

Germany's Digital Scoreboard

Still in “Neuland” or catching up?

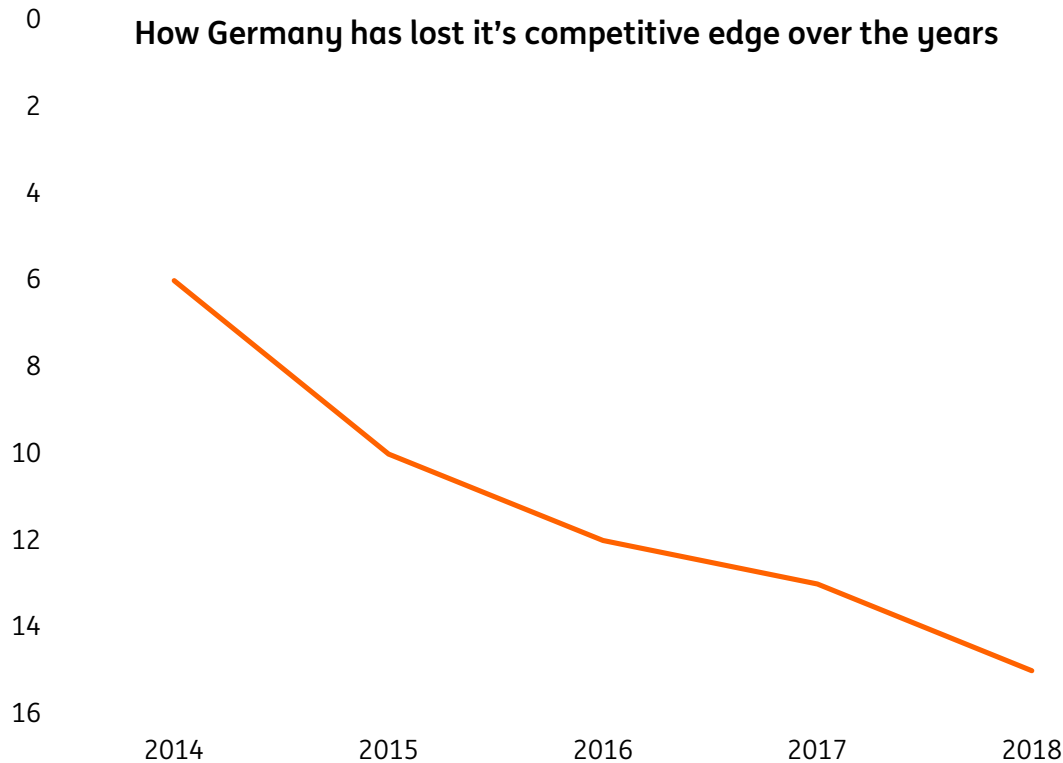
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Still in “Neuland” or catching up?

- Sound fundamentals, low interest rates, and record high employment currently bode well for the German economy.
- However, some darker clouds have appeared in the German economic sky. Protectionism would definitely hurt the self-proclaimed export world champion and Italian politics and the continuing migration crisis could slow down the current euphoria. And there are longer-term challenges such as ageing and digitalisation.
- Complacency is not an option. The German economy needs new investments and structural reforms. Improving the digital infrastructure is urgently needed as digitalisation is key. Not only to get the German population up to speed but to ensure that German small and medium-sized enterprises (SMEs) and all the hidden champions, don't fall behind international competition.
- While Germany has a digital agenda for 2025 - a lot needs to be done in order to become a real forerunner. In 2013, Chancellor Angela Merkel called the internet “Neuland”. It might not be so new anymore but Germany clearly needs to step up its game to really embrace and reap the benefits of “Neuland”.

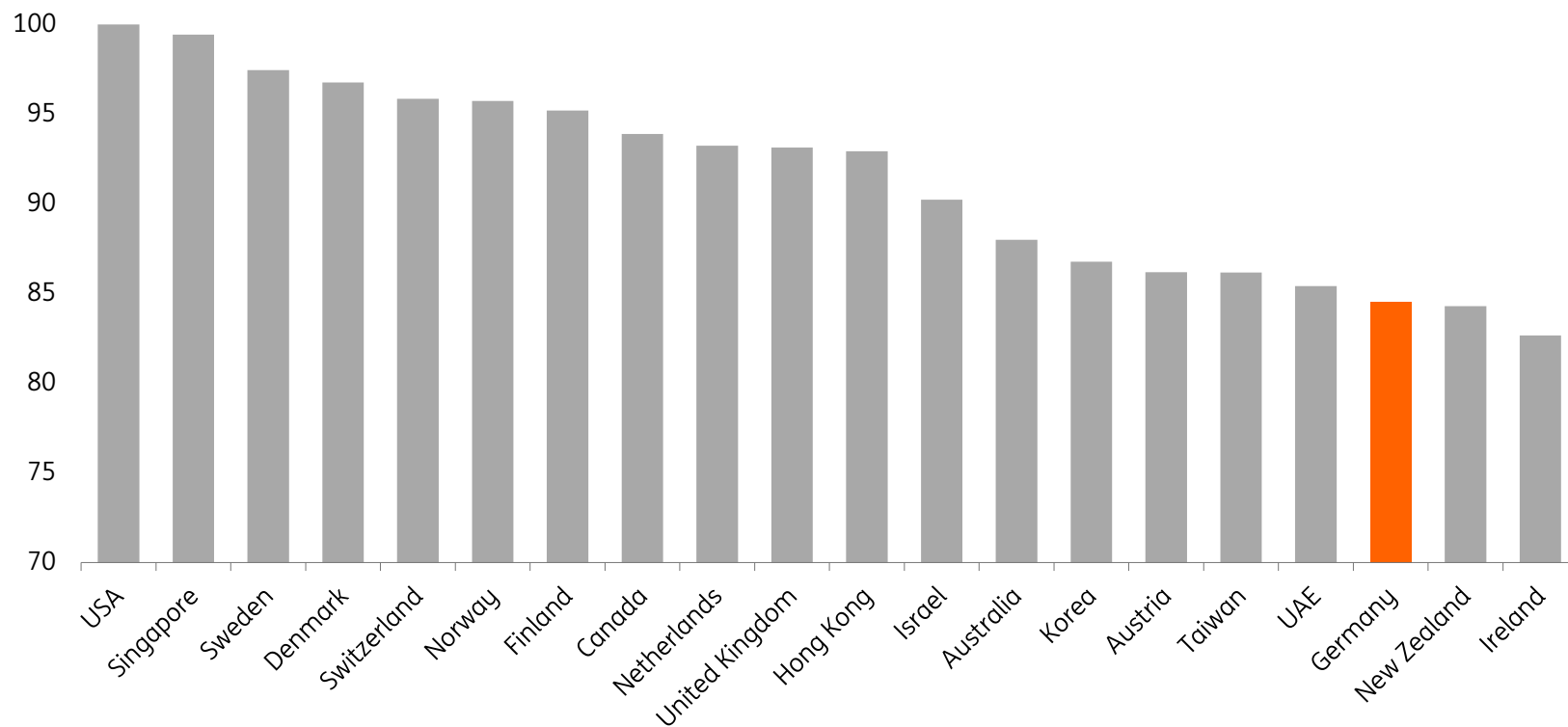
Germany ranks 15th in IMD's 2018 world competitiveness ranking



The world competitiveness ranking is published yearly by the Swiss-based International Institute for Management Development (IMD) since 1989 and is a worldwide reference point on the competitiveness of countries.

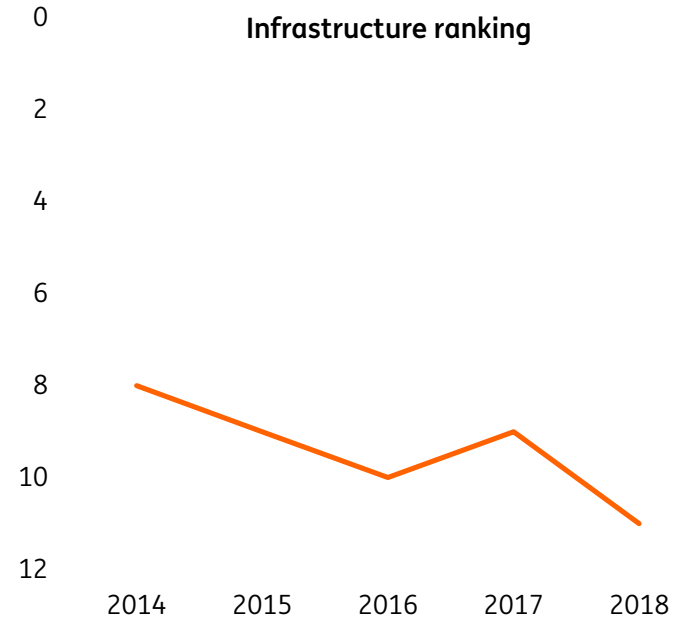
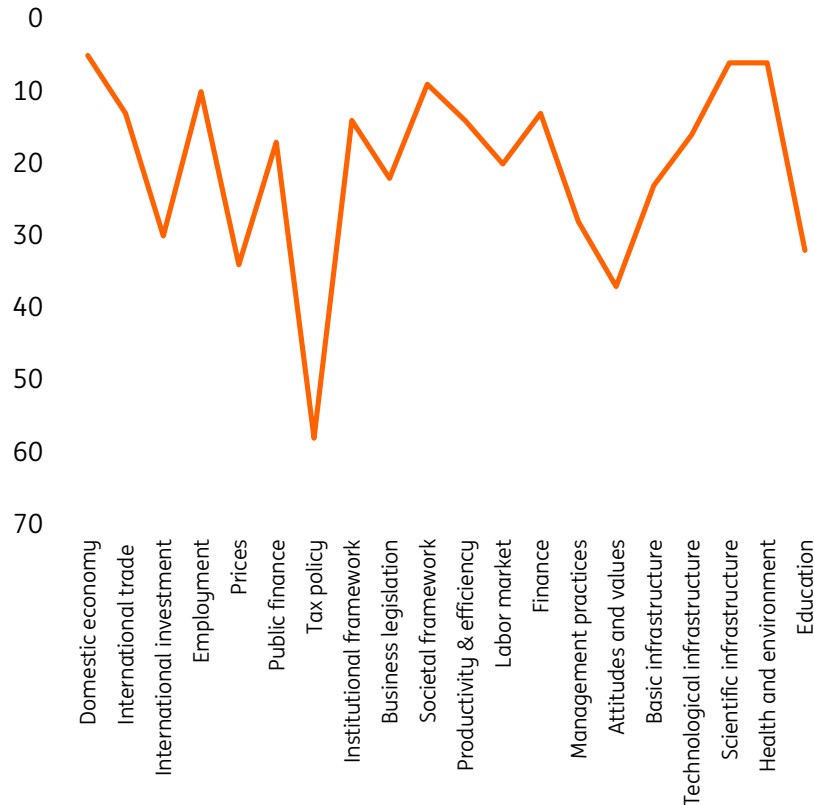
The ranking combines hard data in the form of statistics from international regional and national sources and soft data in the form of a survey sent to middle and upper-level managers for each of the 63 economies assessed.

And 18th when it comes to digital competitiveness in 2018



Source: IMD World Digital Competitiveness Ranking 2018

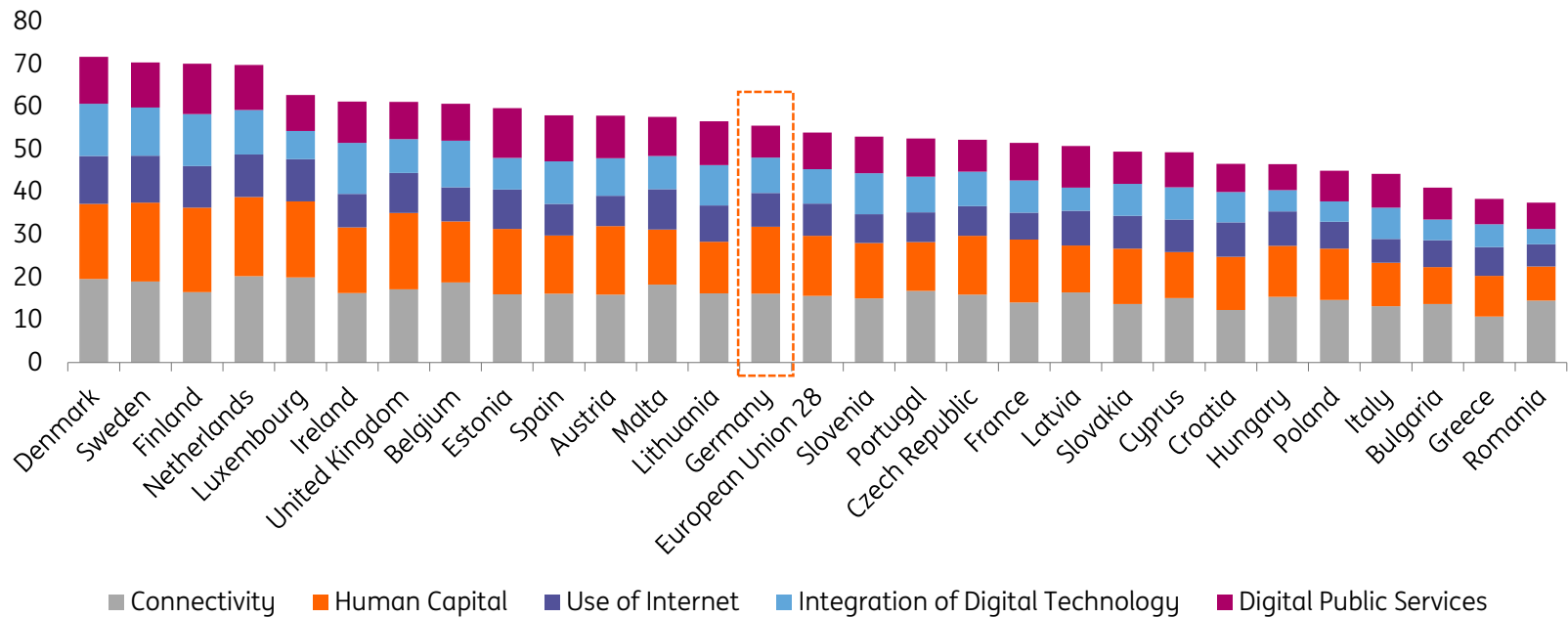
Germany's competitiveness landscape could look better – especially when it comes to infrastructure



Source: IMD World Digital Competitiveness Ranking 2018

And overall digital competencies

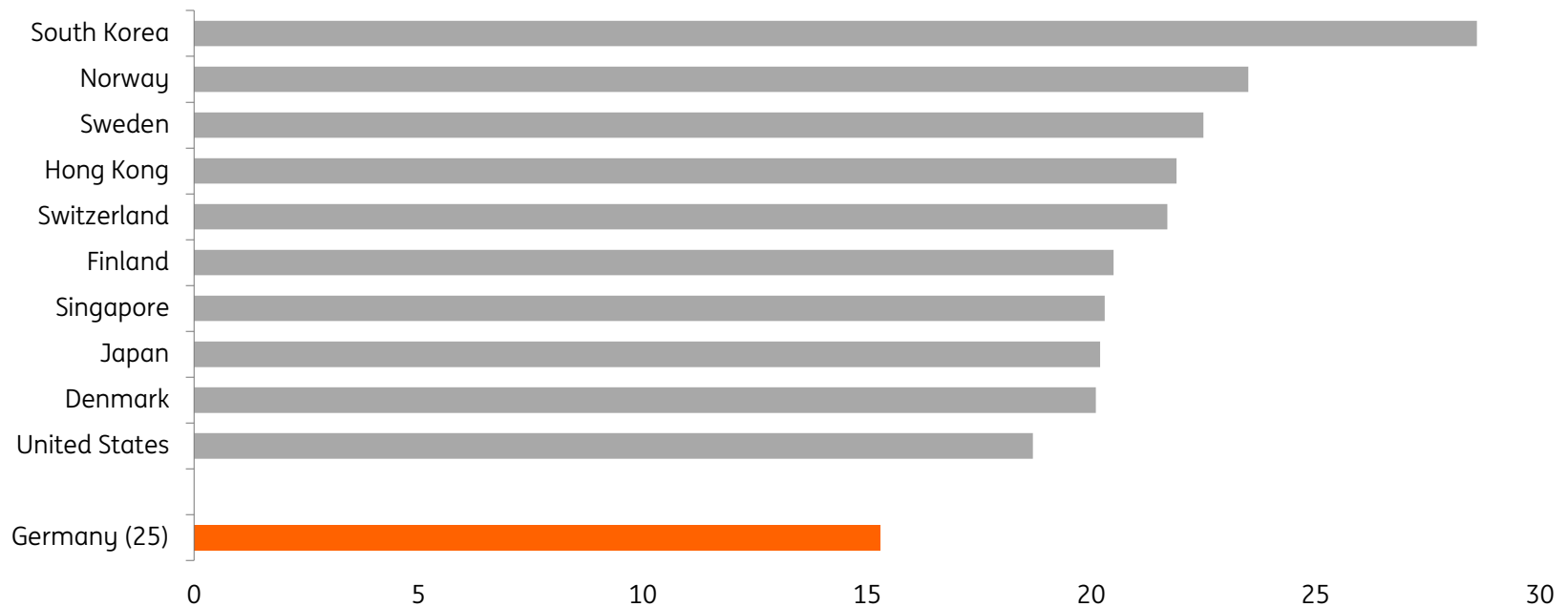
The Digital Economy and Society Index
2018 ranking



Source: European Commission

Internet speed is too slow for the top...

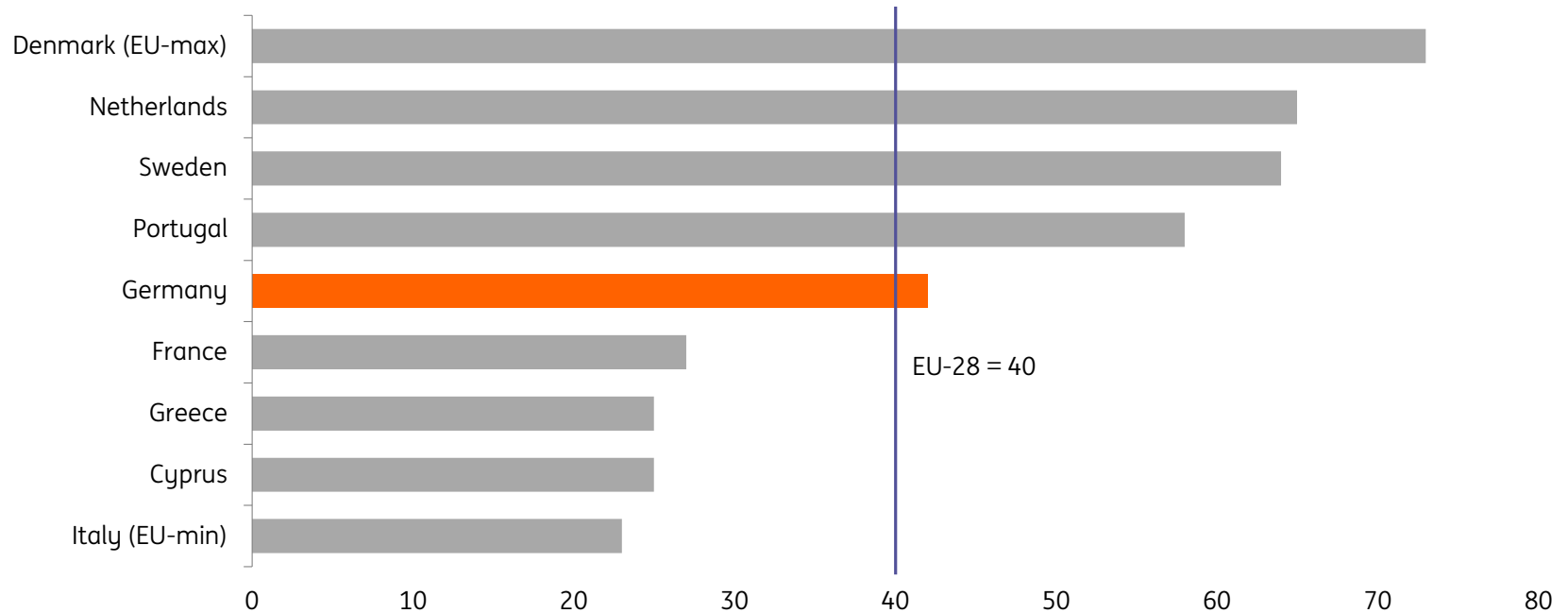
Average internet connection speed
(Mbps) Q1 2017



Source: Akamai

Also in companies

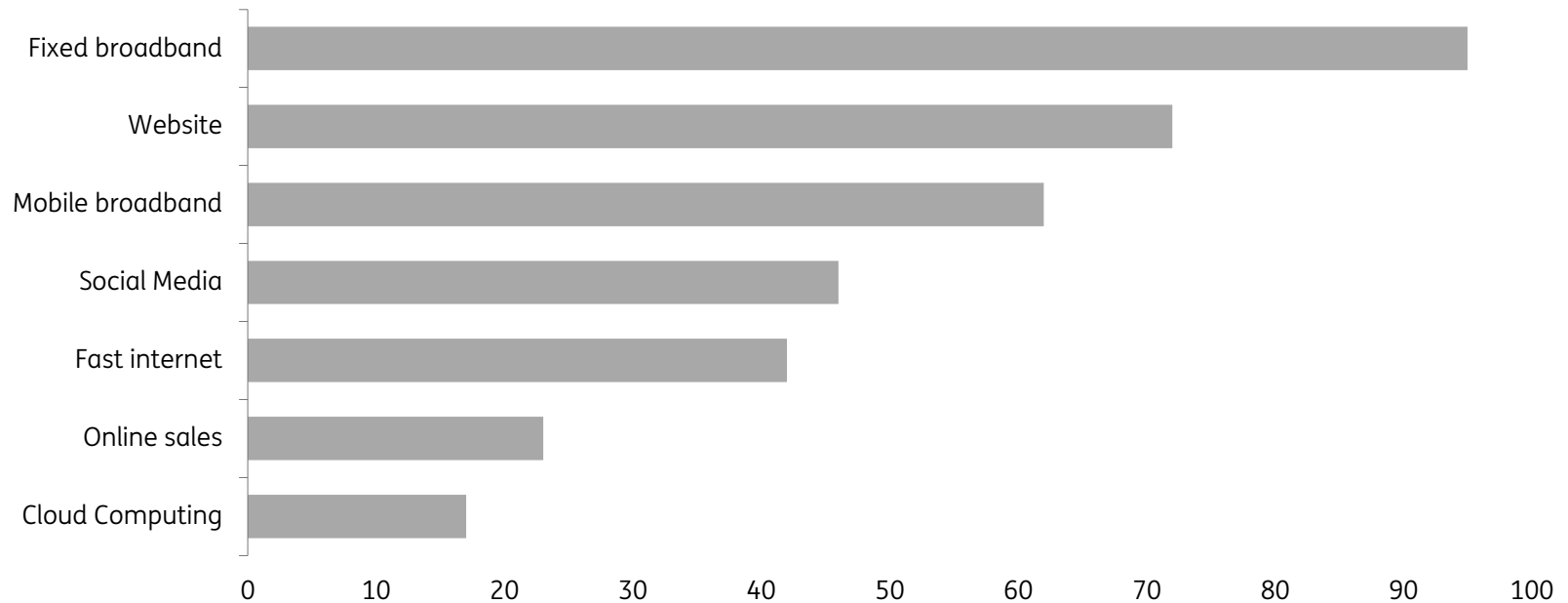
Enterprises with fast internet access
all enterprises with 10 or more persons employed (%), 2017



Source: Destatis, Eurostat. Fast internet refers to fixed broadband connections with a contractually agreed data transfer speed of at least 30 megabits per second (Mbps).

Online sales and cloud computing are not widespread

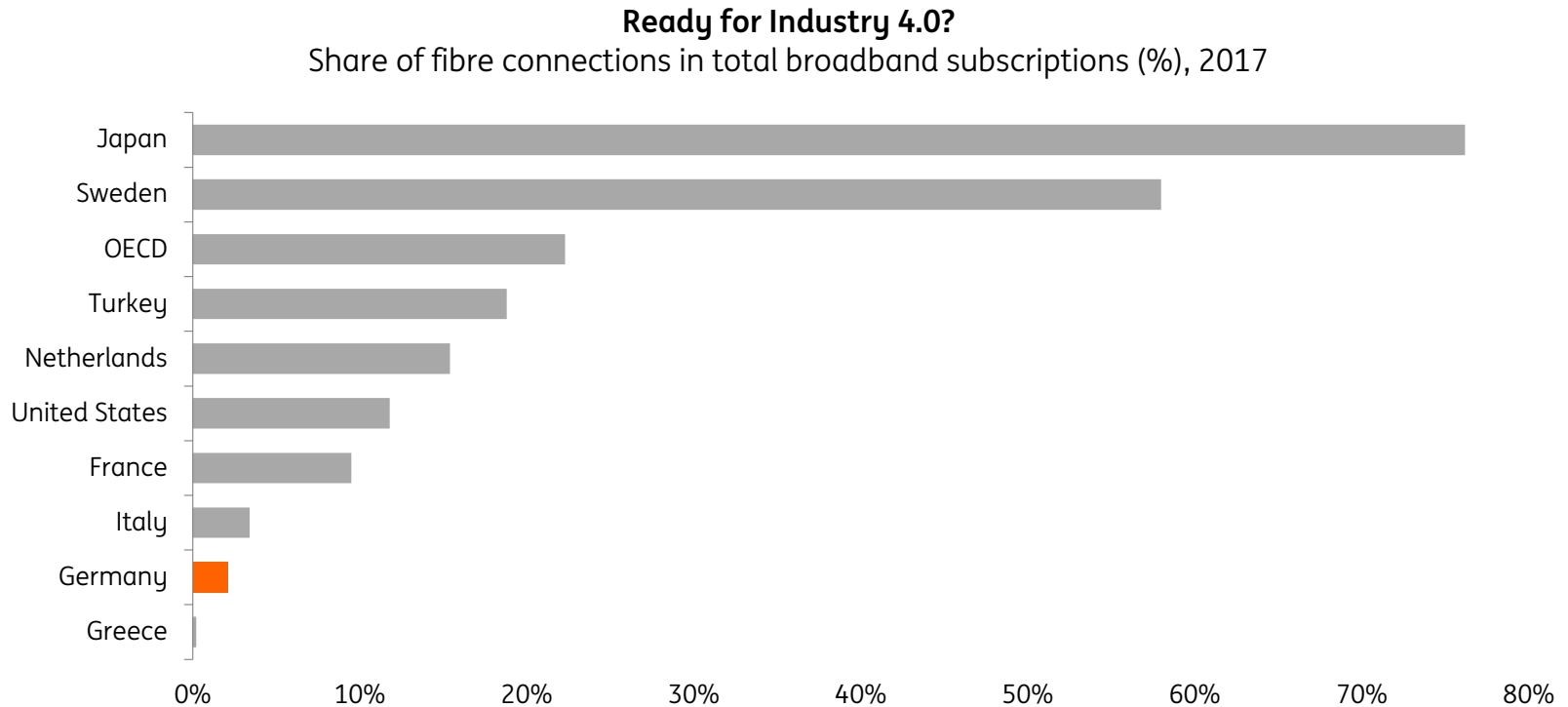
Companies in Germany that have...
(%) 2017



Source: Destatis

Share of glass fibre...

Glass fibre is made up of multiple strands of glass. Fibre optic cables are designed for the transmission of large amounts of data and for long distance.

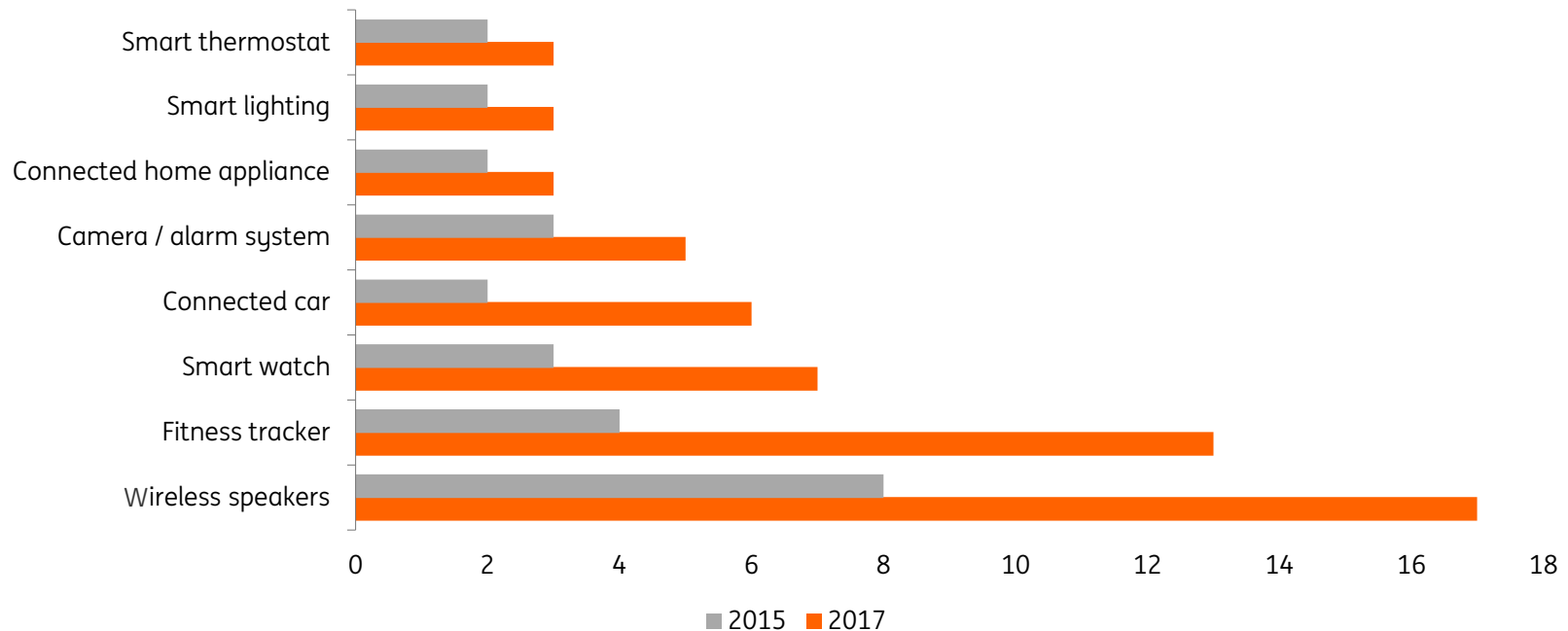


Source: OECD Broadband Portal

IoT devices...

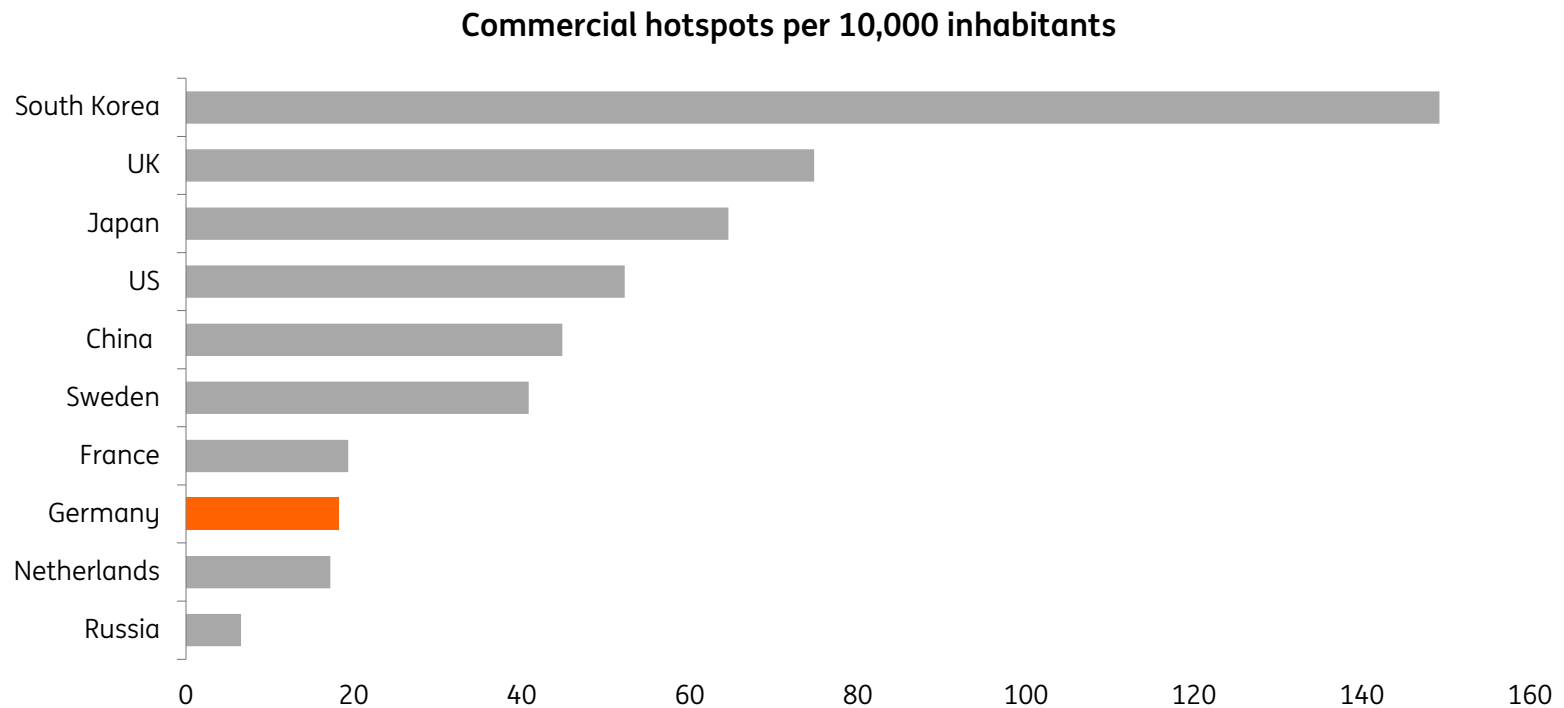
IoT: Internet of things describes the networking of physical devices (e.g. fitness tracker, vehicles or home appliances) with sensors, software or electronics via the IP network. The physical devices are able to connect and exchange data.

Share of respondents who use IoT products in Germany (%)



Source: Deloitte, as of July 2017

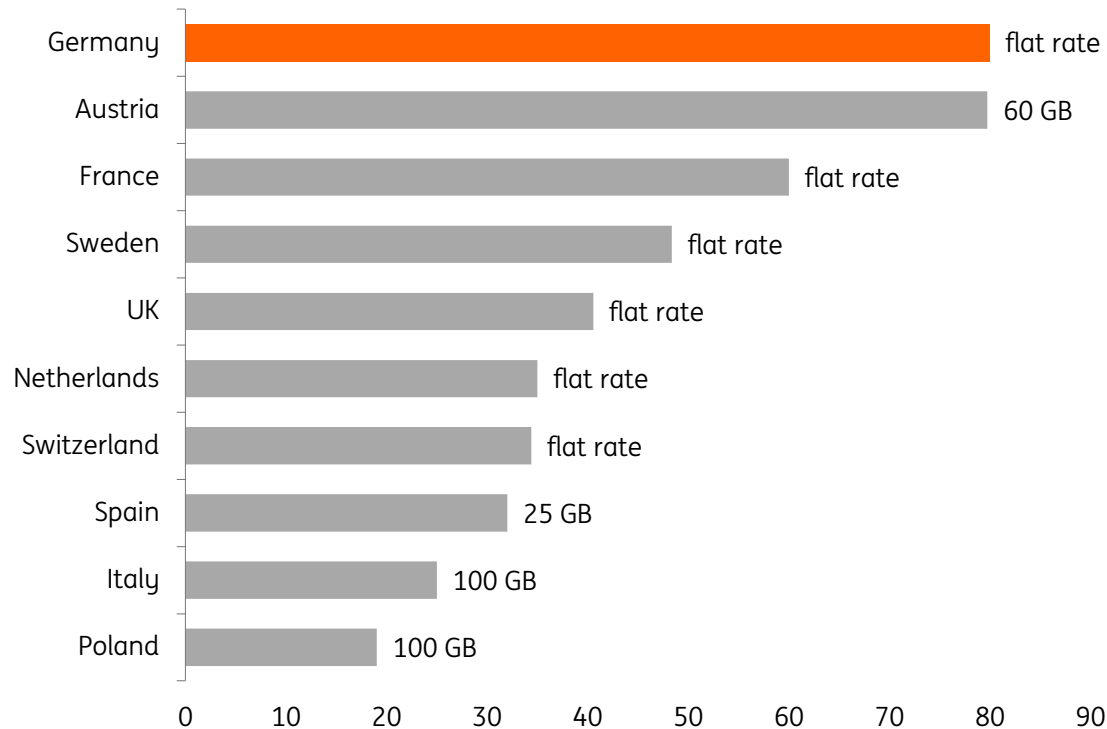
As well as the number of wifi hotspots remain low



Source: iPass, OECD ING Economic & Financial Analysis. Population data for Russia and China as of 2016

While costs remain high...

Mobile phone tariffs in comparison
(€) per month



The chart shows monthly prices for unlimited internet flatrates, e.g. tariffs that do not reduce the surfing speed after consuming a certain amount of data, or very large data packages.

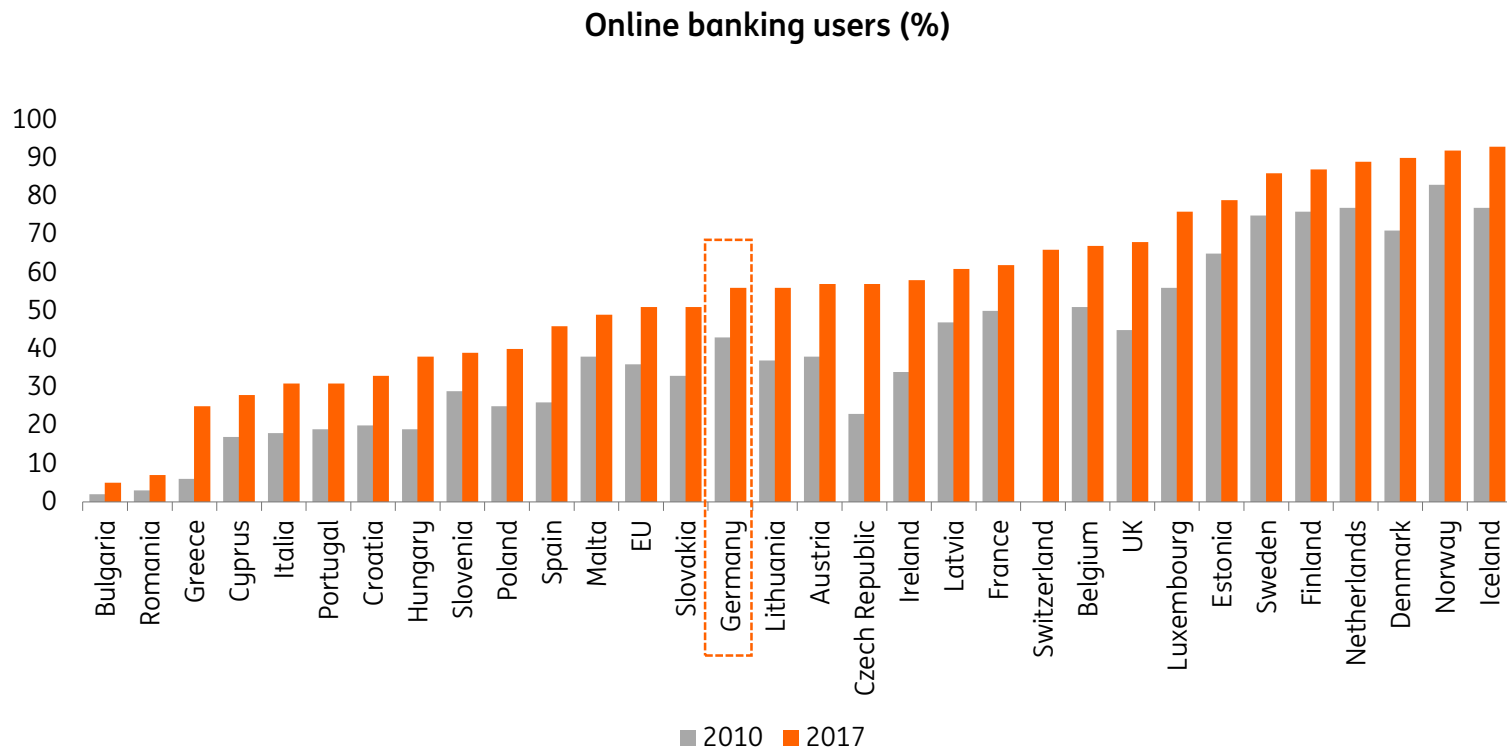
Not only for mobile phone tariffs but electricity too

Electricity price for households per 1 kWh in H2 2017 (€)



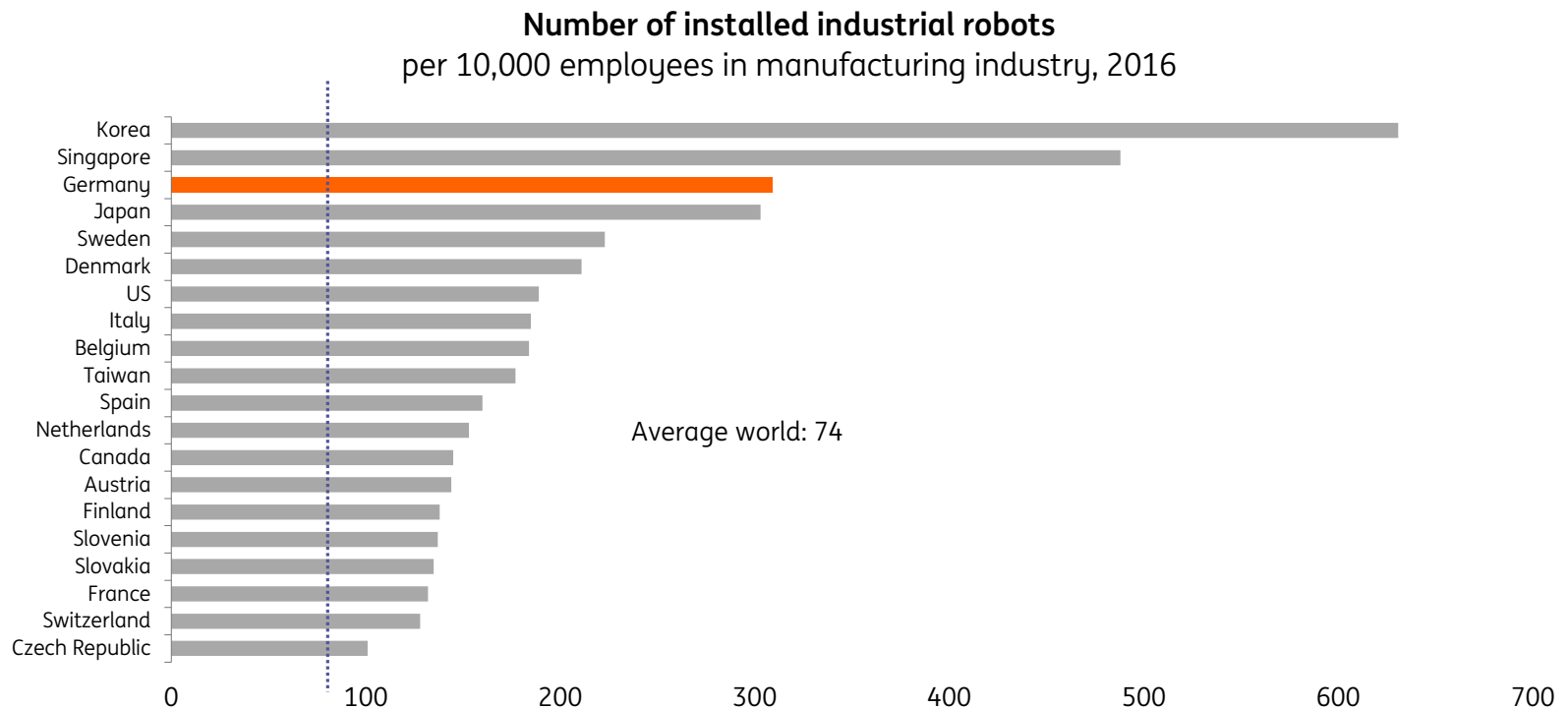
Source: Eurostat

Online banking is on the rise, yet remains low when compared to peers



Source: Eurostat

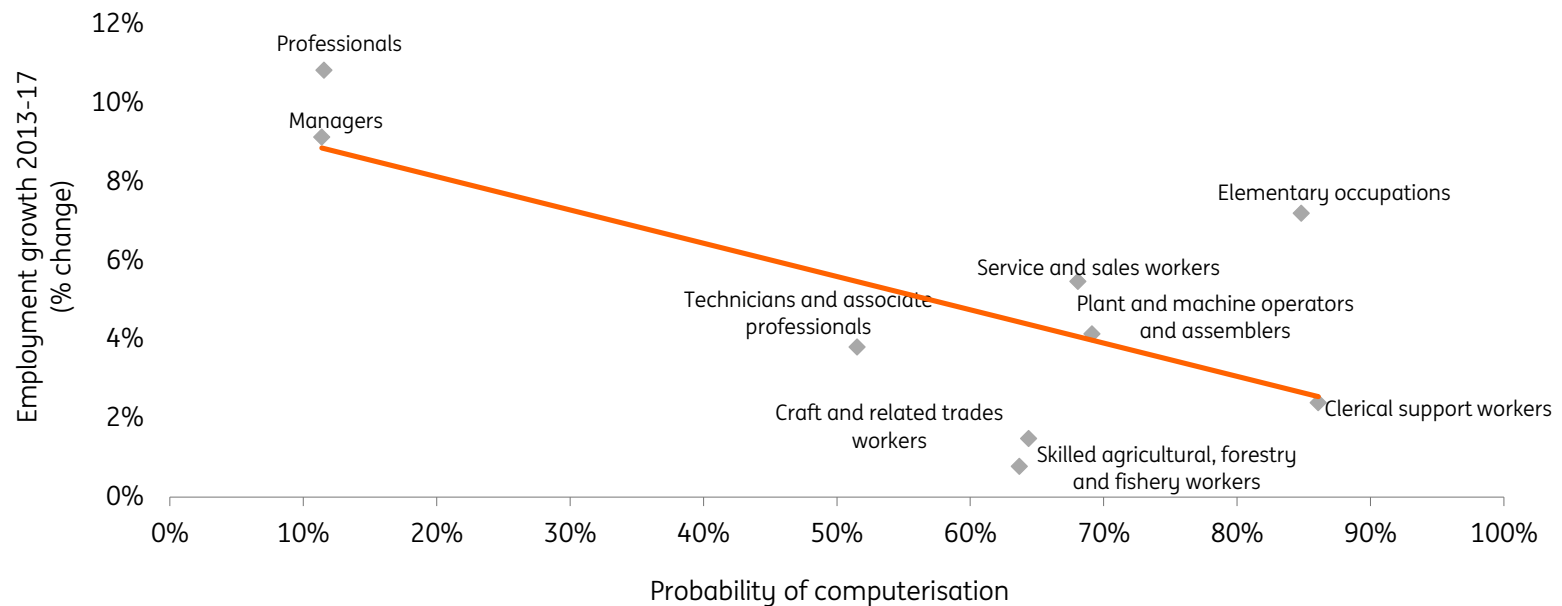
But robots are already here



Source: IFR

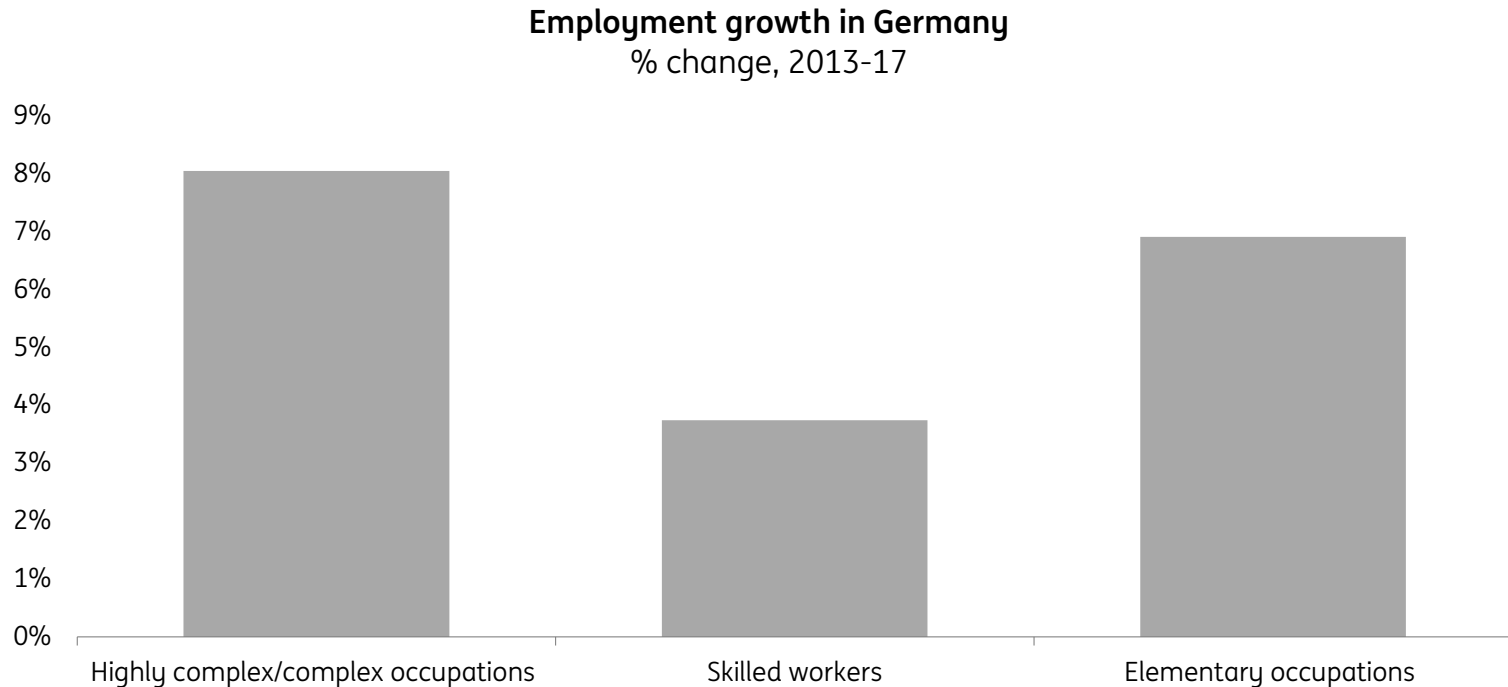
And are changing labour markets...

Employment growth and probability of computerisation in Germany (%)



Source: ING-DiBa Economic & Financial Analysis, Die Roboter kommen (doch nicht?), Juni 2018

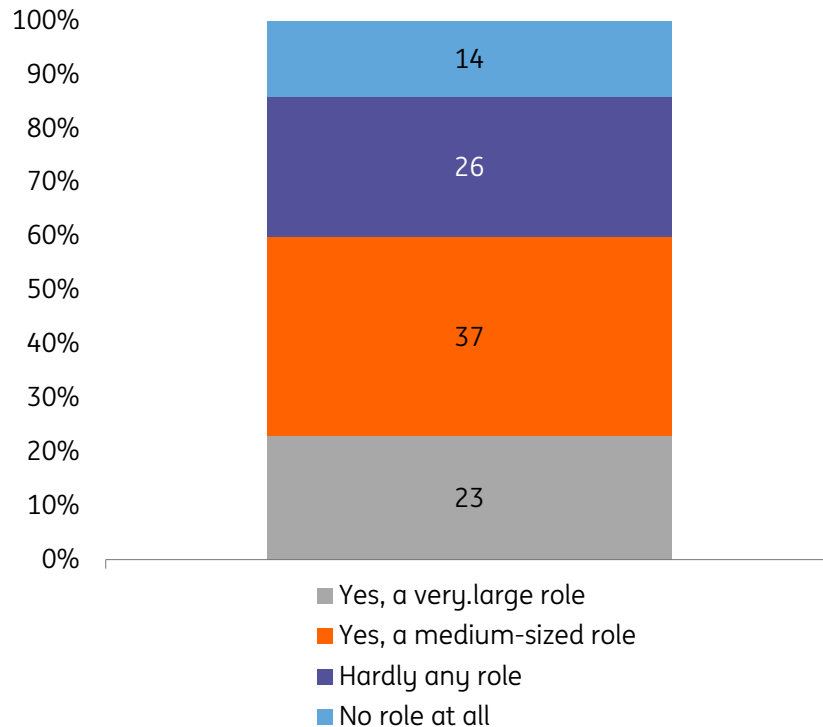
...and having an impact on middle-class jobs



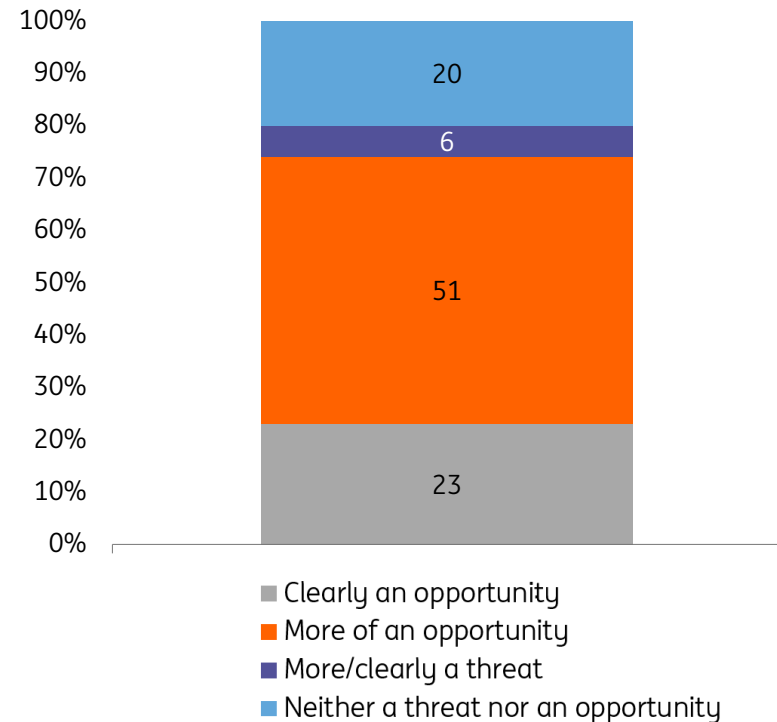
Source: ING-DiBa Economic & Financial Analysis, Die Roboter kommen (doch nicht?), Juni 2018

For Germany's Mittelstand it's more of an opportunity than a threat...

Do digital technologies play a role for the business model of your company?



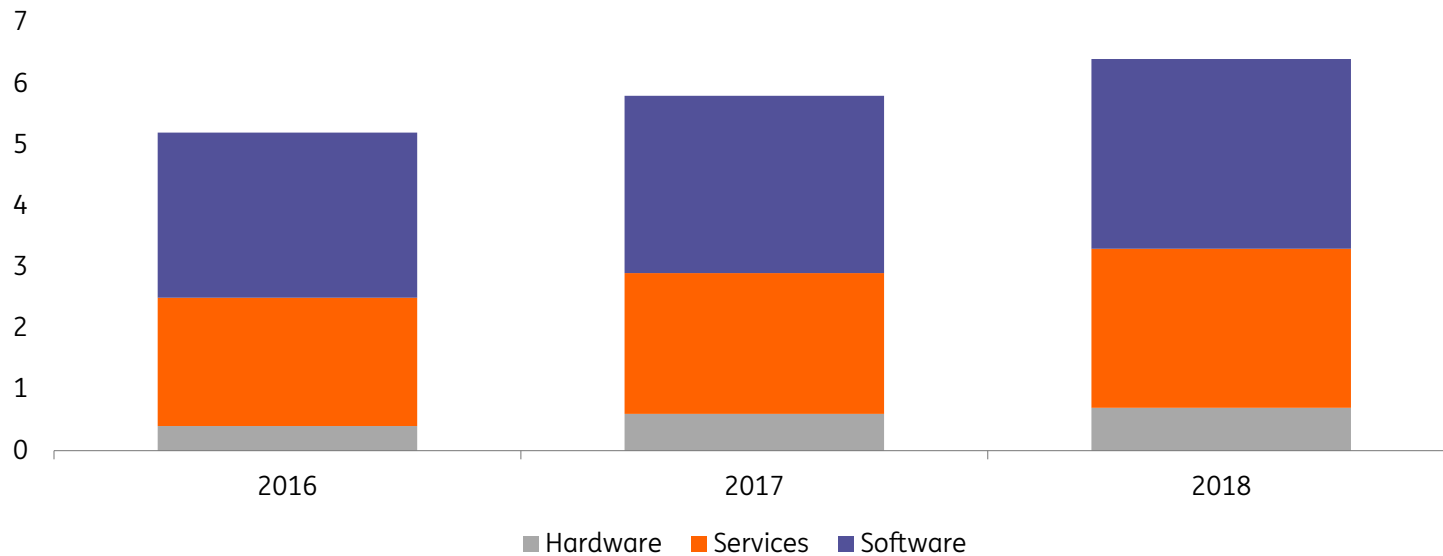
Is the growing importance of digital technology more of a threat or an opportunity?



Source: EY, Digitalisierung im deutschen Mittelstand, März 2018

It's also about money...

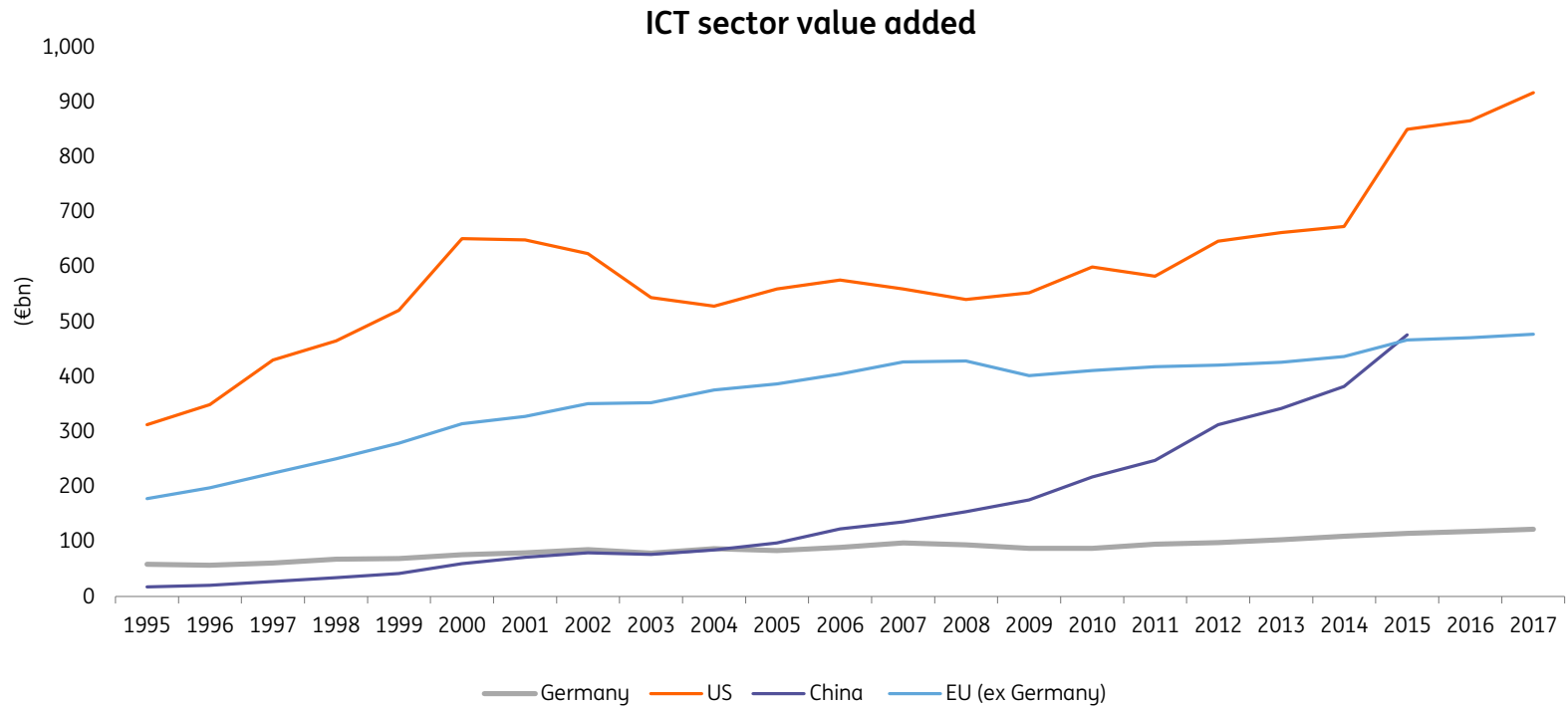
Market for big data is growing at double-digit rates in Germany
Sales (€bn)



Source: Bitkom, IDC

And value addition

Value added: value of output minus the value of intermediate consumption



Source: European Commission, The 2018 PREDICT Key Facts Report, ING Economic & Financial Analysis. ICT sector acc. to operational definition, data for 2016 and 2017 has been nowcasted. The operational definition takes into account the standard distinction between manufacturing and services, but does not include the sectors "Manufacture of magnetic and optical media" and "ICT trade industries"

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