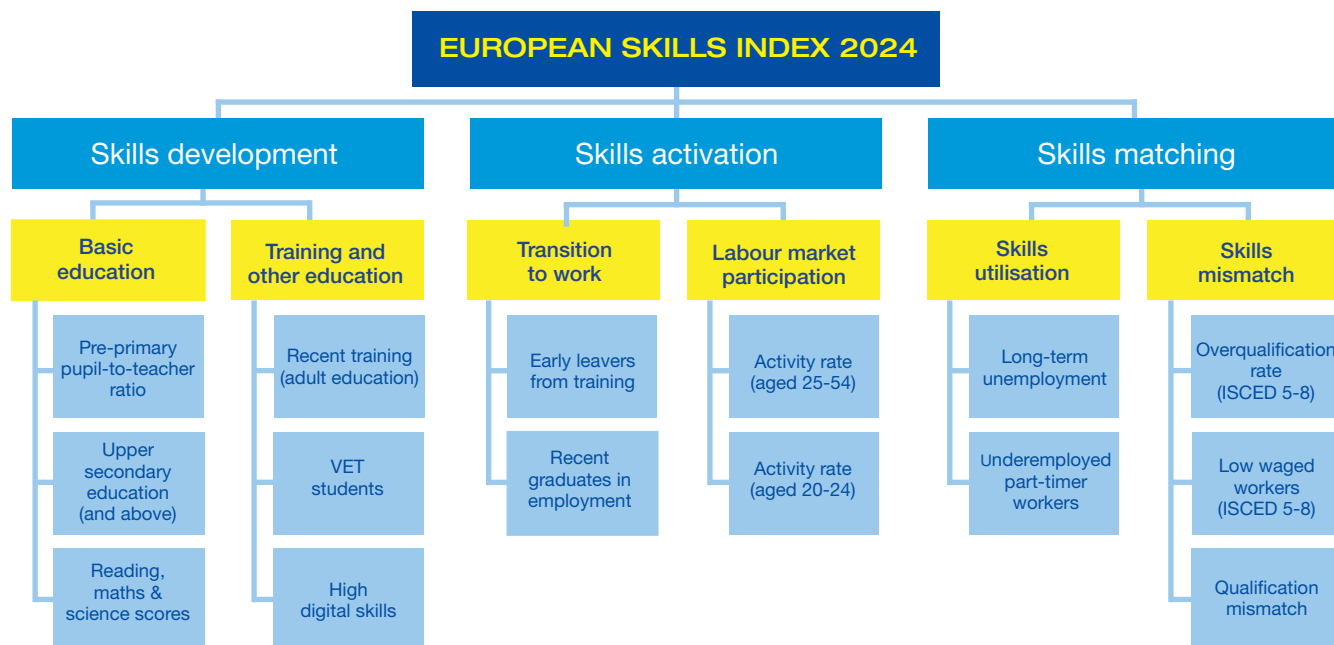
As skills are integral to competitiveness and equality of opportunity, the comprehensive approach across policy areas, advocated by Cedefop, is central to the European Union's (EU's) social rights pillar, 2020 skills agenda and vocational education and training (VET) policy. The 2023/24 European year of skills also highlighted the key role of skills for Europe's successful 'twin' transition to 'digital' and 'green' economies and societies.

Cedefop's [European skills index \(ESI\)](#) measures how skill systems in EU Member States perform. Its latest release, 2024, looks at how, between 2015-22,

Member State skills systems have adapted to raised expectations and challenges: the aftermath of the financial crisis, climate change, the COVID-19 pandemic, accelerating development and diffusion of technologies, population change and the invasion of Ukraine.

Skill systems comprise elements reflecting the interplay between skills supply and demand. Institutions and policies also influence the behaviours of individuals, employers and training providers in matching skill supply to demand. The ESI aggregates 15 indicators of key components of skill systems, grouped as three supporting pillars, each with two further sub-pillars (Figure 1).

Figure 1. Structure of the European skills index (ESI)



Source: Cedefop, 2024 European skills index.

- skills development pillar: education and training activities and the skills people have developed;
- skills activation pillar: transition from education to work;
- skills matching pillar and labour market activity: successful skill use and the extent to which skills are matched in the labour market.

The ESI produces a single metric for overall performance, and values for each pillar and sub-pillar.

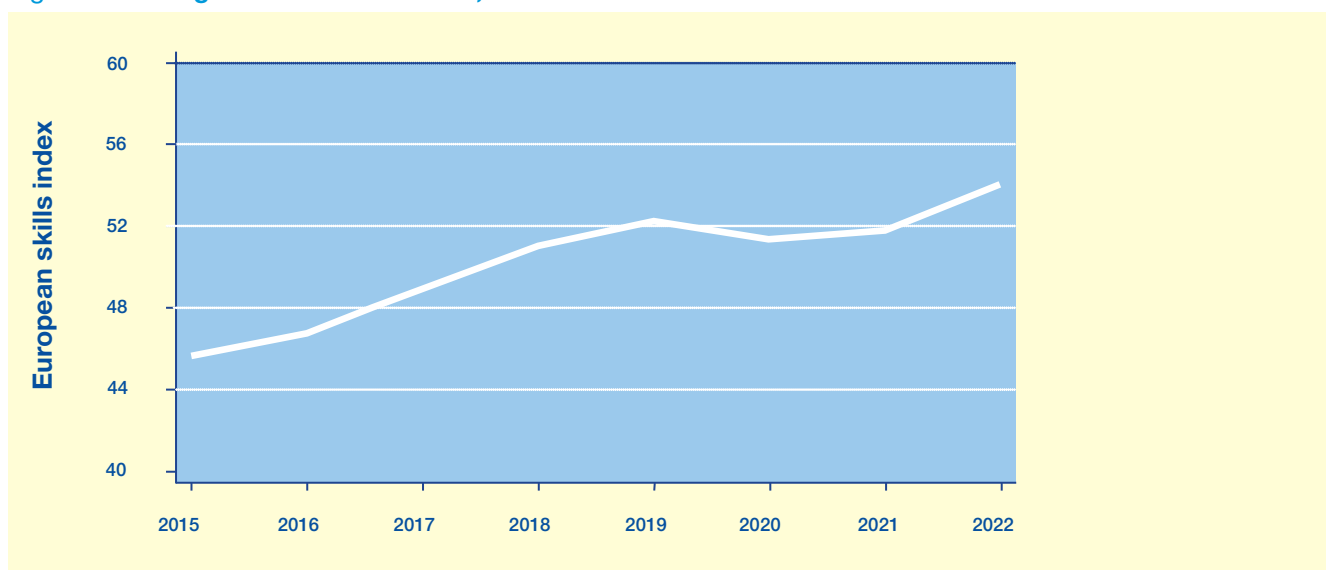
## Positive changes, mostly

The ESI is a snapshot of how countries' skills systems are performing. It shows skills system improvement in absolute terms (changes in system performance) and relative terms (changes in system performance in one country, compared to skill systems in other countries).

Over the period 2015-22, the ESI, aggregated for all countries, shows an overall, absolute, improvement in skills systems across the EU (Figure 2).

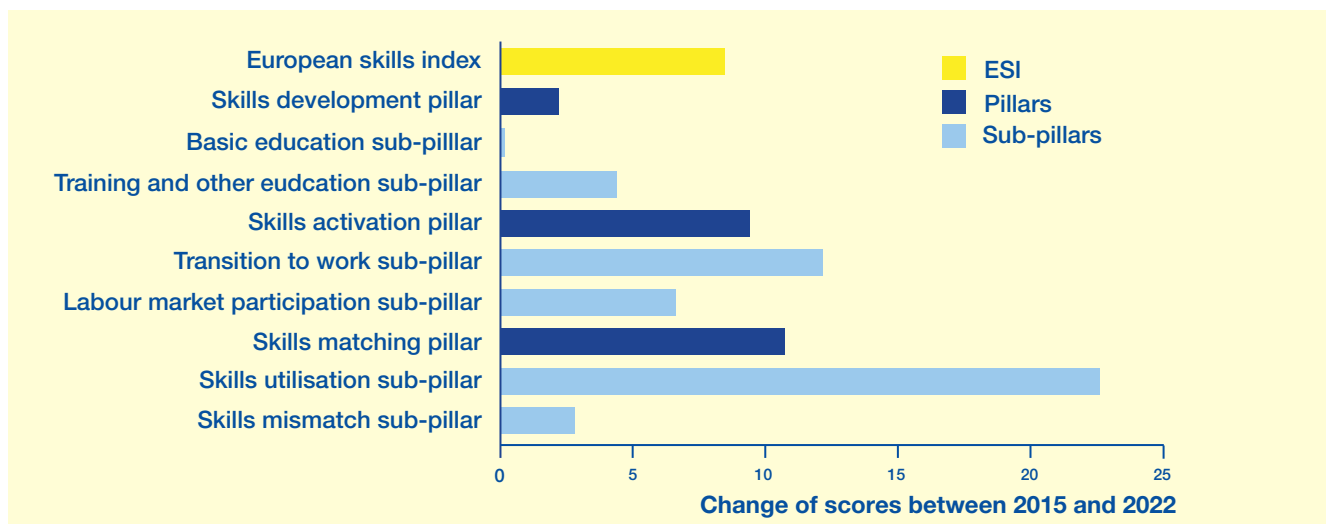
The ESI score dipped during the COVID-19 pandemic lockdowns, but quickly bounced back to a record high in 2022, nine points above its 2015 level.

Figure 2. Average ESI scores 2015-22, EU



Source: Cedefop, 2024 European skills index.

Figure 3. ESI scores 2015-22, change by pillar and sub-pillar, EU



Source: Cedefop, 2024 European skills index.

Comparison of change in skills performance across the ESI and its pillars and sub-pillars (Figure 3) shows an overall increase in skills systems performance across all dimensions, but the rates of performance improvement are seen to vary significantly in the sub-pillars.

At the aggregate level, the ‘skills matching’ pillar has seen the biggest improvement in performance, mainly based on better ‘skills utilisation’.

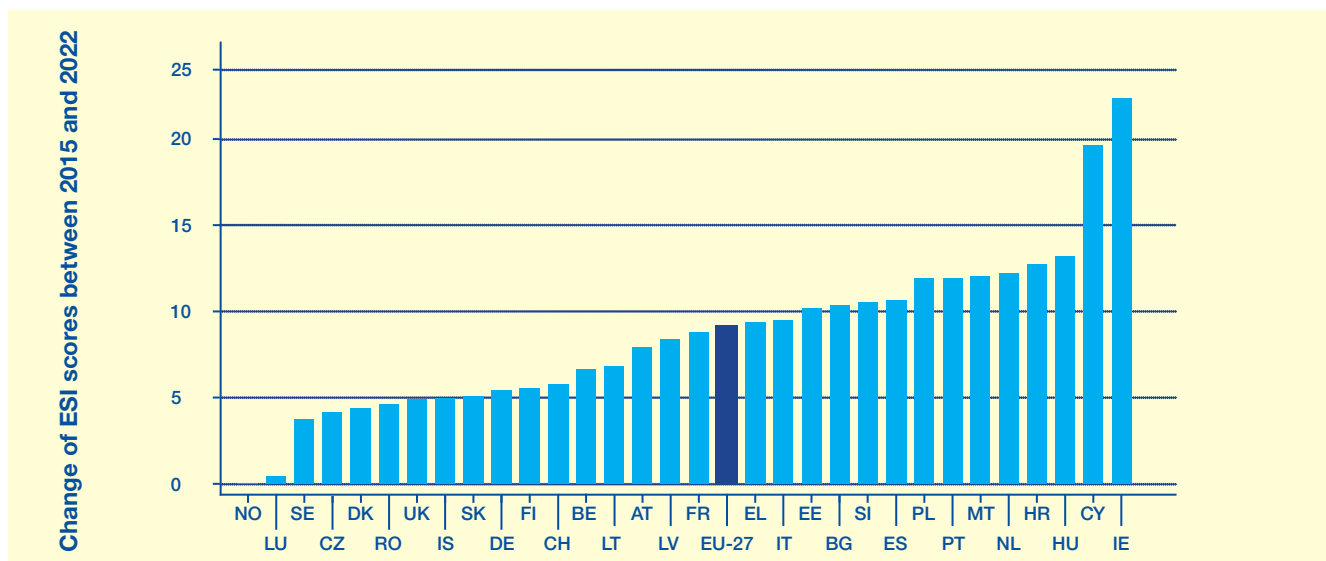
However, the ability of skills systems to address skills gaps has only slightly improved. The ESI shows negligible improvement in the ‘basic education’ sub-pillar.

This could be argued as the most important challenge for European skills systems. Their capacity to provide adequate basic knowledge and skills to citizens is fundamental to building a fit for purpose skills systems architecture.

The ESI, generally, indicates a trend towards convergence of Member State skills systems at a higher performance level.

The most striking overall improvements, over the period 2015-22, were observed in Ireland and Cyprus (Figure 4). Several other countries, including Bulgaria, Greece, Spain, France, Italy, and Portugal, also recorded above average improvements in the performance of their skill systems. Although the performance of countries such as Czechia, Denmark, Germany, Latvia, Lithuania, Austria, Slovakia, Finland and Sweden was below the ESI average in 2022, they were all above the EU average in 2015. Several countries with an above average ESI score in 2015, also scored above the average in 2022, including Estonia, Croatia, Malta, Hungary, the Netherlands, and Poland.

Figure 4. ESI scores, change, 2015-22, EU, Member States and some other European countries



Source: Cedefop, 2024 European skills index.

Except for labour market participation, convergence was also reflected across ESI pillars and sub-pillars. Change in cross-country differences in participation rates during 2015-22 was minimal. Activity rates particularly seem persistent; increasing them is a major challenge for skills systems. Malta, however, showed significant improvements in 'labour market participation'; others, for example Portugal, in relation to 'transition to work', and Ireland, Germany, Cyprus, Latvia, Portugal and Slovenia in 'skills utilisation'.

Although the ESI analysis is positive overall, some negative aspects are striking: a strong decline in the 'basic education' performance in Germany, Slovenia, and Sweden; and in 'training and other education' in Luxembourg.

## External factors

Skills systems must be seen in their local, regional and national contexts. Consequently, the ESI also considers the influence of three key external contextual factors – demography, economic structure and technological development – on skills systems performance.

Demography influences the composition of labour supply and the skills available within it. The proportion of older workers increased in 26 of the 31 ESI countries, notably in Spain and Italy. In contrast, in countries such as Malta and Poland, the proportion of older workers has fallen. An ageing workforce presents challenges for Member State skills systems in the years ahead.

It may, for example, reduce the adaptability of labour supply to emerging skills requirements, as older workers are required to adjust to rapidly evolving technologies, leading to skills mismatch. This places pressure on skills systems to retrain, upskill and activate older workers and jobseekers. Older workers are also more susceptible to health issues that affect their productivity. Further, as older workers retire, having fewer experienced professionals in certain sectors or occupations is leaving skills gaps that can hinder productivity.

Within this demography, the influence of migration on skill systems is two-edged. Migrant integration into the workforce can put pressure on skills systems, but migration can also enable receiving countries to address skills gaps, and labour market imbalances.

Economic structure directly influences the skills demand to which a country's skills system must respond. For example, manufacturing industries typically demand more manual skills, while service sectors may prioritise interpersonal and customer service skills. Reduction in employment in manufacturing in most ESI countries presents challenges for

skills systems. Manufacturing industries often require specialised technical skills that may not be easily transferable to other sectors.

Technological development creates opportunities and challenges for skills systems. New technologies transform jobs and the skills required to perform them. Greater automation, new professions and the changing nature of existing jobs all put pressure on skills systems, but new technologies can also improve education and training provision.

The ESI analysis suggests that, among these external factors, workforce ageing and falling shares of employment in manufacturing posed the most pressing challenges to European skills systems in recent years.

Although it is a single composite indicator, the ESI underlines the importance of a comprehensive approach to VET that includes other policy areas. The various indicators in the ESI address different elements of skills systems, while consideration of external and contextual issues reflects the changing world to which VET systems respond. Encouragingly, during the turbulence in 2015-22, skill systems in the EU have improved. However, the continuing pressures to improve competitiveness and to achieve the 'twin' transition require VET systems to continue to evolve and improve. The indicators in the ESI point to areas for focus, such as improving basic education. They also highlight the importance of ensuring that labour force participation is high and that an ageing workforce can acquire the skills it needs, not only to adapt to change but to drive it.



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