

SKILL SHORTAGES, SURPLUSES AND MISMATCHES

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Anticipating future skills needs:

How does Europe cope so far?

December 19th, 9.00am – 12.00am

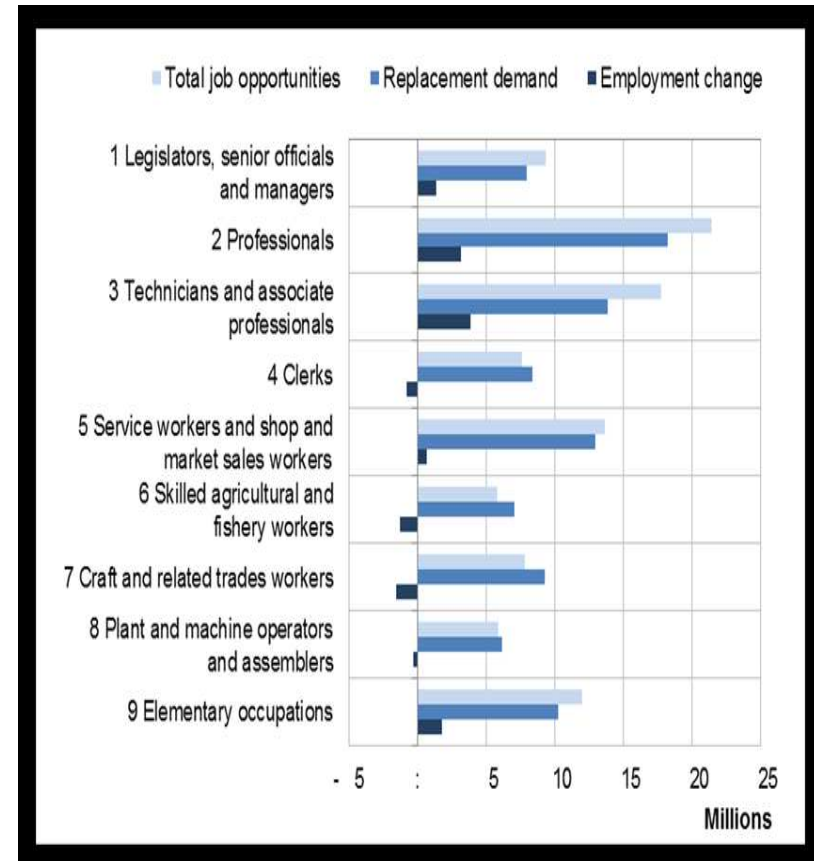
European Economic and Social Committee



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The importance of anticipating skill demand

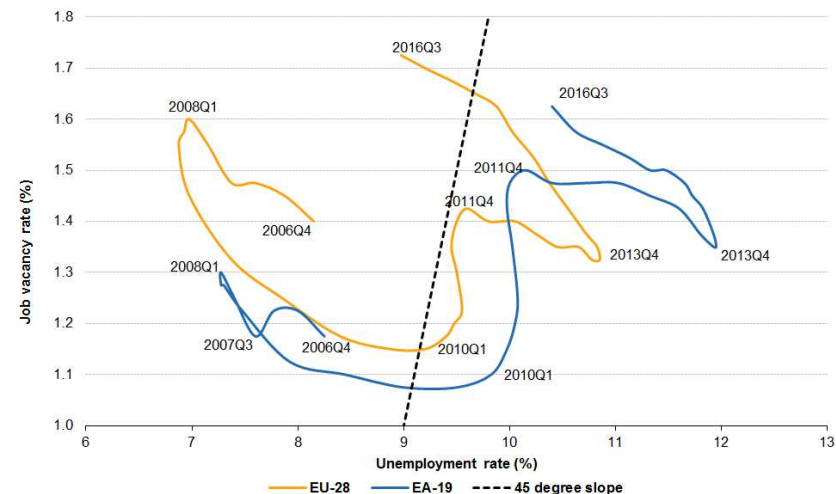
- Countries increasingly compete on the quality of their human capital
- In the future, skill demand will be especially high in professional / associate professional jobs (i.e. high skilled ones)
- But there remains uncertainty about skills that will comprise jobs in the next few decades...
- ... disruptive technologies / Industry 4.0 are likely to transform the demand for skills
- So if more and higher skills are needed, how do we determine exactly which ones are required?



Source: Cedefop skills forecasts (2016)

The need to minimise skill mismatches and skill obsolescence

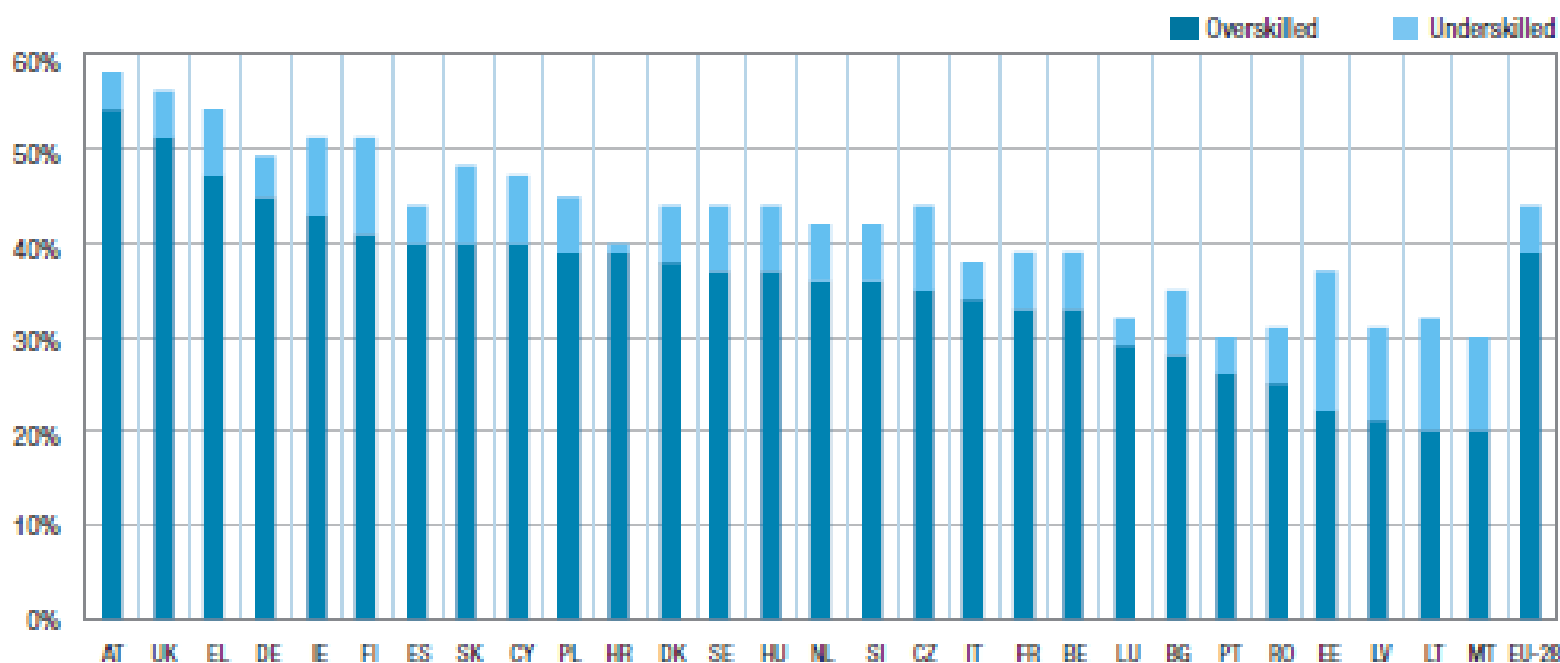
- Evidence of relatively high levels of unemployment and job vacancies co-existing
- Where individuals end up in jobs for which they are over-qualified – evidence suggests affects lifetime earnings and job satisfaction
- For employers where they struggle to find the skills they need – lost orders, delays in developing new products and processes, negative impact on customer service, etc.
- In aggregate, the costs at the country level can be high



Source: Eurostat Job Vacancy and Unemployment Rate statistics

The extent of skills mismatch across Europe: evidence from the European Skills and Job Survey

Figure 13. Incidence of skill mismatch, adult employees, 2014, EU-28

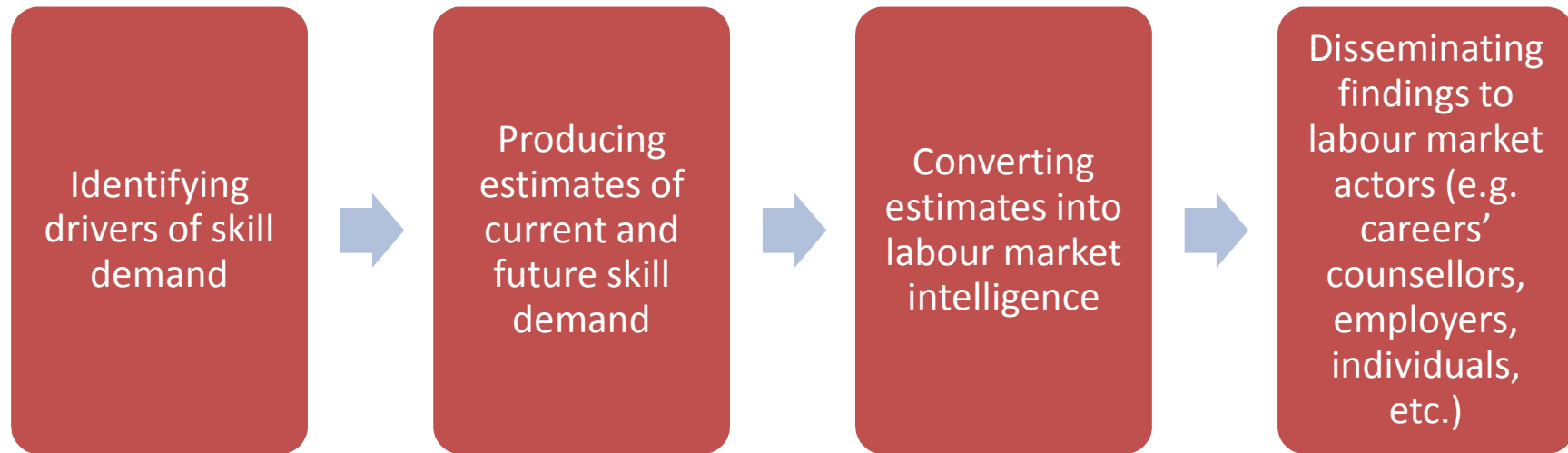


Source: Figure 13, p.38 Cedefop (2015) *Skills Qualifications and Jobs in the EU: the making of a perfect match? Evidence from Cedefop's European Skills and Jobs Survey*. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/3072>

The New Skills Agenda

- The new Skills Agenda for Europe, adopted by the Commission on 10 June 2016, launched **10 actions to make the right training, skills and support available** to people in the EU
- The 10 actions are designed to:
 1. improve the quality and relevance of training and other ways of acquiring skills
 2. make skills more visible and comparable
 3. improve information and understanding of trends and patterns in demands for skills and jobs (skills intelligence) to enable people make better career choices, find quality jobs and improve their life chances
- The concept of skills anticipation is writ large in the New Skills Agenda – especially in relation to (3)

Skill Anticipation in Practice



The tools of skills anticipation

Understanding the current state of affairs

- Understanding the returns of different types of education and training currently, and the way the existing stock of skill is utilised
- Important approaches here include:
 - **Employer surveys** (to be discussed later)
 - **Survey of employees** (and the economically active population)
 - **Tracer studies**
 - **Skill assessments** at occupational, sectoral, regional / local levels
 - **Qualitative investigations** (e.g. company case studies)

Capturing a view about the future

- Ideally the aim is to influence future decisions, so some view of what is likely to happen over the medium-term is required.
- Important here are:
 - **Projections of future skill demand using econometric models**
 - providing an assessment of what the future will look like if current trends continue
 - More qualitative assessments including **foresight and horizon scanning**
 - This provides the opportunity to assess the way in which future trends might be disrupted in some way

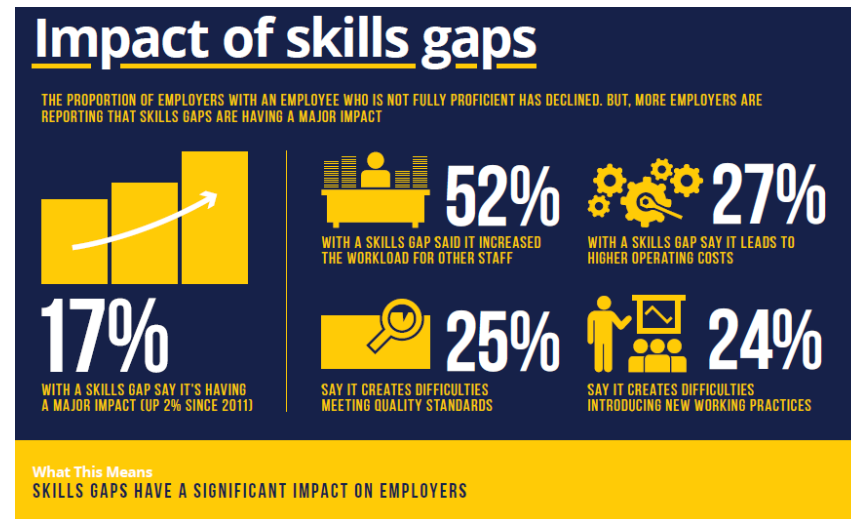
No one approach offers all the answers

- Each approach has its advantages and disadvantages
 - **Studies based on historical data**
 - **Advantages** – are based on solid evidence
 - **Disadvantages** – the returns obtained in the past may not accrue in the future given changes in the external environment
 - **Future oriented studies**
 - **Advantages** – provide a systematic view of what is likely to occur in the future assuming a continuation of past trends
 - **Disadvantages** – not always able to take into account disruptive events (e.g. the impact of Industry 4.0) or if they do, it is speculative
- Hence the need for a degree of pluralism in conducting skills anticipation...
- ... and making the most of what is available through synthesising available information in an analytically robust manner

Converting data into labour market intelligence

Need to convert analysis into...

... results that resonate with intended audiences



Skills anticipation as a system

| | | |
|-----------------------------|--------------------------|---|
| Skills Anticipation System | Governance | Various ministries and agencies responsible for skills anticipation, |
| | Stakeholders | The actors involved in the design and implementation of skills anticipation activities |
| | Target Groups | The groups at which skills anticipation outputs seek to inform (e.g. policy makers, employers, learners, public employment services (PES), etc.) |
| Types of Skill Anticipation | Quantitative Forecasting | Forecasting or projecting the future demand for skills typically using econometric modelling. |
| | Skills Assessments | Assessments of the both the demand for, and supply of, skills usually with an assessment of the extent to which demand and supply are in balance |
| | Foresight | Critical thinking about the future of skills supply / demand using a range of methodologies |
| | Other | Other approaches not contained in the categories above that reveal something about current and future skill demand / supply, including employer skills surveys, tracking surveys, analysis of wage trends, etc. |
| Dissemination | Main Pathways | How the results of various skill anticipation exercises are communicated to the target audiences. |
| | Impact | The use made by various groups of skill anticipation outputs, especially in relation to policy making. |

Source: CEDEFOP Skills Panorama – see: [http://skillspanorama.cedefop.europa.eu/en/analytical-highlights?f\[0\]=field_collection%3A765](http://skillspanorama.cedefop.europa.eu/en/analytical-highlights?f[0]=field_collection%3A765) for detailed information on how countries undertake skills anticipation in practice

Resource implications

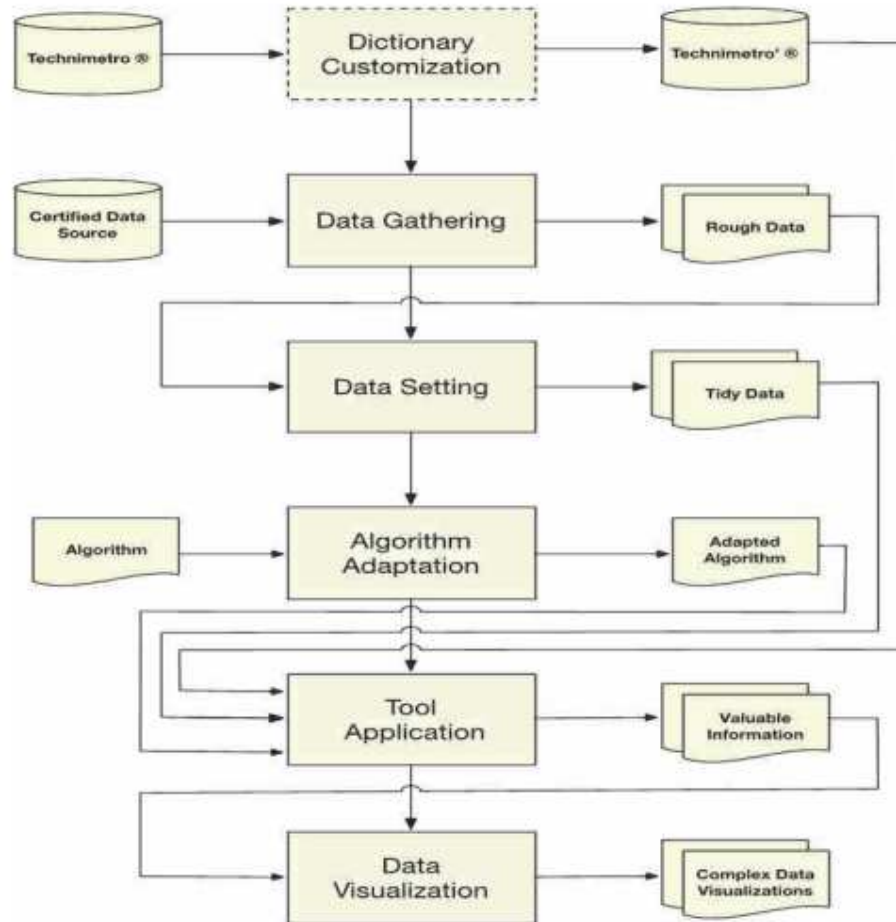
At the country level there are sometimes barriers to developing skills anticipation systems, including:

- Lack of funds (ESF funding sometimes a vital resource)
- Lack of human resources with suitable skills (skills shortages)
- Lack of co-ordination between agencies and institutions

The current state of play

- Much activity at the EU level by Cedefop, including:
 - Governance of skills anticipation and matching: supporting EU countries
 - Skills Panorama
 - Skills Forecasting
 - Key surveys such as the European Skills and Jobs Survey
- At the country level:
 - Skills Panorama country overviews on skills anticipation
 - Much policy innovation across the EU that can serve as a means of identifying relatively good practice

The Industry 4.0 framework



The Industry 4.0 Tech-
Measurement-Device tool
developed by FGB:

- 1) Mapping Industry 4.0 technologies relevant to the concrete sector
- 2) Translating the technologies mapped into specific skills
- 3) Describing identified skills using languages and codes and job profiles related to the sector
- 4) Comparing the skills with classifications

Further resources

European Skills and Jobs Survey

<http://skillspanorama.cedefop.europa.eu/en/content/european-skills-and-jobs-survey>

Skills forecast

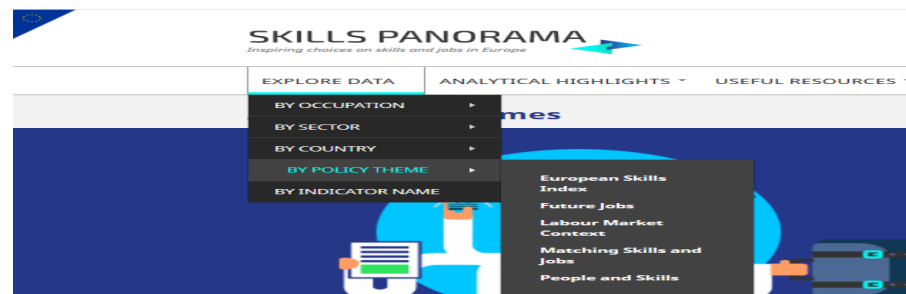
<http://www.cedefop.europa.eu/en/publications-and-resources/country-reports>

Skills anticipation in Europe

[http://skillspanorama.cedefop.europa.eu/en/analytical-highlights-country?f\[0\]=field_collection%3A765](http://skillspanorama.cedefop.europa.eu/en/analytical-highlights-country?f[0]=field_collection%3A765)

European Skills Panorama

<http://skillspanorama.cedefop.europa.eu/en>



Thank you

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