

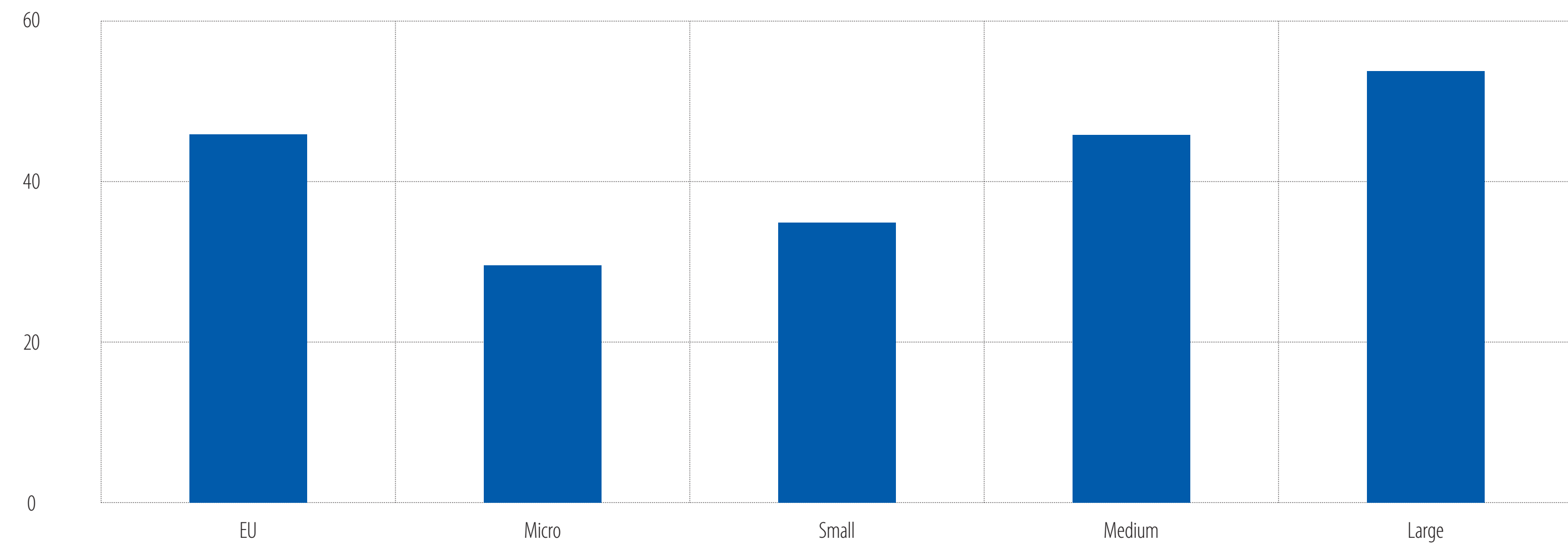


Chapter 5

Investing in Europe's digital transformation

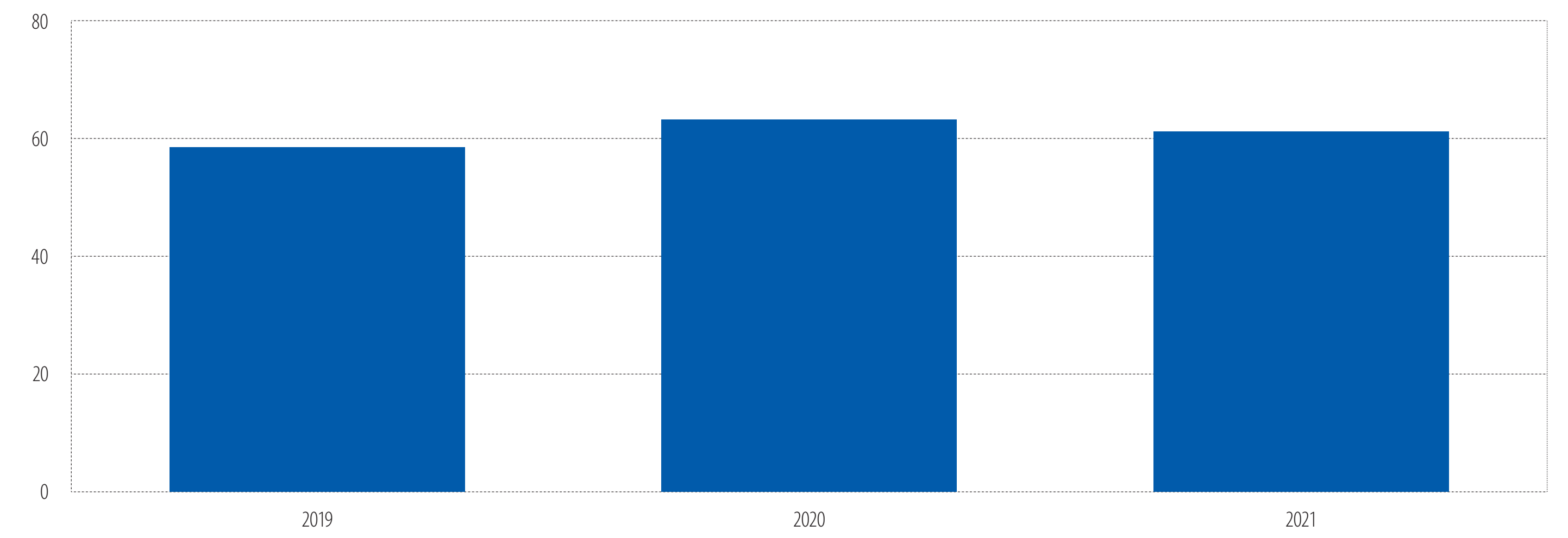
The COVID-19 crisis accelerated the digital transformation, with many firms starting to provide services online

Nearly one in two firms invested to become more digital, and large firms were particularly active (% of firms)



Source: EIB Investment Survey 2021, firms in the EU27.
Question: As a response to the COVID-19 pandemic, have you taken any actions or made investments to become more digital (e.g. moving to online service provision)?

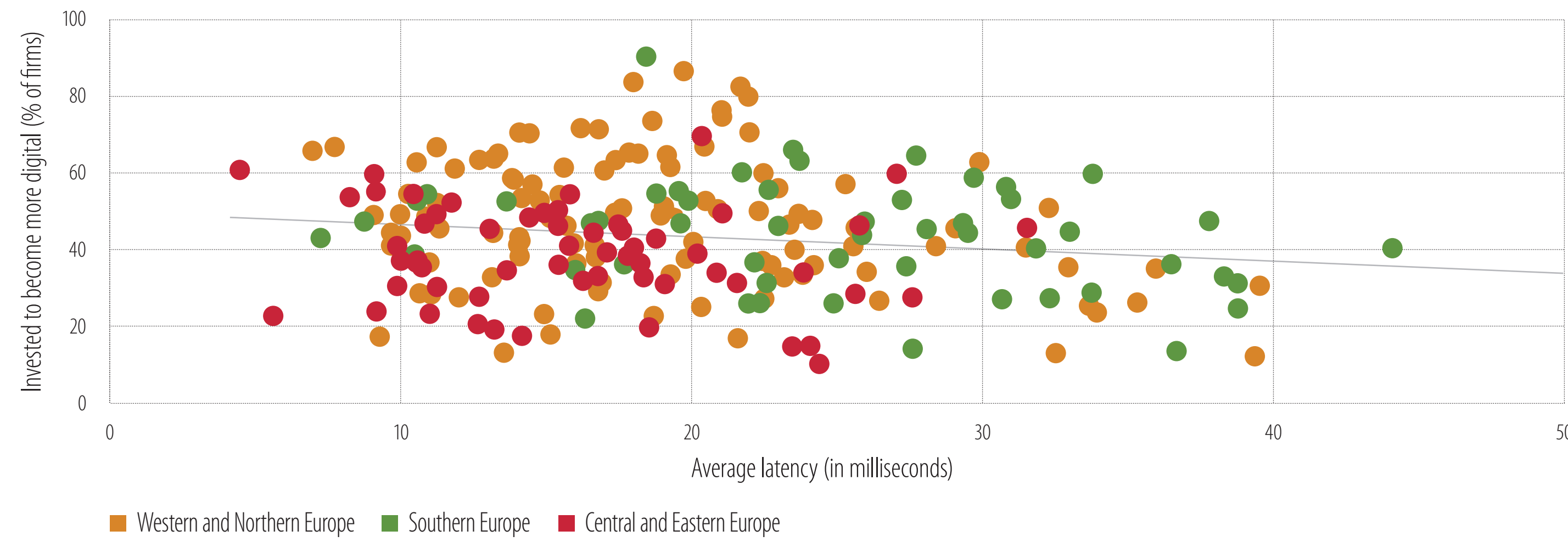
However, the pandemic did not increase the adoption of more advanced technologies, such as 3-D printing or artificial intelligence (% of firms)



Source: EIBIS 2019, 2020, 2021, firms in the EU27.
Question: Can you tell me for each of the following digital technologies if you have heard about them, not heard about them, implemented them in parts of your business, or whether your entire business is organised around them? Firms were asked to answer the question for four different digital technologies specific to their sector (see the note to Figure 5 for the definition of digital technologies).
Question: You just said that you implemented digital technologies in your business or organised your entire business around them. Did you introduce any of these technologies in the past year?

Firms tended to invest more in regions with good digital infrastructure

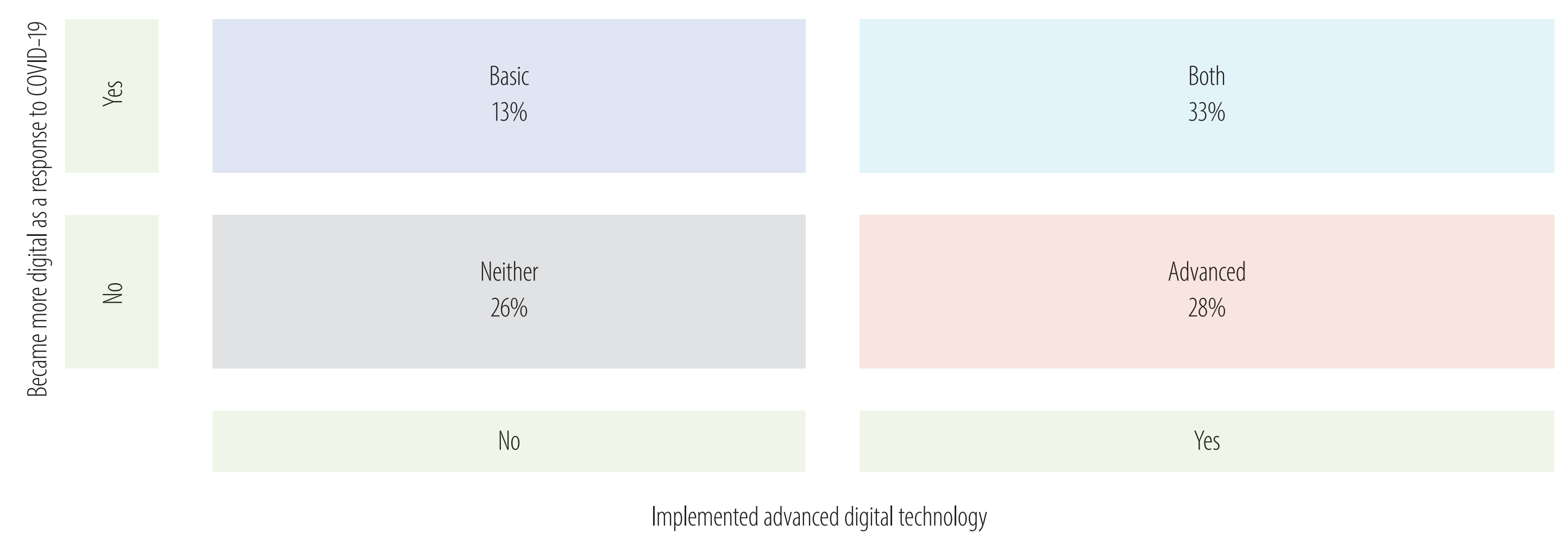
Regions' digital access measured in latency



Source: EIBIS 2021, firms in the EU27 and European Data Journalism Network (2021).
Question: As a response to the COVID-19 pandemic, have you taken any actions or made investments to become more digital (e.g. moving to online service provision)?

The digital divide is growing, which could have negative implications for Europe's long-term competitiveness

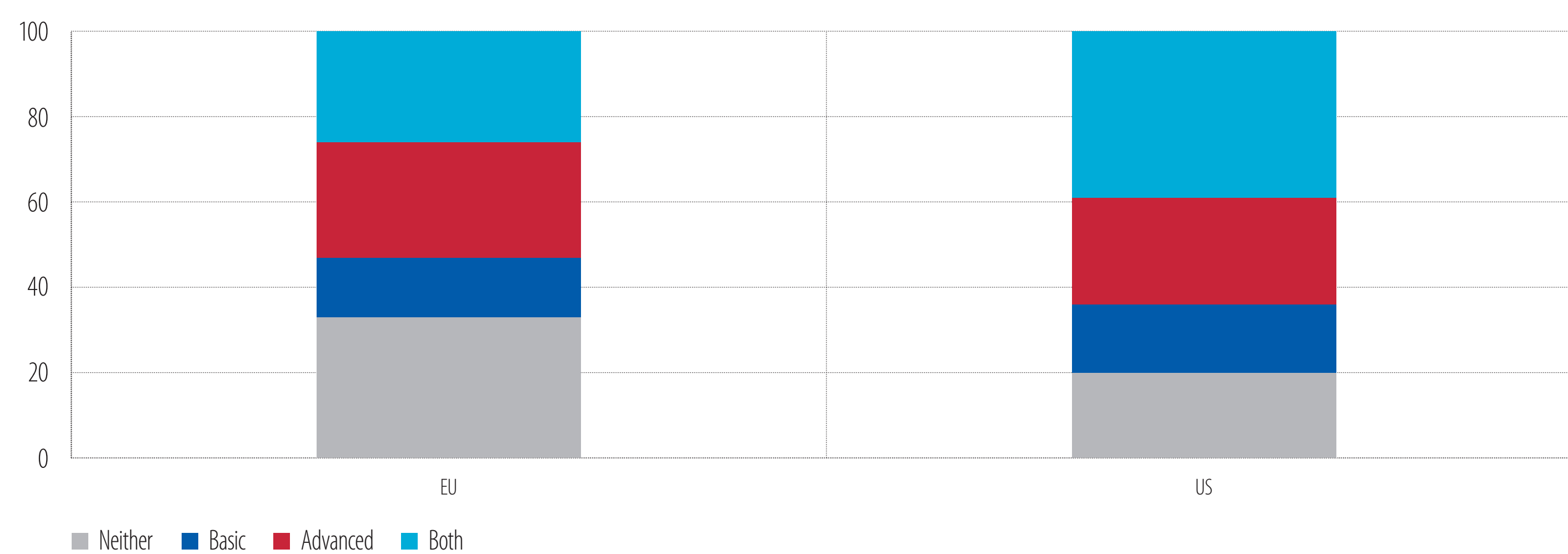
More than one in four EU firms did not invest in digitalisation, despite lockdowns and other restrictions on movement



Source: Authors' estimates.

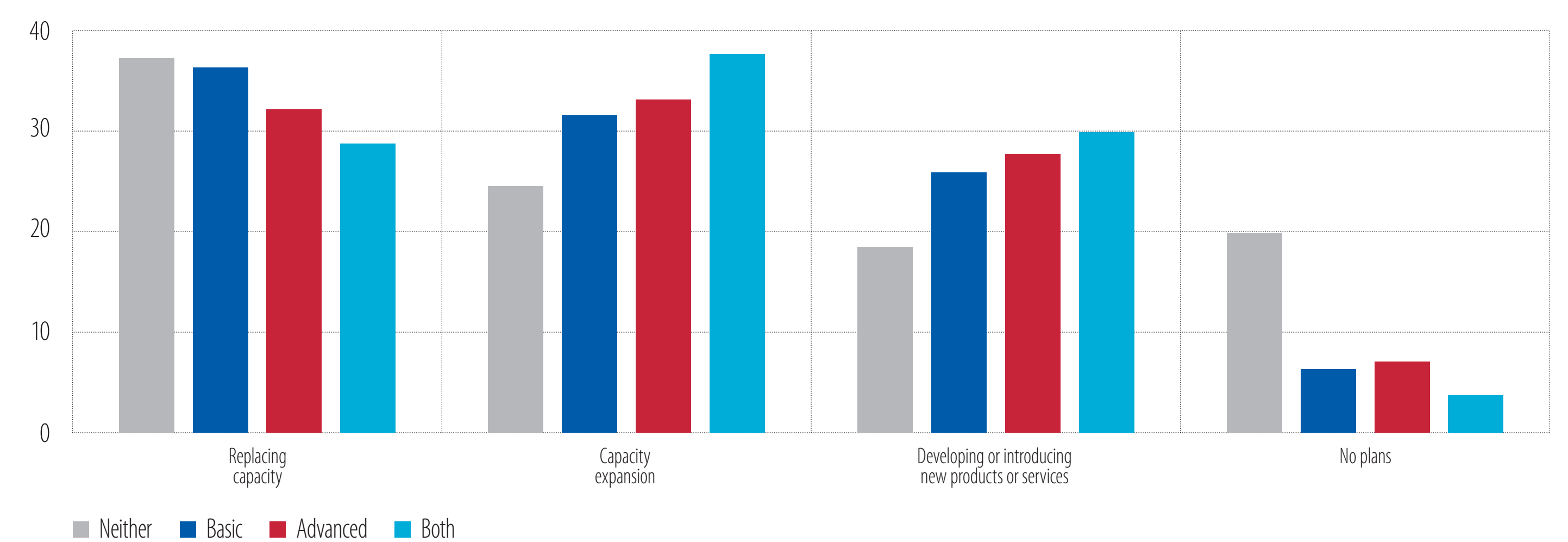
The crisis widened the gap between digital and non-digital firms

One in three employees in the European Union works for a firm that has neither adopted advanced digital technologies nor invested in digitalisation, compared with one in five in the United States (% of firms investing in digital technologies)



Source: EIBIS 2021, Eurostat and OECD Structural Business Statistics, and US Census Bureau.

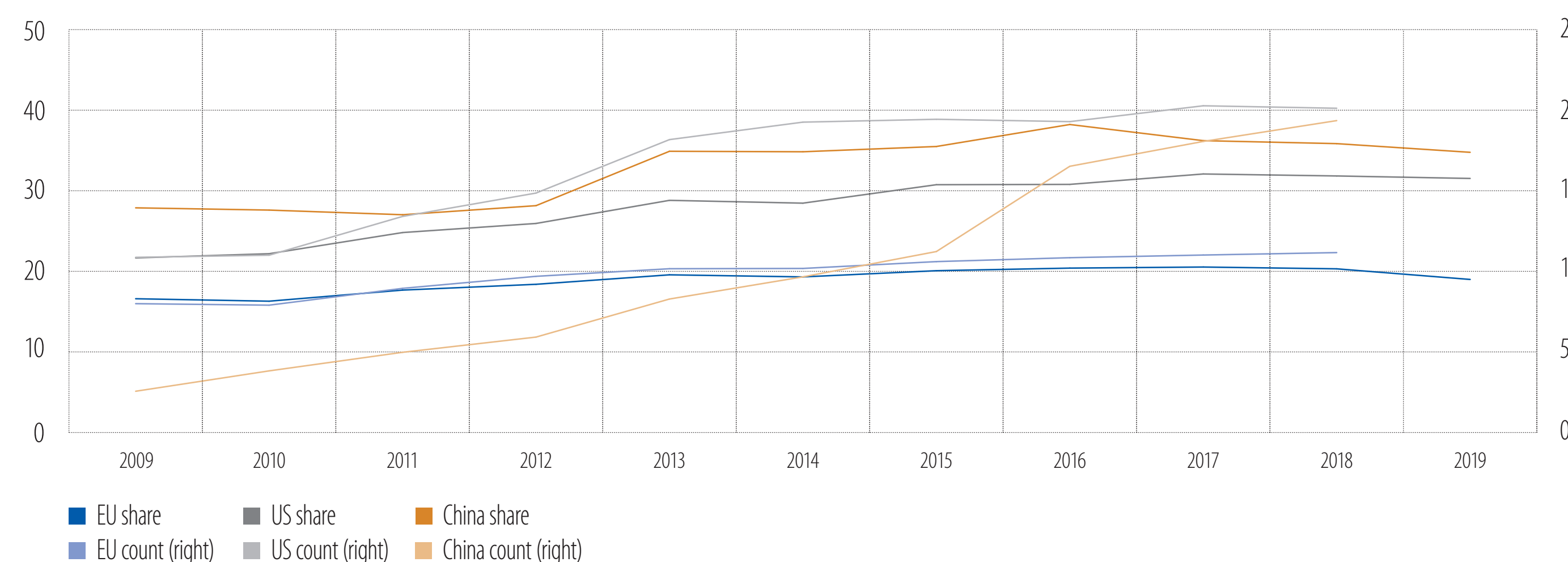
A fairly large group of firms (in %) do not plan to invest to improve their digitalisation or to innovate



Source: EIBIS 2021, firms in the EU27.
Question: Looking ahead to the next three years, which of the following is your investment priority?

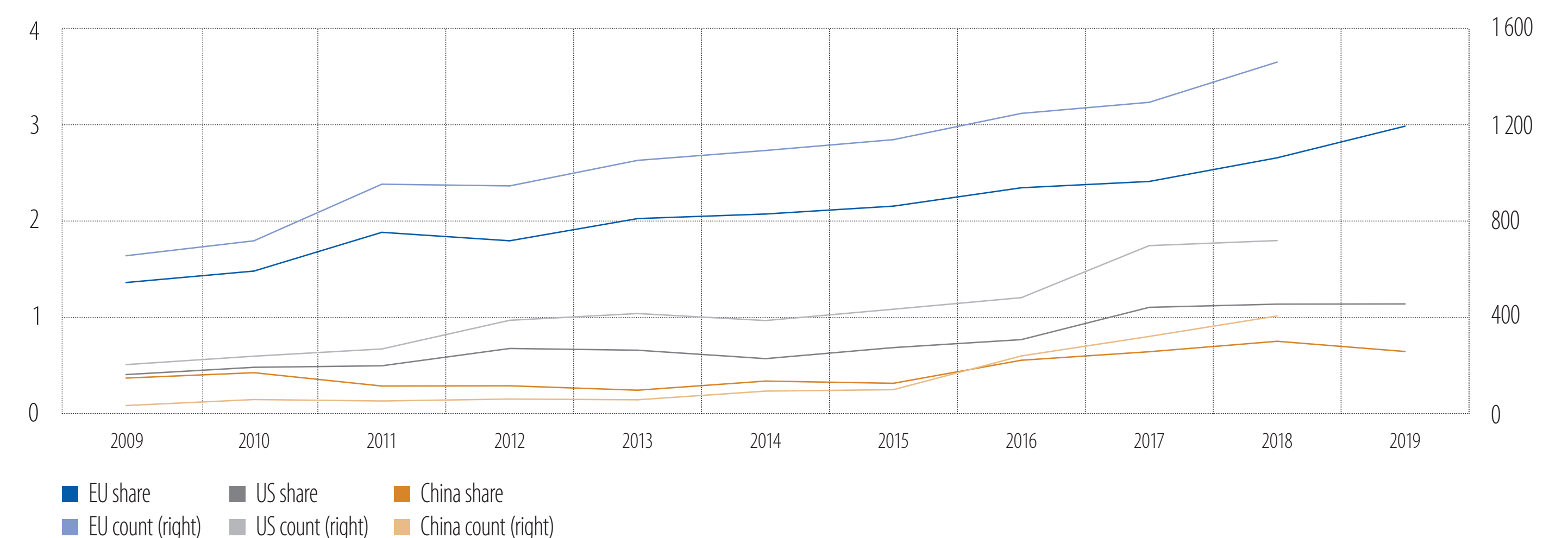
While not a digital innovation leader, Europe is ahead on green technologies

But the European Union trails the United States and China in generating digital patents (left axis: % of total patents; right axis: patent count)



Source: The European Patent Office's Worldwide Patent Statistical Database (PATSTAT), Patent Cooperation Treaty (PCT) data prepared in collaboration with the Centre for Research and Development Monitoring (ECCOM).

The European Union remains at the forefront of digital innovation for the automotive sector and climate change (left axis: % of total patents; right axis: patent count)



Source: PATSTAT (PCT) data prepared in collaboration with ECCOM.

Ensuring a sustainable recovery

- Europe should leverage its advantage in digital innovations for green and automotive technologies.
- Further innovation should be encouraged by supporting a spectrum of EU firms and addressing the problems of laggard, non-digital firms.
- Strong infrastructure and targeted incentives, when they are well designed, can help accelerate the digital transformation.
- Significant investment in digital infrastructure and in digital skills are needed across the European Union to support a broad-based economic recovery.
- Non-digital firms say that advice on funding and consistent regulations would encourage them to invest in digital technologies.



Chapter 5 of the *Investment Report 2021/2022: Recovery as a springboard for change* can be downloaded at:
https://www.eib.org/attachments/publications/economic_investment_report_2021_chapter05_en.pdf

