

The future UK tech built

Tech Nation Report 2021

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UK Tech pioneers are building the future...UK VC investment is third globally. Hitting a record high of \$15bn in 2020

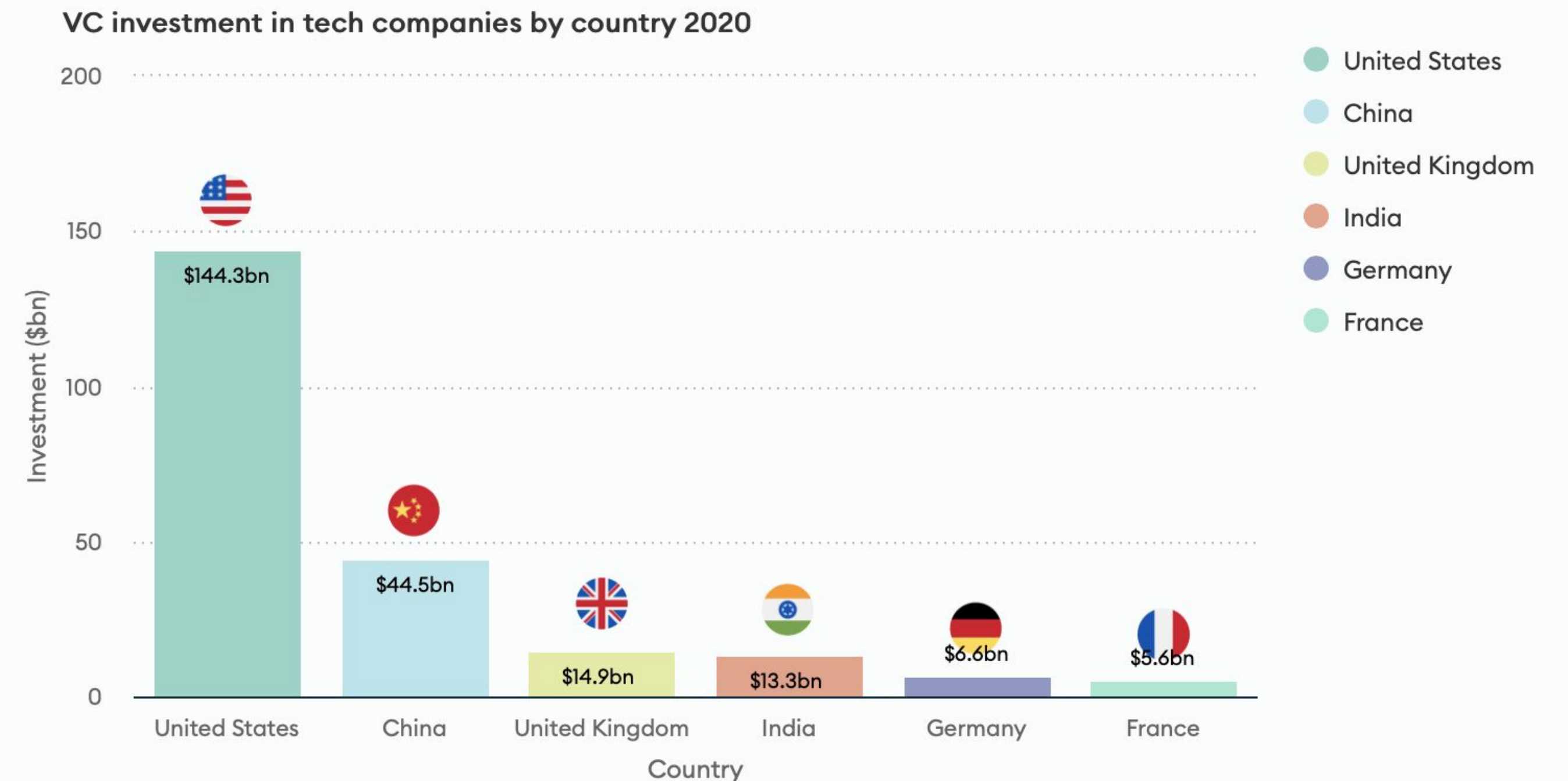


Key statistics



UK VC investment hit a record high of \$15bn in 2020

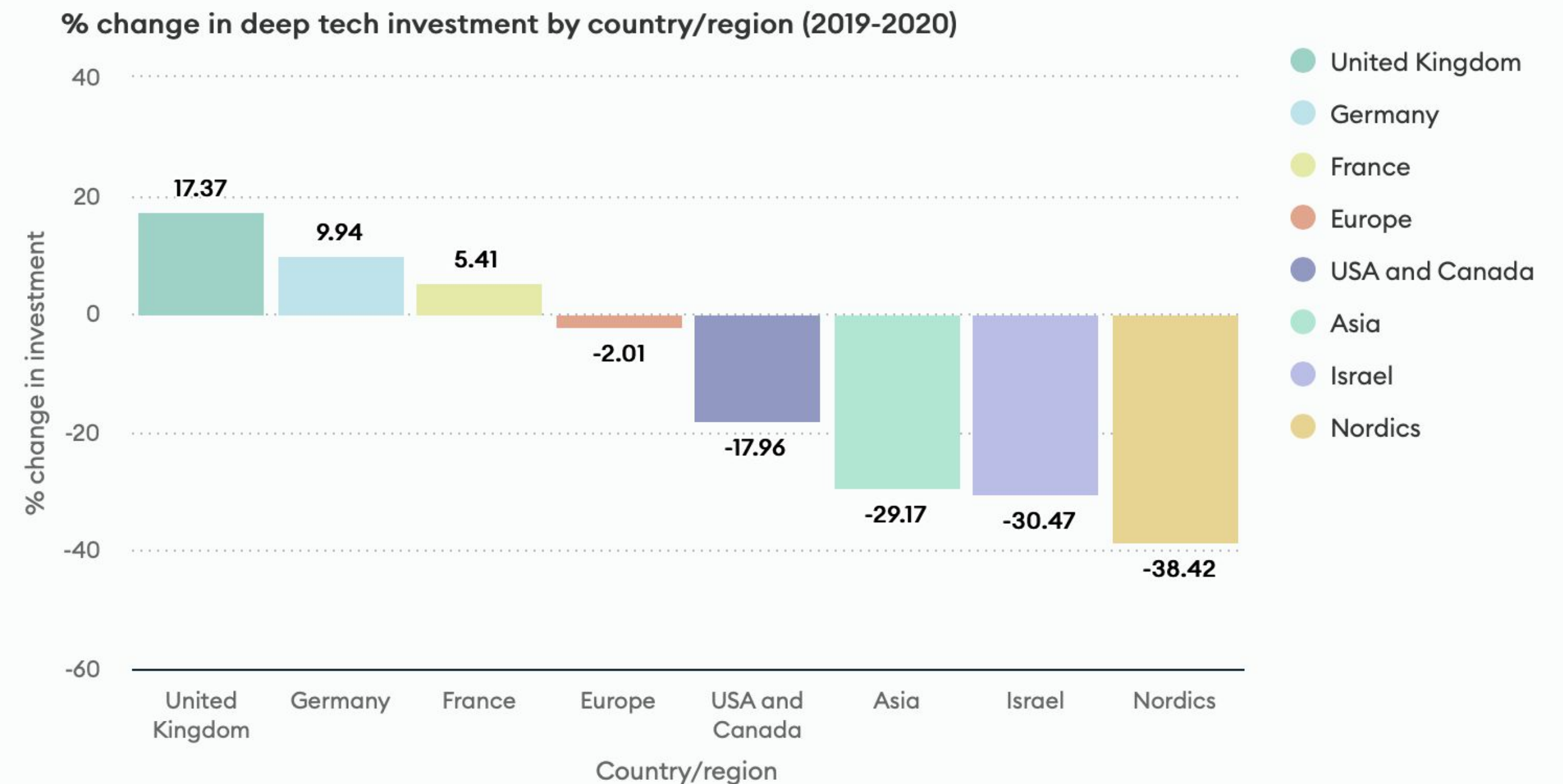
- The UK is strengthening its position as number three in the world for tech behind only China and the US.
- Despite uncertainties such as Brexit and Covid-19 pandemic, investment in Q2 of 2020 rocketed.



Source: Tech Nation, Dealroom 2021

UK Deep Tech investment rose by 17% in 2020, the highest rate of growth globally.

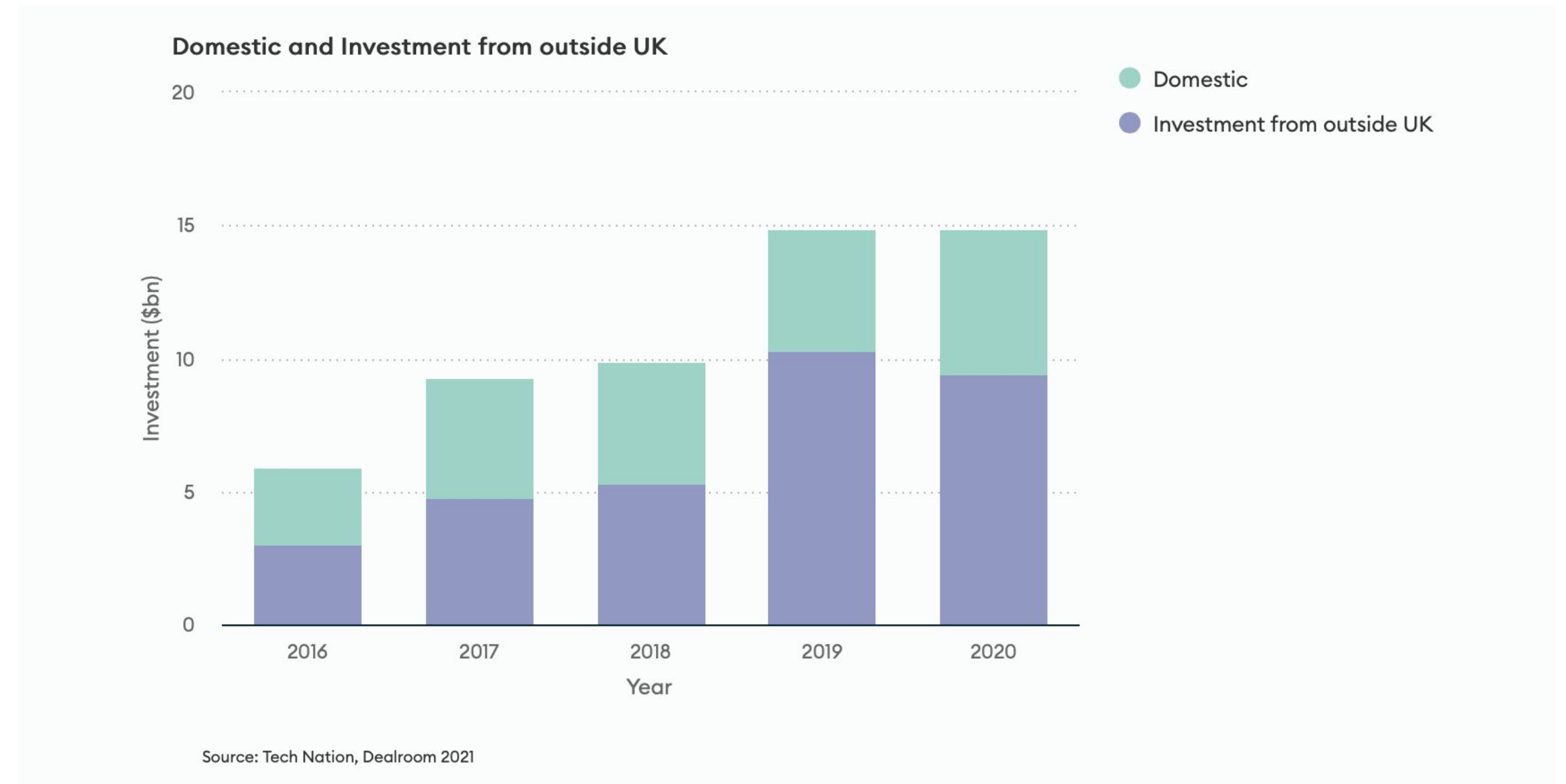
- UK deep tech investment is third globally, but only around a tenth of that made into US companies.
- However, R&D expenditure, which is a gauge of development activities in both the public and private sectors is falling behind global players.
- In 2018, UK R&D expenditure (public and private spending) was just under £30bn, whilst in the same year, the combined R&D expenditure of Amazon and Alphabet (on their own R&D activities) was £33bn.



Source: Tech Nation, Dealroom 2021

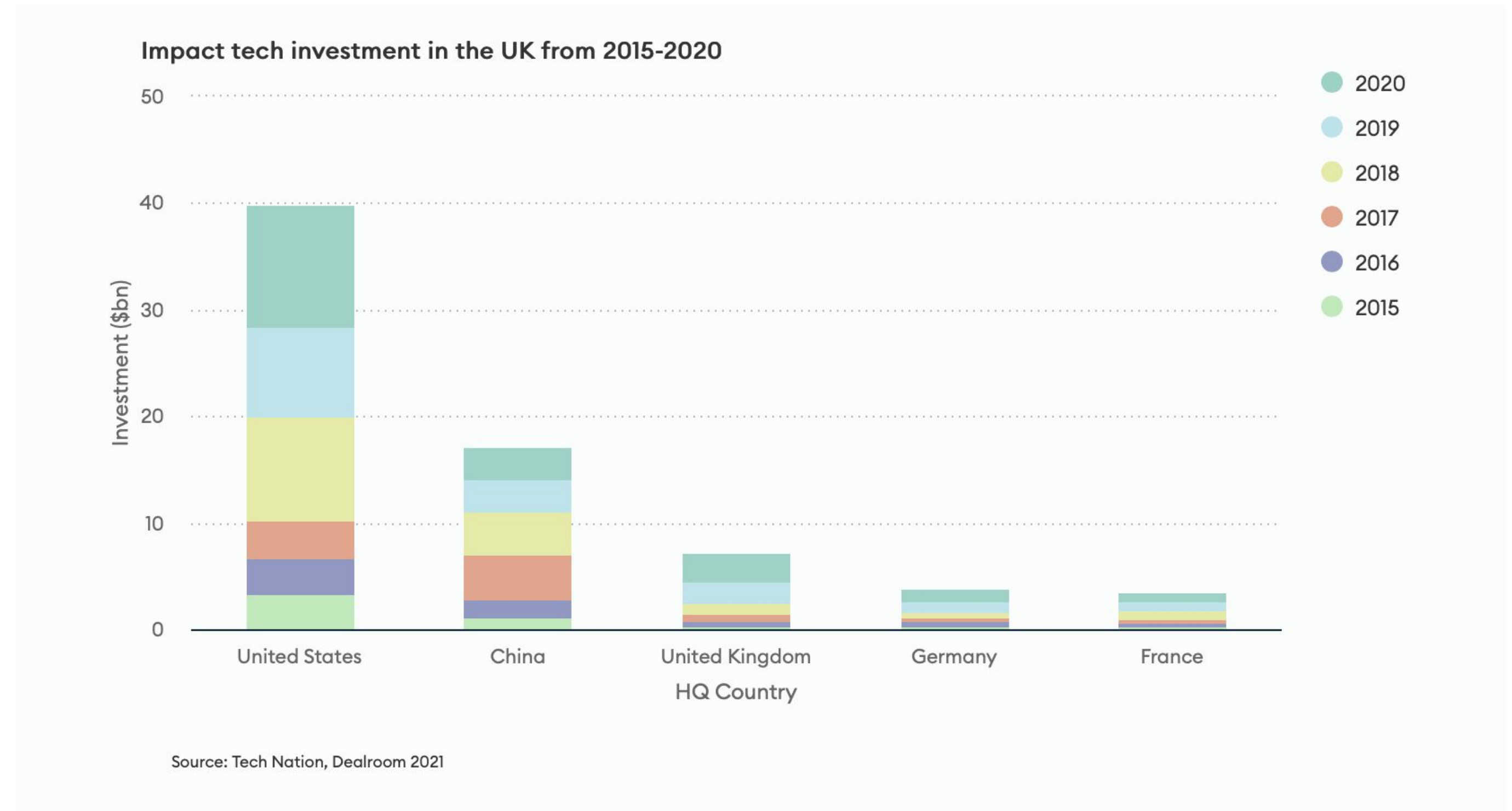
The UK is more open to global investment than ever - 63% of investment in UK tech came from overseas in 2020, up from 50% in 2016.

- Since 2016, investment from outside the UK has steadily increased. It reached its peak in 2019, at 69% of total VC investment before dropping by 6% in 2020.
- Last year, domestic investment made up a slightly higher proportion of the total, at 37%. Nevertheless, the UK tech ecosystem remains an attractive proposition for international investors, despite challenging conditions.



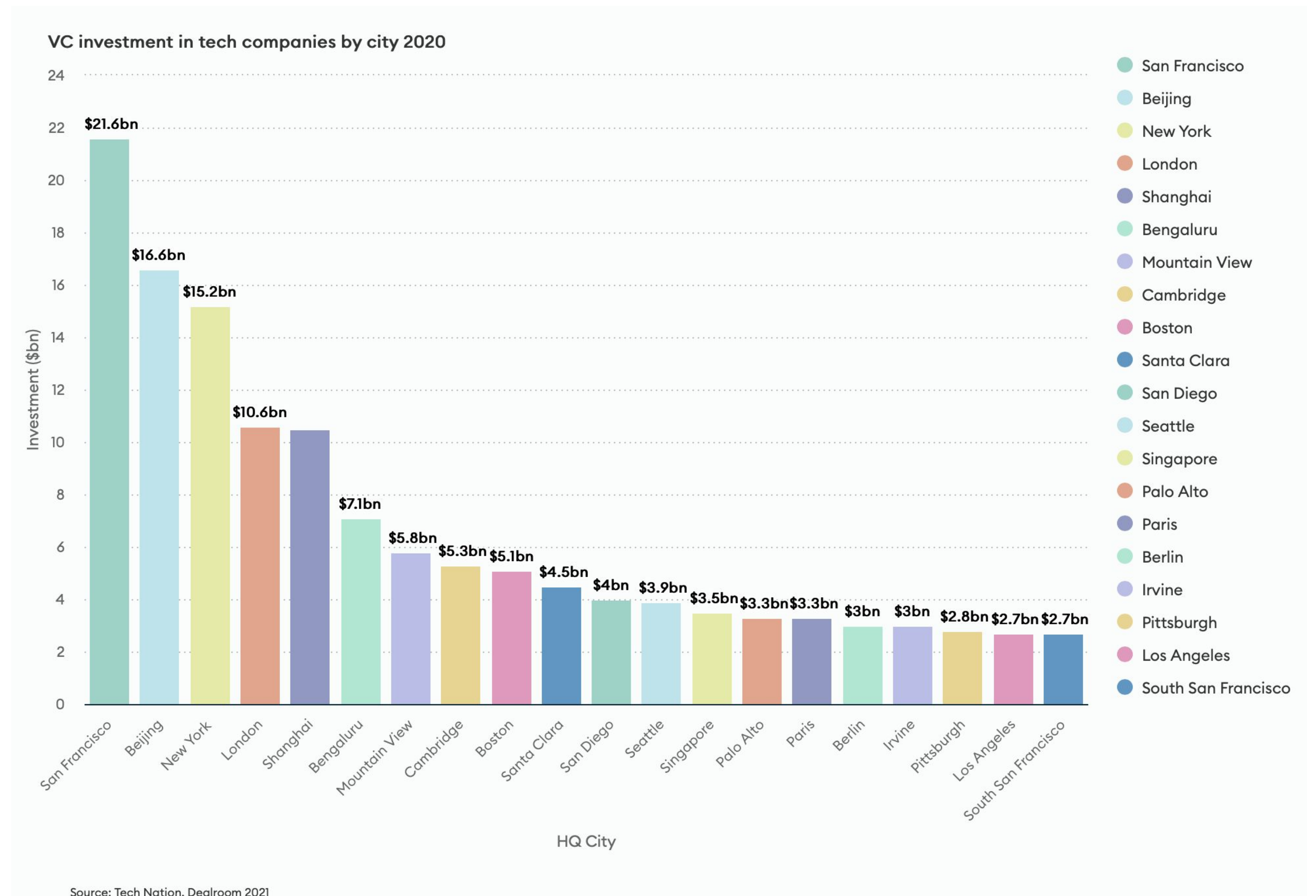
The UK is third in the world for impact tech investment. Investment has more than doubled since 2018 (160% increase) whilst in the US, it rose by 15% over the same period.

- European startups are more impact-focussed than their global peers and that the UK has had a surge in impact investing – with a 9.5x increase between 2014 and 2019.
- Impact investing now accounts for 15% of total European VC investment, a 3x increase when compared to a decade ago, and more than double the global average of 7%.
- The biggest rounds for UK impact startups in 2020 include Octopus Energy, Arrival, Connexin (Hull), Tokamak Energy (Abingdon), Five (Cambridge), The Meatless Farm Company (Leeds).



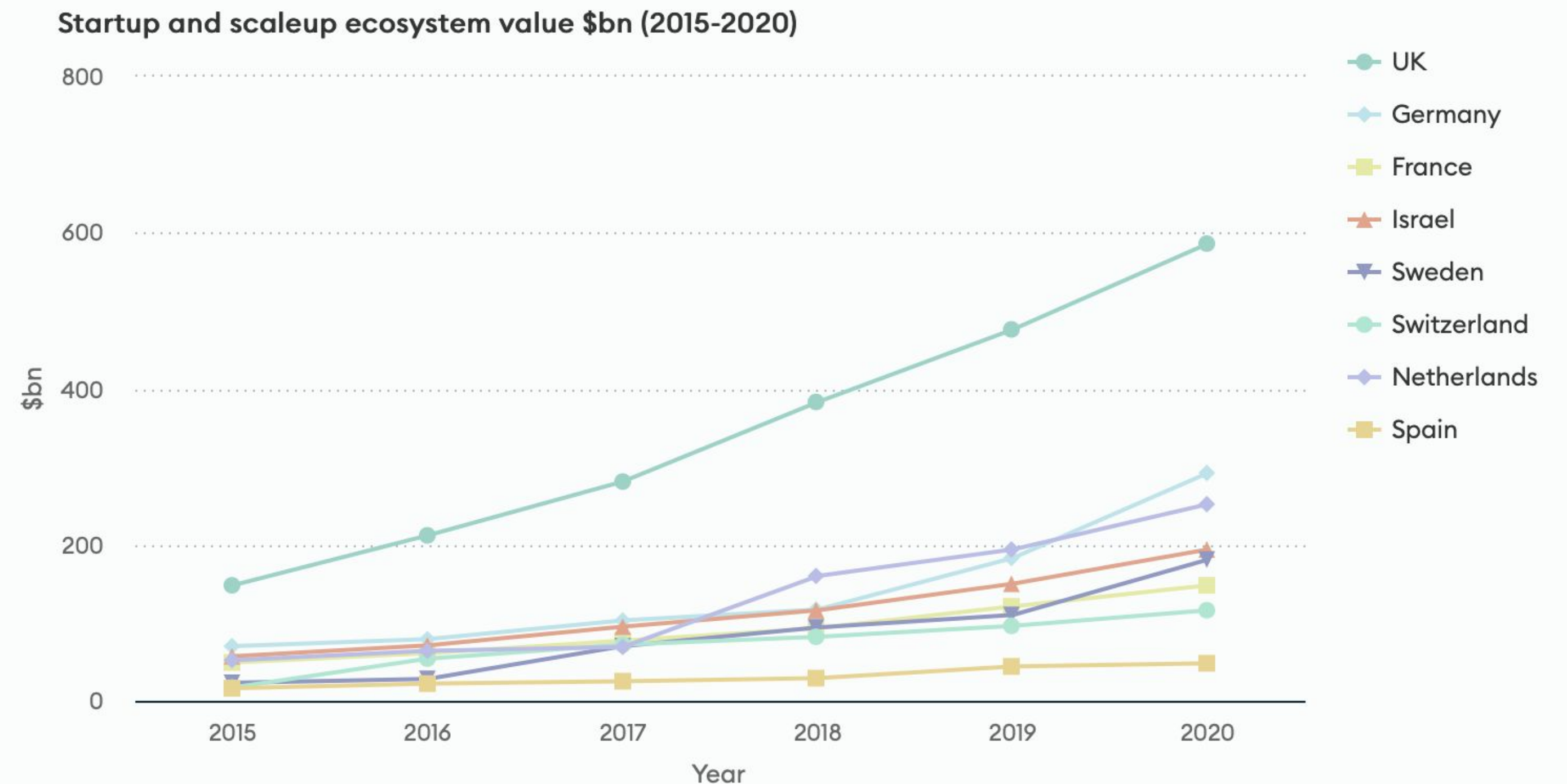
London is fourth for tech VC investment globally behind San Francisco, Beijing and New York at \$10.6bn.

- Through 2020 US cities have pushed European counterparts down the rankings - with Berlin moving from 8th to 16th, and Paris from 13th to 15th place.
- London has held its position at fourth in the world for VC investment in tech, but the gap between the UK capital and Shanghai has decreased by \$100mn over 2019-2020.



The UK tech startup and scaleup ecosystem is valued at **\$585bn** - 120% more than in 2017

- Over the past 6 years, the UK has seen a steady growth rate in value.
- This is more than double the next most valuable ecosystem, Germany, at \$291bn.

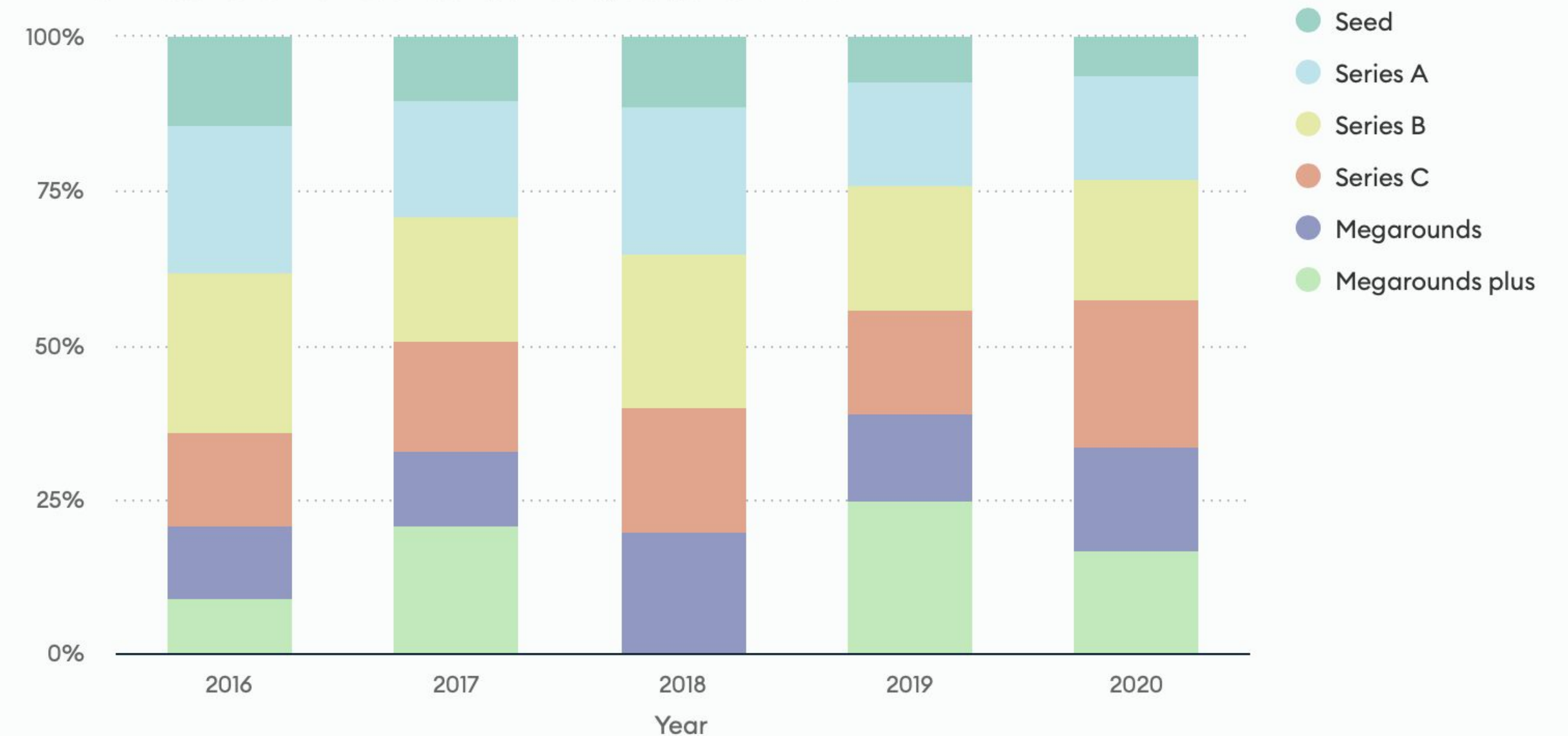


Source: Tech Nation, Dealroom 2021

Investment in seed stage companies is decreasing as a proportion of overall tech VC investment (14% to 6% over 5 years), and series B and C investment is rising in the UK

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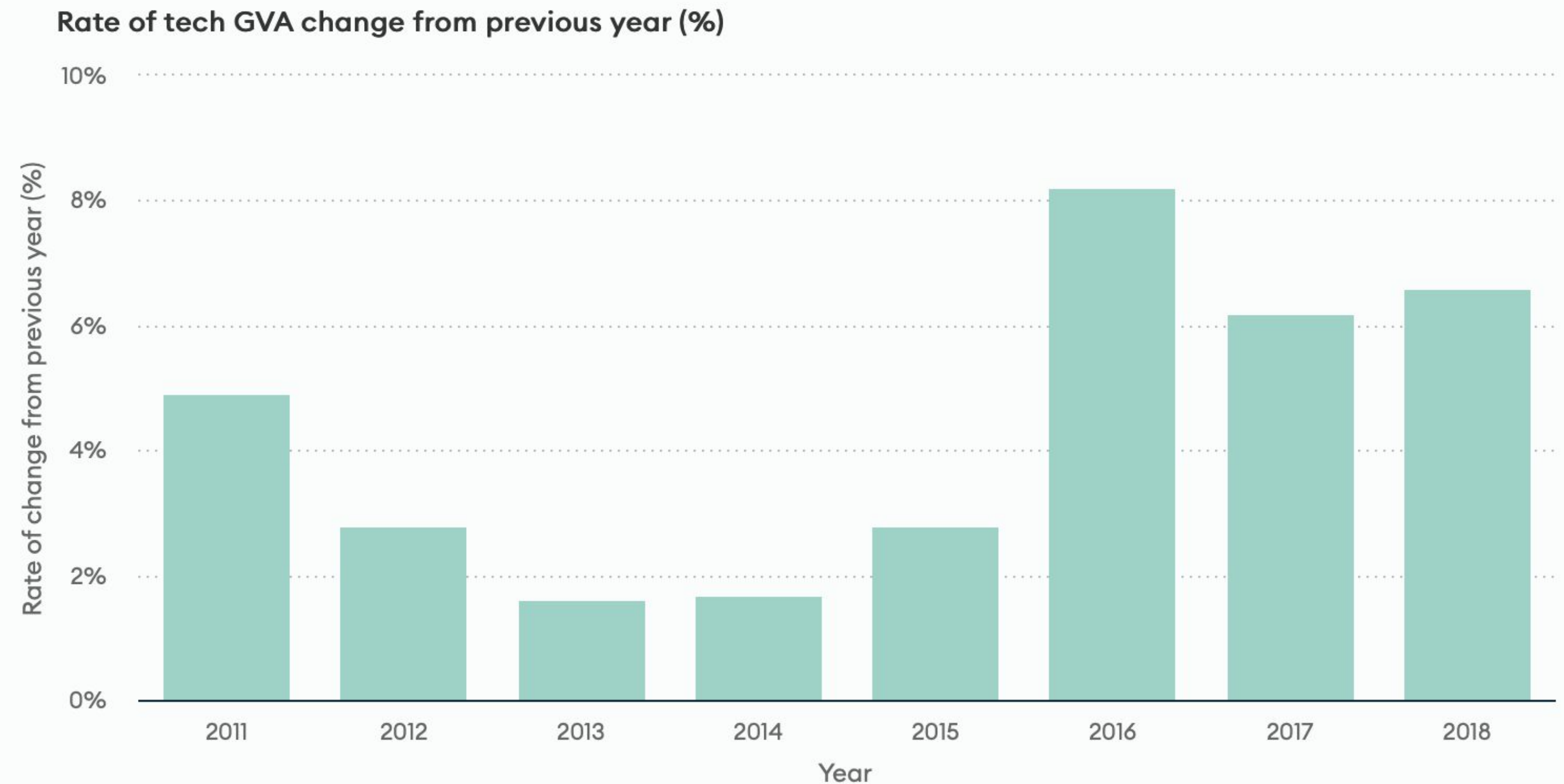
VC investment in UK tech companies by stage 2016-2020



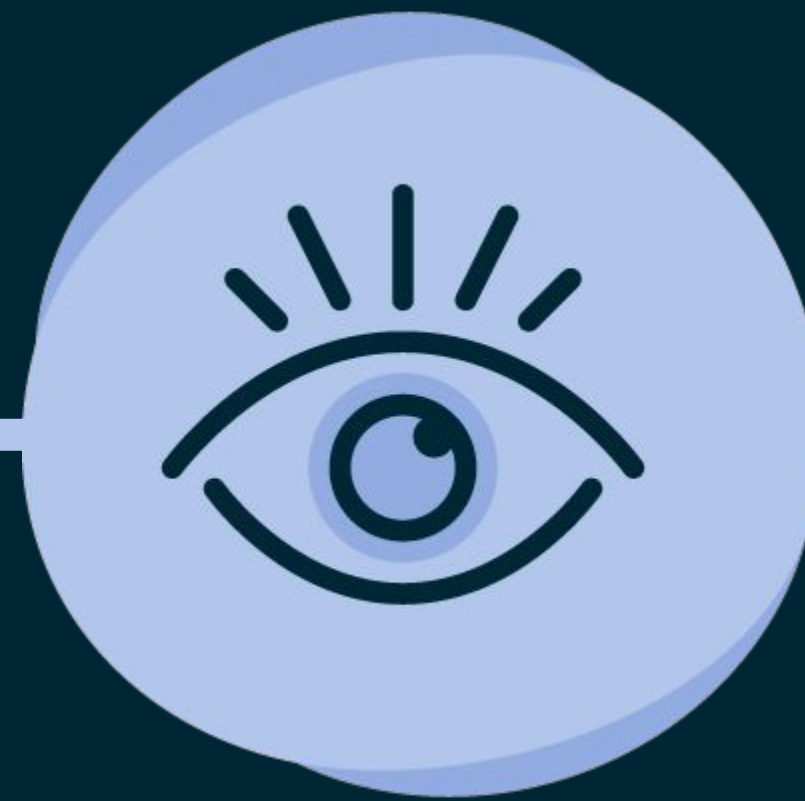
Source: Tech Nation, Dealroom 2021

Tech's contribution to the UK economy is on the increase, in 2018 UK tech was delivering £149bn to the economy.

- The value of startups and scaleups in the UK is steadily climbing too; now worth over \$585bn to the UK economy, and an upward curve.
- This represents a value double that of our next closest European neighbour, Germany, with \$291bn.



Source: Tech Nation, Dealroom 2021



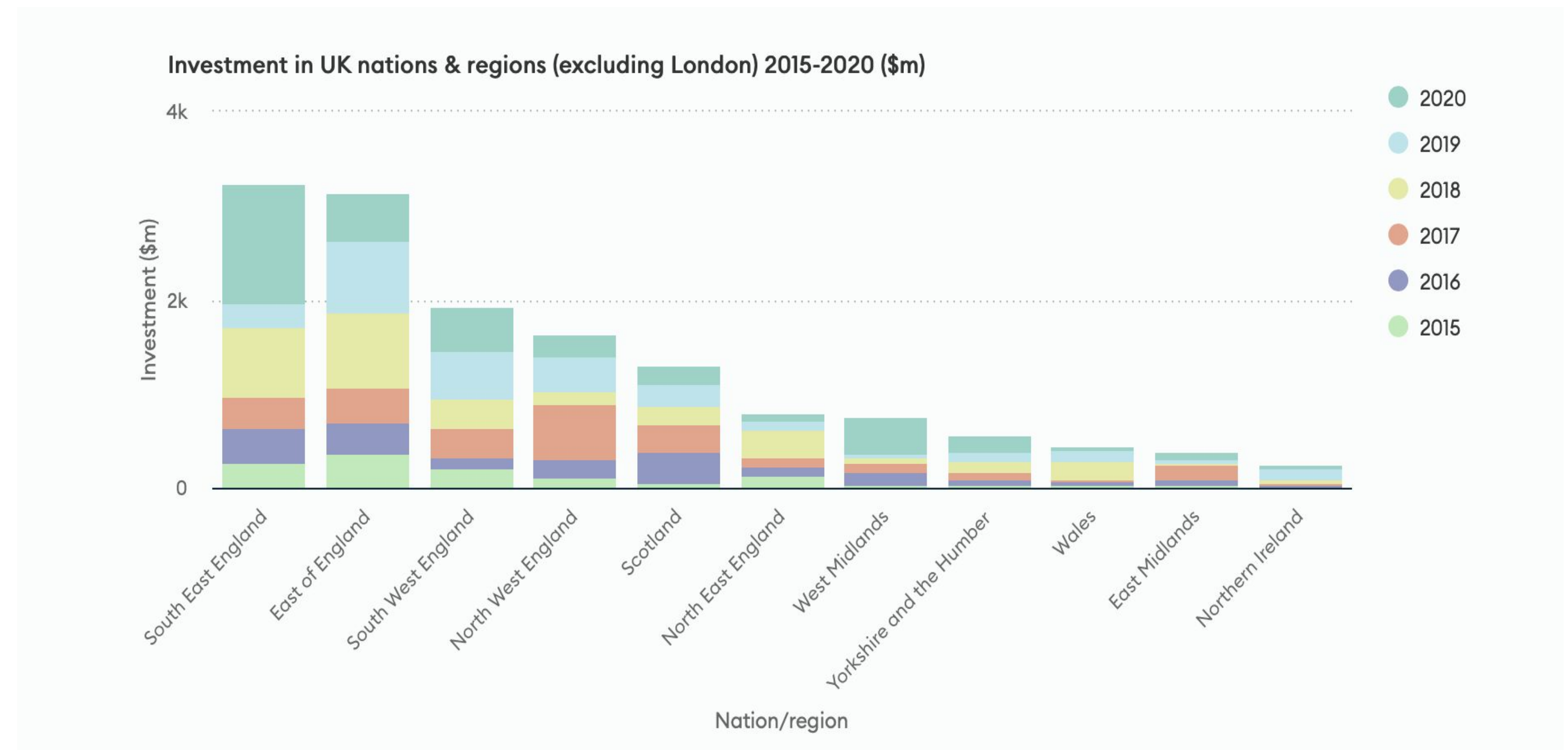
2020 Highlights

What stands out in a
year like no other?

2020 investment by UK region (excluding London)

The city of Hull in Yorkshire stands out in 2020 for venture capital investment, ranking 6th in the UK with £81.4. It's previous investment record was £11.2m in 2017 (ranking 14th).

This year's success - with £80m raised by smart city business Connexin alone - is a key example of how high-growth businesses in emerging technology can change the playing field for regional economies.



Regional investment in EdTech

Outside of London, edtech activity in 2020 was clustered in the East of England and the Midlands, with a number of companies harnessing deeptech for adaptive educational tools.

OBRIZUM Group Ltd. raised £1.78m in 2020 to grow its AI-driven personalised learning platform for corporate enterprise.

FluenceWorld, based in Birmingham, raised £355k for its language analysis and insights product identifying and curating personalised teaching resources.



Regional investment in HealthTech

The Covid-19 pandemic has not only highlighted the importance of investing in health technology and remote medical services, but also challenged the idea that startups in major cities like London have an advantage by being optimally positioned for in-person meetings and pitches with investors.

Most fundraising deals happened entirely remotely last year (2020), and the North West of England experienced the highest increases in healthtech investment from 2019 - up 224% from £25m to £82m.

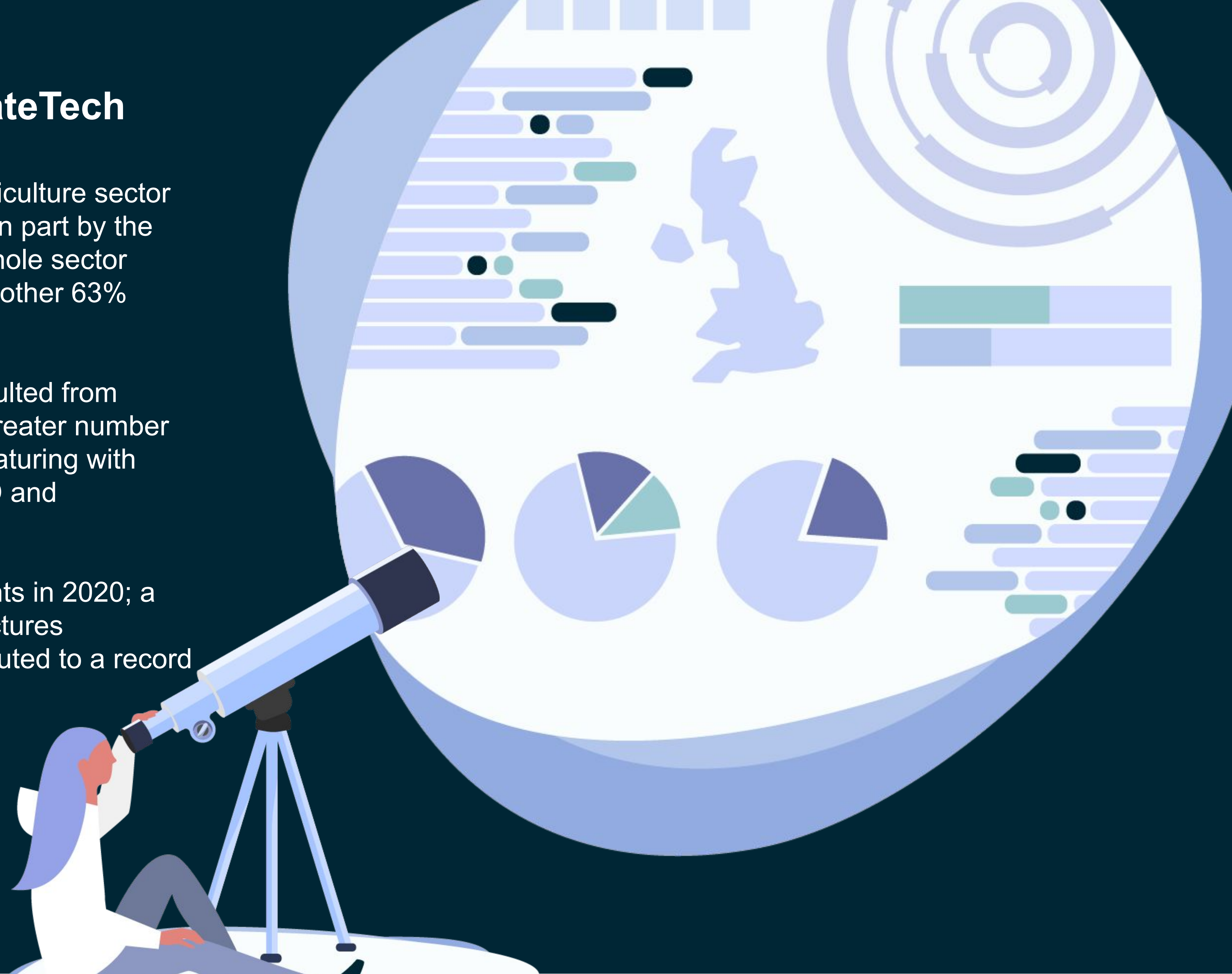


Regional investment in ClimateTech

The adoption of tech in the climate and agriculture sector in the UK is developing rapidly, evidenced in part by the fact that the amount invested across the whole sector grew 81% between 2018 and 2019, and another 63% between 2019 and 2020 to reach £1.3bn.

The fact that this growth in funding has resulted from higher investment per deal, rather than a greater number of deals, also shows that ClimateTech is maturing with more investment now needed both for R&D and high-growth stage companies.

Wales in particular saw radical developments in 2020; a £150m deal for Riversimple which manufactures hydrogen-powered electric vehicles contributed to a record year for ClimateTech in Wales.

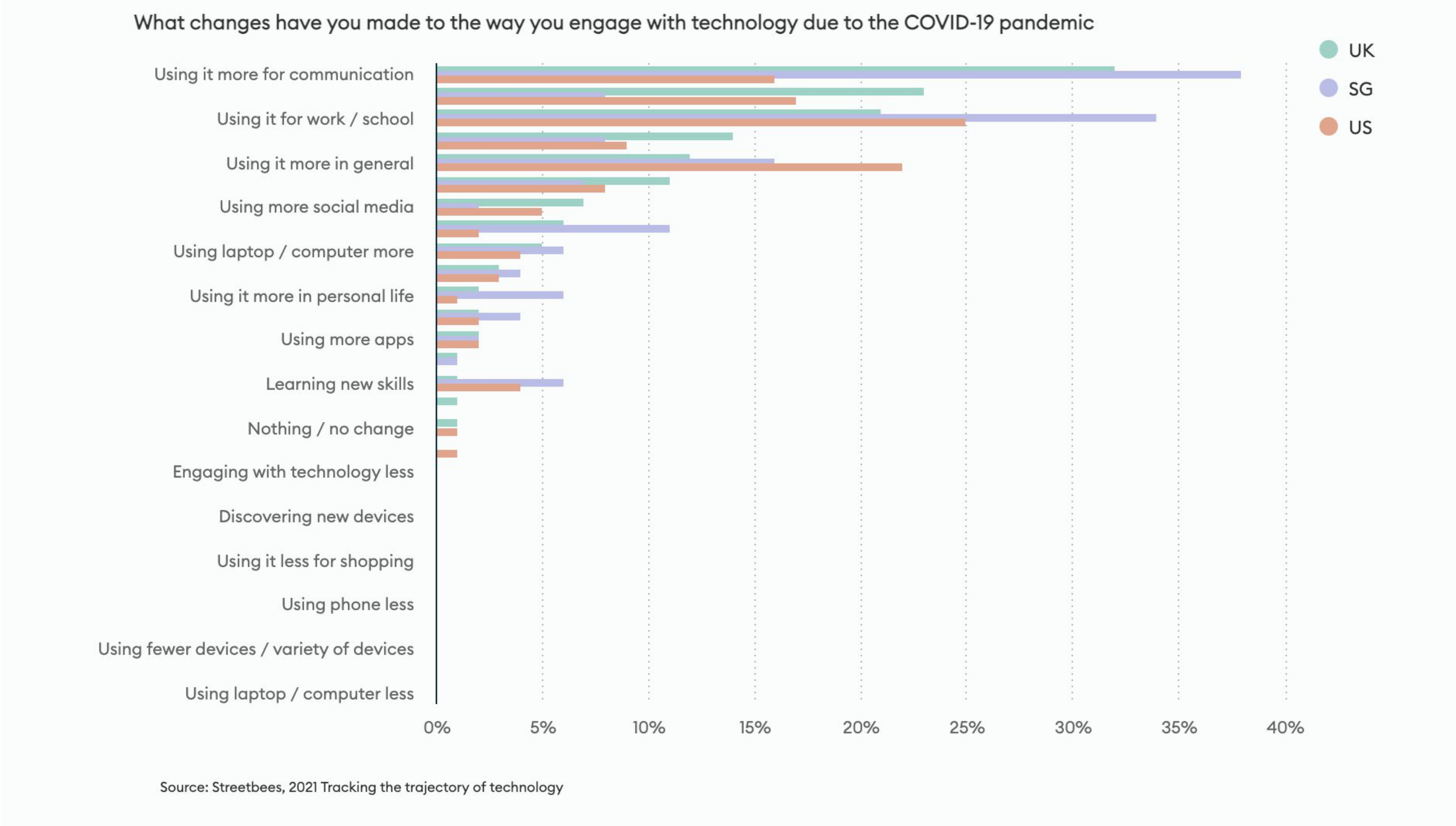


Changes to the way you engage in tech due to pandemic

2020 was a year of unprecedented seismic shifts in both the role and usage of technology as everyday activities were interrupted by the Covid-19 pandemic.

Overall, consumers reported using technology more for communication, for work or school activities, and for entertainment. Surprisingly, given physical retail closures, an increase in online shopping was reported less frequently than other changes, only just making it into the top 10 changes in the UK and falling outside the top 10 in the US.

Only a small minority (1%) said they had bought more technology during the pandemic and only 9% said they were using their phone more, indicating that while the pandemic changed how people used technology and devices, it did not affect the overall levels of technology or device usage.





Global context

How does the UK compare to other
tech hubs around the world?

VC investment in tech companies by city 2020

For the second year in a row the UK's capital has secured fourth spot for VC investment into tech by city, keeping ahead of Shanghai (5th) and Hangzhou (40th) in China, which have both outperformed London between 2015 and 2018.

The top 30 cities for tech investment in 2020 (20 of which feature in the chart) are heavily dominated by US cities, but comparing tech investment rank to current estimates of GDP shows that London (ranked 8th for GDP behind Paris, Seoul and Chicago) is disproportionately successful for tech investment relative to its economic size.



LSE investors by domicile 2020

The London Stock Exchange (LSE) experienced significant engagement from non-UK institutional investors in 2020, with 30% from North America.

Although some UK tech companies will choose to list outside of London for their IPOs (and conversely, some international tech companies do choose LSE for their public listings), the diverse participation from institutional investors indicates the maturity of the UK's IPO market.

The most active international institutions on LSE in 2020 were Capital Research & Management, Vanguard, BlackRock, Norges Bank and Invesco.



Emerging technologies adoption

Comparing country-level investment in emerging technologies to global medians and averages, we arrive at a picture of international innovation where: the UK disproportionately invests in robotics and drones (34% of total tech investment compared to a global average of 3%);

Israel, Poland, South Africa, Nigeria and Norway disproportionately invest in artificial intelligence (between 19% and 34% of their total investment compared to 11% global average);

Finland over-invests in augmented and virtual reality (6% compared to 1% global average); Switzerland, South Africa and Singapore invest high proportions into blockchain and crypto (7% and 5% compared to 1% global average); and both Norway and Spain stand out for IoT investment (44% and 10% respectively compared to 4% global average).

The UK is not alone in disproportionately investing in robotics; Poland, South Africa and Denmark all invest well above the global average, between 6% and 13%).

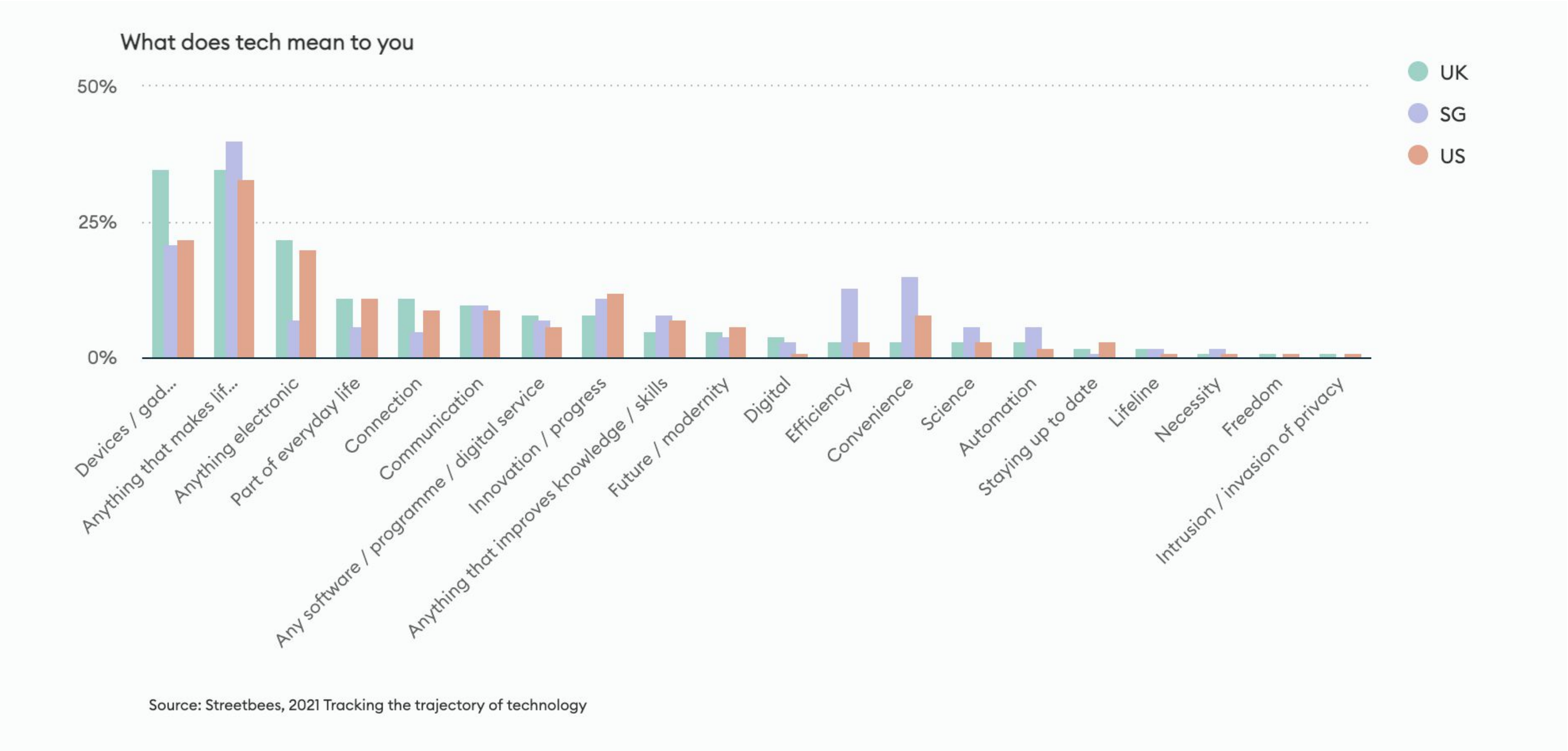


What does technology mean to you?

In a survey of consumer attitudes to technology in 2020, UK respondents showed key differences from Singapore and US peers when asked ‘what does technology mean to you?’

A relatively smaller proportion associated technology with ‘innovation / progress’, ‘anything that improves knowledge / skills’ and ‘convenience’.

Attitudes were generally comparable between the US and the UK, but consumers in Singapore were more likely to associate technology with ‘anything that makes life easier’, ‘convenience’ and “efficiency”.





Looking ahead

What do year-on-year trends tell us
about the future of UK tech?

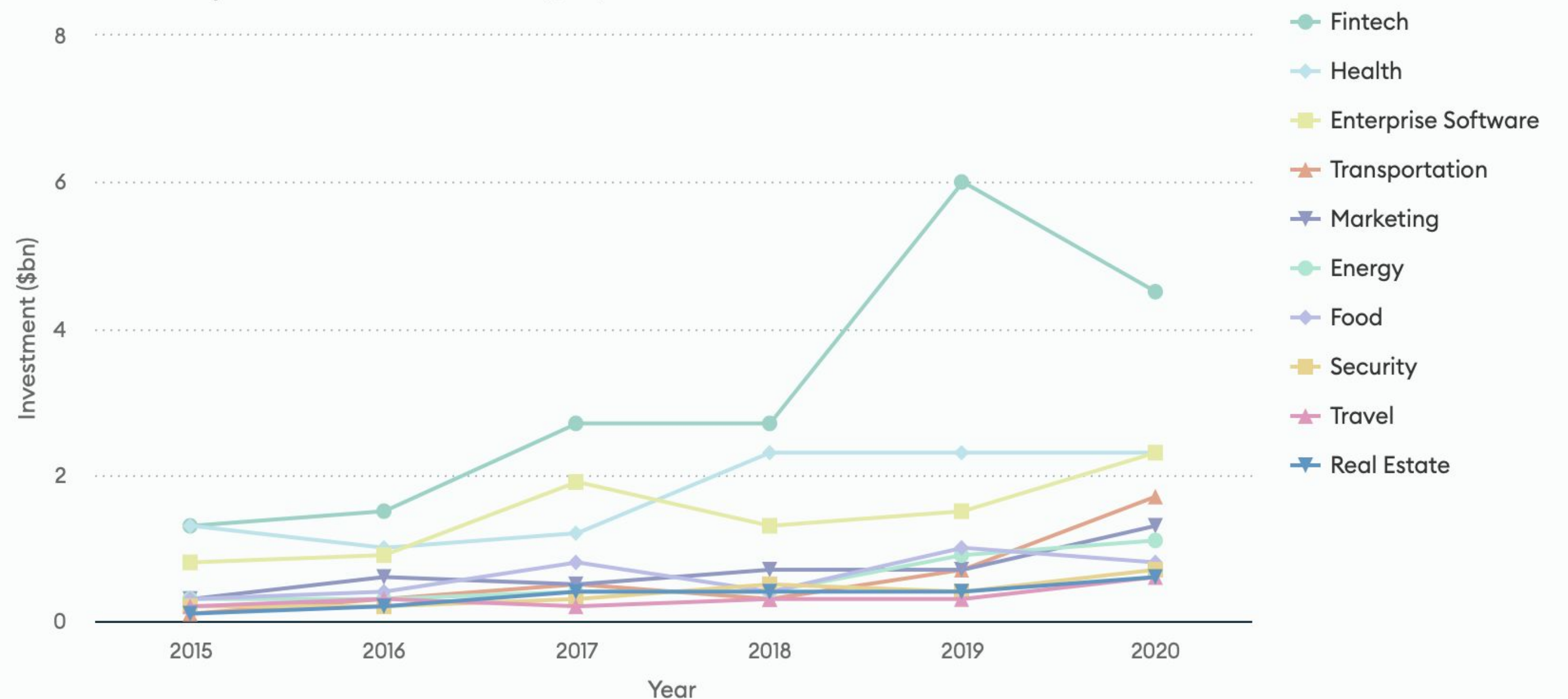
A changing of the guard with UK sector investment

While fintech, enterprise software and healthtech have been leading UK sub-sectors for the past five years, the supremacy of UK fintech investment has only come about over the past two.

2019 was a year like no other for VC investment into fintech firms, but underpinning the astronomical total, was a handful of megarounds, principally, nearly \$1.5bn into Greensill, which hit the headlines recently, having filed for administration.

In 2020, signs started to emerge of a changing of the guard in the VC investment rankings. Fintech dropped and healthtech showed but a small increase while transport tech rocketed by +160% year on year from 2019, energy by +20%, and security by +66%.

Investment by tech subsector in the UK (\$bn) 2015-2020

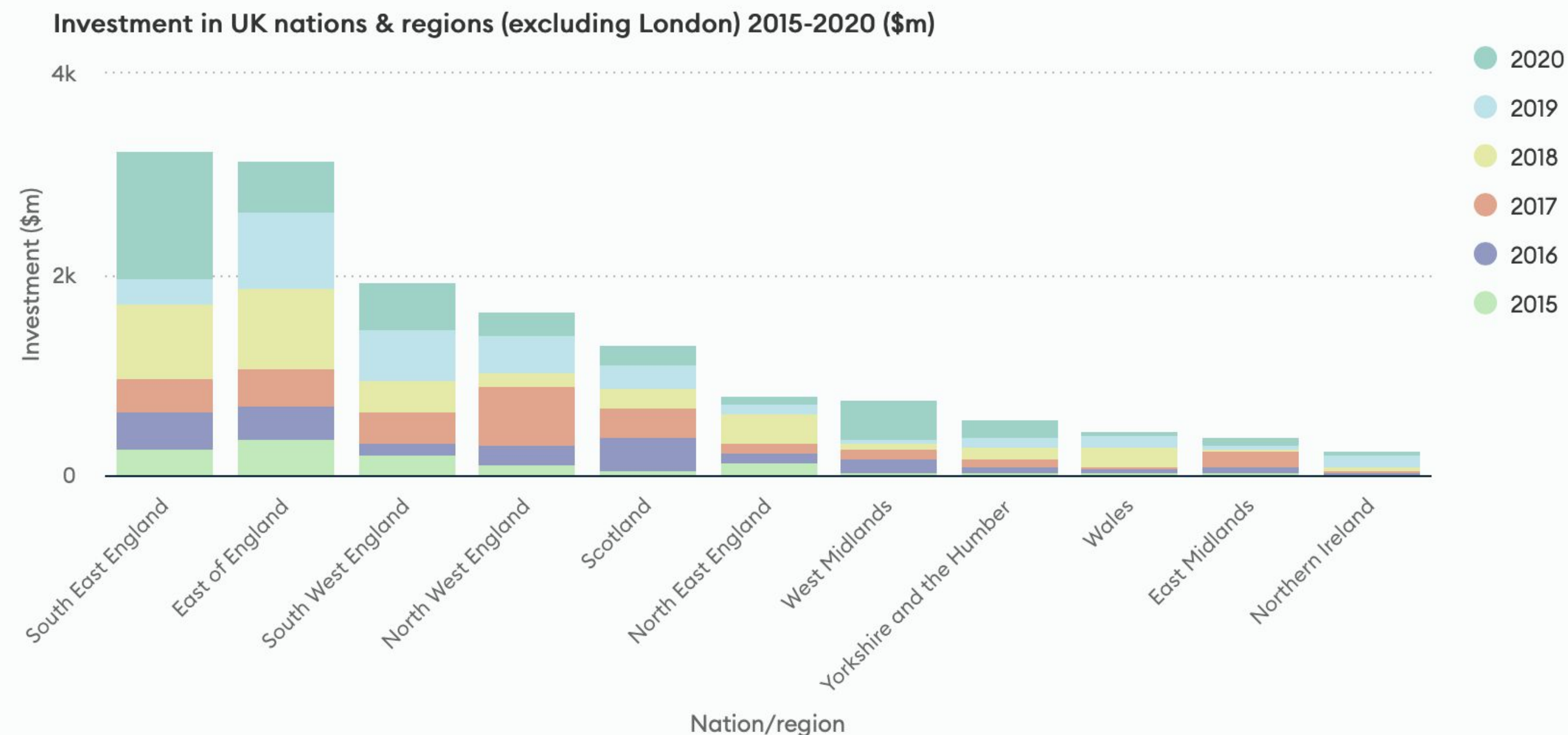


Source: Tech Nation, Dealroom 2021

UK VC investment levels up in many regions, but greater access to funding needed

South East England (4x), Yorkshire and the Humber (nearly 2x), the West Midlands (10x) and the East Midlands (3x) saw rapid increases in VC investment over the course of 2020.

To build back from the effects of the pandemic, UK VC investment will have to be more accessible across nations and regions. There is evidence of this beginning to take shape, but undoubtedly more needs to be done to raise awareness of, and support scaling companies reach their investment objectives outside of London and the South East.



Source: Tech Nation, Dealroom 2021

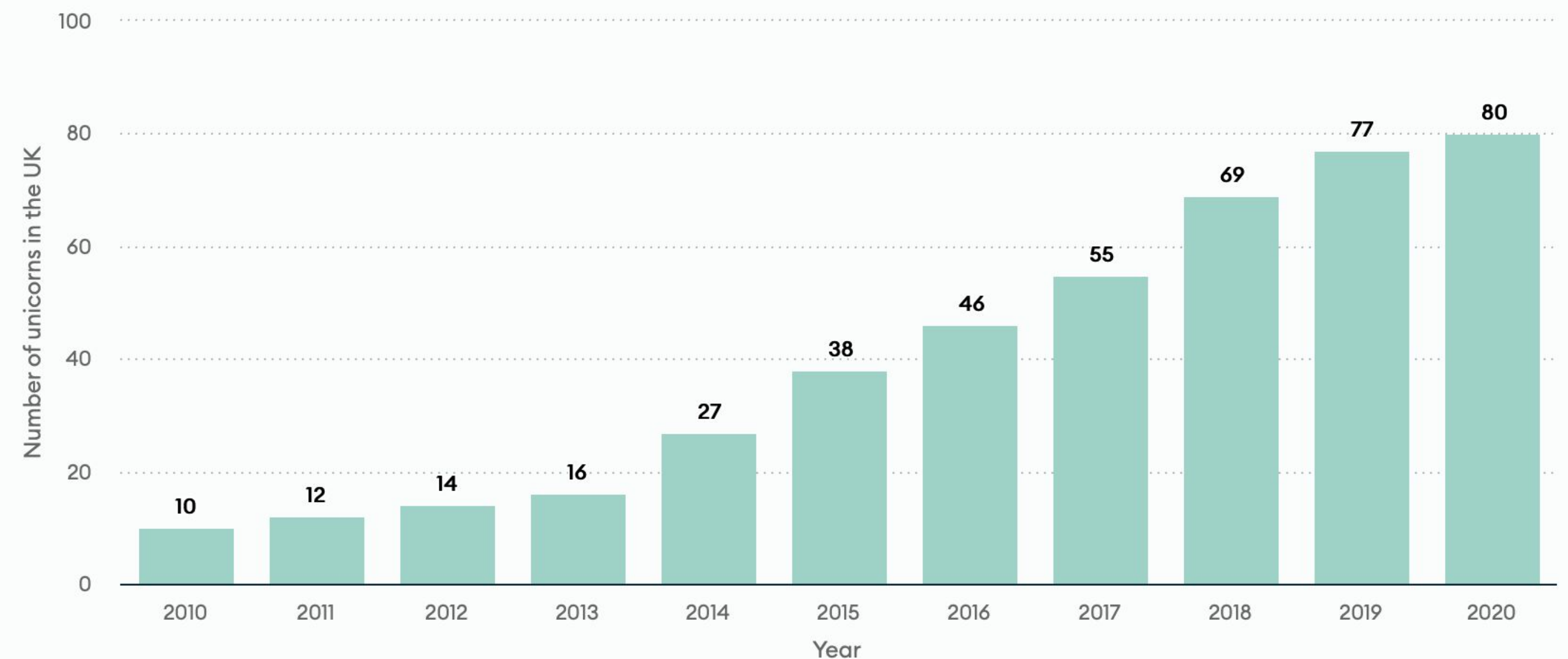
UK unicorns are stampeding, and the herd is set to grow

UK unicorns are stampeding - and seven more were added to the UK herd in 2020. The unicorn class of 2020 includes Hopin, Gousto, Arrival, Cazoo, Gymshark, Infobip and Octopus Energy, who all reached the \$1bn+ valuation mark last year.

Already, by early March 2021, we have seen six additional unicorns join their ranks - bolstering the UK's already prime position in Europe, with more billion dollar plus tech companies than France and Germany combined.

Far from being the definitive success metric, unicorn numbers tell us about the underlying conditions required to support their creation - 2020 numbers, and a slew of 2021 newcomers suggests that the scaling growth environment is improving in the UK as the ecosystem continues to mature.

Number of Unicorns in the UK (2010 - 2020)



Source: Tech Nation, Dealroom 2021

Tech jobs are a bellwether for changing work patterns in the UK

Jobs in the digital economy have risen by nearly 50% over the last fifteen years. Tech jobs represent a growing part of the labour market, but as first movers in the working from home revolution we have witnessed over the year 2020, they also indicate what the future of work might look like for many millions more over the next few decades.

'The return to hiring was also coupled with a new breed of job titles being advertised by some of the world's biggest technology companies. 'Head of Remote' and "Remote Work Director' jobs could be the next big hiring trend as Facebook, Quora and GitHub all advertised vacancies to look after staff who never see the office.'
Andrew Hunter, Co-Founder, Adzuna

Digital economy jobs (mn) (2005 - 2019)



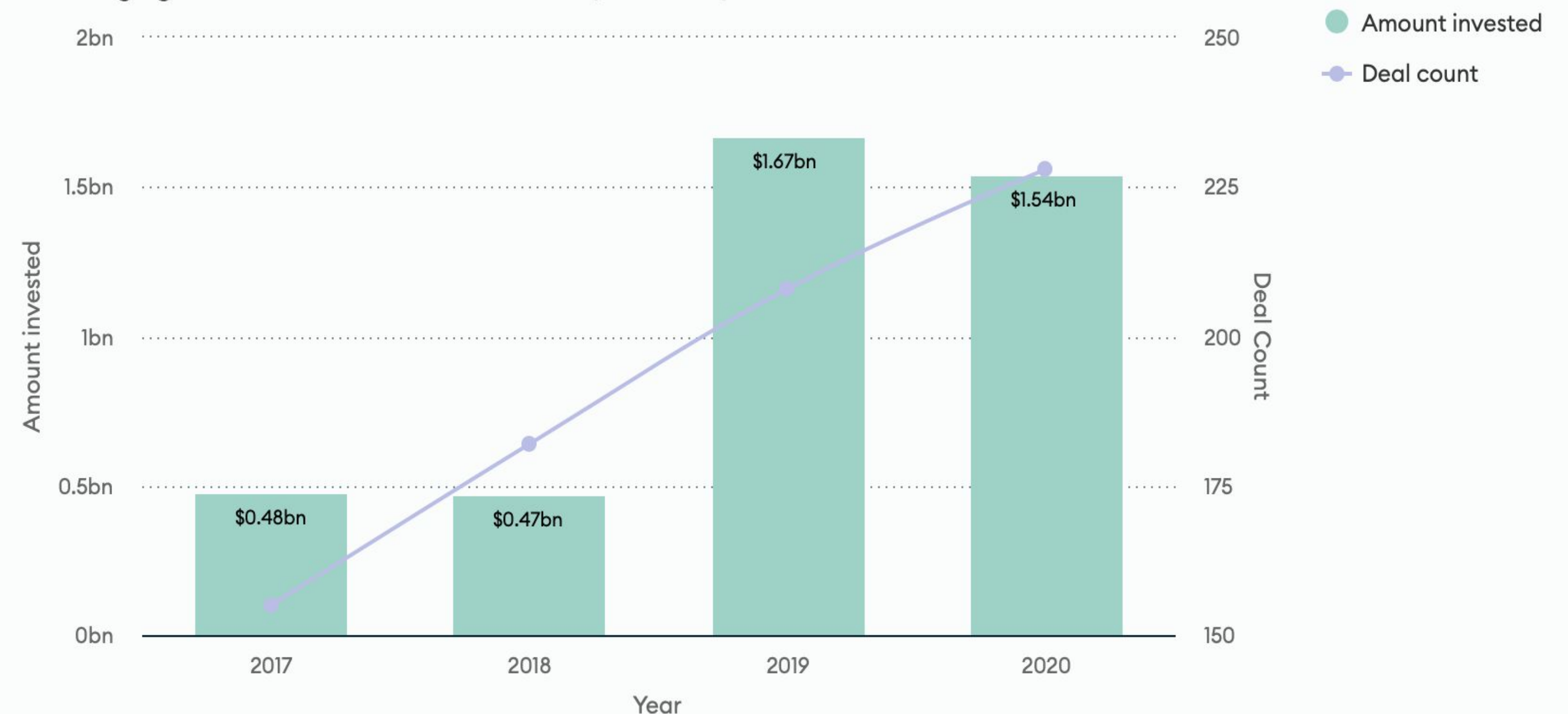
Source: Tech Nation, Dealroom 2021

Investment in tech for health and wellness has more than tripled since 2017

Investment in emerging healthtech companies (using next generation technologies such as AI, quantum, AR/ VR and advanced computing) in the UK has climbed from just under \$500m to over \$1.5bn in 2020.

Last year demonstrated the importance of continued access to services to support physical and mental health even when we're forced to replace physical interactions and services with digital tools and other tech-driven products. With several bumper deals including \$100m to Babylon Health, a digital healthcare platform, and \$104m to Cera Care, a platform which connects healthcare professionals and patients, it's likely that 2020 marked a step-change in how healthcare is provided in the UK and globally. UK companies are at the front of the pack in delivering on this future.

Emerging Healthtech investment in the UK (2017-2020)



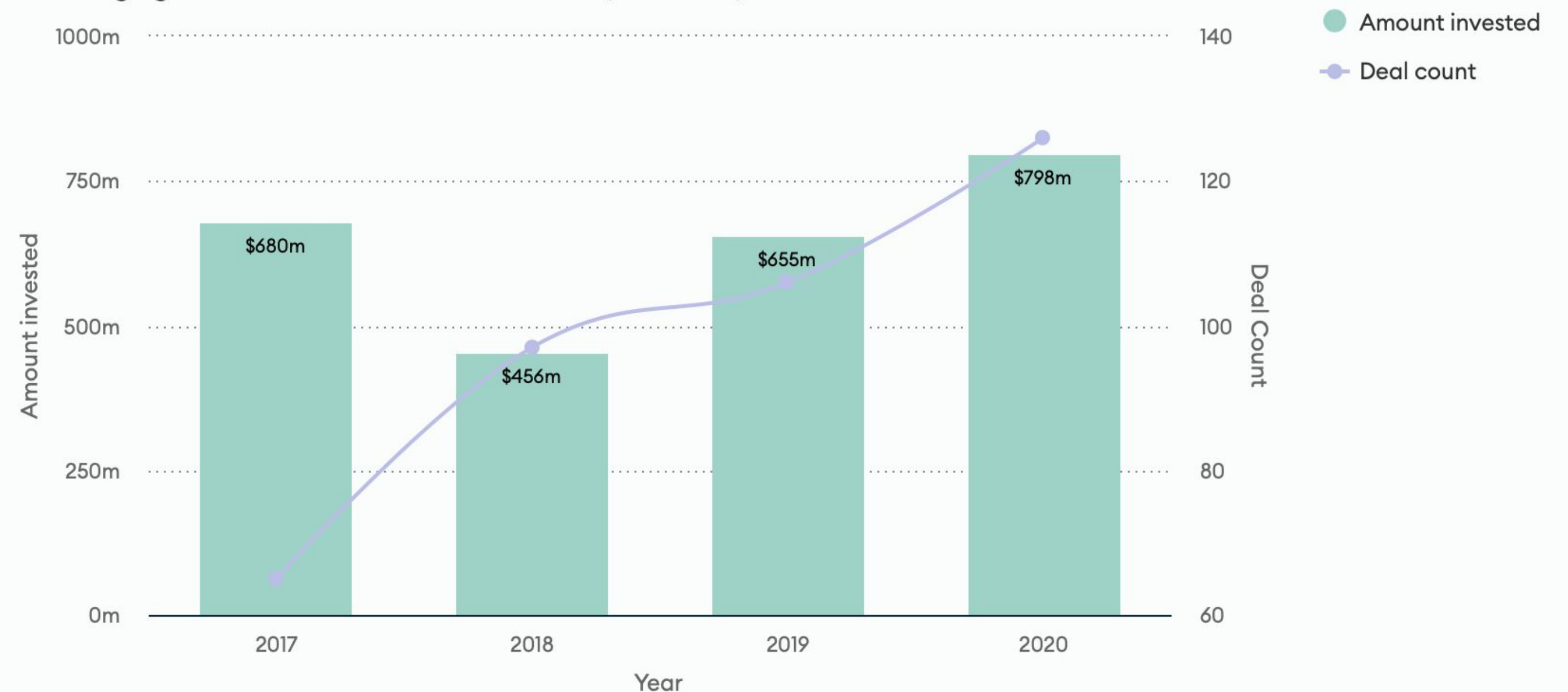
Source: Tech Nation, Dealroom 2021

Investment in tech for climate and agriculture grows as COP 26 approaches

In 2020, trends in funding rounds for emerging climate tech companies indicates a mix of both late and early scaling stage finance - sowing the seeds for future growth in this area of tech.

More deals than ever were made last year, as well as a record total of close to \$800mn. Juan Pablo Cerda of Zeigo predicts that the UK will be world's leading climate tech hub in the next decade, taking advantage of the UK's energy infrastructure, geography, and expertise to act as a testbed for green innovation to be exported across the globe.

Emerging climate tech investment in the UK (2017-2020)



Source: Tech Nation, Dealroom 2021

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