CHANGING THE SKILLS NEEDS
FIRST FINDINGS FOR SERBIA

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9 November 2023
SUMMARY OF THE PRESENTATION

• The ESJS in a nutshell. What’s in for the ETF partner countries?

• The post-pandemic (digital) transformation at the workplace

• Skill gaps and the learning potential

• Going digital: fear or facts?

• Few takeaways for future reflection
... in a nutshell

35 COUNTRIES SURVEYED BY 2023

Some **50,000 adult employees aged 25-64 surveyed**
(sample size 1000 - 3000/country)

Job-skill requirements (skills demand approach), skills mismatch (vertical, gaps, horizontal), digitalisation, workplace learning in one highly versatile statistical tool relevant (EU Skills Agenda, EU Digital Strategy, European Education Area)

Conducted in **two rounds** (6 countries 2022/23 & 3 countries* 2024/25)

*Subject to discussion and confirmation of ETF’s Single Programming Document (SPD)*
July 2022
Pilot fieldwork

Nov 2022
Main fieldwork

End 2022
Unweighted data

Spring 2023
Dataset

Summer 2023
Products

2nd half 2023
Dissemination

WHEN ? / WHERE ?

ALBANIA
BOSNIA AND HERZEGOVINA
ISRAEL
KOSOVO*
NORTH MACEDONIA
SERBIA
WHAT DO WE WANT TO FIND OUT? ETF PCs vs EU

- Workers holding higher qualifications than needed
- Jobs requiring manual skills ...
  ... or computerized machines
- Jobs with low/high digital needs ...
  ... or workers writing code at workplace
- The pandemic: its impact on workers ...
  ... and those working now remotely
## JOB-SKILLS REQUIREMENTS IN THE ESJS: THE META-SKILLS

<table>
<thead>
<tr>
<th>Cognitive</th>
<th>Manual</th>
<th>Interpersonal</th>
<th>Digital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Lifting</td>
<td>Counselling</td>
<td>Email / Internet / Social media</td>
</tr>
<tr>
<td>Writing</td>
<td>Dexterity</td>
<td>Selling</td>
<td>Word processing</td>
</tr>
<tr>
<td>Maths</td>
<td>Repetitiveness / standardisation</td>
<td>Serving</td>
<td>Spreadsheets</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>Use of computerised machines</td>
<td>Presenting</td>
<td>Data management</td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
<td>Teaching/training</td>
<td>Occupation-specific software</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Persuading / negotiating</td>
<td>Programming (AI)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team-working</td>
<td></td>
</tr>
</tbody>
</table>

### Reading

*In your main job, did you do any of the following during the last month?*

...read texts that are at least >=5 pages long?

### Manual

...lift or carry heavy loads, without the help of machines?

### Digital

Did you use any computer device to do the following activities for your work in the last month?

...send emails...  
...write or edit text using a word processor...  
...write a program or code using a computer language
Main effects observed: boosting uptake of digital/remote working & learning, a persistent digital transformation but also accentuating labour market inequalities.

32% EDU-high
26% EDU-low

32% Skilled occupations
14% Elementary occupations

73% Computer programmers
42% Financial/Insurance
17% Health/Social work
5% Hotels/Restaurants

New working patterns
What post-pandemic effects?

In the last year, did you do any work as part of your main job from a location other than your employer’s premises?

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), Author’s elaboration
In the last year did new digital technologies* have been introduced at your workplace?

Only 1/6 employees had to learn using new digital technologies at work.

Has digital upskilling brought a substantial change on the jobs and likely triggering up/re-skilling?

NEW DIGITAL TECHNOLOGIES INTRODUCED AT WORKPLACE

HAD TO LEARN USING THEM (DIGITAL UPSKILLING)

*For example, new computer systems/devices or programmes, but not minor updates
Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), ETF provisional data
**How digitalised are the jobs today in Serbia?**

Did you use *computing devices* to do the following activities as part of your main job in the last month?

<table>
<thead>
<tr>
<th>Activity</th>
<th>RS</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERNET (BROWSE/SEND EMAILS)</strong></td>
<td>65%</td>
<td>82%</td>
</tr>
<tr>
<td><strong>WRITE/EDIT TEXT</strong></td>
<td>44%</td>
<td>75%</td>
</tr>
<tr>
<td><strong>USE SPREADSHEETS</strong></td>
<td>42%</td>
<td>66%</td>
</tr>
<tr>
<td><strong>USE ANY SPECIALISED SOFTWARE</strong></td>
<td>38%</td>
<td>56%</td>
</tr>
<tr>
<td><strong>ADVANCED FUNCTIONS/MACROS</strong></td>
<td>38%</td>
<td>26%</td>
</tr>
<tr>
<td><strong>WRITE PROGRAMS/CODING</strong></td>
<td>6%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Did you work with/operate any of the *computerised machinery* below in the last month at your main job?

<table>
<thead>
<tr>
<th>Machinery</th>
<th>RS</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIGITAL HANDHELD DEV (MONITORS/SCANNERS)</strong></td>
<td>17%</td>
<td>26%</td>
</tr>
<tr>
<td><strong>3D PRINTERS</strong></td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>COMPUTER NUMERICALLY-CONTROLLED MACHINE TOOLS</strong></td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>ROBOTS</strong></td>
<td>2%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), ETF provisional data
What workers for today’s jobs?

What is the level of education usually needed to do a job like your main job nowadays?

1/4 of Serbian workers held jobs requiring lower levels of their formal qualifications (diplomas)

Field of study for my job (today’s requirements)

- **34%** Exclusively my field of study
- **28%** A related field of study
- **9%** A different field of study
- **29%** Not a specific field of study

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), ETF provisional data
Skill gaps and the learning potential

To what extent do you need to further develop your **overall level of knowledge/skills** to do your job better?

- **Greatly**
- **Moderately**
- **Slightly**
- **Not at all**

29% of Serbian workers have high* unmet learning needs

**31%** Social skills

**25%** Computer/IT skills

**21%** Job-specific skills

**17%** Numeracy skills

*Sum of those reporting greatly & moderately unmet learning needs

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), ETF provisional data

Note: Totals may not add up to 100 due to those with an unknown/unidentifiable status/no response
9 in 10 Serbian workers holding elementary jobs lack awareness of the new realities in the world of work.

To what extent do you need to further develop your computer/IT skills to do your main job even better?

Investing in skills

Still sizeable disparities

In the last 12 months, have you participated in any education/training to learn new job-related skills?

Modest engagement in training and high disparities on the intensity/participation: those who need it most often don’t get it

And was at least one of these trainings done to further develop your computer/IT skills needed for your job?

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022). Author’s elaboration
Learning potential in digital skills **remain vast despite modest digital skill demand**

Cedefop Digital Skills Intensity index (EU+ countries)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Non-users</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet browsing, email, social media</td>
<td>13%</td>
<td>28%</td>
<td>43%</td>
<td>16%</td>
</tr>
<tr>
<td>Write or edit text</td>
<td>13%</td>
<td>28%</td>
<td>43%</td>
<td>16%</td>
</tr>
<tr>
<td>Use spreadsheets</td>
<td>13%</td>
<td>28%</td>
<td>43%</td>
<td>16%</td>
</tr>
</tbody>
</table>

**Low**
- Internet browsing, email, social media: 20%
- Write or edit text: 28%
- Use spreadsheets: 38%

**Medium**
- Use specialised software: 50%
- Prepare presentations: 60%
- Use advanced spreadsheets: 74%

**High**
- Manage or merge databases: 81%
- IT systems, hard/software: 87%
- Programme or code: 92%
Do you think you may lose your current job as new digital/computer technologies will do your work?... and as new digital/computer technologies will also need new skills/knowledge which you don’t currently hold?

Going digital
Fear or facts?

1/5 Serbian workers reported a high/moderate job insecurity, for 1/4 it’s linked to lack of digital skills. Job insecurity is non-uniform by type of digital technologies used.

DIGITAL TRANSITION: JOB INSECURITY

<table>
<thead>
<tr>
<th>Country</th>
<th>AL</th>
<th>BA</th>
<th>XK</th>
<th>MK</th>
<th>RS</th>
<th>IL</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>34%</td>
<td>21%</td>
<td>38%</td>
<td>27%</td>
<td>19%</td>
<td>38%</td>
<td>36%</td>
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</table>

JOB INSECURITY: LACK OF NEW DIGITAL SKILLS

<table>
<thead>
<tr>
<th>Country</th>
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<tbody>
<tr>
<td>37%</td>
<td>22%</td>
<td>53%</td>
<td>35%</td>
<td>24%</td>
<td>45%</td>
<td>45%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), ETF provisional data
Few takeaways for future reflection

**Digitalisation could indeed increase job insecurity**

- Particularly in *manual/routine occupations*, less in non-routine jobs
- 1/4 EU employees think that technology can/will (partly) do their tasks

**Today’s (low skill demand) jobs could foster skills underutilisation**

- With workers using *basic digital technologies* if at all => a 1st step towards their jobs tasks being displaced by digital technology => the next one: *digital transition* could become a pathway for less rewarding jobs

**(Despite) widespread skill gaps and yet low training engagement**

- High inequalities in training intensity/participation, those who need it most often don’t get it
- *Digital upskilling* entailed to learn using the ‘basics’, is *modest and its duration not substantial*

**Digitalisation is also seen as an innovator, no longer as a disruptor**

- So far, digitalisation = job destruction potential; indeed, it could expectedly lead to job losses, it could also automate *some job-tasks* of an occupation but *not entire jobs/occupations*
- *ESJS data/evidence is a major shift in thinking*, making way for a *more balanced perspective*
Thanks for joining today!

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