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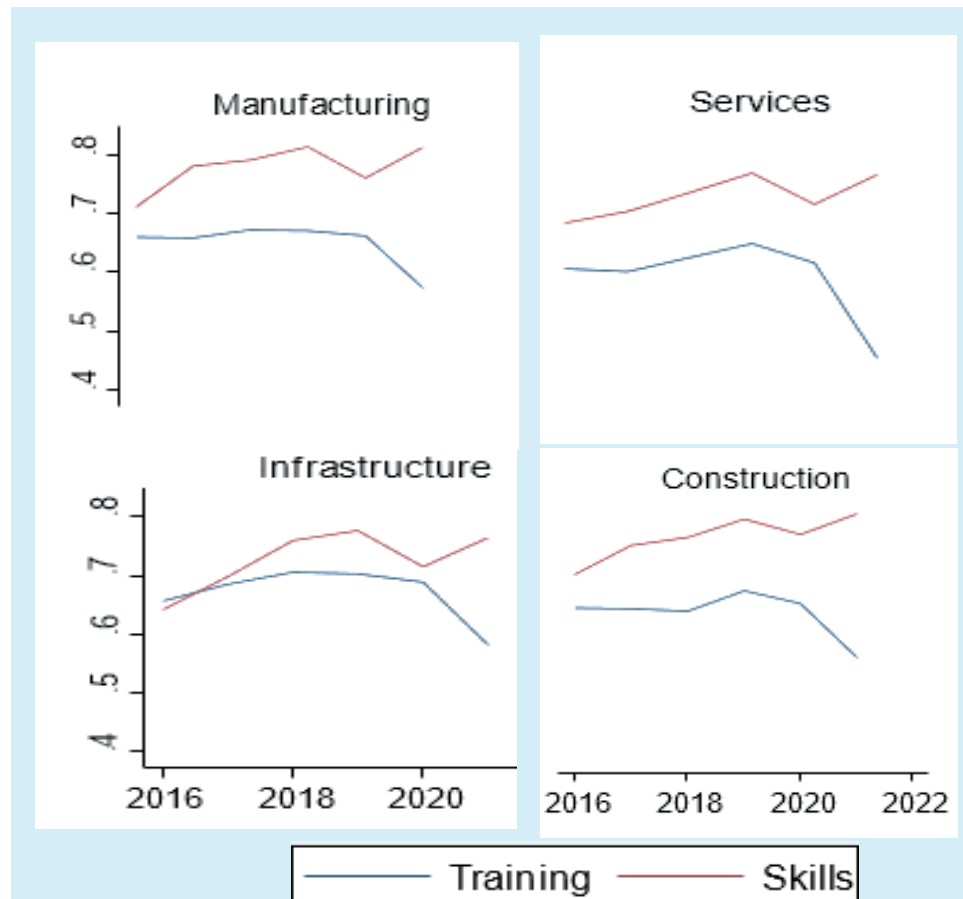
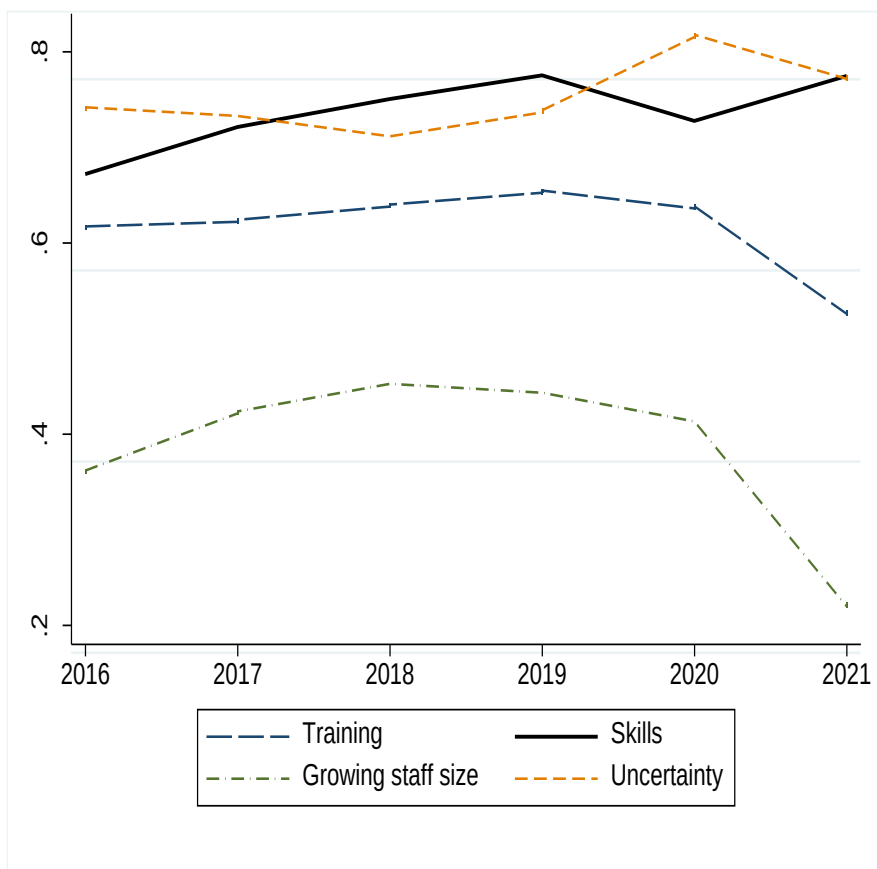
*The EU bank*

**Corporate Training and Skill Gaps  
Did Covid-19 stem EU convergence in training  
investments?**

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# Skill shortages have persisted during shocks – but training investment tool a hit



NB: 'Training' = share of companies in the sample that invested in employee training in the last financial year. 'Skills' = share of companies for which the 'availability of staff with right skills' is an obstacle to investment. 'Growing staff size' = share of companies with increasing staff size in last 3 years. 'Uncertainty' = share of companies for the 'uncertainty about the future' is an obstacle to investment.

Source: European Investment Bank Investment Survey (EIBIS)

# Who are the firms investing in training?

- Firms with skill gaps train more often
- Lower training responsiveness to major skill gaps

## Least likely to train

- Manufacturing
- Younger firms
- SMEs
- Facing obstacles to finance

## More likely to train

- Innovative
- Growing
- Better managed
- With a positive outlook

# Training investment and skill gap dynamics

- **Persistence in skill gaps** – 8 in 10 EU companies stuck with skill constraints
- 1 in 2 EU firms move from no skill gap to some (mainly **minor**)
- **State dependence in training investment** - but less sluggish
- Move to training state greater in SE Europe and CESEE - **convergence**
- Significant **transitions during Covid-19 period**

|                                             | <i><b>No skill gap</b></i>       | <i><b>Skill gap</b></i>       |
|---------------------------------------------|----------------------------------|-------------------------------|
| <i><b>No skill gap</b></i>                  | 46%                              | 54%                           |
| <i><b>Skill gap</b></i>                     | 16%                              | 84%                           |
|                                             | <i><b>No major skill gap</b></i> | <i><b>Major skill gap</b></i> |
| <i><b>No major skill gap</b></i>            | 71%                              | 29%                           |
| <i><b>Major skill gap</b></i>               | 32%                              | 68%                           |
|                                             | <i><b>No training</b></i>        | <i><b>Training</b></i>        |
| <i><b>No training</b></i>                   | 62%                              | 38%                           |
| <i><b>Training</b></i>                      | 24%                              | 76%                           |
| <i><b>No training (Covid-19 period)</b></i> | 71%                              | 29%                           |
| <i><b>Training (Covid-19 period)</b></i>    | 32%                              | 69%                           |

# Training investment and COVID-19

## Determinants of training transitions, pre- and pandemic period

|                                    | T → NT   | NT → T   |
|------------------------------------|----------|----------|
| Investment obstacle: skills        | -0.08    | 0.06     |
| Sector: construction               | -0.26*** | 0.28***  |
| Sector: infrastructure (ref: manf) | -0.27*** | 0.16*    |
| Age: <5 years                      | 0.39**   | -0.23    |
| Age: 5-9 years                     | 0.27***  | -0.09    |
| Age: 10-19 years (ref: >20 years)  | 0.02     | -0.14*   |
| SME                                | 0.14*    | -0.23**  |
| Innovation                         | -0.12**  | 0.23***  |
| Subsidiary                         | -0.11*   | 0.36***  |
| ln(wage bill per employee)         | -0.15*** | 0.11***  |
| Investment obstacle: finance       | 0.08*    | 0.01     |
| 2020 dummy (ref: 2021)             | -0.30*** | 0.19***  |
| Country dummies                    | x        | x        |
| Constant                           | 1.83***  | -1.94*** |
| Observations                       | 4,456    | 2,425    |

Source: Pouliakas and Wruuck (2022) based on 2020-21 EIBIS data

## After COVID-19 outbreak...

- **Manufacturing & Services firms** less likely to move to training
- **Younger firms and SMEs** discontinued training investments
- **Innovative, digital and higher productivity firms** invested in more training
- More firms (with financing obstacles) exited training state in **2021 COVID-19 period**

# Insights on skill shortages: pre- and post-COVID19

## Pre-pandemic:

- Training investment slowly rising
- Still way to go to catch up on regional differences (North-South-East)
- 'Virtuous' training-shortage equilibrium

## Pandemic effects:

- Deepening divergences - Vulnerable firms (younger, SMEs, non-digital, non-innovative, secondary sector) more likely to exit training state
- Break-down of training-shortage link

## Policy implications

- Structural challenge (demographics!)
  - Shocks take its toll
- ⇔ Skill needs for Green and digital Transformation
- Firm level: Poor HRM practices and low job quality → strengthen planning, Skills strategies
  - ...fostering capital-labour substitution?
  - Support to digital transformation of vulnerable firms needed, to avoid accentuating inequalities
  - Tackling obstacles to training investment, incentives and public support

# Main variables

## ► Training

*In [ADD AS APPROPRIATE 2020 OR the 2020/21 OR the 2019/20 financial year], how much did your business invest in each of the following with the intention of maintaining or increasing your company's future earnings?*

(a) land, business buildings and infrastructure (b) machinery and equipment (c) research and development (d) software, data, IT networks and website activities (d) **training of employees** (e) organisation and business process improvements.

## ► Skill gaps as investment obstacle

*Thinking about your investment activities in [ADD COUNTRY OF INTERVIEW], to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?"*

(a) the demand for products and services, (b) energy costs, (c) access to digital infrastructure, (d) labour market regulations (e) business regulations (e.g. licenses, business permits, bankruptcy) and taxation, (f) availability of adequate transport infrastructure, (g) availability of finance and (h) uncertainty about the future (i) **availability of staff with the right skills.**