CHANGING THE SKILLS NEEDS
FIRST FINDINGS FOR ISRAEL

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4 September 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, facts or fiction?

• Few takeaways for future reflection
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)
WHEN? / WHERE?

July 2022
Pilot fieldwork

Nov 2022
Main fieldwork

End 2022
Unweighted data

Spring 2023
Dataset

Summer 2023
Products

2nd half 2023
Dissemination

ALBANIA

BOSNIA AND HERZEGOVINA

ISRAEL

KOSOVO*

NORTH MACEDONIA

SERBIA

KOSOVO*
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>
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<tr>
<td></td>
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</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
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?

Main effects observed: an uptake of digital/remote working, bringing out a persistent digital transformation but also accentuating labour market inequalities

- 45% EDU-high
- 11% EDU-low

46% Skilled occupations
34% Elementary occupations

- 58% Computer programmers
- 40% Financial/Insurance
- 37% Education
- 29% Health/Care

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

What impact on today’s jobs?

In the last year did *new digital technologies* have been introduced at your workplace?

1/3 of employees in Israel 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)

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

*For example, new computer systems/devices or programmes, but not minor updates.
How digitalised are the jobs today in Israel?

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

- **INTERNET (BROWSE/SEND EMAILS)**
  - IL: 84%
  - EU: 82%

- **WRITE/EDIT TEXT**
  - IL: 77%
  - EU: 75%

- **USE SPREADSHEETS**
  - IL: 70%
  - EU: 66%

- **USE ANY SPECIALISED SOFTWARE**
  - IL: 51%
  - EU: 56%

- **ADVANCED FUNCTIONS/MACROS**
  - IL: 37%
  - EU: 26%

- **WRITE PROGRAMS/CODING**
  - IL: 11%
  - EU: 8%

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

- **DIGITAL HANDHELD DEVICES (MONITORS/SCANNERS)**
  - IL: 13%
  - EU: 26%

- **3D PRINTERS**
  - IL: 6%
  - EU: 9%

- **COMPUTER NUMERICALLY-CONTROLLED MACHINE TOOLS**
  - IL: 4%
  - EU: 9%

- **ROBOTS**
  - IL: 6%
  - EU: 8%

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?

37% Israeli employees held jobs requiring lower levels of their formal qualifications (diplomas)

<table>
<thead>
<tr>
<th>Field of study for my job (today’s requirements)</th>
<th>ISRAEL</th>
<th>SERBIA</th>
<th>ALBANIA</th>
<th>KOSOVO</th>
<th>BOSNIA AND HERZEGOVINA</th>
<th>NORTH MACEDONIA</th>
<th>EUROPEAN UNION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusively my field of study</td>
<td>8%</td>
<td>2%</td>
<td>12%</td>
<td>10%</td>
<td>3%</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>A related field of study</td>
<td>37%</td>
<td>37%</td>
<td>27%</td>
<td>26%</td>
<td>16%</td>
<td>14%</td>
<td>28%</td>
</tr>
<tr>
<td>A different field of study</td>
<td>12%</td>
<td>2%</td>
<td>10%</td>
<td>12%</td>
<td>3%</td>
<td>5%</td>
<td>32%</td>
</tr>
<tr>
<td>Not a specific field of study</td>
<td>32%</td>
<td>32%</td>
<td>11%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
</tr>
</tbody>
</table>

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?

70% of adult employees with high* unmet learning needs

*Sum of those reporting greatly & moderately unmet learning needs

Note: Totals may not add up to 100 due to those with an unknown/unidentifiable status/no response

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022), ETF provisional data
New working realities... yet diverse awareness

2 in 3 employees holding elementary jobs lack awareness of the new realities in the world of work in some countries*

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

Source: Cedefop-ETF, European Skills and Jobs Survey (2021/2022). Author’s elaboration

*Albania, Bosnia & Herzegovina, Kosovo, N. Macedonia, Serbia
Investing in skills

Still sizeable disparities

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

<table>
<thead>
<tr>
<th>ANY EDUCATION/TRAINING ACTIVITY</th>
<th>AL</th>
<th>BA</th>
<th>XK</th>
<th>MK</th>
<th>RS</th>
<th>IL</th>
<th>CY</th>
<th>EU</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>48%</td>
<td>49%</td>
<td>53%</td>
<td>45%</td>
<td>35%</td>
<td>62%</td>
<td>51%</td>
<td>62%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Good engagement in training and yet 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?

<table>
<thead>
<tr>
<th>TRAINING TO DEVELOP DIGITAL SKILLS</th>
<th>AL</th>
<th>BA</th>
<th>XK</th>
<th>MK</th>
<th>RS</th>
<th>IL</th>
<th>NL</th>
<th>EU</th>
<th>AT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31%</td>
<td>29%</td>
<td>36%</td>
<td>37%</td>
<td>34%</td>
<td>51%</td>
<td>28%</td>
<td>42%</td>
<td>52%</td>
</tr>
</tbody>
</table>

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 (DTI) index, EU+ countries

<table>
<thead>
<tr>
<th>Skill</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet browsing, email, social media</td>
<td>20%</td>
<td>50%</td>
<td>81%</td>
</tr>
<tr>
<td>Write or edit text</td>
<td>28%</td>
<td>60%</td>
<td>87%</td>
</tr>
<tr>
<td>Use spreadsheets</td>
<td>38%</td>
<td>74%</td>
<td>92%</td>
</tr>
</tbody>
</table>

13% non-users, 28% low, 43% medium, 16% high

13% non-users, 28% low, 43% medium, 16% high
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?

38% of employees reported a high/moderate job insecurity, for 45% it’s linked to lack of digital skills

Job insecurity is non-uniform by type of digital technologies used.

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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