

Digitalisation at its worst

Strategic Foresight – scenario 7

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Key features of the scenario

- In this scenario, digitalisation continues its upward trajectory, increasingly allowing tasks within production and service delivery processes to be outsourced to individuals outside a company's direct employment, leading to a rise in short-term contracts and flexible work arrangements.
- Education and training systems struggle to provide the necessary adaptability skills, exacerbating talent shortages and intensifying pressure to accelerate digitalisation and automation efforts.
- Simultaneously, economic recovery and sustained inflation empower employers to dominate labour market dynamics, seeking flexible and cost-effective labour solutions. This trend negatively impacts working conditions, particularly for vulnerable populations facing income instability and challenges in accessing adequate housing.
- As a result, highly skilled workers move to high-income, high-skill hubs. Low-skilled look for employment in the local economy and turn towards self-employment.
- These labour force shifts exacerbate housing affordability issues across European regions and intensify the unequal impacts of climate change, with rural regions and less affluent countries bearing the cost of environmental challenges. Urban centres, driven by technology-based economies, remain resilient.
- Structural shortages and surpluses persist following the economic recovery, but shortages may be exacerbated by structural changes in the labour market and educational and training systems do not keep pace with technological advances.
- Urban-rural and cross-border labour mobility are increasingly seen as solutions for labour imbalances but low-skilled workers, particularly from vulnerable groups, do not benefit from these opportunities due to challenges of housing affordability or the impossibility of combining their tasks with 'virtual labour mobility'. As a result, shortages of low-skilled workers are anticipated in urban areas and affluent countries, while rural areas and less affluent countries are expected to have a surplus.
- The green transition leads to new skill shortages and surpluses, exacerbated by an obsolete education system unable to keep pace. Desolate areas affected by climate change experience increasing labour market imbalances as skilled workers move away, leaving vulnerable workers with insufficient employment opportunities.
- The impact of the economic recovery, digitalisation, 'platformisation' of work, and increased cross-border mobility on the EURES services leads to increasing demand for services with clients expecting new services to be provided. EURES must provide better and more support for cross-border mobility while addressing skill biases associated with digital matching processes and targeting low-skilled workers.
- Revamping outreach strategies and collaborating with education and training providers is required. Additionally, balancing technology and personal support is key, alongside engagement with employers looking for low-skilled workers.

Expected developments

Up to 2030, digitalisation continues to grow on a path towards **technological and market maturity**. Technological developments have completed phases of design, testing, revisions/adaptations and further improvements, as well as launch and acceptance on the market, enter a period of customisation with significant implications for employment. Increasing digitalisation allows the production and service delivery process to be broken down into a discrete set of components, increasing the number of tasks to be performed. This allows for an increasing number of tasks to be outsourced from a company's directly employed workforce. Although the share of platform workers will remain relatively small in the labour market, there will be an increasing **trend towards breaking down jobs into a portfolio of individual tasks** which can be undertaken independently (either by company's own staff or by outsourcing to other companies, self-employed or freelancers), facilitated through digital tools regarding task assignment and delivery. Ultimately, the labour market experiences an increase in short- and fixed-term employment contracts, self-employment, and flexible work arrangements.

Education and training systems adapt slowly and in a relatively modest way to changing market needs. These changes address some of the most pressing requirements, but overall adaptations are insufficient and therefore fail to provide the skills that are needed. Therefore, many workers face challenges in effectively integrating in a labour market characterised by advancing technology. Consequently, shortages in suitably skilled people to fill emerging new roles intensify the pressure to expand digitalisation through 'intelligent automation' to avoid process bottlenecks in partly automated service delivery processes.

Overall, the economy and the labour market experience a **recovery from various crises**, with no significant new ones emerging. However, inflation remains the norm. Together, these two factors result in employers tending to dominate bargaining over employment and working conditions while seeking flexible and cheap labour. This has a **negative impact on working conditions**, particularly among vulnerable workers. Many of them also see a decline in their living conditions as they are adversely affected by low and unstable incomes. Ultimately, these groups face increasing challenges in affording adequate housing, exacerbating their economic instability.

Relatively small numbers of highly skilled adaptable technology experts, and workers managing robotics, algorithms, and machine learning, are not subject to this decline in labour market conditions, exacerbating **inequalities** and creating polarised views on technology. In this situation, many workers have strong **incentives to engage in labour mobility** as jobs and housing prospects might be better elsewhere. Job search, including across borders, is relatively easy with the increasing availability of **online self-service matching tools**. Some of these are provided by the Public Employment Services (PES), but there is an increasing number of new players on the market, applying a 'digital business model' as part of an employment services delivery ecosystem. Overall, the process of searching for and finding a job becomes increasingly automated with reduced roles for guidance professionals from PES and private providers.

Therefore, there are large-scale movements of people seeking opportunities within cities, regions, countries, and across borders. Highly skilled workers concentrate in emerging high-income, high-skill hubs potentially displacing existing residents from vulnerable groups as part of a national trend of migration from rural to urban areas. On a broader scale, at the European level, highly skilled individuals increasingly cluster in 'super economies', particularly in technologically and corporately integrated hubs situated in central and northern European countries. Conversely, it is anticipated that low-skilled workers from vulnerable groups, who tend to lack the necessary foreign language skills and necessary qualifications to easily find jobs in other EU/EEA countries continue to participate in essentially domestically focused economies. Some revert to local self-subsistence and self-employment after the disintegration of their economies, and experience significant alienation. Others seek employment providing services for the highly skilled elite from affluent countries who have relocated – working remotely – to less wealthy nations, often in the southern regions.

These movements, in turn, exacerbate **housing affordability issues**, affecting all European regions. In the long run, these movements also intensify the unequal impacts of climate change, particularly between urban and rural areas. Rural regions and less affluent countries, primarily in the south and east, rely heavily on agriculture and tourism, making them particularly vulnerable to the impact of climate change. Meanwhile, urban areas, driven by technologically-based economies, increase their carbon footprint while maintaining their economic resilience.

Expected impact on labour market imbalances

Structural shortages and surpluses persist due to economic recovery. Shortages increase because of the rapid advancement of digitalisation and automation which is not accompanied by sufficient development of the education and training systems. As a result, employers increasingly resort to short-term, ultimately unsustainable, solutions.

The application of digital tools facilitates changes in job design, task assignment and delivery. Jobs are broken down into a portfolio of individual tasks which can be undertaken independently. Coupled with the digitalisation of job matching this has the potential to increase employment and alleviate shortages. However, the increased efficacy of matching is biased towards high-skilled workers. Some low-skilled workers, especially from vulnerable groups, experience digital exclusion and their potential employers rely on other sources to search for workers. Consequently, both workers and their potential employers may spend more unproductive time in matching processes, exacerbating inefficiencies in labour market dynamics. This trend may be mitigated as employment services direct more support towards assisting lower-skilled people as much of their traditional matching business supporting more skilled workers is automated.

Cross-border mobility is increasingly recognised by the European Union as a potential solution for labour market mismatches. Workers supported by technological advancements can undertake tasks in an increasingly fragmented labour market, and fulfil short-term assignments, whilst the attractiveness of international employment increases. However, much international labour **demand is for higher-skilled jobs**, many of which include the possibility of 'virtual labour mobility' (i.e., cross-border work facilitated by technology without – or with very limited – physical relocation across borders). High-skilled workers, equipped with the necessary technological expertise, are in high demand and concentrate in more affluent regions with more attractive living conditions, exacerbating labour shortages in rural and less affluent areas. Additionally, this movement of highly skilled workers may lead to 'brain drain' in less developed areas, hindering their economic development and perpetuating imbalances. Conversely, lower-skilled workers tend to face more friction in labour migration. Among other reasons, the lack of foreign language proficiency, the difficulty in fulfilling employers' qualifications expectations, or the impossibility of performing certain tasks virtually (e.g., construction, HORECA, and craft work) negatively contribute to their labour mobility opportunities.

Additionally, these low-skilled workers, particularly from vulnerable groups, face difficulties in adapting to a new flexible and fast-paced labour market. Due to their unfavourable employment and working conditions they are less motivated to engage in upskilling and reskilling. Similarly, employers, especially those who have significantly automated their production processes, have less incentive to invest in these workers. Consequently, low-skilled workers who are not able to continuously adapt to the changing requirements brought about by digitalisation, automation, and 'platformisation' of work form part of an increasing stock of surplus workers across Europe.

At the same time, many low-skilled workers face income instability and problems in finding adequate accommodation. This instability discourages low-skilled workers from relocating even if suitable housing is available. Therefore, significant **shortages of low-skilled workers are expected in urban areas and more affluent countries while there is a surplus of these workers in rural areas and less affluent countries**.

The **green** transition also leads to the emergence of new **skill shortages**. An out-of-date education system fails to keep pace with emerging requirements. In addition, economically depressed areas, experiencing depopulation and the greatest negative impact from climate change, are witnessing growing imbalances in their labour markets. More affluent workers with in-demand skills move away from these regions whilst vulnerable workers remain but struggle to find sufficient work or quality jobs.

Expected impact on EURES services

Due to economic recovery, rapid digitalisation, and the increasing 'platformisation' of work, there is an increase in demand for EURES services, and users expect new functionalities on the EURES portal.

There is an increasing priority in EURES on addressing the rise in **self-employment** which can be delivered within its existing mandate.

There is also an increasing focus on **self-service, online, and automated matching**. However, these new functions should be developed with the needs of the low-skilled in mind. EURES needs to find a balance between the increasing use of technology in PES (e.g., AI, chatbots; which generally are of more value for high-skilled) and the face-to-face support needed by the increasing target group of vulnerable workers. The EURES portal must feature intuitive self-service navigation, ensuring vacancies are streamlined to display only current job offers, with clear indications of whether employers are open to candidates from another country, while maintaining accuracy and completeness of vacancy notes.

There should be enhanced **transparency about the benefits of intra-European cross-border mobility**, which is recognised as a significant solution to labour market imbalances. EURES can have a role in promoting these benefits through existing initiatives such as group counselling sessions for newly registered unemployed individuals or information activities targeting (mainly in their final grade) students in schools. Once these become mobile workers, they will seek support, namely details of job opportunities, information on living and working conditions, advice on cultural differences, language training, and help with social integration. This support should be especially targeted at **low-skilled** individuals who tend to face stronger barriers when searching for jobs in other EU/EEA countries due to their typically weaker foreign language proficiency and qualifications that may not meet employers' expectations. At the same time, **higher-skilled jobseekers** should not be left behind as high-skilled small jobs emerge with the 'platformisation' of work. For both high- and low-skilled **workers who want to return to their home countries**, a specific new section on the EURES portal should have advice and support for individuals returning to their country of origin, both before and after the transition.

There is also a need to intensify EURES actions to tackle challenges arising from the skill biases inherent to digitalised matching services, particularly in the face of the growing 'platformisation' of work. As lower-skilled workers are often reluctant to actively approach support services, the EURES outreach strategy needs to be revamped. This will require **more intensive outreach to those most vulnerable in the labour market** rather than expecting them to access the EURES portal or contact an adviser. EURES Advisers need to enhance their capacities to approach, inform, and consult a target group of vulnerable workers (particularly in disadvantaged regions). This requires training to meet the specific needs of this increasing cohort.

Additionally, these low-skilled workers also need **advice on social issues** such as where to find decent housing or financial support for accommodation or re- and upskilling. Complementing the latter, the EURES network needs to be increasingly **connected to education and training providers** – through, for instance, more efficient interoperability, information exchange, or shared platform access – to improve the training offers suitable for the low-skilled target groups.

Regional approaches are also important to increase the attractiveness of EURES services for both low-skilled workers and employers seeking to recruit them. EURES needs to identify methods to connect the surplus of low-skilled workers with continuing lower-skilled labour market demand across regions and countries. Additionally, as low-skilled workers increasingly engage in sporadic and self-subsistence tasks, EURES should collaborate with regional stakeholders to establish a coordinated approach to this local and fragmented labour market, consolidating these micro jobs on single, publicly-run platforms.

Following this, EURES can play a role in **facilitating access to suitable platforms where individuals can find micro jobs**, including opportunities across borders. While micro jobs may attract certain workforce groups such as students, these jobs may not be universally attractive. Hence, these jobs should not be promoted as a mobility tool. EURES should, however, recognise their existence and that some individuals, particularly young people, are increasingly attracted by these due to job autonomy and the ability to change tasks frequently.

EURES should act as an **information provider** about

- the nature and implications of micro jobs and platform-based work (e.g., social protection effects and psycho-social aspects,);
- how earnings compare to the cost of living in different regions, aiding jobseekers in making informed decisions about potential relocations or job opportunities; and
- relevant trade unions and applicable collective agreements in various sectors, empowering them to negotiate fair wages and working conditions.

Furthermore, EURES Advisers should help facilitate increased job security by identifying roles which can potentially result in long-term employment, thereby promoting stability over precarious employment. All these will represent a significant change/broadening of the EURES activities with implications for staff training.

EURES should also become **more involved with employers**, particularly SMEs seeking low-skilled workers. EURES could further engage in onboarding support and integration measures. There should be a particular priority for EURES to support regional businesses in less affluent areas. Therefore, information and awareness raising about EURES services is needed to support particularly SMEs including targeted support offers (e.g., EURES Advisers specialising in SMEs' needs). As part of this visibility and awareness raising, EURES should take advantage of the already existing practices to share approaches and lessons learnt, EURES successes and EURES services (e.g., 'what EURES can do for you').

In this context, enhanced **cooperation and exchange with both (regional) employer organisations and trade unions** is needed. The aim is to find a balance between flexibility and security that is acceptable to both employers and workers. EURES staff must spend more time and effort approaching social partners, to inform them about the network and attract them to join or cooperate. Resources need to be made available for this task.

Finally, as labour market imbalances intensify because of the unequal impacts of short-term climate change policies, EURES needs to respond to the shifting demand for skills and employment opportunities, particularly between urban and rural areas. This may involve promoting sustainable employment practices and forging partnerships with local entities to aid affected regions.

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