

Digital transformation and productivity

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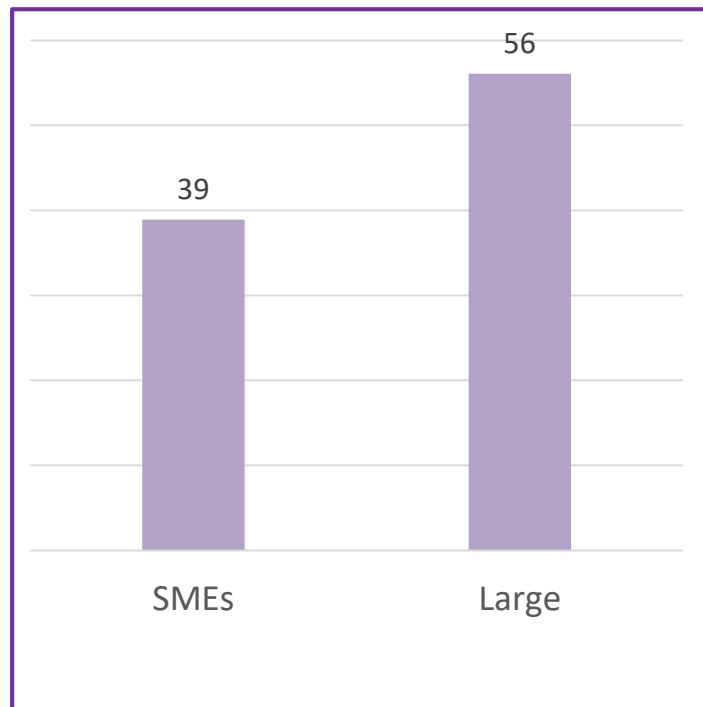
Digitalisation in Europe

- The pandemic as an accelerator of digital adoption
 - Still Europe lags behind
- Signs of digital divide across firms and workers and some risk for those left behind
- There is a cost of delay – which suggests the importance of policy response

The COVID-19 crisis has accelerated digital transformation for EU firms

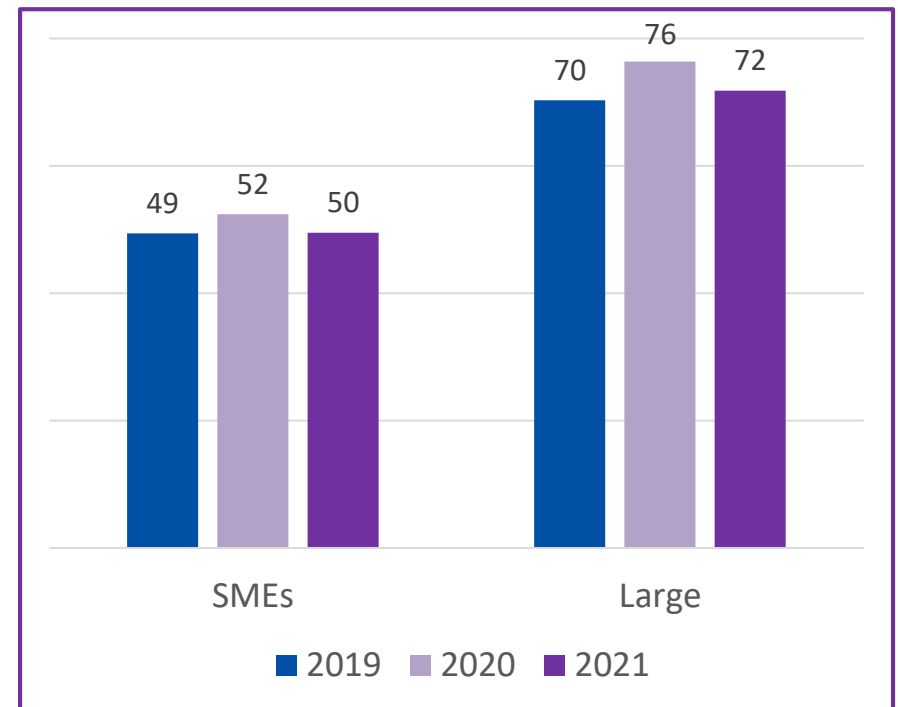
Firms that invested to become more digital as a response to COVID-19

Share of firms %



But the use of advanced digital technologies is stalling

Share of firms %

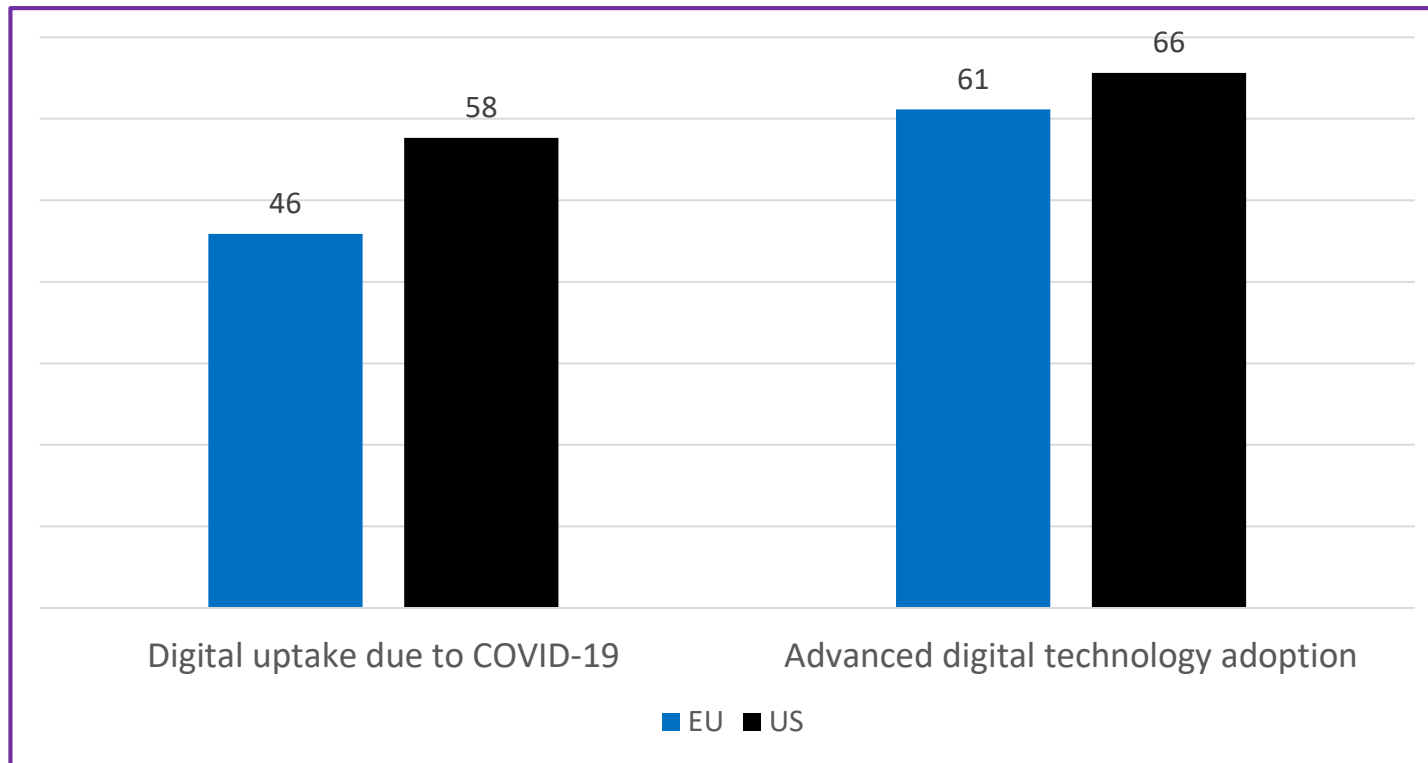


Source: EIBIS 2021

Still, the EU lags the US in digitalization and the digital divide is widening

Digitalisation activities: EU vs US

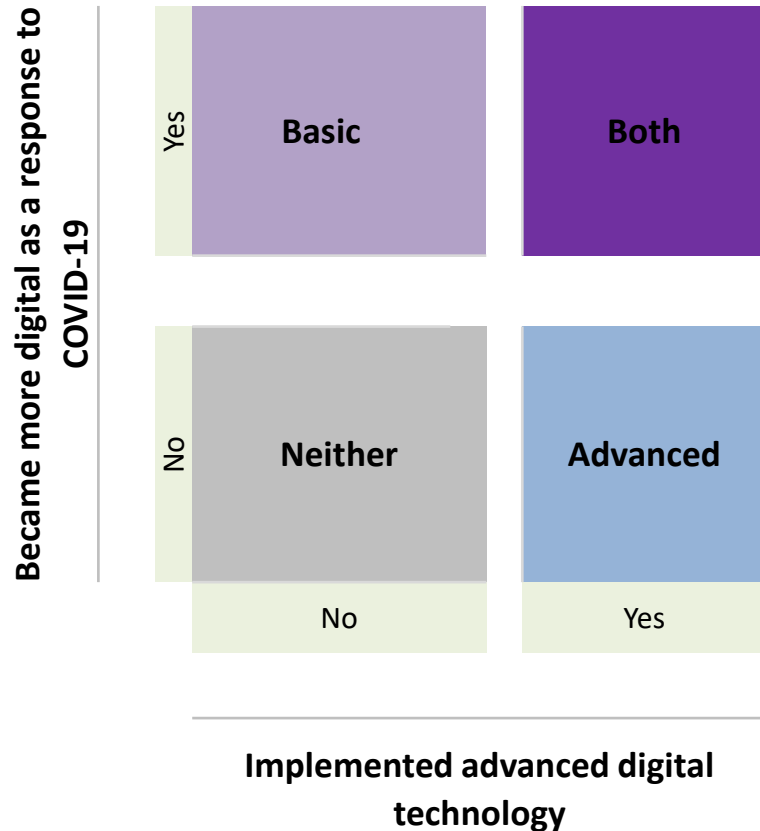
Share of firms %



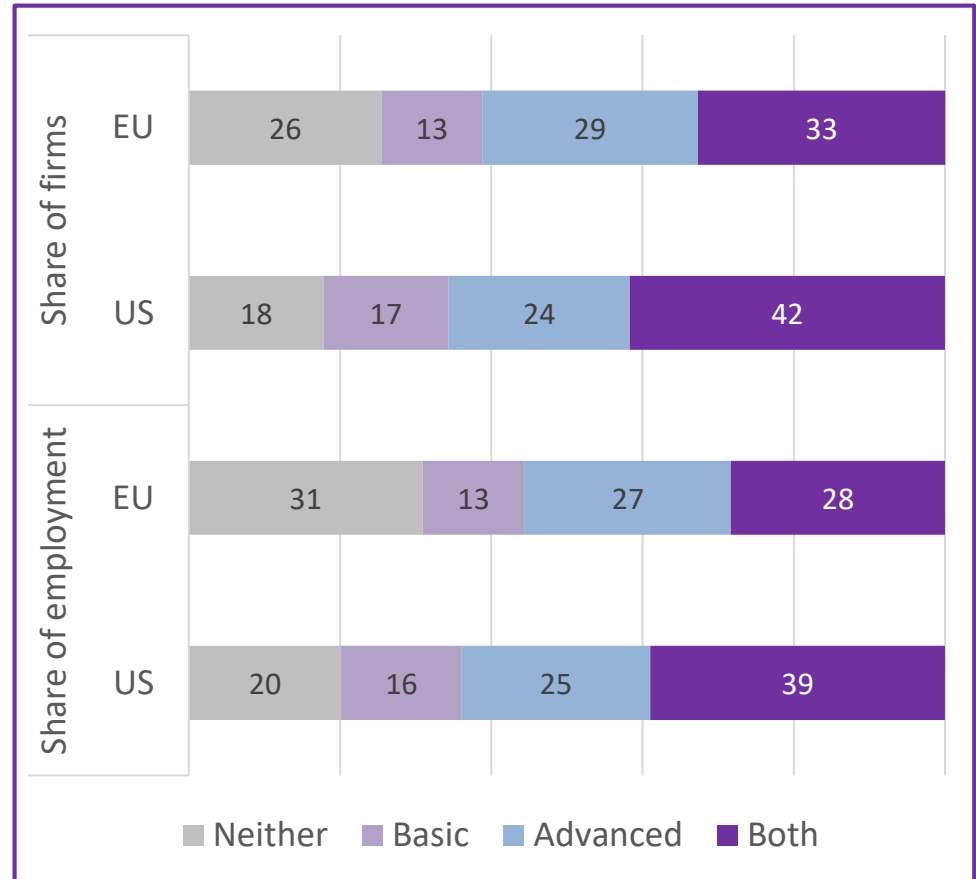
Source: EIBIS 2021

The divide across firms is increasing, with a risk for some to be "left behind"

Corporate digital profiles



Corporate digital profiles: EU vs US in %

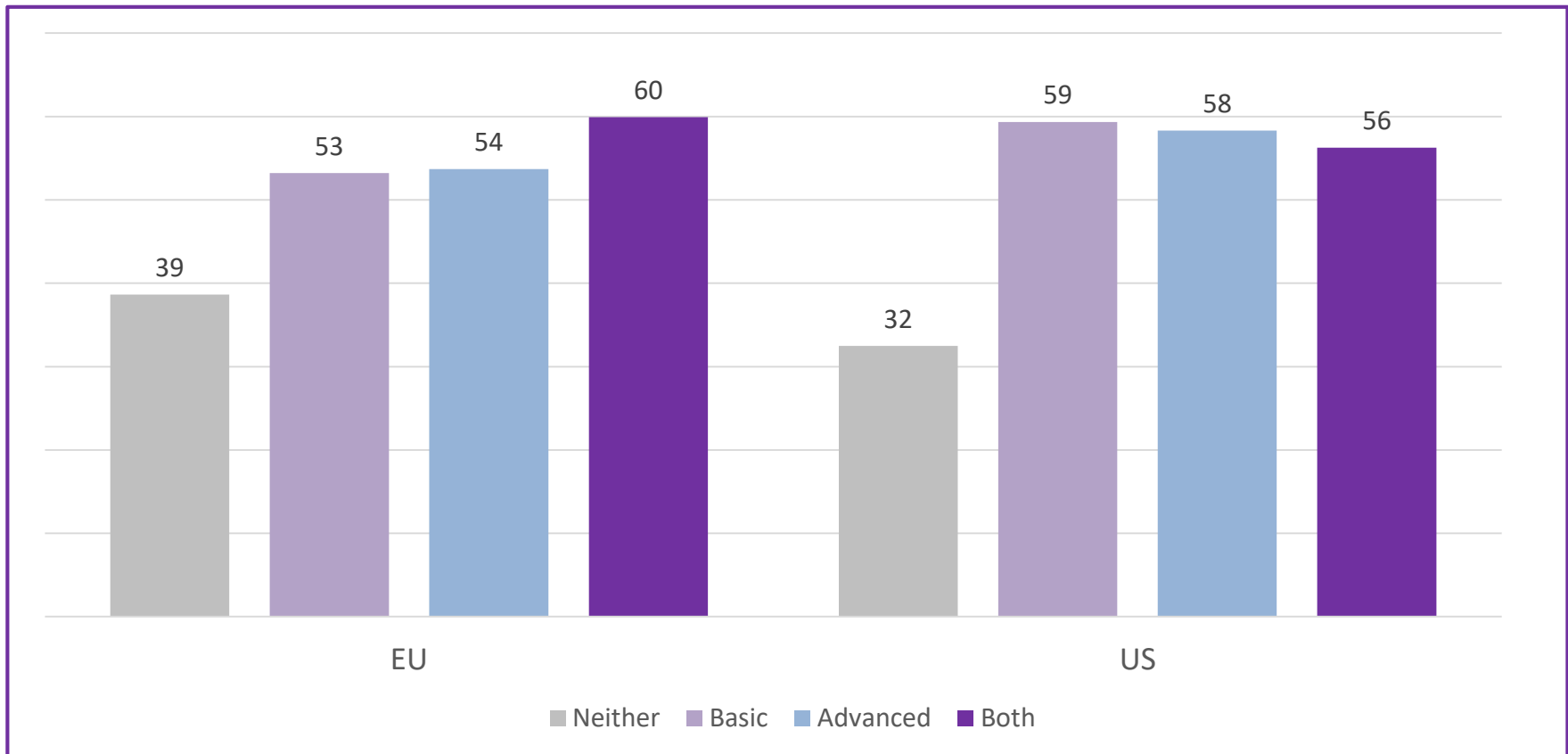


Source: EIBIS 2021, Eurostat, OECD Structural Business Statistics, and US Census Bureau.

The pandemic adds to the skill challenge and risks to exacerbate divergences

Firms investing in employee training

Share of firms %

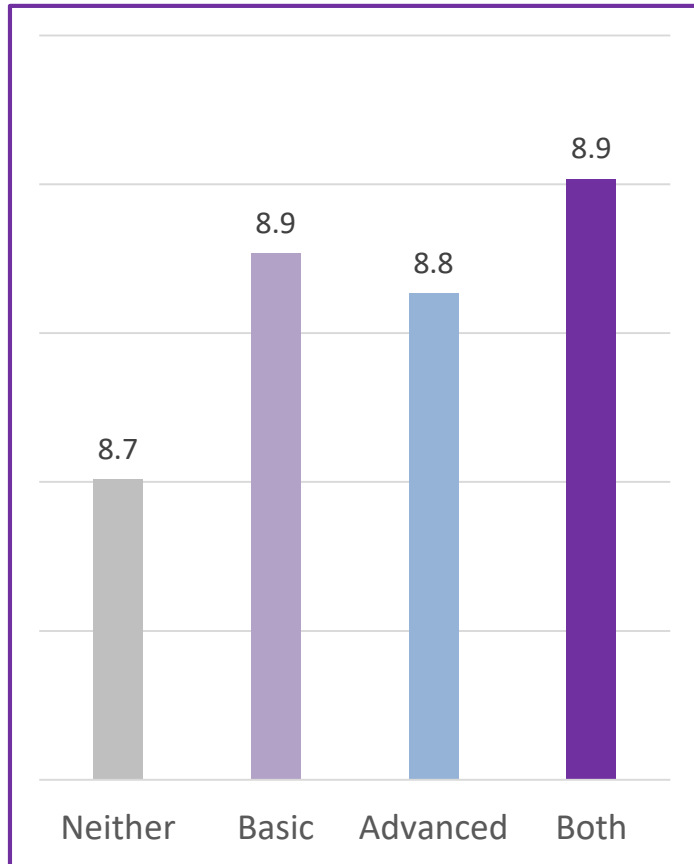


Source: EIBIS 2021

Digital firms tend to be more productive, more innovative and ultimately more resilient

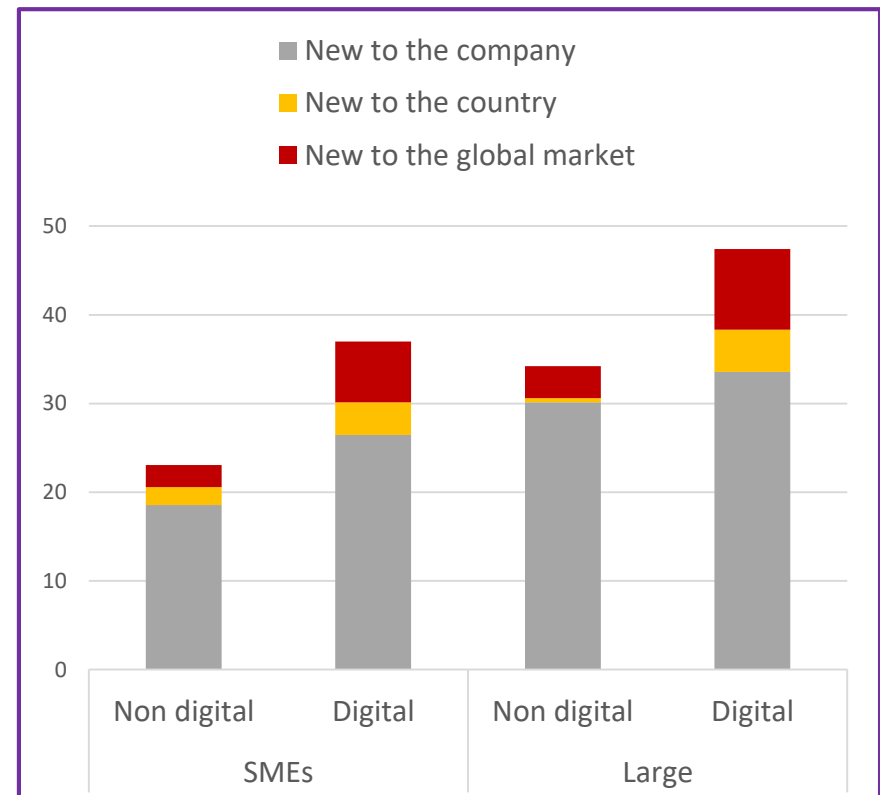
Total Factor Productivity

in log



Firms that introduced new products/services

Share of firms %

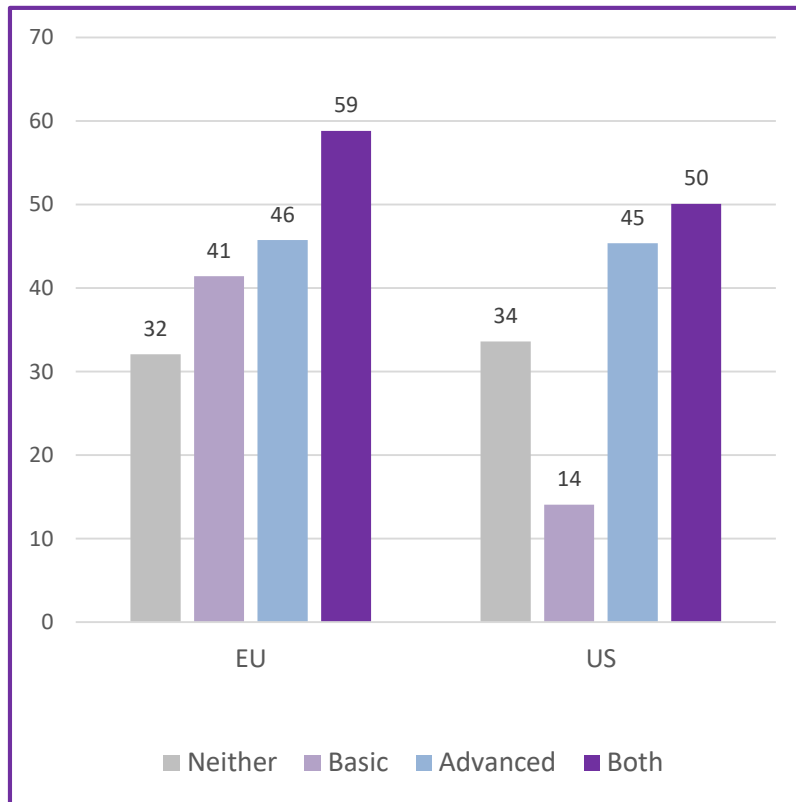


Source: EIBIS 2021

Digital firms are also more proactive in investing in climate change and energy efficiency – a sign of better management

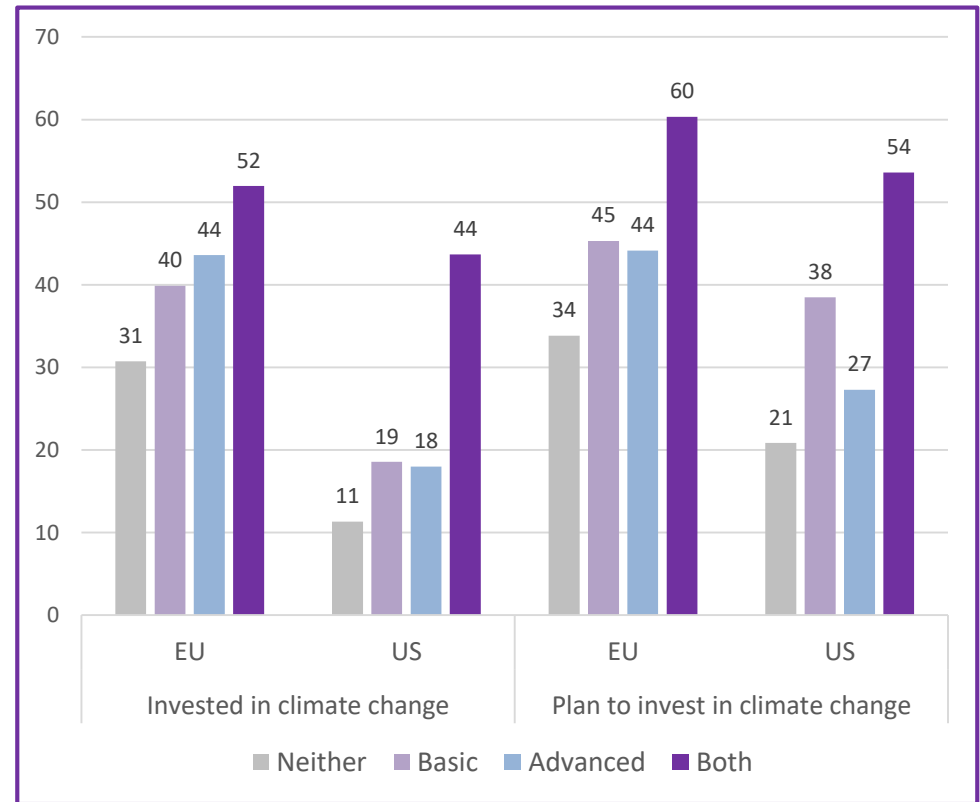
Firms investing in measures to improve energy efficiency

Share of firms (in %)



Investments to tackle climate change

Share of firms %

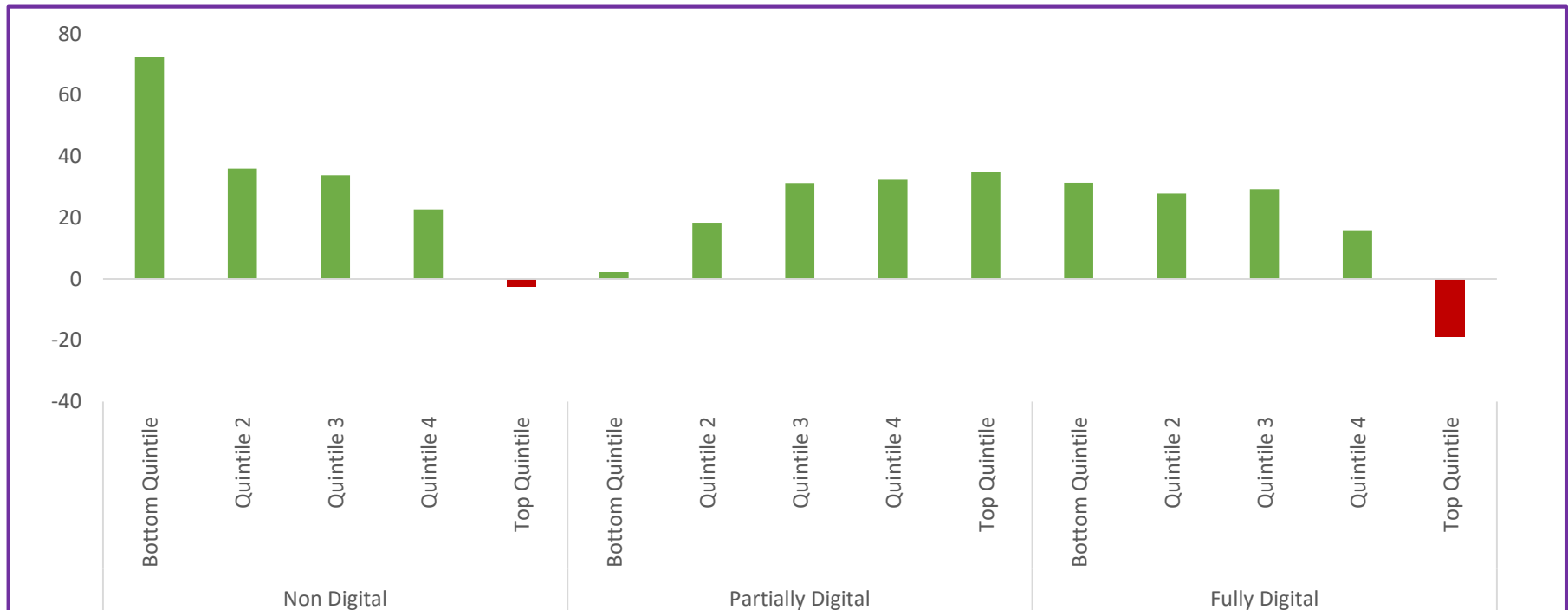


Source: EIBIS 2021

Some evidence of “leaders takes it all” – the most efficient among the fully digital firms expect competition to decrease

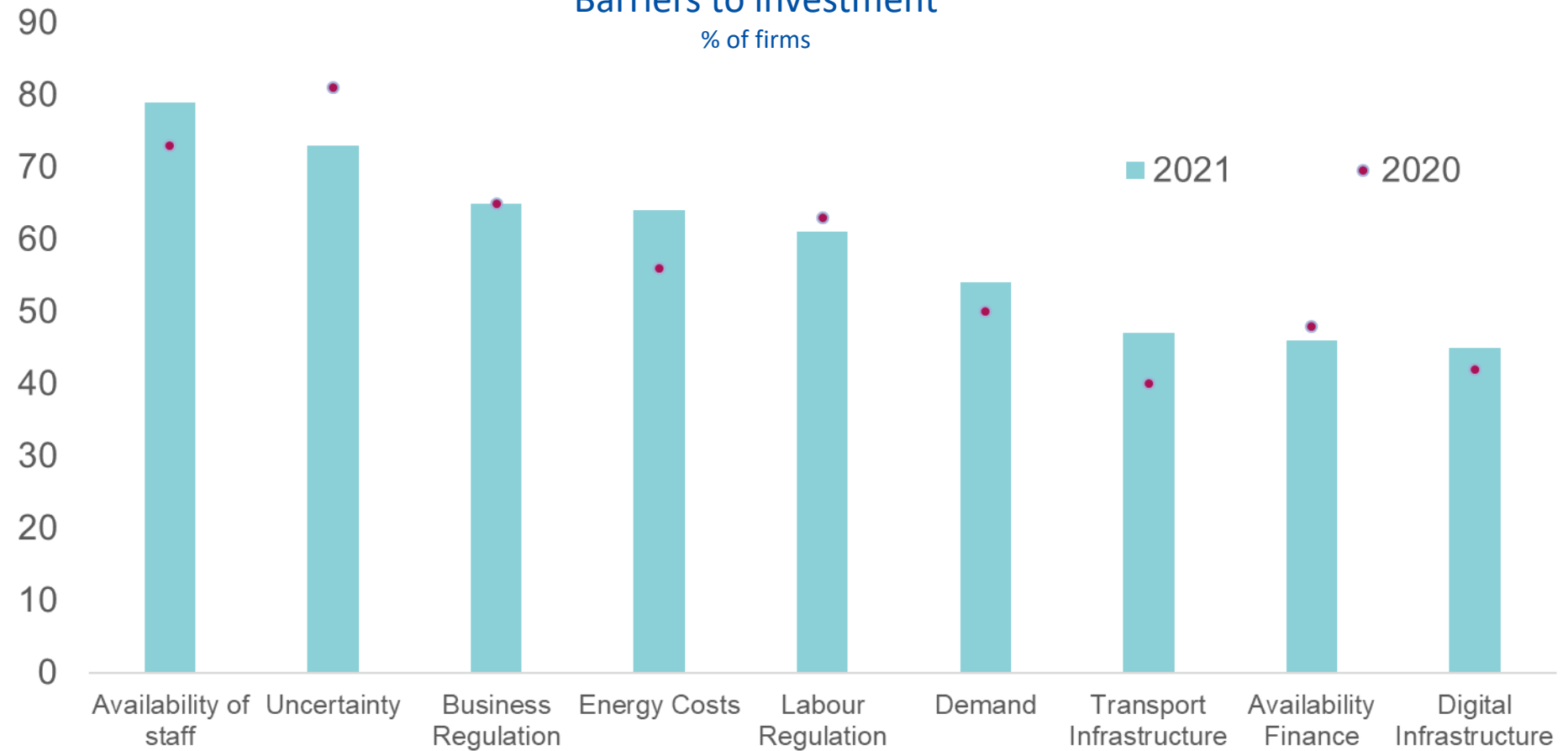
Expected effect on market entry, by digitalisation status and productivity level

Net balance of firms expecting an increase
in the number of firms competing in their market (in %)



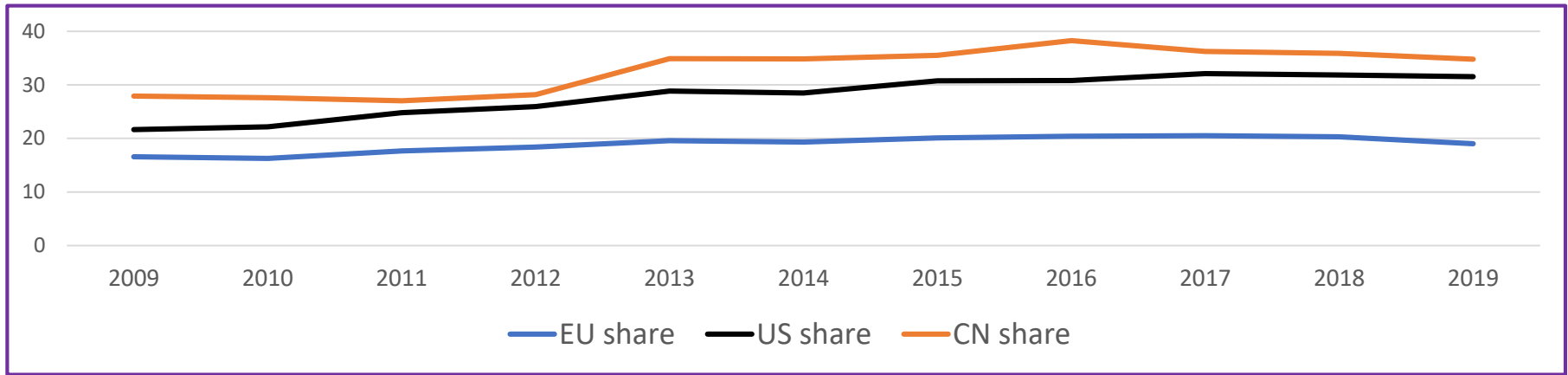
Unlock private investment by addressing barriers: lack of skills, risk sharing, policy clarity and infrastructure

Barriers to investment
% of firms

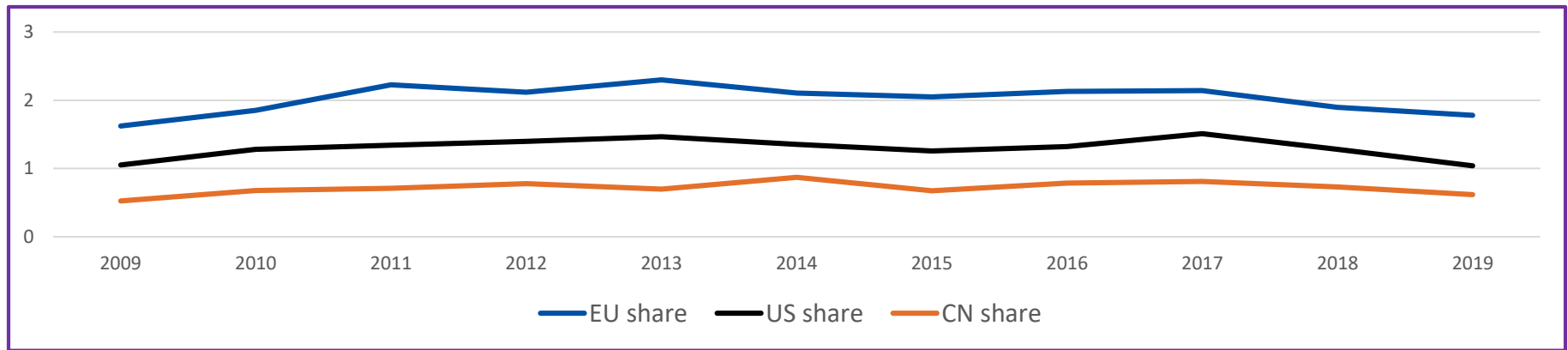


EU is lagging the US and China in digital innovation, but leads at the intersection of digital and green

Digital patents (Share of digital patents in total domestic patent portfolio, in %)



Digital green patents (Share of digital green patents in total domestic patent portfolio, in %)



Source: PATSTAT (PCT) data prepared in collaboration with the Centre for Research and Development Monitoring (ECOOM)

What does it mean for Europe?

- Europe should further enable digitalisation advancements through the spectrum of EU firms, including dealing with laggard, non-digital firms
- The availability of infrastructure and targeted incentives, when they are well designed, can make a strong difference to accelerate the digital transformation
- Advice on funding and consistent regulation is the policy support that non-digital firms would find most helpful to invest in digital technologies
- Focus on innovation, leveraging on the lead at the intersection of digital&green

The EIB Investment Report and the EIB Investment Survey (EIBIS)

- ▶ The Investment Report is the EIB flagship report, combining macro and micro data – to understand investment patterns in Europe, combining structural and cyclical features
- ▶ Combined to EIBIS - a unique tool, established to track non-financial corporate investment activities in the 27 member states of the EU, the UK and since 2019 the US
 - ▶ Administered on a yearly basis since 2016
 - ▶ In the field April-July each year
 - ▶ Covering manufacturing, services, construction and infrastructure sector...
 - ▶ ... and 4 size classes (micro, small, medium and large)
 - ▶ Matched to ORBIS data and PATSTAT



<https://www.eib.org/en/publications/investment-report-2021>