

Beauhurst

# Small Business Equity Tracker 2021

### Contents

Foreword	3
Executive summary	6
ntroduction	12
Chapter 1: Recent trends in SME equity finance	14
Chapter 2: Equity investment in deep tech and	
R&D-intensive sectors	34
Chapter 3: Exit routes for equity backed companies	52
Chapter 4: British Business Bank activity	62
Appendix	77
Endnotes	80

### Foreword

As the country's ambitious smaller businesses move on from the impact of the Covid-19 pandemic, a strong and vibrant equity finance market can help them to grow to their full potential, contributing to the UK's broader economic recovery.

Our seventh annual Small Business Equity Tracker report provides a comprehensive picture of the performance of the UK equity finance for smaller businesses over the last year. As the government's centre of expertise on smaller business finance, this research helps us to track changes in equity finance and identify and address areas of the market that are not working as effectively as they might. In doing so, we support the government's wider agenda, including building on the UK's position as a science superpower and levelling up the regions of the UK.

This year's report finds that UK equity finance finished 2020 in a strong position overall, with a record £8.8bn invested, up 9% from 2019, showing the continued strength of the UK ecosystem in helping companies to scale up.

Higher investment in 2020 coincided with an increase in the number of announced deals, which grew 5% to 2,044 – again a new record high – showing more companies than ever before were getting the finance they needed. This was due in no small part to the contribution of the Future Fund, which was a response to equity activity declining in the second quarter of the year, as the pandemic struck and global uncertainty increased. Without the Future Fund, there would have been a lower number of deals in 2020 than in 2019.

The British Business Bank worked closely with the UK Government to deliver the Future Fund at pace and scale, providing £1.1bn of Convertible Loan Notes (CLNs) of £125,000 to £5m to 1,190 UK equity-backed businesses affected by the pandemic.

This report exposes disparities in the availability of equity funding going to deep tech and R&D-intensive industries, however, with UK companies receiving less funding than their US counterparts at all stages of their development. The Bank will be launching the Future Fund: Breakthrough programme through its commercial subsidiary British Patient Capital, to help these R&D-intensive companies to raise the growth capital they need.

The proportion of our deals going to businesses outside of London is now higher than the overall equity market (58% vs 52%). Our dedicated regional funds continue to make an impact, with the Midlands Engine and Northern Powerhouse Investment Funds contributing to 25% and 20% of equity deals in their respective regions in 2020. In addition to these, the Cornwall and Isles of Scilly Investment Fund, Regional Angels programme and the Bank's other equity programmes are creating greater demand and more opportunities to access finance in every region and nation of the UK.

The British Business Bank is committed to investing with purpose by increasing diversity and inclusion in access to finance. Our **Alone Together** report, published in October 2020, revealed there are persistent disparities in business outcomes for entrepreneurs from Black, Asian and Other Ethnic Minority backgrounds. Through our equity programmes, we will continue to seek out fund managers with wider and more inclusive networks who can better fulfil the funding requirements of the UK's diverse business population.

In this year's tracker we are providing, for the first time, indicative information on the gender composition of companies our funds are supporting. As part of our commitment to the Investing in Women Code, we are seeking to lead others to be more open about their own portfolios. While there has been a year-on-year increase in the proportion of deals going to female founders in the market as a whole, there is still much progress to be made.

I hope you find this year's Small Business Equity Tracker informative and thought-provoking. As the country's largest Limited Partner investing in UK venture capital, we look forward to helping more high-growth businesses to access the finance they need to fulfil their future growth potential.



Catherine Lewis La Torre CEO, British Business Bank

# **Executive** summary

This is the seventh annual British Business
Bank Equity Tracker Report examining trends in
equity investment into UK SMEs. Equity finance
supports companies with innovative operating
models and products, who can quickly respond
to new opportunities created in the market.
This has been particularly important in 2020
given the unprecedented disruption and
continued macroeconomic uncertainty created
by the Covid-19 pandemic.



Covid-19 began to impact on UK SME equity finance markets in the last month of Q1 2020, but after the number of deals declined by 6% in Q2 2020 compared to the same quarter in 2019, investor confidence returned and the number of equity deals and investment value quickly recovered in the second half of the year.

The British Business Bank continues to monitor equity market conditions carefully and respond as necessary to changing market conditions. This is demonstrated by the introduction of the Future Fund in May 2020, in response to emerging evidence of a decline in equity deals in March and April 2020 due to global uncertainty caused by the pandemic.

Table 1

#### Number and value of equity deals over time

Source: British Business Bank analysis of Beauhurst data

	2018	2019	2020
Number of deals	1,846	1,941	2,044
Seed	803	785	863
Venture	722	794	862
Growth	321	362	319
Investment value	£7.1bn	£8.1bn	£8.8bn
Seed	£841m	£725m	£751m
Venture	£2.2bn	£2.2bn	£3.0bn
Growth	£4.0bn	£5.2bn	£5.1bn

#### **Key findings**

1. Equity finance has performed well in 2020 overall with a record £8.8bn invested and activity was very strong in Q1 2021

As the Covid-19 pandemic struck, the increased global economic uncertainty led equity investors to be more cautious about investing in high growth potential companies. £3.8bn was invested in the first half of 2020, down 15% from the first half of 2019. However, this decline was in part due to the inclusion of a single very large equity deal in Q1 2019. The number of equity deals fell 6% in Q2 2020 compared to the equivalent quarter in 2019, as investors assessed market conditions.

Equity activity bounced back strongly in the second half of 2020 as investor confidence returned, especially for sectors like life sciences. This was due to the easing of Covid-19 restrictions, combined with resurgent public market valuations and continued extensive government stimulus. The second half of the year finished with £5bn invested, 37% higher than H2 2019. Q4 2020 finished the year strongly with £2.7bn invested in this single quarter.

This momentum continued into 2021, with ground-breaking record deal numbers and value of investment in the first quarter. There were 657 announced deals in Q1 2021, 24% higher than the previous highest quarter in Q3 2020. £4.5bn was invested in Q1 2021, by far the highest amount of equity investment ever recorded in a single quarter. This is 67% higher than in the previous record quarter (Q4 2020) and is higher than annual equity investment recorded in 2016. The average venture stage deal in Q1 2021 was £5.1m, a 41% increase compared to 2020 which had also seen a large increase on the year before. This shows equity investors retain confidence in the prospects of these companies.

There are large differences by sector. Certain sectors benefited from increased digitalisation and greater home working and received increased investment as a result e.g., companies in the software sector. These companies also received corresponding valuation increases. However, other sectors such as retail, leisure and entertainment and personal services were the most susceptible to Government initiated restrictions and as a result received less investment in 2020. Technology/IP-based businesses continued to attract both the largest number of deals and the most investment in 2020 with 825 deals and £4bn invested, up 12% and 7% compared to 2019.

## 2. Deep tech has grown in importance in the last five years, but the UK lags behind other countries in terms of investment into this sector, with smaller deal sizes

Deep tech companies are founded on scientific discoveries, but often struggle to find funding because of their complex nature, long development times and large amounts of financing required.

Deep tech covers a broad range of different sectors including Al, clean tech and quantum computing, but the key focus is on the development of new ground-breaking technology. The report also looks at wider R&D-intensive sectors, which includes life sciences as these companies share similar funding characteristics to deep tech companies.

Investor interest in the UK deep tech sector has increased in the last five years. There were 440 deep tech deals worth £2.3bn in 2020, up 78% and 291% from 2015. Deep tech forms 22% of all UK VC deals, compared to 21% in the US and 24% in the rest of Europe.

The UK performs relatively well compared to the US in terms of number of VC deals going to the deep tech sector. However, US deep tech companies received almost twice the level of investment taking into account size differences between the two economies. Between 2018 and 2020, UK deep tech companies received investment equivalent to 0.09% of UK GDP whilst US deep tech companies received investment equivalent to 0.16% of US GDP.

By comparison, the UK VC ecosystem is relatively strong in supporting non-deep tech sectors like software and fintech. The UK's overall VC gap with the US as measured by differences in VC to GDP ratios is largely down to the differences in the amount of funding going to deep tech and R&D-intensive sectors.

Cohort analysis was undertaken to assess how the equity ecosystem supports deep tech companies at all stages of their development. The UK has a greater proportion of deep tech companies that have died or failed to raise funding before the second round of funding (39% compared to 30% for US deep tech companies). This is due to UK deep tech companies being less likely to raise a second round of funding compared to their US counterparts (49% compared to 63%), although UK deep tech companies are more likely to have exited before the second round (12% compared to 7%). This suggests there may be a funding constraint at the second round of VC funding for UK deep tech companies.

At every subsequent round of funding the UK has a similar proportion of deep tech companies compared to the US achieving a successful outcome (raising funding or exiting), although UK deep tech companies are more likely to have exited before round 3 (15% compared to 11%). This suggests UK deep tech companies are exiting at earlier stages compared to US companies potentially leading to lower benefits to the UK economy.

UK deep tech companies receive substantially smaller rounds of funding than the US. The difference in average deal size is present from the initial round of funding where US companies receive 1.3 times larger deals, but this widens for later rounds of funding. By round 6, US VC deal sizes are 6.8 times larger than comparable deals in the UK (£52m compared to £8m in the UK).

UK deep tech deal sizes do not scale up in the same way as in the US. The average UK deep tech company raises £24m after 6 rounds of funding compared to the £113m raised by the average US deep tech company after 6 rounds. This suggests UK deep tech companies may be undercapitalised compared to their US counterparts. The UK-US investment gap for deep tech companies is greatest at the £40-60m and £100m plus deal sizes.



### 3. A high proportion of UK VC-backed companies exit by listing on an overseas public market or are acquired by an overseas company

Exits are essential to the health of the UK equity ecosystem as they demonstrate success and enable funding to be recycled back to new investments. Equity-backed company IPO activity increased in 2020 despite Covid-19 with 7 IPOs, up from 3 in 2019. Whilst the number of IPOs in 2020 is below historical levels, many UK VC-backed later stage companies have announced their intention to list in 2021 suggesting exit activity will be strong this year.

UK public markets are relatively attractive, but the recent UK Listing Review identified areas of improvement for high growth technology companies. Around a third of UK equity backed companies that exited via an IPO since 2016 have listed on an overseas stock exchange.

The number of equity backed companies exiting via a trade sale was relatively flat in 2020 at 135. Just under half of UK equity backed companies that have exited via a trade sale since 2016 were purchased by an overseas company. This is likely to be typical of an open economy like the UK and also reflects the large contribution overseas VC investors make to the UK VC market.

### 4. British Business Bank equity programmes, in particular the Future Fund, made a large contribution to equity finance in 2020

The British Business Bank's market share has increased markedly in 2020 showing the important role the Bank has had in sustaining equity activity during the pandemic. The Bank estimates we supported around 21% of all equity deals in 2020 via both pre-existing programmes and also through the Future Fund. The latter was introduced to ensure innovative businesses could continue to raise finance during the Covid-19 pandemic.

Our pre-existing equity programmes are estimated to have supported 13% of UK equity deals in 2020, with these deals forming 17% of the overall invested equity amount in that period. This is an increase from 10% of deals in 2019 and 14% by value. This reflected an increased number of deals made by BPC supported funds, but also contributions from the Regional Angel Programme and Managed

Funds programme. In addition, the Future Fund contributed to 11% of all deals in 2020.

Funds supported by the British Business Bank were more likely to invest in technology/IP-based businesses than the overall equity market in 2020, with 49% of Bank supported deals in this sector compared to 40% of the wider market.

The Bank's regional focus has also increased the availability of equity finance outside of London. The concentration of the Bank's deals undertaken in London has reduced sharply over the last couple of years, from 68% in 2016 to 42% in 2020. This is due to the contribution of our regional programmes like NPIF, MEIF and CloSIF funds, but also due to the Regional Angel Programme. As a result, the Bank's share of deals going to London is now less concentrated than the wider equity market. In 2020, NPIF and MEIF supported 20% and 25% of all equity deals in the North and Midlands respectively.



#### **British Business Bank response**

The British Business Bank will use the evidence presented in this report to inform our ongoing discussions with Government, businesses, and the finance industry, and to refine our programmes, so they remain focused on parts of the market where smaller businesses can benefit most from the Bank's support. This report highlights several important findings:

- Seed stage investment continues to remain low. Whilst seed stage investment increased by 4% in 2020 to £751m, it remains lower than 2018 levels (£841m). Equity investors restricted their funding to early-stage companies by reducing their deal sizes for new deals. This shows there is a continued role for the Enterprise Capital Fund programme in supporting funds that support smaller equity deals in early-stage companies and also the Angel CoFund, Regional Angel Programmes and regional equity programmes like the MEIF Proof of Concept fund that undertake smaller deals.
- UK equity deal sizes are still smaller than equity deal sizes in US companies at each funding round, despite deal sizes increasing over the last few years. This is especially the case for later stage companies where UK deal sizes at funding round six are three times smaller than their US counterparts. This shows a continued need for BPC to support funds of sufficient scale that can undertake larger deals.
- The UK VC ecosystem is relatively strong in supporting non-R&D-intensive sectors like software and fintech, but the UK's overall VC gap with the US is largely down to the differences in the amount of funding going to deep tech and R&D-intensive sectors. This provides support for the Future Fund Breakthrough to increase the availability of funding to R&D-intensive companies looking to scale up. The Bank will also soon launch the Life Sciences Investment Programme, which aims to mobilise significant third-party capital alongside public sector investment to increase the funding supply to UK Life sciences scale-ups.
- Last year's Equity Tracker report provided evidence from the 2008 Financial Crisis which identified equity finance was likely to be adversely affected by the economic disruption caused by the Covid-19 pandemic. Although investment values are up, the number of equity deals in 2020 would have been lower overall if it had not been for the Future Fund. The programme contributed to 11% of all equity deals in 2020, helping to sustain the market. The British Business Bank will manage the Future Fund portfolio with a commercial focus to ensure value for money is achieved.
- The Bank is pleased to see its deal activity becoming more geographically dispersed in 2020, largely driven by its regionally focused programmes like NPIF, MEIF and CloSIF, but also due to the recent contribution of the Regional Angel Programme, whose deals have been included in this report for the first time.

### Introduction

This is the seventh annual Equity Tracker report exploring trends in equity finance for unlisted UK smaller companies. Similar to previous reports, this year's report uses data from Beauhurst to assess conditions affecting equity finance. Beauhurst identifies and records equity deals made by the full range of equity investors from large multi-million growth deals in established businesses by private equity funds, to smaller deals in early stage companies by angel investors and equity crowdfunding platforms. Additional information on Beauhurst methodology and terminology can be found in the report appendix. Data from PitchBook is also used to complement and enrich the analysis derived from Beauhurst. The use of PitchBook data in this report allows for international

comparisons to be made in relation to deep tech and

the wider patient capital ecosystem.

The report provides a summary of equity activity in 2020, building on the comprehensive analysis contained in our recent Small Business Finance Markets Report covering equity activity in 2020 and the impact of Covid-19 upon equity markets. Our upcoming regional report will provide detailed analysis of the geographical distribution of equity deals which has been a feature of past reports.

This year's report is structured as follows:

- Chapter 1 provides a summary of activity in 2020 and Covid-19's impact as well as a headline summary of deal and investment activity in Q1 2021.
- Chapter 2 provides an examination of deep tech and R&D-intensive sectors in relation to the wider UK VC ecosystem, making comparisons to the US and rest of Europe.
- Chapter 3 focusses on the current environment for exits for equity backed companies with commentary on recent developments such as the emergence of SPACs and Government reviews on public markets for innovative companies.
- Chapter 4 provides an overview of equity deals made by the British Business Bank supported equity funds in 2020, including deals made by the Future Fund and makes comparisons by stage, sector, region and gender composition to the wider equity market.



#### **Chapter 1**

# Recent trends in SME equity finance

- Equity markets bounced back in the second half of 2020, and this strong performance continued in Q1 2021 with record deal numbers and investment
- Deal numbers and investment grew at the seed and venture stages in 2020, whilst the growth stage remained strong but saw a decline in the number of deals
- Equity investors have responded to Covid-19 with caution and smaller size deals at seed stage but have been optimistic on the prospect of later stage companies with larger size deals
- Covid-19 has had differing impacts on sectors with some benefitting from the shift to remote work and increased digitisation and others suffering due to lockdown restrictions

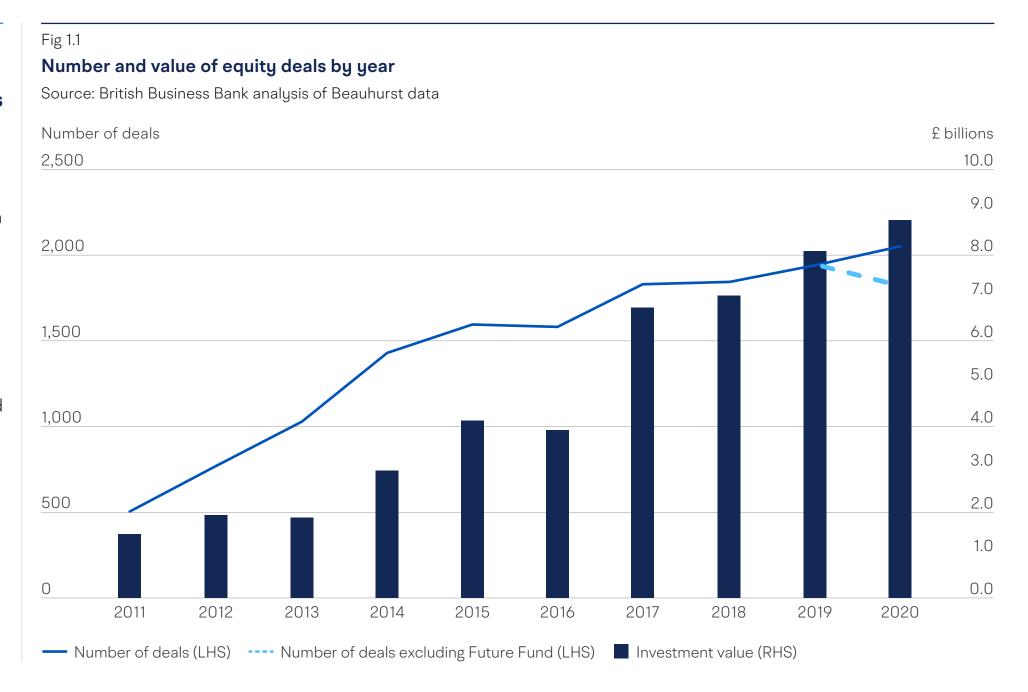


## Equity markets bounced back in the second half of 2020, and this strong performance continued in Q1 2021 with record deal numbers and investment.

The number of equity deals and investment has greatly increased since Beauhurst first began collecting data on equity finance in 2011 with strong growth particularly seen from 2015 onwards. Last year's Equity Tracker reported that 2019 saw a record number of announced equity deals and investment into small UK businesses. In that context, the resilience of the UK equity markets in the face of Covid-19 is remarkable with both deal numbers and investment reaching new records in 2020.

Figure 1.1 shows that in 2020, there were 2,044 announced equity deals which is a 5% increase on the 1,941 recorded in 2019. There was £8.8bn of investment in 2020, which is a 9% increase on the £8.1bn recorded in 2020.

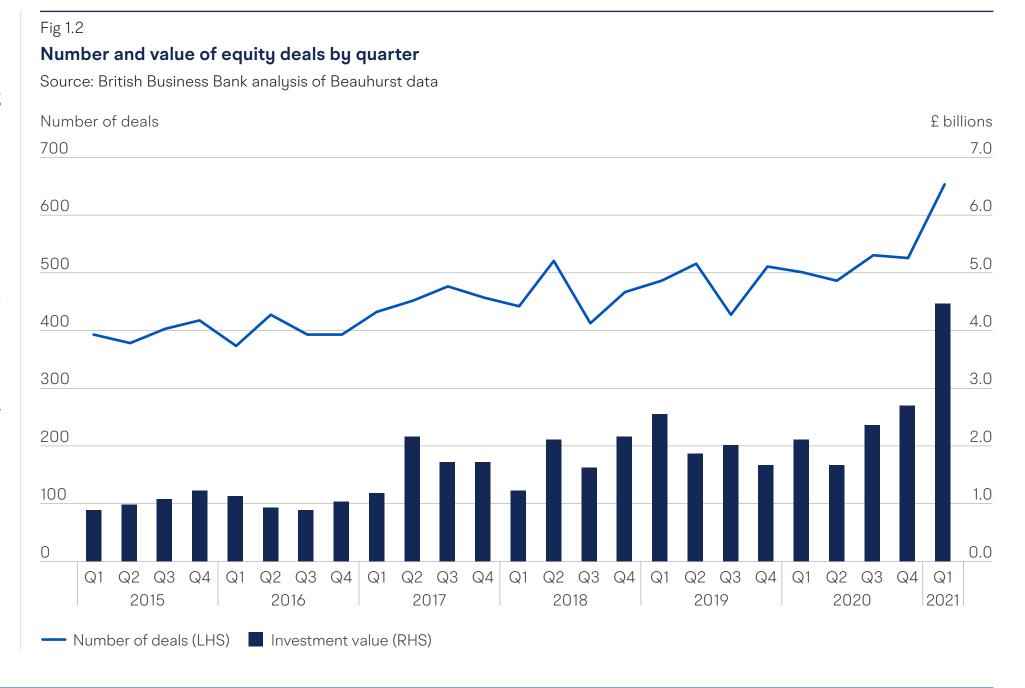
In response to Covid-19, the Bank set up the Future Fund programme to support the UK Equity Market through Covid-19. The Bank's recent Small Business Finance Markets report looked at the support that the Future Fund provided to the equity markets in 2020. The Future Fund has issued 1,190 CLAs to the value of £1.1bn.





Some of these funding rounds have been captured by Beauhurst. The Future Fund opened for applications at the end of May 2020. From June to end of December 2020, 223 announced deals involving companies drawing down Future Fund funding were captured in Beauhurst. Overall, we estimate that 11% of all announced equity deals in 2020 involved the Future Fund, but this was as high as 15% in Q3 2020. The Future Fund has therefore helped contribute to the functioning of UK equity finance markets in 2020, to ensure innovative equity backed companies are able to weather the current period of economic disruption and continue their long-term growth trajectory to reach their full potential.

If Future Fund deals were excluded, the number of deals would have been 6% lower than in 2019, but investment values would have still been at record levels at 3% higher than in 2019 showing the resilience of the equity markets. Overall, investors remained optimistic on the prospects of UK equity backed companies, however 2020 was a year of two halves.



In the first half of 2020, there was £3.8bn of investment, 15% lower than the same period in 2019. Figure 1.2 shows that in Q2, there were 486 deals, 6% fewer than the same period in the previous year. This was when uncertainty was at its highest with the Government first introducing lockdown restrictions in March 2020.

Equity markets finished the second half of the year strongly as uncertainty reduced as news about potential vaccines emerged. Public markets also rallied<sup>1</sup>, and the Government continued its stimulus packages. The establishment of the Future Fund in May also helped renew market confidence. Deal numbers were higher in both Q3 and Q4 2020 than the same periods in the previous year. Investment values were particularly strong in this period with £5bn invested, 37% higher than in H2 2019. Q4 2020 saw £2.7bn invested which was the highest recorded in a single period with several mega deals in unicorn status companies.

Data for Q1 2021 shows that this momentum continued into 2021. There were 657 announced deals worth £4.5bn in Q1 2021, by far the busiest quarter for equity activity. There were 24% more deals than in the previous record quarter for deal numbers (Q3 2020) and remarkably 67% more investment than in the previous record quarter (Q4 2020).

The level of investment in Q1 2021 was so strong that it is comparable to previously recorded annual investment levels prior to 2017. Indeed, in comparison with 2011 there were both more announced deals and investment showing how the equity market has matured in the last 10 years. Furthermore, this data is affected by reporting lags and so the figures are likely to be revised upwards in the coming months.

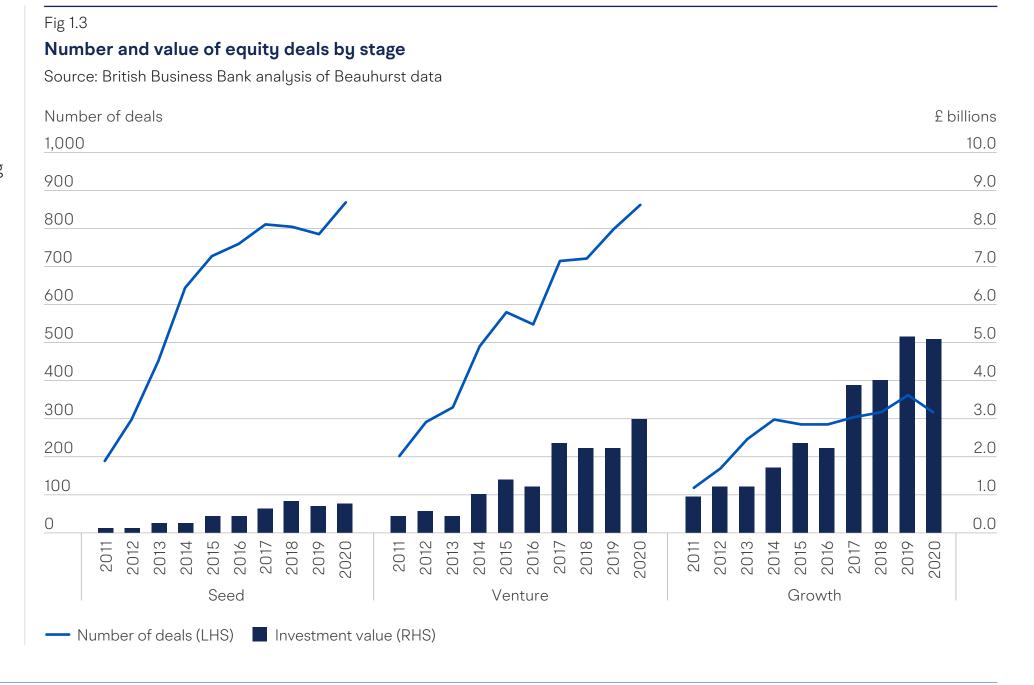
#### Deal numbers and investment grew at the seed and venture stages in 2020, whilst the growth stage remained strong but saw a decline in the number of deals

Beauhurst have historically classified deals into three stages: seed, venture and growth, reflecting the company's underlying position in terms of product development, commercialisation, sales and profitability. In 2019 Beauhurst introduced the 'established' company category, a subset of the original growth stage which reflects more mature companies. Beauhurst define the established category as "companies that may well be experiencing significant growth but are doing so from a position of greater commercial security than a company at the seed, venture or growth stages". For consistency with previous Equity Tracker reports, we are not currently using the established category in our analysis, therefore our deal stage analysis will differ to Beauhurst's own reporting in the Deal publication.<sup>2</sup>

nce \_\_\_\_\_

The seed stage generally encompasses young companies being set up or that have been in business for a short time but have not yet made any commercial sales. The venture stage covers companies that have been in existence for a few years and are in the process of gaining market traction with sales growing rapidly. The venture stage does not solely correspond to funding by venture capitalists, as other investor types also provide funding to venture stage companies. Growth stage businesses are more developed with multiple offices or branches and substantial revenue streams (some of which may be profitable). The growth stage includes later stage VC-backed companies seeking to grow their core market, expand into new markets or create new products/services.

Figure 1.3 shows the number and value of deals at each company stage.





#### **Seed Stage**

There were 863 deals in seed stage companies in 2020, a 10% increase compared to 2019. The amount invested was £751m in 2020, a 4% increase on 2019. Last year's Equity Tracker report identified the annual investment going to the seed stage declined in 2019, the first annual decline. When the Covid-19 crisis began there were widespread fears that the seed stage would be disproportionately affected as it was in the 2008 Financial Crisis, but this has not been the case. Despite this increase, the amount invested remains below the £841m invested in 2018. The 863 seed stage deals in 2020 is a record number. It is an encouraging sign that investors were still willing to invest in the riskier seed stage companies despite the uncertainty brought by Covid-19 even though these companies may not have been as well capitalised as those in previous years.

#### **Venture Stage**

The venture stage has historically been the most volatile of the three business stages in terms of deals and investment values. In 2020, the venture stage saw the strongest growth of all three stages with record numbers of deals and investment. There were 862 deals in venture stage companies, a 9% increase on 2019 with £3.0bn invested, a 33% increase on 2019.

#### **Growth Stage**

In recent years, the growth stage had been the main contributor to the strong increase in the overall amount of equity investment. In 2020, these annual increases stalled. There were 319 growth stage deals in 2020, a 12% decrease compared to 2019. These deals were worth £5.1bn, a 1% decrease compared to 2019. However, there was one particularly large deal of £940m in 2019. With this deal removed, the growth stage would have seen 21% growth in 2020. Therefore, the growth stage remained strong overall with annual investment over £5bn for the second year running.

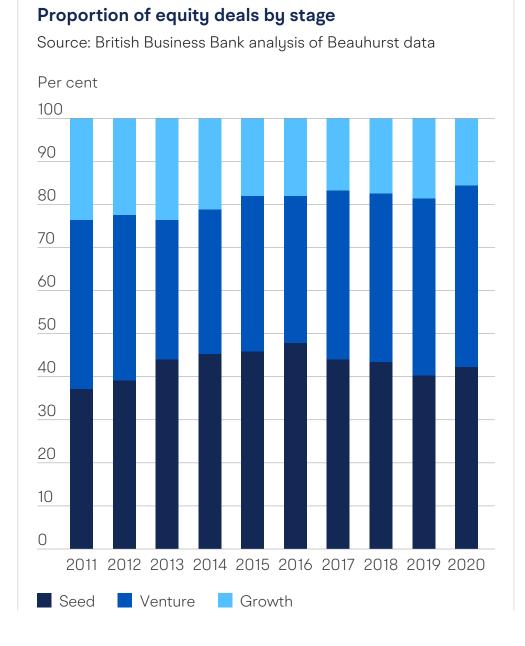
Figures 1.4 and 1.5 shows the proportion of deals and investment going to each stage. The seed stage proportion of deals increased by 2 percentage point to 42% whilst its proportion of investment values was flat at 9%. The venture stage saw a slight increase in its proportion of deals, increasing by 1 percentage point to 42% but saw a large increase in its proportion of investment value, increasing by 7 percentage point to 34%.

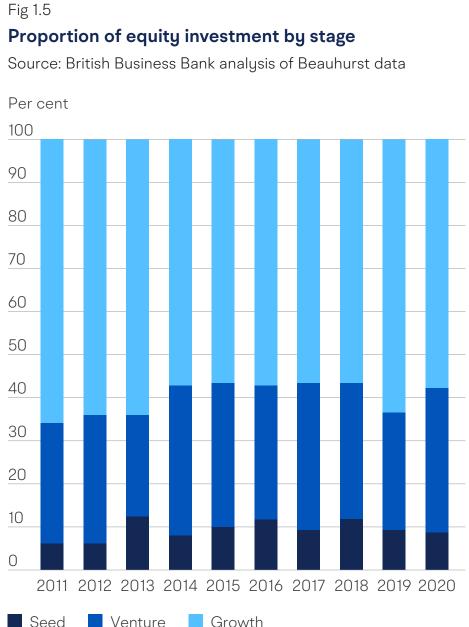
The growth stage was the only stage that saw a decline in either its proportion of deals or investment. Its proportion of deals decreased by 3 percentage point to 16% of deals in 2020 and value decreased by 6 percentage point to 58% of overall investment in 2020. However, this is in line with historical proportions and the stage continued to receive the majority of investment. As investment at the growth stage was broadly flat in 2020 compared to 2019, this decline in investment share was driven by the increase of investment at the venture stage.

Fig 1.4



The number of companies raising funding for the first time fell 2% in 2020, although there was a much greater decline by value (19%). The proportion of deals for companies raising equity finance for the first time decreased from 48% in 2019 to 44% in 2020, the lowest percentage since Beauhurst started collecting data. Although fundraising conditions for first time companies were more difficult in 2020, concerns that investors would only focus on their existing portfolio and not make any new investments have not fully materialised in 2020. The decline seen in 2020, is partly due to the contribution of the Future Fund as excluding Future Fund deals, the proportion of first time deals is identical to 2019. There is a long run trend for a greater proportion of companies raising following on rounds rather than initial rounds as the UK equity market matures.







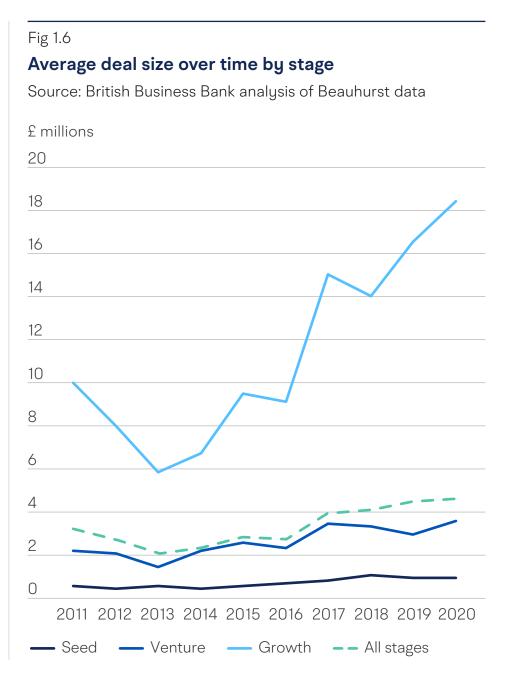
The latest data for Q1 2021 shows that activity was strong across all three stages. There were record quarterly levels of deals and investment at each stage. At the seed stage, there were 278 announced deals worth £440m. Related to this, the proportion of initial rounds in companies in Q1 2021 was 52%. For the last two years, this proportion has been below 50% and so together these are positive signs for the future pipeline of equity backed companies. At the venture stage, there were 272 deals worth £1.3bn and at the growth stage there were 107 deals worth £2.8bn.

It is inadvisable to extrapolate one quarter of data to the full year. Quarterly activity is volatile with investment being especially influenced by outliers. However, these results suggest that investors are looking to invest across the whole spectrum of companies providing large amounts of capital to those companies in the process of scaling up but also willing to take the risk on the earliest seed stage companies and those who had not previously raised equity finance.

# Equity investors have responded to Covid-19 with caution and smaller size deals at the seed stage but have been optimistic on the prospects of later stage companies with larger size deals

Figure 1.6 shows the average deal size has been trending upwards since 2013 and this trend continued in 2020 despite the impact of Covid-19. In 2020, the overall average deal size was £4.6m, this is a 3% increase compared to the £4.5m average of 2019. Average deal sizes increasing in the ecosystem is a positive sign as it means that companies will be better capitalised and therefore better able to pursue their growth aspirations.

The long run trend of an increase in the average deal size has been driven by large increases in the average growth stage deal. The average growth stage deal in 2020 was £18.4m, an 11% increase compared to the £16.5m recorded in 2019. If the £940m deal in OneWeb is excluded, then this increase is 35%. The average venture stage deal was £3.6m, a 25% increase compared to the 2019 figure of £2.9m. This shows the confidence that investors had in the prospects of more mature equity backed companies.





The picture at the seed stage is different to the overall trends affecting the wider market. For the second consecutive year, the average deal size at the seed stage decreased. The average seed stage deal was £924k, a 7% decrease compared to last year's figure of £990k. This suggests that investors were more cautious with their capital with riskier seed stage companies.

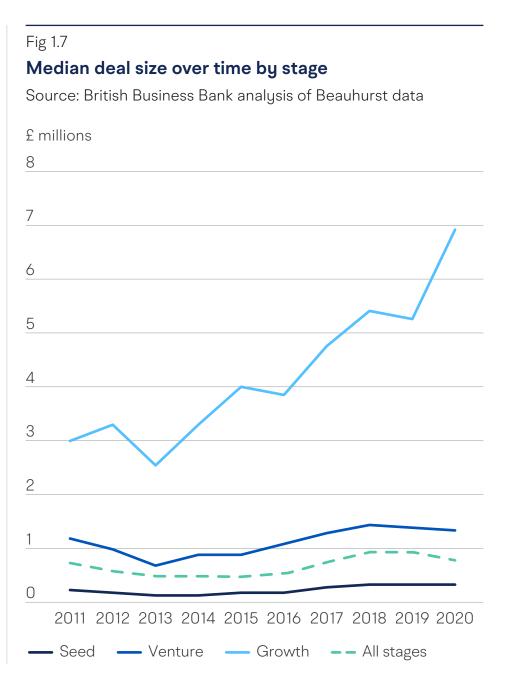
The mean average can be distorted by extremely large outlier deals and so it is useful to look at trends in the median. Figure 1.7 shows that the median overall deal size in 2020 was £796k, a 16% decrease compared to £950k in 2019. This is driven by dynamics at the venture stage where the median deal size decreased by 4% to £1.3m and the increased number of deals at the seed stage.

The record-breaking level of investment seen in Q1 2021 was accompanied with a large increase in the average deal size relative to 2020, which if sustained would be the highest average deal size recorded. There were increases seen at every stage with the largest at the growth stage driven by a quarterly record in the number of deals larger than £100m in size, 11 in total, with 9 in growth stage companies. This is the same number recorded in the whole of 2020 and considerably higher than the 5 in 2019.

The average deal size was £7.6m in Q1 2021, a 64% increase compared to 2020. The average seed stage deal was £1.7m, an 80% increase compared to 2020 and higher than the peak of £1.1m recorded in 2018. If this is sustained, it would reverse the trend of declining average deal sizes at the seed stage seen over the last two years.

The average venture stage deal in Q1 2021 was £5.1m, a 41% increase compared to 2020 which had also seen a large increase on the year before. Notably, 2 deals over £100m in size took place at the venture stage in this quarter. The growth stage saw the largest increase, increasing by 95% to £35.7m which is nearly 4 times higher than the level in 2011. There were 9 deals larger than £100m in growth stage companies in the quarter.

There were also strong increases in the median deal sizes in this quarter showing that start-ups across the spectrum benefitted from this investment rather than being entirely concentrated in a few outliers. The median deal size was £1m in Q1 2021, 26% higher than in 2020 and higher than 2019. The median seed stage deal was £400k, 14% higher than in 2020. The median growth stage deal saw particularly strong growth, increasing by 74% to £12m.



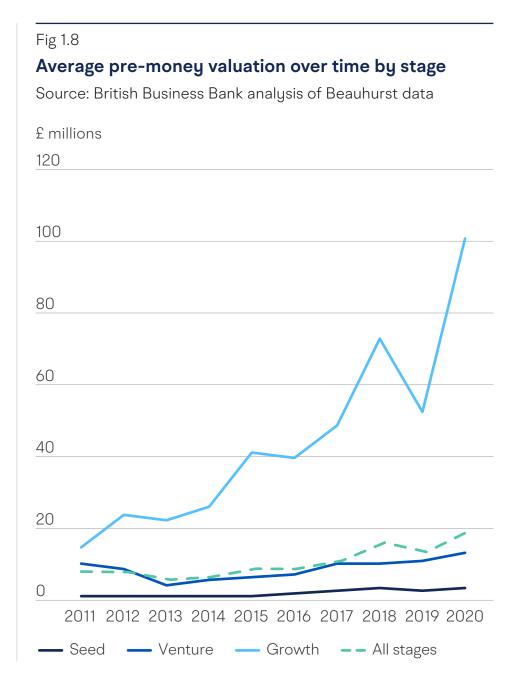


Beauhurst includes information on company pre-money valuations, allowing analysis of trends over time. Figure 1.8 shows the mean average pre-money valuation of companies receiving equity finance since 2011, by stage.

Average pre-money valuations have shown long run increases over the last decade but have fluctuated in recent years due to the effect of volatile outlier valuations in growth stage companies. The UK's equity ecosystem has also matured considerably; companies have access to more private capital enabling them to stay private for longer. Companies therefore achieve higher valuations as they scale to larger sizes than previously possible privately. There were fears that the pandemic would cause downward pressure on valuations which has not proven to be the case.

Figure 1.8 shows the average pre-money valuations proved to be resilient to Covid-19 and in fact increased in 2020 with the average pre-money valuation growing by 47% to £19.7m. The mean average is susceptible to distortion from a few very large valuations such as unicorn companies. An analysis of the median pre-money valuation is therefore useful to establish a fuller picture of what is happening to company valuations. Figure 1.9 shows the median pre-money valuation in 2020 was £4.4m, a 2% increase on 2019. This shows that valuations did generally increase, but the average is being distorted by outlier deals. There are also differences by stage for median pre-money valuations.

Figure 1.8 shows that the average pre-money valuation of a seed stage company in 2020 was £3.4m, a 14% increase on 2019 and the highest recorded. This is despite the average seed stage deal shrinking in 2020. Equity investors generally seek to take consistent stakes of a company so deal sizes and valuations are generally correlated, though the average is heavily influenced by outliers. The median pre-money valuation increased by 17% consistent with the increase in the average.

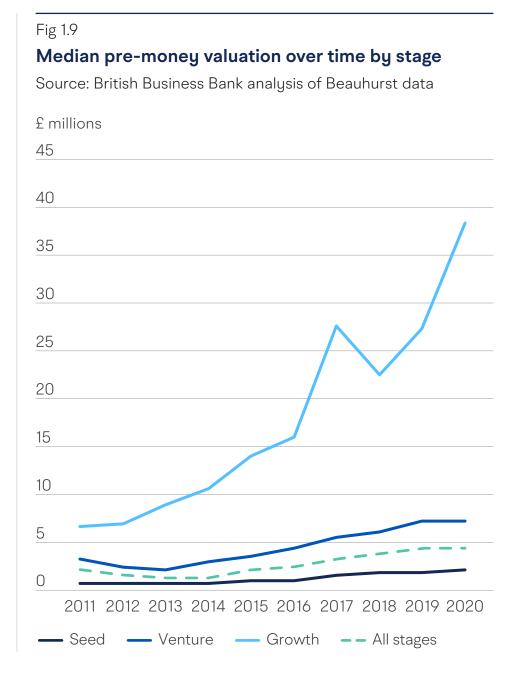


The average pre-money valuation of a venture stage company in 2020 was £13.4m, a 25% increase on the £10.7m recorded in 2019. The venture stage generally performed strongly in 2020 with corresponding increases in deal numbers, investment values and average deal sizes. The median venture stage pre-money valuation was flat at £7.1m in 2020 which may reflect investors becoming more cautious in some investments at the venture stage.

The average pre-money valuation of a growth stage company in 2020 was over £100m for the first time at £100.8m. This is 92% higher than the £52.6m recorded in 2019. Several outsized rounds at the growth stage closed despite the macroeconomic uncertainty in 2020 but an analysis of the median suggests this increase in valuations was felt across the growth stage. The median growth stage valuation grew by 40% in 2020.

The record activity in Q1 2021 has had a corresponding effect on the average pre-money valuations with significant increases at all stages reaching further record levels. The average seed pre-money valuation was 39% higher than in 2020 at £4.7m. The average venture pre-money valuation was £20.5m, 53% higher than in 2020. The average growth pre-money valuation was £255.4m, 153% higher than in 2020.

The median pre-money valuation in Q1 2021 was 17% higher than in 2020 at £5.2m. The seed stage median pre-money valuation fell by 7% to £2.1m. This is despite the large increase in the average seed pre-money valuation. Q1 2021 saw more initial rounds than follow-on rounds which was not the case in 2020. Initial rounds generally have lower pre-money valuations attached so this may be the cause of the decreasing median.





The median pre-money venture valuation was £9.0m, this is 26% higher than in 2020. The median pre-money venture valuation had been flat in 2020. This potentially means that investors are more positive across the spectrum of the venture stage with Covid-19 no longer causing as much caution.

The median pre-money growth valuation grew by 39% compared to £53.3m, this is a lesser rate of growth than in the mean average but is still very strong. This shows that the average pre-money growth valuation is being distorted by the 9 mega deals and associated high valuations but there were higher valuations across the board for growth stage companies.

This strong growth in the average growth pre-money valuation is being driven by the increase in the number of UK unicorns. This report defines a unicorn as a privately held company worth over \$1bn which has received VC funding. Our definition excludes companies that have achieved a \$1bn valuation through Private Equity rounds alone such as Gymshark.

This report also only classifies a company as a unicorn if it has a valuation over \$1bn on a commercial data provider and its status can therefore be verified. There has been increasing media interest and speculation on unicorn status businesses in recent times, some companies are widely reported as being unicorns, such as Lendable, but as they are unable to be verified, they are not included in our list.

As of 7th June 2021, the UK had 23 unicorn status businesses. 4 new businesses have joined the UK's list of unicorn businesses in 2021, Zego, Blockchain.com, Starling Bank and Bought By Many. In 2020, 4 new unicorns were created. So far in 2021, three unicorn companies have successfully exited, leaving the unicorn list. This includes Deliveroo and Darktrace that had IPOs on the London Stock Exchange and Arrival that listed via a reverse merger with a NASDAQ listed Special Purpose Acquisition Company (SPAC). Another current unicorn, Cazoo has announced its intentions to exit via a SPAC<sup>3</sup>, and so is likely to also exit the unicorn list shortly. Chapter 3 discusses the exit environment in more detail, specifically the rise of the SPAC as an option for private companies to exit.

The pace of unicorn creation has been increasing in recent years. Both in terms of the number of unicorns and the shortening time it takes for a company to reach unicorn status. Beauhurst estimates the average age of all companies gaining unicorn status was 7 years. In 2020, Hopin gained unicorn status after only one year – the fastest recorded in the UK. This shows that the later stage VC funding conditions in the UK are strong with the capacity to develop scale-up companies.



Table 2

Current UK unicorn status businesses (as of 7th June 2021)

	Company name	Location	Sector	Date of unicorn status	British Business Bank involvement	British Business Bank delivery partner involvement (Not part of Bank programme)
1	Oxford Nanopore Technologies	Oxford	Life sciences	03/04/2015		M&G investments, Amadeus
2	Wise	London	Fintech	25/05/2016	Formerly part of BPC portfolio	
3	Brewdog	Ellon	Beverage manufacturing and distribution	09/04/2017		
4	Improbable	London	Gaming	11/05/2017	Supported by ECF	
5	Oaknorth	London	Challenger bank	12/10/2017	British Business Bank Delivery Partner- Help to Grow and Covid Ioan schemes	
6	Benevolent.ai	London	Al	19/04/2018		
7	Revolut	London	Challenger bank	25/04/2018	Supported by UKIIF and BPC	
8	Monzo	London	Challenger bank	31/10/2018		Passion Capital
9	Graphcore	Bristol	Semiconductor manufacturing	18/12/2018	Supported by ECF and BPC	M&G investments
10	Ovoenergy	Bristol	Energy supply platform	14/02/2019		
11	Checkout.com	London	Fintech	02/05/2019		
12	OneTrust	London	Cyber security	11/07/2019		
13	Babylon Health	London	Digital health	01/08/2019		
14	CMR Surgical	Cambridge	Life sciences	17/09/2019		



#### Table 2 (continued)

	Company name	Location	Sector	Date of unicorn status	British Business Bank involvement	British Business Bank delivery partner involvement (Not part of Bank programme)
15	Rapyd	London	Fintech	01/10/2019		
16	Snyk	London	Cyber security	21/01/2020		
17	Cazoo	London	Used vehicle marketplace	23/06/2020	Supported by BPC	
18	Gousto	London	Subscription meal service	02/11/2020	Supported by ACF	Barclays
19	Hopin	London	Events platform	10/11/2020	Supported by BPC	Seedcamp
20	Zego	London	Insurtech	10/03/2021	Supported by BPC	
21	Blockchain.com	London	Fintech	24/03/2021		
22	Starling Bank	London	Challenger Bank	19/04/2021	British Business Bank Delivery Partner- Covid Ioan schemes	
23	Bought By Many	London	Insurtech	01/06/2021		



## Recent reports have highlighted the importance of diversity and inclusion within the VC ecosystem

Encouraging diversity and inclusion is important within the equity ecosystem. Women and people from an ethnic minority background have historically and continue to be underrepresented within the VC industry, both on the supply and demand side. Increasing diversity and inclusion is not just a moral imperative, but it makes financial sense and can deliver improved financial returns for investors by ensuring funding goes to businesses with the highest potential for growth. Academic research<sup>4</sup> has found that greater diversity within US VC funds led to improved financial returns.

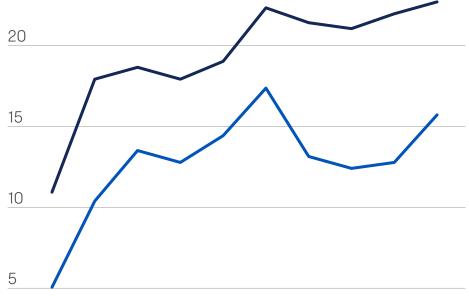
Beauhurst includes information on the gender composition of the founding team for the UK companies they track, though information is not available for every company tracked. Figure 1.10 shows the proportion of UK equity deals and investment value going to companies with at least one female founder. In 2020, the proportion of deals going to a company with at least one female founder was 23%. This is 1 percentage point higher than the proportion in 2019.

This increase in proportion is driven by an increase in the number of deals going to a company with at least one female founder. 442 deals went to a company with a female founder in 2020, 9% higher than in 2019. This rate of increase is higher than in companies with only male founders. There were 1,507 deals in companies with only male founders in 2020, 4% higher than in 2020. All female founder teams received 7% of deals in 2020, whilst a 1 percentage point increase on 2019, this remains substantially lower than the 77% of deals received by all male founder teams.

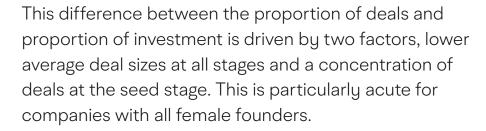
In 2020, the proportion of investment value going to a company with at least one female founder was 16%. This is 3 percentage points higher than in 2019. There was £1.3bn invested in companies with at least one female founder in 2020, 33% and about £300m higher than in 2019. This rate of increase is again higher than for all male founding teams with a similar absolute increase in investment. In 2020, £7.1bn was invested in all male founder teams which is 5% higher than in 2019. This accounted for 84% of all investment in 2020, substantially higher than the share of investment received by all female founder teams (5%).

# Fig 1.10 Proportion of equity deals and investment received by companies with at least one female founder by year Source: British Business Bank analysis of Beauhurst data









In 2020, there were 134 equity deals in companies with all female founders. Of these deals, 79 were in seed stage companies (59%), with 49 deals in venture stage companies (37%) and 6 deals in growth stage companies (4%).

The average seed stage deal in a company with all female founders was £439k, 53% lower than the overall average. The average venture stage deal in a company with all female founders was £7m which was 93% higher than the overall average. This is a result of one extremely large deal in a company with all female founders (Karma Kitchen, £52m). With this deal excluded, the average was £1.9m, 48% lower than the overall. The average growth stage deal in a company with all female founders was £3.2m, 83% lower than the overall average of £18.4m.

As mentioned previously, the majority of deals in companies with all female founders are at the seed stage. In 2020, 59% of deals in companies with all female founders were at this stage which is nearly

20% higher than the overall market. This helps explain why the average deal size for a company with all female founders is lower as seed stage deals are the smallest of all three company development stages.

This increased concentration of female founders in the seed stage could also be an indication that the situation will improve in the future as these companies develop, but it is likely to take time. Going forward, we may see a higher proportion of venture and growth stage deals going to all female founded companies in the future as these seed stage companies mature.

Another indicator that this may prove to be the case is the rate of follow-on funding. 44% of companies with at least one female founder with an initial round between 2013 and 2017 went on to receive a follow-on round which is almost identical to the overall rate which was 45%.

BVCA's recently published Diversity and Inclusion report<sup>5</sup> found that female representation within the PE/VC workforce has increased in recent years but they remain underrepresented with 38% of PE/VC employees being women. This is an increase from the 29% recorded for PE firms in 2018 and 30% recorded for VC firms in 2019. However, only 20% of investment team professionals in PE/VC firms were women with the

proportion decreasing with seniority (only 10% of senior investment professionals were women).

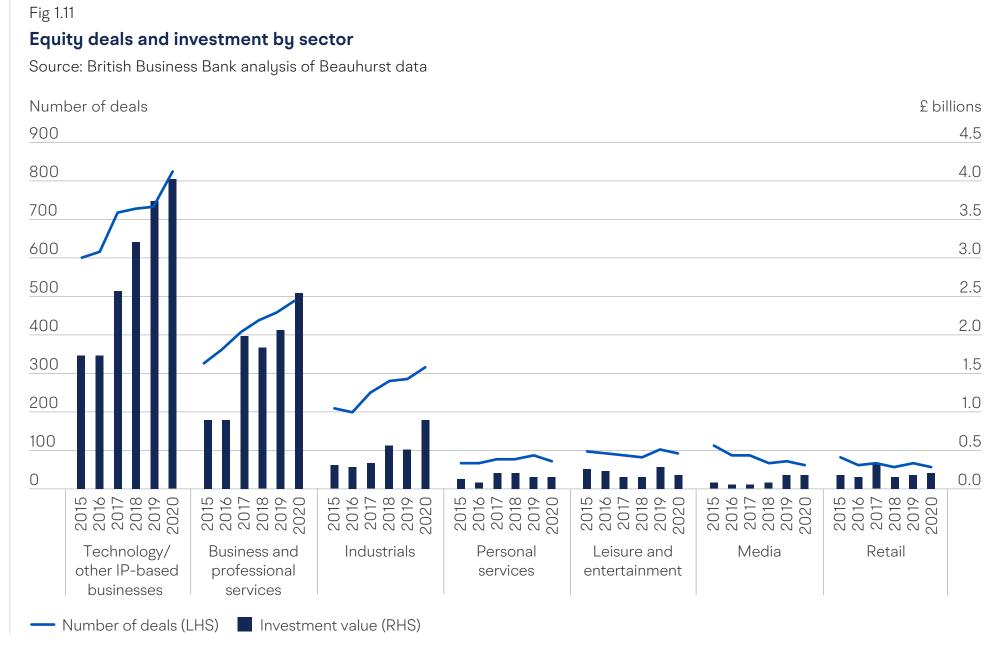
Beauhurst does not currently track information on the ethnicity of company founders but it is commonly understood that those of an ethnic minority background are underrepresented in companies receiving funding and within the VC industry. Last year, Extend Ventures<sup>6</sup> published a report that found that founding teams comprised solely of members with an ethnic minority (excluding white minorities) background received just 1.7% of capital invested at all stages. This is despite 14% of the population being of an ethnic minority background. This compares to the 76% of capital received by all white founding teams and 23% to teams with white founders and at least one ethnic minority founder. This was particularly acute for black founders who received just 0.24% of capital in this period, with only 38 businesses receiving funding.

The Bank has also recently published its 'Alone Together: Entrepreneurship and Diversity in the UK' research report. The report finds there are persistent disparities in business outcomes for business owners from ethnic minority backgrounds with female entrepreneurs from ethnic minority backgrounds experience the biggest disparities.



Covid-19 and the associated restrictions and uncertainty have had a "K-shaped" impact on deal activity in the different sectors that make up the UK equity market. Some sectors have proven to be beneficiaries whilst others have suffered as revenue has fallen to near zero. In some cases, company prospects are still unclear due to sustained shifts in consumer behaviour brought on by the pandemic.

Technology/IP-based businesses continued to attract both the largest number of deals and the most investment in 2020. Figure 1.11 shows that there were 825 deals in technology companies worth £4bn, 12% and 7% higher than the totals in 2019. Much has been written about the increase in digitisation and remote working caused by Covid-19, with technology companies proving to be the beneficiaries. This is also evident on the public markets such as the NASDAQ, which is technology-focussed and performed strongly in 2020.7 This is reflected in investors preferences for making investments in technology companies.





in 2020 was £100.8m, 60% higher than in 2020.

pre-money valuations for companies in the tech sector in 2020, especially at the growth stage showing the positive outlook investors had on their prospects. The average valuation of a technology company raising equity funding in 2020 was £23.4m, a 50% increase on 2019. The average valuation of a growth stage tech company raising equity funding in 2020 was £124m, 102% increase on 2020.

This can also be seen from the increasing average

Another beneficiary of the increased digitisation and the shift to remote working has been the business and professional services sector. There were 493 deals worth £2.6bn in 2020. The rate of growth in this sector was even stronger than that of the tech sector, though it must be considered there are crossovers. The number of deals increased by 7% and the investment value increased by 23%.

As with the technology sector, the business and professional services sector saw large increases in the average pre-money valuation, especially at the growth stage. The average valuation of a business and professional services company receiving equity funding in 2020 was £23.6m, 47% higher than in 2020. The

Companies in these sectors made up both the majority of deal numbers and investment, 64% and 75%. Technology business accounted for 40% of deals and 46% of investment values and business and professional Services accounted for 24% and 29%. The industrial sector continued to be third largest sector receiving equity investment, continuing its long run trend of increasing activity with an 11% increase in deals and 75% increase in investment, the largest of any sector.

professional services company receiving equity funding

As would be expected, the sectors that performed poorly in 2020 were those most affected by the Government imposed lockdown restrictions including retail, personal service and leisure and entertainment. All three sectors saw falling deal numbers though the impact on investment values varied. Deal numbers fell by 13%, 17% and 10% respectively.

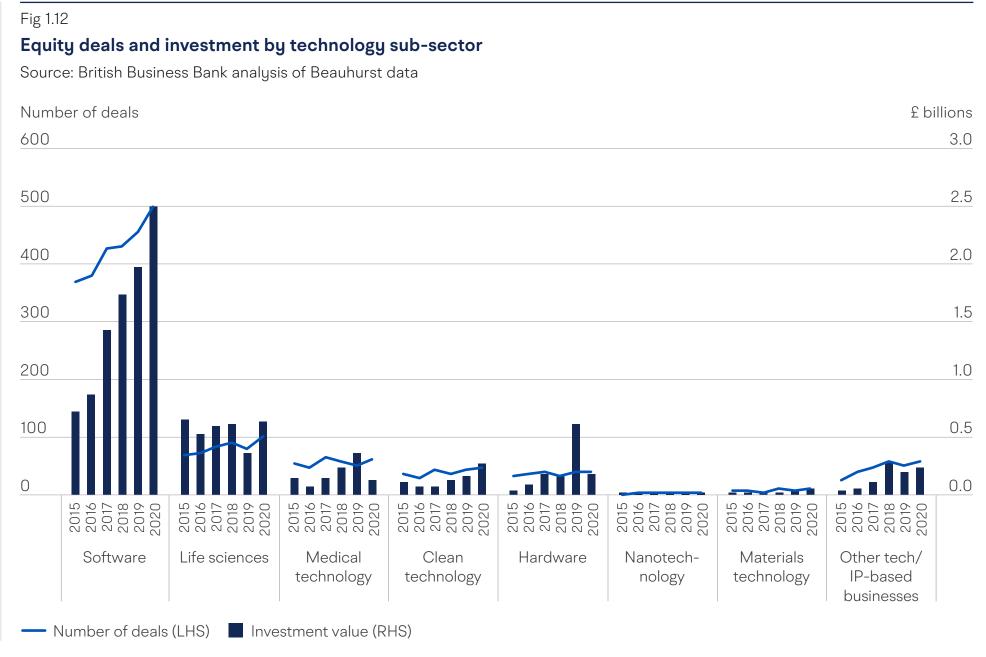
Investment also fell in the personal services and leisure and entertainment sectors, decreasing by 4% and 36%. Despite difficult trading conditions in the retail sector, especially physical retail, investment in this sector increased by 22% in 2020. However, this was the result of one extremely large deal of £200m into Gymshark, who are notably online only with a business model heavily built around social media and thus well placed to perform well during the pandemic with the increases in exercising at home. With this deal removed, investment values fell by 36% which is more representative of the wider decline in the retail sector in 2020.

The average pre-money valuations of personal services and leisure and entertainment companies suggest that investors remain cautiously optimistic on their future long-term prospects as the impact of Covid-19 fades. The average pre-money valuation of a personal services company in 2020 increased by 2% to £9.1m whilst the average pre-money valuation of a leisure and entertainment company was £10.5m, a 17% increase on 2019. The only sector to see a decrease in the average valuation was the retail sector. The average pre-money valuation fell substantially, by 34% to £8.6m suggesting investors may be cautious on the prospects of the retail sector.



Beauhurst subdivides technology/IP-based businesses into eight technology sub-sectors which reflect the underlying activities of the companies. Figure 1.12 shows the number and value of deals in each sub-sector. Two sub-sectors have traditionally formed the majority of the technology/IP-based business sector:

- Software continues to attract the most deals and investment out of the technology sub-sectors, with 500 deals worth £2.5bn in 2020. This a 10% increase in the number of deals and a 26% increase in investment value
- Life sciences has consistently been the second largest technology sub-sector in terms of deal numbers and investment values. Investor interest in this sector has increased due to Covid-19, with life sciences being involved in developing tests and vaccines. There were 102 deals worth £631m in 2020, increases of 26% in deal number and 70% in investment value.





Sectors like industrials and business and professional services cover a broad range of activities. In order to define what a company does, Beauhurst also offer an alternative way to classify companies based on the market the company serves, the technology they employ or the delivery model of the company. This is a more targeted classification approach, allowing investors to identify companies that offer niche products. Verticals better match the description fund managers use to describe the areas of the market they focus on. It is important to acknowledge that companies can be in more than one vertical e.g., software-as-a-service (SaaS) and fintech, and so it is not possible to aggregate these verticals together.

Table 3 shows the ten verticals with the highest amount of investment in 2020. SaaS continues to receive the most investment with 514 deals worth £3bn in 2020, followed by fintech (237 deals worth £1.6bn) and Artificial Intelligence (AI) (191 deals worth £1.3bn). This is the same top three in the same order as in 2019. The number of deals in these verticals was broadly flat for SaaS and AI but fintech deals increased by 17%. The amount invested in the SaaS vertical grew by 18%, the fintech vertical grew by 4% and the AI vertical grew by 33%.

Table 3

#### Top 10 verticals by investment received in 2020

Source: British Business Bank analysis of Beauhurst data

Rank	Vertical	Investment received
1	Software-as-a-Service (SaaS)	£3bn
2	Fintech	£1.6bn
3	Artificial Intelligence	£1.3bn
4	Digital security	£1.0bn
5	Big data	£569m
6	Subscription	£492m
7	Cleantech	£352m
8	Open source	£321m
9	Electric and hybrid vehicles	£321m
10	Sharing economy	£316m

**Chapter 2** 

# Equity investment in deep tech and R&D-intensive sectors

- The number of VC deals going to deep tech companies has increased substantially in recent years, and the UK performs relatively well compared to the US once differences in the size of the economies are taken into account
- Despite large increases in equity investment going to deep tech in the last five years, UK equity investment to R&D-intensive sectors lags behind the US, contributing to the overall funding gap
- UK deep tech deal sizes are considerably smaller than deep tech deal sizes in the US and rest of Europe
- UK deep tech companies raise smaller deals at each funding round and appear more likely to exit early after receiving one round of VC funding compared to US deep tech companies



#### Introduction

This chapter considers the VC investment landscape in the UK for deep tech and R&D-intensive companies compared to the wider VC market. A comparison of the UK market is made against the US and the rest of Europe.

The US is a suitable comparator as its VC ecosystem is the largest and most developed globally. The US has notable history of deep tech innovation with DARPA (Defense Advanced Research Projects Agency), world leading universities with links to industry and the most developed clusters in life sciences, quantum technology, space and mobility. It therefore provides a benchmark for the UK to target.

Within Europe as a whole, innovation and VC ecosystems have been developing over the last decade making it a useful point of reference. The US and rest of Europe have similar economic systems to the UK making them a more useful comparison than China, which is also noted as developing key strengths in deep tech.

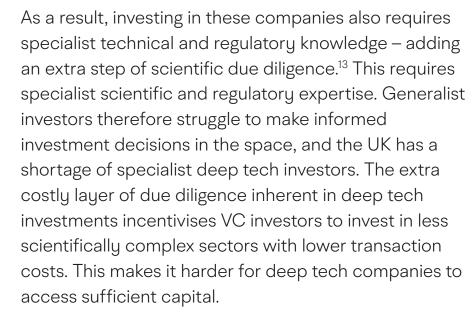
# Deep tech companies are founded on scientific discoveries with the potential to drive economic growth but face specific challenges in raising VC investment

In recent years, there has been significant advances in a wide range of sciences, including Artificial Intelligence (AI), quantum computing and advanced materials, that have the potential to significantly disrupt existing technologies. Companies looking to develop and commercialise these ground-breaking technologies are widely described as 'deep tech'. Deep tech is defined as "companies founded on tangible scientific discoveries or meaningful engineering innovation".8 Deep tech has the potential to significantly alter the world we live in, improving people's lives in new ways, solving complex societal problems, and creating sustainable economic growth. Deep tech not only drives economic growth but is also important for the UK's international competitiveness and creation of high-quality long-term employment.

Much technology that is commonplace today was once considered to be deep tech, for instance, the internet in the 1990's or GPS (Global Positioning System) in the 1970's and 1980's. Therefore, the definition of deep tech goes beyond individual sectors, and the technology considered to be deep technology will change over time.

Deep tech is often associated with research coming out universities. For instance, Graphene was discovered by researchers at the university of Manchester in 2004.9 This material has potential applications across a wide range of industries including biomedical, electronics, energy and coatings. The UK is ranked 2nd in the world for the quality of its university research, with 54% of the UK's university research output considered world leading.<sup>10</sup>

Deep tech companies have additional difficulties raising equity funding compared to software companies because of their complex nature, long development times and large amounts of financing required.<sup>11</sup> Tech Nation supports this finding, with "deep tech start-ups taking 8-12 years for VCs to see returns, versus 3-5 years" for start up companies in general, including software companies.<sup>12</sup>



Life sciences companies are similarly capital-intensive, with even longer technology commercialisation timescales and work in complex scientific areas.

Life sciences companies are therefore similarly affected by these structural market issues and are grouped alongside deep tech companies to form the R&D-intensive sectors in this report. This covers companies seeking to develop and commercialise technologies with long lead times, which require relatively large amounts of funding to develop.

The life sciences sector is mainly comprised of the biopharma and med tech sub-sectors. Biopharma involves companies undertaking research and development of new pharmaceutical products, as well as manufacturing of pharmaceutical products and supporting businesses that offer goods and services to biopharma businesses. Med tech sector involves companies developing and producing technology for medical usage such as complex hospital equipment. An example of this technology development in the life sciences sector is the nanopore sequencing developed by Oxford Nanopore Technologies, a UK VC-backed company. Nanopore sequencing has been in use throughout the Covid-19 pandemic "From [the] initial characterisation of the SARS-CoV-2 virus genome to the rapid identification of variants".14

UK VC investment into technology companies has historically been concentrated into software and fintech sectors. The software-as-a-service business model and cloud computing has allowed for Minimum Viable Products (MVP) to be built relatively quickly and cheaply which are then easily scalable. Lerner and Nenda<sup>15</sup> argue that VCs have shifted their investment towards SaaS companies due to the relative ease of learning about

#### Table 4 Definitions of deep tech and R&D-intensive companies **R&D-intensive** Deep tech Companies founded on Companies attempting **Definition** tangible scientific to commercialise discoveries or meaningful technologies with long engineering innovation and costly processes **PitchBook** 3D Printing In addition to deep tech sectors listed to left: Verticals Advanced Manufacturing HealthTech AgTech - Life Sciences Artificial Intelligence & LOHAS & Wellness Machine Learning - Oncology Augmented Reality Excluding any companies in Autonomous Cars SaaS and fintech verticals CleanTech Climate Tech Infrastructure Manufacturing Nanotechnologu Robotics and Drones Space Technology Wearables and Quantified Self Excluding any companies in SaaS and fintech verticals

their chances of success and associated lower capital requirements compared to deep tech and R&D-intensive companies who require greater capital, longer development times and whose prospects are more uncertain.

PitchBook data was used in the analysis in this section as it allows for international comparisons with the US and the rest of Europe. The PitchBook verticals in Table 4 are used to identify deep tech and R&D-intensive companies. These verticals are generally considered to be associated with sectors being R&D-intensive but not every company within them will be.

This chapter of the report will focus on a narrow subset of companies in the 'deep tech' sector as well as the 'wider R&D-intensive' sector which includes life sciences and deep tech.

# The number of VC deals going to deep tech companies has increased substantially in recent years, and the UK performs relatively well compared to the US once differences in the size of the economy are taken into account

In 2020, there were 440 VC deals into UK deep tech companies, compared to 2061 in US and 1,061 in rest of Europe. Figure 2.1 shows the indexed level of VC deals in deep tech companies in the UK, US and the rest of Europe with 2015 serving as the base year. Over the last five years, the number of deals in UK deep tech companies has increased by 78%. This is higher than the increases seen in the US and rest of Europe, 66% in the US and 73% in the rest of Europe.

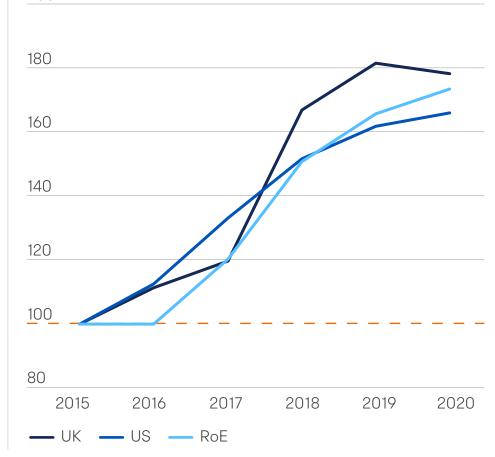
In the UK in 2020, there were 727 VC deals in R&D-intensive companies compared to 3,895 in the US and 1,675 in the rest of Europe. Figure 2.2 shows the indexed levels of deals in wider R&D-intensive companies in the UK, US and the rest of Europe with 2015 serving as the base year. The UK has seen the joint largest relative increase in the number of deals showing the increased interest that VC investors are taking in the UK R&D-intensive ecosystem. Over the

Fig 2.1

### Number of VC deals into deep tech companies (Index, 2015 = 100)

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

Indexed deals

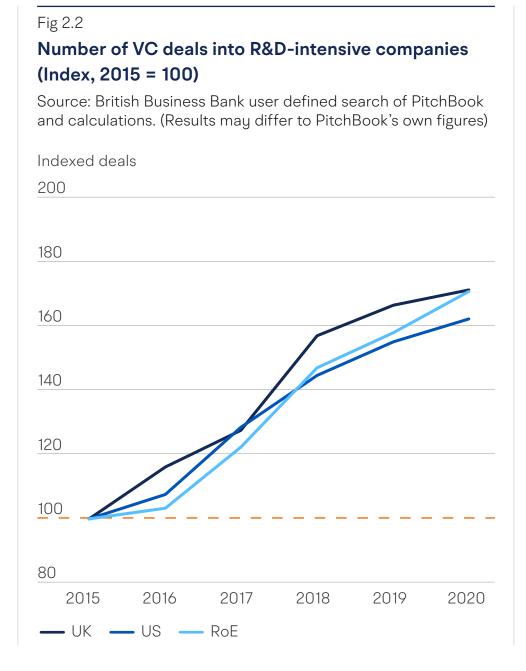




last five years, the number of deals in UK R&D-intensive companies has increased by 71%, higher than the 62% seen in the US and the same as in the rest of Europe.

Over the last five years the rate of growth in deep tech and R&D-intensive deals in the UK was higher than that of the wider market mirroring trends seen internationally. VC investors increasingly turned their attention to deep tech companies and increased their investment in deep tech companies. This is due to several factors including advances in key technology such as AI so that it now has increased commercial applications, and societal and political changes affecting the appetite for commercially viable deep technology that address today's global challenges such as climate change.

This sector is also developing a proven track record with several successful unicorn companies emerging such as Graphcore, a developer of semiconductors for Al and machine learning and Lilium, an electric powered personal air vehicle. The software market is also showing signs of increased competition amongst investors, making it harder to derive outsized returns compared to historically when this sector was itself immature. For instance, there has been poor IPO performance from some recent technology companies.





Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

Indexed deals

200

180

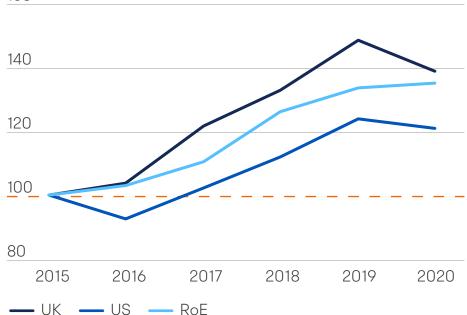
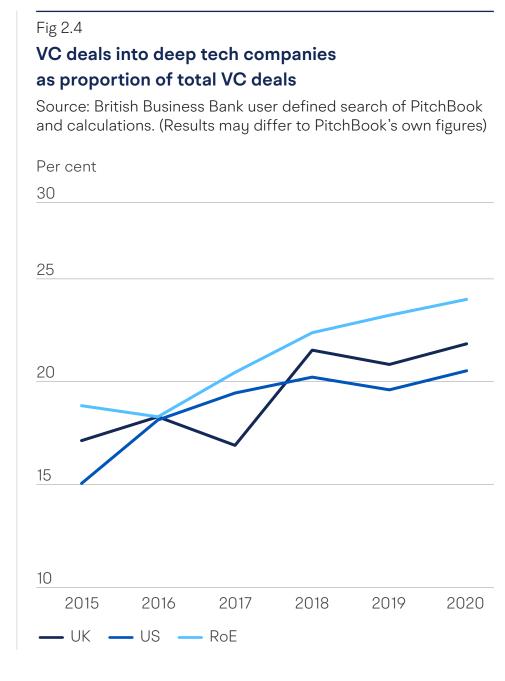




Figure 2.3 shows the indexed level of overall VC deals in the UK, US and the rest of Europe with 2015 serving as the base year. In the UK and internationally, these growth rates are substantially lower than those for deep tech or wider R&D-intensive companies showing a potential shift in investor interest away from SaaS companies. Over the last five years, the number of VC deals in the UK has increased by 39%, higher than the 21% increase in the US and 36% increase in the rest of Europe.

Deep tech still receives a minority of VC deals across all three of these markets but has increased its market share over the last five years. Figure 2.4 shows the proportion of the overall market that deep tech makes up in the UK, US and the rest of Europe. In the UK, 22% of all VC deals in 2020 were in deep tech companies, compared to 21% in the US and 24% in the rest of Europe.

The wider R&D-intensive sector's market share in the UK in 2020 was 36% of all VC deals, this proportion was 39% in the US and 38% in the rest of Europe. The US's proportion shows its relative strength in life sciences as it has the highest proportion of R&D-intensive deals despite the lowest proportion of deep tech deals. There were 1,141 VC deals in US life sciences companies in 2020, 11% of all US VC deals.



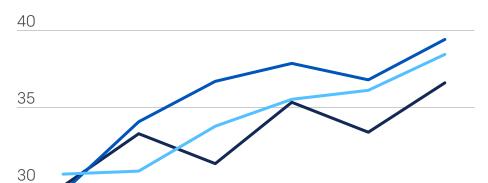


### VC deals into R&D-intensive companies as proportion of total VC deals

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

Per cent

45







The UK had the greatest relative growth in the number of deals in deep tech and wider R&D-intensive companies over the last five years however their market share has not grown as much as in the US and rest of Europe. This is due to stronger growth in other sectors such as software and fintech in the UK which the UK are recognised as having strengths in.

Considering differences in the size of the economies using GDP as the denominator, Figure 2.6 shows that UK deep tech companies receive considerably more VC deals relative to the US. Between 2018 and 2020, there were 201 deals in UK deep tech companies per £trn of GDP compared to 121 deals per £trn of GDP in US deep tech companies. As with the deep tech sub-sector, the UK received more VC deals per £trn of GDP in R&D-intensive companies. In other sectors, the UK performs ahead of the US with 610 deals per £trn of GDP compared to 369 in the US. Therefore, on an activity basis the UK performs relatively well compared to the US in terms of deal flow into deep tech and R&D-intensive companies.

#### Despite large increases in equity investment going to deep tech in the last five years, UK equity investment lags behind the US, contributing to the overall funding gap

As with deal numbers, investment values in deep tech companies in the UK have grown more than the overall VC market over the past five years suggesting increased investor interest in these companies. This is also seen internationally.

Figure 2.7 shows the indexed level of VC investment in deep tech companies in the UK, US and rest of Europe with 2015 serving as the base year. Over the last five years, the investment level in UK deep tech companies has increased by 291% to £2.3bn. This is the same increase seen in the US, but the rest of Europe has grown more strongly (596% since 2015). 2020 was an especially strong year for deep tech investment in the rest of Europe with 63% year on year growth. In 2020, there were 18 deals above £100m in size going to European deep tech companies including CureVac, NorthVolt, Ynsect, and Lilium. Before this year, deep tech investment in the rest of Europe had been following a similar trajectory to the UK.

Fig 2.6

VC deals (2018-2020) as proportion of GDP

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures), Bank analysis of ONS and Bureau of Economic Analysis

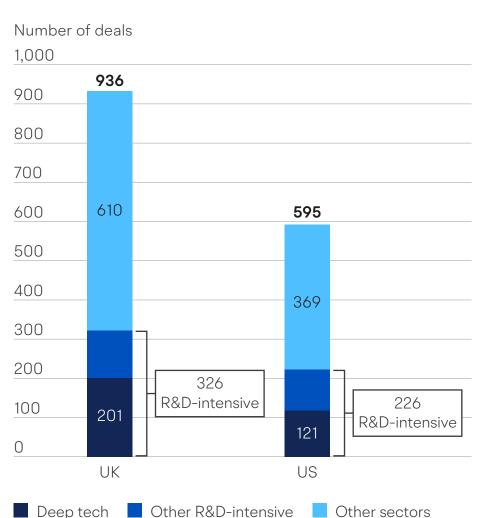
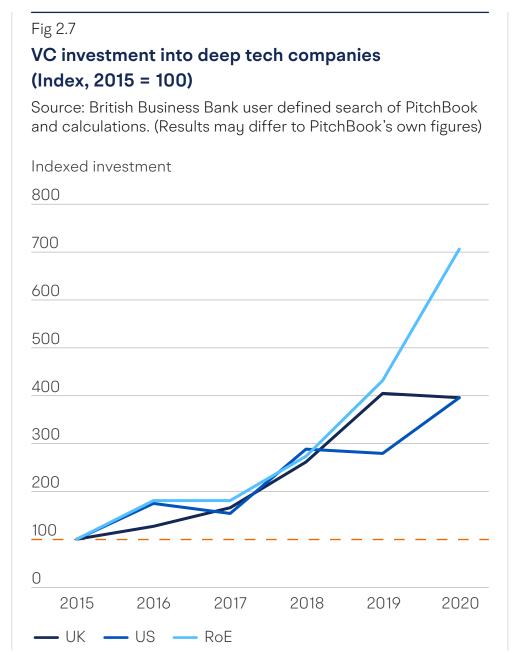


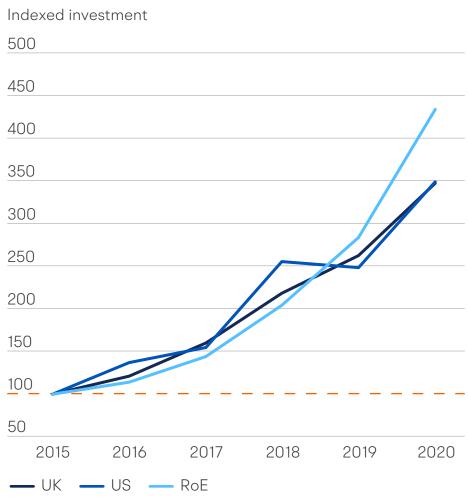
Figure 2.8 shows the indexed levels of VC in wider R&D-intensive companies in the UK, US and rest of Europe with 2015 serving as the base year. The UK has had a strong relative increase in VC investment since 2015 with a 246% increase. However, this is lower than the growth rates seen internationally of 249% in the US and 334% in the rest of Europe. Figure 2.9 shows the indexed level of overall VC investment in the UK, US and the rest of Europe with 2015 serving as the base year. Over the last five years, the level of overall VC investment in the UK has increased by 204%, higher than the 141% increase in the US and just lower than the 216% increase in the rest of Europe, driven by increased investment in fintech and SaaS sectors.

These growth rates show that in the last five years increased capital is flowing into the wider R&D-intensive sector. Of the wider R&D-intensive sector in the UK, the deep tech subset has seen the greatest increases in investment values.



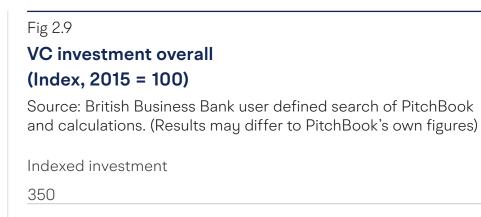


Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)



Deep tech's proportion of investment is linked to that of its number of deals but it's reasonable to expect that the proportion may be substantially higher due to the higher capital requirements. This is the case internationally but not in the UK.

Figure 2.10 shows investment into UK deep tech companies made up 19% of all UK VC investment in 2020 lower than the 22% of all UK VC deals received by them. In the US in 2020, deep tech companies received 27% of all US VC investment which is higher than its proportion of 21% of all US VC deals. In the rest of Europe in 2020, deep tech companies received 26% of all VC investment which is higher than its proportion of 24% of all VC deals.



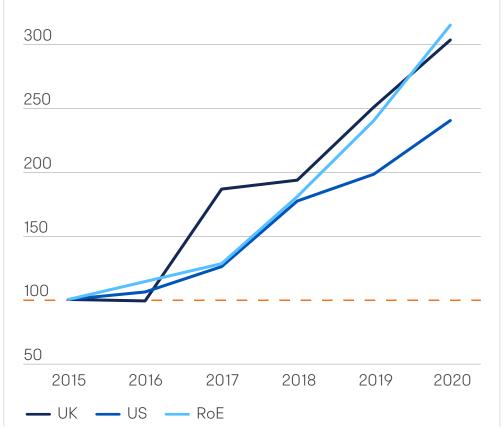


Fig 2.10

## VC investment into deep tech companies as proportion of total VC investment

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

Per cent

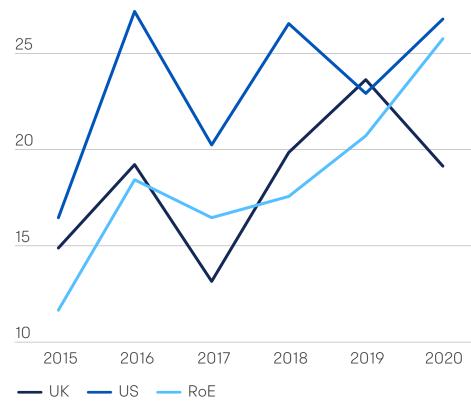




Figure 2.11 shows that investment into UK wider R&D-intensive companies made up 39% of all UK VC investment in 2020 compared to its proportion of 36% of all UK VC deals. In the US in 2020, wider R&D-intensive companies received 51% which is higher than its proportion of 39% of all US VC deals. In the rest of Europe in 2020, wider R&D-intensive companies received 47% of all VC investment which is higher than its proportion of 38% of all VC deals.

Considering differences in size of economies, Figure 2.12 shows the GDP-weighted levels of investment shows deep tech and R&D-intensive companies in the UK receive considerably less investment than their US counterparts.

US deep tech companies received almost twice the level of GDP-weighted investment. Between 2018 and 2020, UK deep tech companies received investment equivalent to 0.09% of the UKs GDP whilst US deep tech companies received investment equivalent to 0.16% of the US's GDP.

Fig 2.11

VC investment into R&D-intensive companies as proportion of total VC investment

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

Per cent

55

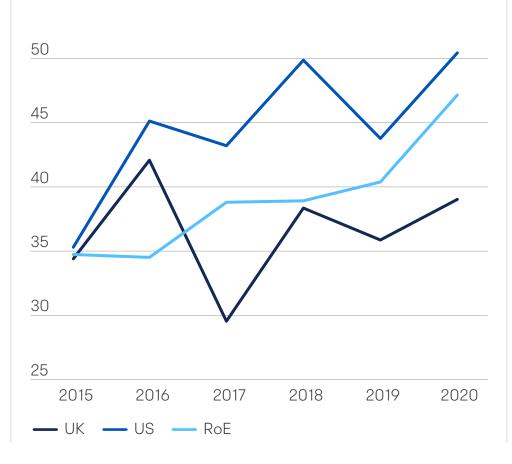
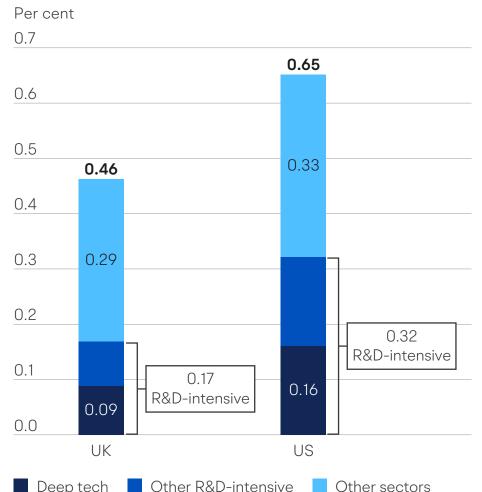


Fig 2.12

#### VC investment (2018-2020) as proportion of GDP

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures), Bank analysis of ONS and Bureau of Economic Analysis



This difference in GDP-weighted investment is even larger for the wider R&D-intensive sector showing the strength of the US life sciences ecosystem. Between 2018 and 2020, UK R&D-intensive companies received investment at a level equal to 0.17% of GDP substantially lower than US R&D-intensive companies which received investment equal to 0.32% of GDP.

The UKs relative strength in the software and fintech sectors is shown in the much narrower gap in GDP-weighted investment for non-R&D-intensive sectors. The UK receives relatively more investment in fintech than the US, which has the effect of reducing the overall gap. UK companies in these non-R&D-intensive sectors received investment equivalent to 0.29% of GDP which is slightly lower than the 0.33% of investment received by US companies. Therefore, the UK's overall VC gap with the US as measured by differences in VC to GDP ratios is largely down to the differences in the amount of funding going to deep tech and R&D-intensive sectors.

Figure 2.13 shows that the disparity between GDP weighted investment for UK deep tech companies compared to their US counterparts becomes worse at the later stages.<sup>17</sup> At the seed stage, there is 1.1 times more GDP-weighted investment in US deep tech companies than UK deep tech companies. This multiple increases to 1.7 times more GDP-weighted investment in early stage VC deals for US deep tech companies and 1.8 times more GDP-weighted investment in later stage VC deals for US deep tech companies.

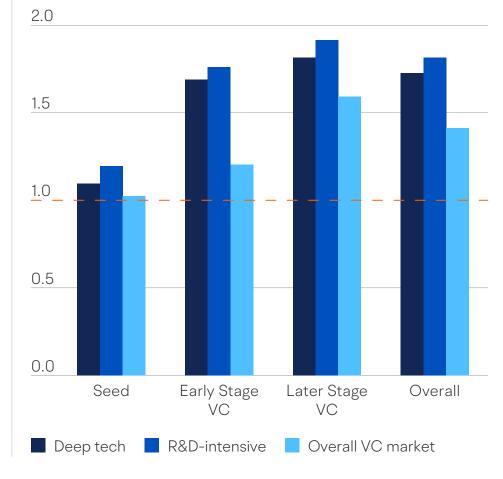
These GDP-weighted US/UK investment multiples are even larger at all stages for the wider R&D-intensive sector. At the seed stage, there is 1.2 times more GDP-weighted investment in US R&D-intensive companies than UK. This multiple increases to 1.8 times more GDP-weighted investment in early stage VC deals for US R&D-intensive companies and 1.9 times more GDP-weighted investment in later stage VC deals for US R&D-intensive companies.

Fig 2.13

## US/UK GDP weighted investment multiples by stage (2018-2020)

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures), Bank analysis of ONS and Bureau of Economic Analysis

Investment multiple (US relative to UK)





For the overall VC market, the UK has a similar GDP weighted investment at the seed stage as the US with a US/UK investment multiple of 1.0 times. This suggests that the initial pipeline of UK VC-backed companies is relatively strong but the differences appear at later VC stages. There was 1.2 times more GDP weighted investment from early stage VC deals in the US and 1.6 times more GDP weighted investment from later stage VC deals showing relatively less patient capital available for later stage companies in the UK.

# UK deep tech deal sizes are considerably smaller than deep tech deal sizes in the US and rest of Europe

The previous sections outlined the UK performed relatively well in terms of deal activity but relatively worse for investment going to deep tech and R&D-intensive sectors. The proportion of investment received suggests that UK R&D-intensive companies may be receiving less investment and therefore undercapitalised relative to their international counterparts. This appears to be particularly acute for UK deep tech companies.

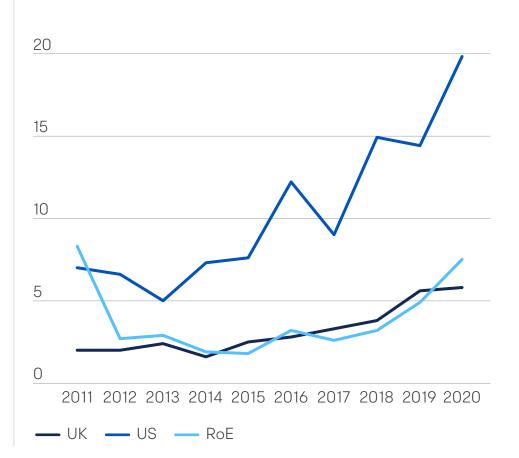
Figure 2.14 shows the average deal size received by deep tech companies in the UK, US and the rest of Europe. The average VC deal into a UK deep tech company in 2020 was £5.9m. This is smaller than the £19.7m received by a US deep tech company and the £7.7m received by a European deep tech company.

Fig 2.14

#### Average VC deal size for deep tech companies

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

£ millions



The average VC deal received by a UK deep tech company is 70% smaller than that received by a US deep tech company and 22% smaller than that received by a European deep tech company. This is a wider gap than for the overall market, where the average UK VC deal is 55% smaller than the average US VC deal and 7% smaller than the average European VC deal.

As mentioned earlier in the report, deep tech companies require more capital to build than regular start-ups which should in theory translate into them receiving larger average deal sizes. In 2020, the average deal into a UK deep tech company was 0.88 times the size of the average VC deal received by a UK VC-backed company in other sectors and since 2015 has frequently been below 1.0 times. This differs to the US and the rest of Europe where deep tech deals are larger than other equity deals. In the US deep tech deals are 1.3 times larger than other VC deals and have been greater than 1.0 multiple every year since 2015. In the rest of Europe this proportion was 1.1 times in 2020. This shows that deep tech companies internationally receive larger funding rounds than the average VC-backed company which is not the case in the UK.

Figure 2.15 shows the average size of a VC deal received by a UK wider R&D-intensive company was £7.2m. This is 63% smaller than that received by a US R&D-intensive company and 18% smaller than that received by a European R&D-intensive company. These are again wider gaps than for the overall market, where the average UK VC deal is 55% smaller than the average US VC deal and 7% smaller than the average European VC deal.

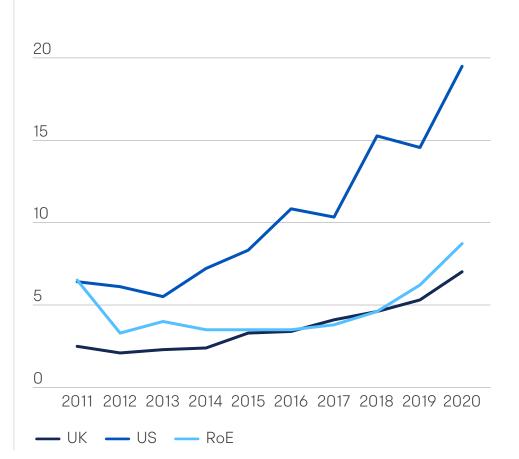
Figure 2.16 shows the UK's relative position compared to the US in terms of the amount of investment going to companies by deal stage. Across all sectors, the UK receives more deals per trn of GDP and GDP-weighted investments in deals below £10m. In every other deal size bracket, the US receives relatively more investment.

This is most noticeable in the £40m to £60m in size deal size category, where the US has over 4.5 times as much investment than the UK. Despite the infrequency of £100m+ deals even in the US, US deep tech companies received 3.1 times as much capital from deals £100m+ in size.

Fig 2.15 **Average VC deal size for R&D-intensive companies** 

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures)

£ millions





These multiples show the relative weakness of the UK VC ecosystem in providing the larger ticket sizes necessary to support more mature VC-backed companies. Deep tech and R&D-intensive companies are particularly affected by this, as demonstrated by the larger US/UK investment multiples in these sectors compared to the overall market.

# UK deep tech companies raise smaller deals at each funding round and appear more likely to exit early after receiving one round of VC funding compared to US deep tech companies

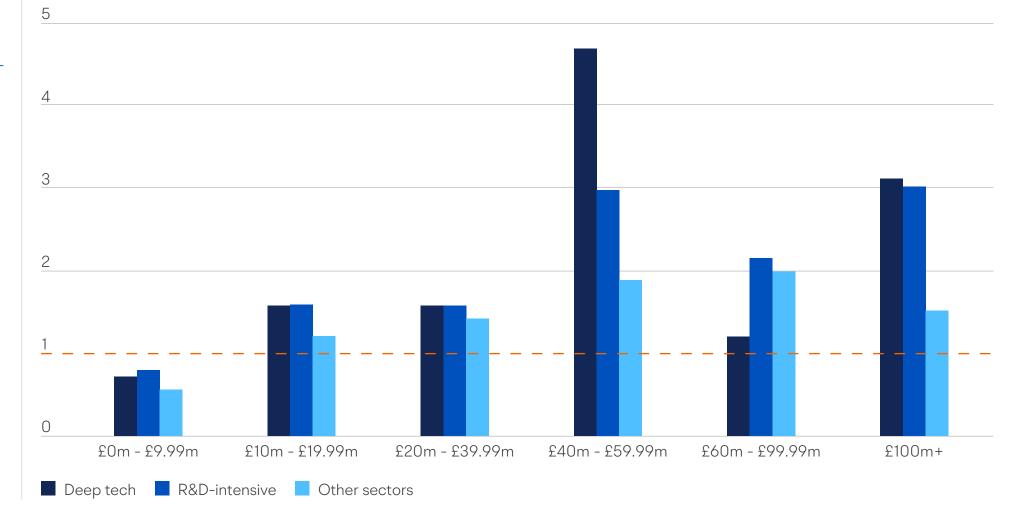
The British Business Bank's 2019 Equity Tracker found that UK companies that raised an initial round of funding between 2011 and 2012 were just as likely to raise follow-on rounds of funding but received considerably less capital at each round. This section provides an update on that analysis using a cohort of UK and US companies that raised an initial round of VC funding between 2012 and 2013, but with results disaggregated for deep tech and R&D-intensive companies.

Fig 2.16

US/UK GDP weighted investment multiple by deal size (2018-2020)

Source: British Business Bank user defined search of PitchBook and calculations. (Results may differ to PitchBook's own figures), Bank analysis of ONS and Bureau of Economic Analysis

Investment multiple (US relative to UK)





Follow-on funding is particularly important for R&D-intensive companies due to their long and costly commercialisation processes before generating revenue. This makes them reliant on external sources of funding early in their lives and an inability to secure follow-on funding will significantly worsen their prospects (e.g., slowing down their R&D activities).

Figure 2.17 shows the UK has a greater proportion of deep tech companies that have died or failed to raise funding before the second round of funding (39% compared to 30%). This is due to UK deep tech companies being less likely to raise a second round of funding compared to their US counterparts (49% compared to 63%), although UK deep tech companies are more likely to have exited before the second round (12% exited companies may experience greater funding constraint at their second round of funding compared to US deep tech companies.

At every subsequent round of funding the UK has a similar proportion of deep tech companies achieving a successful outcome compared to US companies. Therefore, across the funding rounds, the UK has a similar proportion of deep tech companies that have

Proportion of deep tech companies achieving a successful outcome by each round, UK and US

Source: PitchBook

Per cent
Fer cent
For a successful outcome by each round, UK and US

Round 2 63 7 70

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round, UK and US

For a successful outcome by each round and US

For a successful outcome by each round a successful outcome by each round

Round 5

Round 6

US deep tech

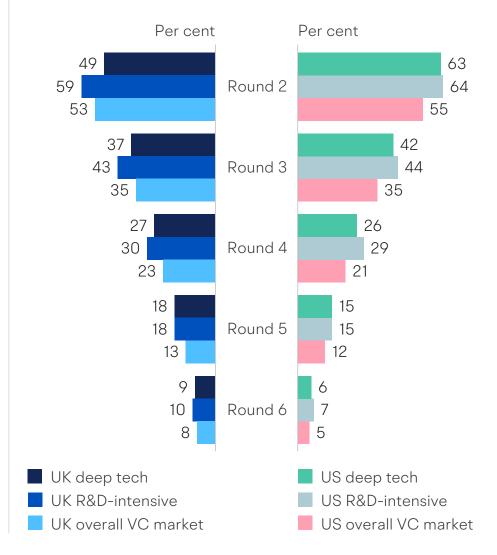
follow-on funding

US deep tech exited

Fig 2.18

Proportion of companies raising first VC round in 2012-13 raising subsequent rounds





UK deep tech

follow-on funding

UK deep tech exited



died, failed to raise funding or exited, although UK deep tech companies are more likely to have exited before round 3 (15% compared to 11%). This suggests UK deep tech companies are exiting at earlier stages compared to US companies potentially leading to lower benefits to the UK economy. The issue of UK companies exiting earlier before they reach sufficient scale was identified by the Patient Capital Review, which suggested the benefits to the UK economy are reduced.

Figure 2.18 compares the proportion of deep tech, R&D-intensive companies and overall VC-backed companies that go on to raise subsequent funding rounds, following their first VC investment in 2012-2013. As highlighted previously, UK deep tech companies were less likely to have raised a second round of funding compared to their US counterparts (49% compared to 63%). This is also the case for UK R&D-intensive companies where 59% raised a second round of funding compared to 64% in the US. This is despite the proportion of companies that died, failed to raise subsequent rounds of funding or exited before round 2 being similar for UK and US R&D-intensive companies (70% compared to 71%).

If a UK deep tech company does go on to raise a second round of funding, they are then more likely to raise at every subsequent round than their US counterparts (on a marginal basis). The impact of this becomes apparent at later funding rounds with 9% of UK deep tech companies raising a 6th round of funding compared to 6% of US deep tech companies. 10% of UK R&D-intensive companies received a 6th round of funding compared to 7% of US R&D-intensive companies.

This suggests that there is a funding constraint for deep tech companies specifically looking to raise their second round of funding. This difficulty in obtaining a second round of funding may lead to some UK deep tech companies exiting prematurely, rather than continuing their growth in the UK VC ecosystem despite a greater proportion of US VC-backed deep tech companies exiting overall. 12% of UK VC-backed deep tech companies exited after the first round compared to 7% of US VC-backed deep tech companies.

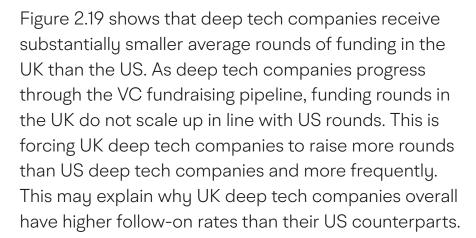
However, the UK VC ecosystem appears to be relatively strong at providing follow-on capital to deep tech companies overall with this issue confined to those seeking to raise a second round of funding. This may be

result of inadequate capitalisation in companies' initial rounds leading to a lack of progress to justify follow-on funding or other factors.

Comparing the follow-on rates for deep tech and the wider R&D-intensive sector against that of the overall VC market also suggests that this issue is limited to deep tech companies aiming to raise their second round of funding. As deep tech and wider R&D-intensive companies require more capital and time to build, it would be expected that their follow-on rates would be higher than that of the overall VC market. This is the case for UK wider R&D-intensive companies and for UK deep tech companies at every subsequent round after the second.

Overall, UK VC-backed companies were slightly less likely to receive a second round of follow-on funding than their US counterparts. 53% of UK companies received follow-on funding compared to 55% of US companies.

As Chapter 3 will discuss in more detail, UK R&D-intensive (including deep tech) companies are more likely to be acquired by an overseas company than wider market companies. This may suggest that some deep tech companies are unable to access all the early stage funding they require in the UK and are forced to exit early to access further capital.



This difference is present from the initial round of funding and significantly widens for companies' later rounds of funding. The initial round in a US deep tech company is 1.3 times higher than the UK's, this gap widens to 6.8 times by the 6th round. The average UK deep tech company raises £24.5m after 6 rounds of funding compared to the £113.4m raised by the average US deep tech company after 6 rounds. This £24.5m raised by the average UK deep tech company is lower than the £32.9m raised by the average US deep tech company after just 4 rounds.

This is also the case for the wider R&D-intensive sector, where the difference is less acute but still significant. Figure 2.19 shows an initial round in a US backed R&D-intensive company is 1.6 times than the equivalent round

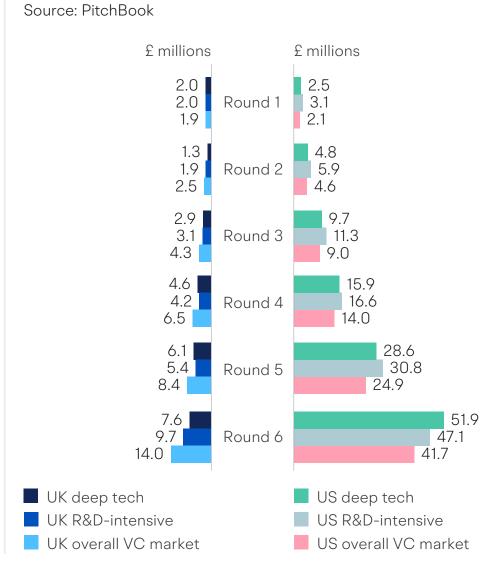
for a UK VC-backed R&D-intensive company. By the 6th round this gap had widened to 5.7 times. This results in the average UK VC-backed R&D-intensive company raising £26.2m of funding after 6 rounds of funding compared to the £114.8m raised by a US VC-backed R&D-intensive company after 6 rounds. As with deep tech, UK VC-backed R&D-intensive companies raise less after 6 rounds than their US counterparts do after 4 (£36.9m).

This is also true in the wider VC market, where the initial round in a US VC-backed company is 1.1 times the equivalent in round for a UK VC-backed company and 3.0 times at the 6th round.

Companies in the US may require larger funding rounds compared to UK and European countries to offset their greater start-up costs due to higher staff salaries and property rent. Although related to software sectors, Tech Nation found developer salaries in Silicon Valley were \$112,000 on average, 117% higher than developer salaries in London. Staff costs are often the largest contributing factor to a VC companies cash burn, and so this may explain some of the differences seen in round sizes between UK and US companies.

Fig 2.19

Average deal sizes of companies raising first VC round in 2012-13 by subsequent VC round number





Previous analyses, such as the HMT Patient Capital Review, have identified that the UK lacks patient capital to allow later stage companies to scale in comparison with the US. This data shows this is also the case for UK deep tech and R&D-intensive companies.

As discussed earlier, R&D-intensive companies require more capital to successfully scale and hence should receive larger rounds of funding on average. However, UK deep tech and R&D-intensive companies in this cohort consistently received similar amounts of VC funding compared to overall UK VC-backed companies at each funding round despite this sector's greater capital intensity. This was not the case in the US, where deep tech and R&D-intensive companies consistently received more funding than overall VC-backed companies as they progressed through the fundraising pipeline.

These smaller rounds at each stage lead to UK deep tech and R&D-intensive companies having shorter cash runways as the costs of developing technology are likely to be relatively fixed between the two countries. This leads to UK companies having to raise more quickly, meaning that a greater proportion of their time is focused on fundraising rather than advancing their technology.

UK deep tech companies from this cohort that raised a second round of funding did so after 1.8 years, 0.15 years quicker than their US counterparts. UK R&D-intensive companies that raised a second round of funding did so after 1.9 years, 0.05 years quicker than their US counterparts. UK deep tech and R&D-intensive companies then go onto consistently raise even faster than their US counterparts as the difference in funding at each round increases. The impact of this is demonstrated in the average time it takes for a deep tech company to raise their 5th round of funding, 6.0 years from the date of the initial VC round for a UK deep tech company compared to 6.9 years for a US deep tech company.

Whereas for the overall VC market, UK companies raised a follow-on round of funding on average after the same amount of time as the US and subsequently raise at similar intervals.

It is possible that the situation for UK R&D-intensive companies has improved since this cohort, with earlier sections of this report showing that average deal sizes for R&D-intensive companies have been increasing in recent years but the multiple for R&D-intensive compared to the overall VC market average deal size remains lower than in the US and rest of Europe.

In the 2017 Industrial Strategy White Paper, the UK Government set an ambition for the UK to increase its total R&D expenditure to 2.4% of GDP by 2027. If the UK is to achieve this target, then companies in the R&Dintensive sectors will need to contribute to it. These companies will therefore require sufficient quantities of VC capital in order to fund this R&D over time. It is not just VC capital required to support these companies. The Government has also introduced Advanced Research and Invention Agency (ARIA), a new research funding body, based on the principles of the US Advanced Research Projects Agency (ARPA) now renamed DARPA (Defence Advanced Research Projects Agency). ARIA will use a range of funding approaches including competitions, equity investment and grants to support R&D.<sup>19</sup>

**Chapter 3** 

# Exit routes for equity backed companies

- The number of IPOs in 2020 was below historical levels,
   but several unicorn companies have listed in 2021 showing
   public markets are open
- UK public markets are relatively attractive, but a recent review has identified areas of improvement to make them work more effectively for high growth technology companies
- UK equity backed companies can exit overseas through a listing on an overseas public market or can be acquired by a foreign owned business



#### Introduction

Exits are an important part of the equity ecosystem and allow the shareholders of a company, including its founders and external investors, to realise the value of their shares. As the company grows, the value of the shares should increase, increasing the wealth of the shareholders. Exits provides liquidity to equity investors, freeing up capital for re-investment into other VC funds or businesses. Many founders who achieve a successful exit also go on to start another company or become investors themselves. This is part of the wider talent and capital recycling that strengthens a VC ecosystem. For example, Atomico<sup>20</sup> found that almost 600 ex-employees of VC-backed companies with valuations over \$5bn have gone on to become founders. Therefore, exits are an important factor in the long-term success of the UK's equity ecosystem.

The two main exit routes for successful investments in equity backed companies are mergers and acquisitions (trade sales), and Initial Public Offerings (IPOs) on public markets. Management Buyouts and secondary sales to other VC/ PE investors are also alternative exit routes for successful investments. Of course, many equity investments are not successful and are written off at less than cost. Equity investment operates under the pareto principle with the small proportion of successful exits aiming to provide sufficient returns to cover and exceed the written off investments.

This section provides an overview of recent trends in IPOs and trade sales for SME equity backed companies with announced funding rounds, including the proportion of overseas listings and mergers and acquisitions to an overseas company. The chapter also provides a summary of the main conclusions from a recent review into the UK listing environment.

# The number of IPOs in 2020 was below historical levels, but several unicorn companies have listed in 2021 showing public markets are open

An IPO occurs when the shares of a private company are first listed on a stock exchange. Listing on a public market is usually reserved for VC investors most promising companies, and the most prestigious exit route as it builds an independent standalone company. Not only does a public listing provide an exit route for existing investors, it also opens up additional sources of capital, especially from retail and institutional investors. However, some companies prefer to remain private and there are increased regulatory requirements from being public.

Figure 3.1 shows between 2016-2018, the yearly number of UK IPOs was relatively flat with an average of 11 equity backed IPOs per year. However, this declined sharply in 2019 to 3 relatively small IPOs. IPO activity was particularly subdued in 2019 due to the increased amounts of later stage VC funding that was available.



IPO activity increased in 2020 despite Covid-19 with 7 IPOs with a total market cap of £5.5bn. This included The Hut Group which listed on the London main market raising £920m, as well as a number of life science companies including Incanthera, Freeline Therapeutics and Compass Pathways.

Total market capitalisation increased by 1,322% to £5.5bn in 2020. The average market cap at IPO increased by 469% to £1.1bn between 2019 and 2020 showing larger exit sizes. This reflects companies staying private for longer due to increased amounts of later stage VC funding and exiting when they are much more developed. Public markets are currently valuing technology companies higher than previously, with the high prices of technology shares reflecting investor preference for these companies.

2021 has started strong for IPO activity with 11 IPOs in equity-backed companies already (as of 20th May 2021), four more than the whole of 2020. Several high-profile UK companies with unicorn status before sale, including Deliveroo<sup>21</sup> and Darktrace<sup>22</sup> have listed in 2021, showing the IPO route is still considered an option for high performing VC-backed companies. Darktrace listed on the London Stock Exchange on 30th April 2021, whilst Deliveroo listed a day later raising £1bn.

The increase in UK IPOs in 2020 is largely following trends in US IPO activity. PitchBook data shows US VC-backed IPO activity remained strong in 2020, with 103 VC-backed IPOs taking place worth \$259.8bn.<sup>23</sup> There were multiple later stage unicorn companies exiting, such as DoorDash, Snowflake, Palantir and Airbnb which all achieved market capitalisation in excess of \$1bn at time of IPO.<sup>24</sup> Three of the top 10 largest US technology IPOs took place in 2020. In part this reflects the strong recovery seen in US stock markets over the year and investor appetite for investing in technology companies.

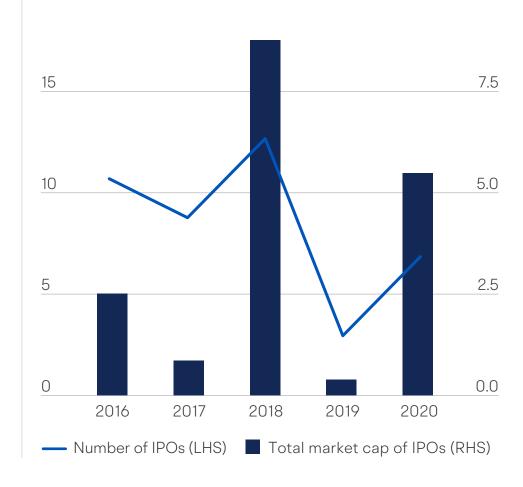
Fig 3.1

Number and value of UK equity-backed company

IPO exits per year

Source: British Business Bank analysis of Beauhurst data

Number of IPOs £ billions 20 10.0





One emerging feature of the US market in 2020 is the proliferation of Special Purpose Acquisition Companies (SPACs), listings of such vehicles increased fourfold in 2020 to 250.25 SPACs are sometimes called 'blankcheck companies' and involve a shell company going public first with the intent to bring a private company public through a reverse merger. 200 of these newly listed SPACs are yet to have acquired any private companies. These US listed SPACs provide further opportunities for investors to exit VC-backed companies, especially SPACs focusing on acquiring companies with complementary companies. One of the principal advantages of SPACs is the shorter timeline to go public than a traditional IPO, thus allowing private companies to take advantage of the current high stock market valuations, and also the lower costs.<sup>26</sup>

It will be interesting to see the extent to which SPACs continue to list in the US, and whether they become a possible exit route for UK VC-backed companies. Two current UK unicorn businesses, Cazoo<sup>27</sup> and Babylon Health are either publicly considering mergers or have already agreed a merger with a US SPAC, which suggests it could be a viable option.<sup>28</sup> This follows the former unicorn status UK electric vehicle company Arrival, which listed in the US using a SPAC in 2020.<sup>29</sup>

#### UK public markets are relatively attractive, but a recent review has identified areas of improvement to make them work more effectively for high growth technology companies

The London Stock Exchange is globally recognised as an attractive and prestigious market to list, with London ranked second only behind New York, in terms of their competitiveness based on a range of measures including business environment, human capital and financial sector development and reputation.<sup>30</sup> Since 2015, over a quarter of all European IPOs by value were listed in London, over ten percentage points ahead of Germany, France and the Netherlands.<sup>31</sup>

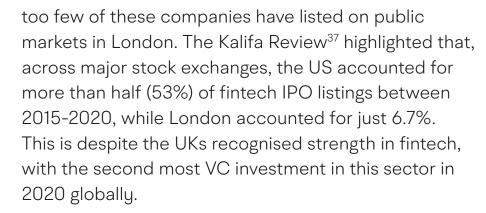
London is an attractive IPO destination due to the beneficial network effects created by its cluster of financial services. The City of London accommodates 133,100 financial, professional and associated business services professionals per square kilometre.<sup>32</sup> This is one of the densest clusters of such activity in the world.

London also offers competitive IPO pricing. Underwriting fees generally constitute at least half of all direct IPO costs. For an issuance of £20m, the typical underwriting fee in the UK would be £700,000 (3.5%), compared with the average price in the US of more than £1.3m (6.5%). $^{33}$ 

Whilst London has retained its position as the leading market for raising capital, there is widespread support by the London Stock Exchange and business groups for changing the UK company listings rules in the UK in order to better attract fast growth and technology companies.<sup>34</sup> Without changes, there are fears companies will choose other markets to list on leading to lost opportunities for the UK economy.

The number of listed companies in the UK has fallen by about 40% from a recent peak in 2008.<sup>35</sup> The decline in the number of listed companies is also seen internationally in France, Germany, Japan, and the US, reflecting companies' appetite for remaining private and the rise of less capital-intensive business models.<sup>36</sup>

The composition of the FTSE index shows largest companies listed in London are either in the financial sector or more representative of the 'old economy' rather than technology companies. Although the UK has great strengths in technology and life sciences,



The UK Listing Review, led by Lord Hill, was launched in November 2020 and was established to examine how companies raise equity capital on UK public markets and how the processes could be improved to strengthen the UK's position as a world-leading financial centre. These proposals attempted to strike a balance between attracting high-growth, innovative companies to list in the UK and ensuring sufficiently robust rules to maintain investor trust in the quality of listing companies.

The report<sup>38</sup> made several recommendations, which are likely to impact on the decision and ease of VC-backed companies to list including, but not limited to the following:

Allow dual class share structures in the London Stock Exchange's (LSE) premium listing segment, giving directors (in particular, founders) enhanced voting rights on certain decisions, with safeguards to maintain high corporate governance standards.

Premium listed companies are currently prevented by the FCA's Premium Listing Principles (part of the Listing Rules) from extending different voting rights to holders of different classes of shares. The rules state "all equity shares in a class that has been admitted to premium listing must carry an equal number of votes in any shareholder vote". Deliveroo recently listed on the standard segment of the LSE with a dual class structure and is hence excluded from the premium segment.

Whilst going public is a sign of success, for some companies it is also a time of vulnerability due to the increased demands from shareholders and greater short-term focus. It can leave companies open to takeover if shareholders are looking to sell their shares in the short term at a premium, this can come at the expense of the company creating value over the longer term. The review proposed a transition period up to 5 years and limits who can hold dual class shares namely, the directors of companies. Dual class shares

provide an attractive option for founder led companies, providing them room to evolve and grow. However, it should be noted, however, that some that some institutional investors regard dual class shares as weakening shareholder rights.<sup>39</sup>

Hong Kong SAR, Singapore, and Shanghai markets have all introduced dual listing in the past couple of years, making them more attractive locations for companies to list.<sup>40</sup>

Reducing free float requirements. The minimum amount of a public company's shares that must be in public hands, from 25% to 15% and allowing companies to use other measures to demonstrate liquidity. The current FCA stated intention of the rules is to ensure that when a company goes public there is enough liquidity that investors can enter and exit easily. AIM, which is not subject to the FCA Listing Rules, does not have a minimum free float level. The High Growth Segment (which is a segment of standard listing on the LSE) has a 10% free float level under LSE rules. Only two companies have used the High Growth Segment since it was established in 2013.

acked companies

The Hill report suggests the existing 25% free float requirement deters companies when they consider where to list, particularly for high growth and private equity backed companies. Different listing venues around the world approach free float requirements at and following the IPO in various ways.

Liberalising the rules regarding special purpose acquisition companies (SPACs). The responses to the Call for Evidence suggest that while there may be several reasons why UK SPAC financing has not emerged at scale. A key factor is regulatory and relates to FCA rules which require trading in a SPAC to be suspended when it announces an intended acquisition. This is currently being reviewed by the FCA<sup>41</sup> with a public consultation recently closed for comments.

SPACs are special purpose acquisition companies or shell companies formed with a view to making an acquisition. Investors buy shares in SPACs in anticipation of the management team making a successful acquisition, based on an investment profile described in its prospectus. The SPAC eventually makes its acquisition in whole or in part using the subscriptions raised from its shareholders.

The vehicle has rapidly gained popularity in the US and European stock exchanges. SPACs are often considered as an alternative to an IPO as a form of financing and access to the public markets. Speed is often cited as a key attraction for target companies since a company looking to raise money need only negotiate with one counterpart, the SPAC, rather than attend time-consuming roadshows of multiple potential investors.

There is a perceived overall weakness in UK public markets for supporting high-growth technology companies. Compared to the US and NASDAQ, the UK lacks sufficient specialist analysts with the depth of scientific and technical knowledge to cover and provide research on listed R&D-intensive sector companies. This, alongside the UK specific difficulties in undertaking SPAC transactions, is leading to some UK technology companies considering reverse mergers with US-listed SPACs. This is due to greater investor appetite and liquidity for high-growth potential technology companies listed on US public markets.

Facilitating the provision of forward-looking information. At present, a growing and ambitious company coming to market in London has to present three years of backward-looking financial information in its prospectus and yet can only give often half a page of narrative relating to forward-looking information in the current trading and prospects section. Forward-looking information is important information that investors ask for when a company is carrying out private funding rounds, but this information is curtailed in a public round putting high growth technology companies at a disadvantage. This issue will be considered as part of a future HM Treasury consultation paper on the UK's prospectus regime.

Whilst the review suggested maintaining the three-year track record requirement for the premium listing segment, it recommended reviewing the provisions for scientific research-based companies to broaden their application to a wider range of high growth, innovative companies across a variety of sectors. These provisions, inherited from the LSE rulebook, have been subject to minimal change since they were introduced in 1993. They currently cover the needs of research companies, including elements around patents and laboratory



research, but the principle behind their introduction is valid for other types of high growth, innovative companies. Therefore, other sectors that should be able to show maturity and quality via different measures other than a revenue stream.

The Government has now responded to the findings of the Hill review. 42 The Government has made commitments in relation to all of the recommendations in the report, including to report annually to Parliament on the state of the City, and to undertake a fundamental review of the UK's prospectus regime. This complements the FCA's commitments to bring forward rule change consultations by the summer (including on Dual Class Share Structures, free floats, and SPACs).

It is worth noting that the listing rules are not the only barrier on companies' ability to list in the UK. Companies also consider the wider ecosystem. The UK needs to grow the pool of specialist tech-focused lawyers and advisers who can support the high-growth companies we wish to attract.<sup>43</sup>

# The number of trade sales was flat in 2020 due to the global economic uncertainty

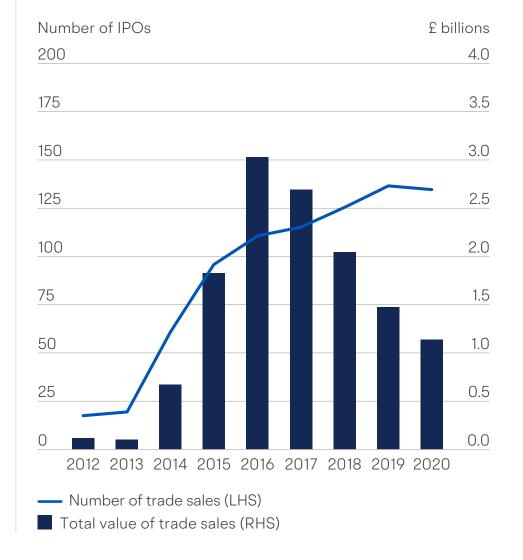
An alternative, but more frequent exit route for equity backed companies is a trade sale to a larger company. Trade sales occur when a company's shares are acquired by another company. Acquirers often seek to make use of an acquired company's intellectual property, claim their market share, or use the acquisition in a new market altogether. Trade sales make up most acquisitions of high-growth companies in the UK.

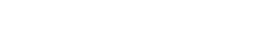
As the UK equity ecosystem has developed, Figure 3.2 shows the number of trade sales in companies that have previously raised an announced round of equity funding has increased since 2012 from 17 per year to 137 in 2019. The number of trade sales was relatively flat in 2020 (135) due to the global economic uncertainty caused by the pandemic. Global economic uncertainty also led to the announced value of trade sales falling 23%<sup>44</sup>, suggesting smaller exit values.

Fig 3.2

Number and value of UK equity-backed company trade sale exits per year

Source: British Business Bank analysis of Beauhurst data





There are some particularly large acquisitions contribute significantly to the yearly value totals. For instance, in 2016, Skyscanner was acquired by Ctrip International for £1.4bn. These acquisitions should not be seen as outliers but instead indicate that successful equity backed companies can exit at large valuations through trade sales, providing strong returns for investors without having to IPO.

# UK equity backed companies can exit overseas through a listing on an overseas public market or can be acquired by a foreign owned business

This section provides new analysis looking at the contribution of overseas public markets and foreign companies. Beauhurst now has information on the nationality of businesses acquiring UK equity backed companies.

UK companies can choose which public markets they would like to list on, making their decision based on factors such as ease of listing, likely valuation achieved and reporting requirements. It is not just due to greater funding opportunities, but choice of market also reflects access to international markets for sales. Therefore, a US listing is particularly attractive due to the greater overall market size, and the greater expertise of investors in technology sectors.

Figure 3.3 shows since 2016 most UK equity backed companies choose to list on a UK market (67%). Of the 33 IPOs from smaller companies that have received an announced round of equity that listed since 2016, 21 (64%) were listed on AIM showing its importance to young growing companies, whilst one (Funding Circle) listed on the main market. Around a third of UK equity backed companies that exited via an IPO have listed on an overseas stock exchange. In particular, US markets like NASDAQ, which specialise in technology companies are a favoured option (especially for life science companies), but European markets have also been used.

- US: 6 IPOs (5 NASDAQ and 1 New York Stock Exchange)
- Europe: 4 IPOs (including 3 on NEX Exchange Acquis and 1 on Euronext)
- Other: 1 IPO (Australian Securities Exchange)

UK companies can also be purchased through a trade sale to a domestic or overseas based company. Figure 3.4 shows between 2016 and 2020 49% of UK equity backed companies that exited via a trade sale were acquired by company located overseas, with the US forming over half of this. For companies in the R&D-intensive sector, the figure is higher with 59% of UK trade sales exits being acquired by a foreign company. R&D-intensive companies were as likely to be acquired by a US company as a UK company between 2016 and 2020. This is likely linked to the increased deal activity of overseas and corporate venture capitalists in R&D-intensive companies.

Fig 3.3 **Proportion of UK SME equity backed company IPOs by public market location** 

Source: British Business Bank analysis of Beauhurst data

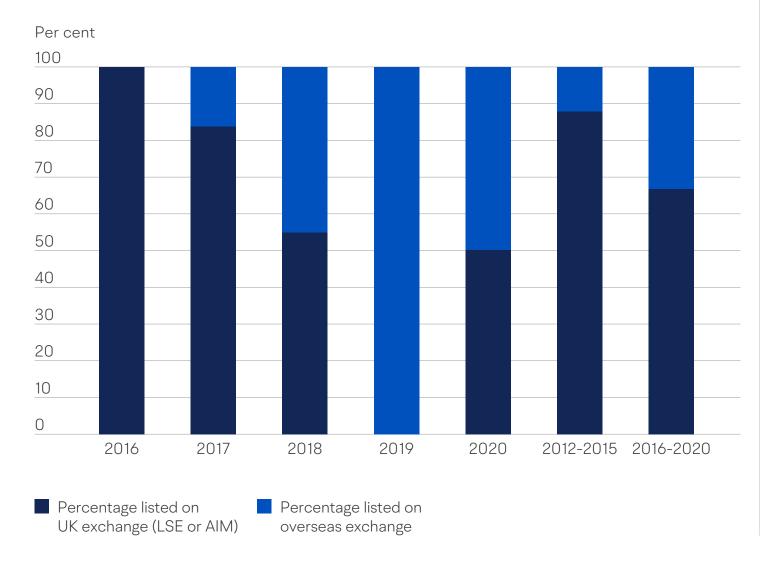


Fig 3.4 Proportion of UK SME equity backed company trade sales by acquiring companies location Source: British Business Bank analysis of Beauhurst data Per cent 100 90 80 70 60 50 40 30 20 10 0 2016 2017 2019 2016-2020 2016-2020 2018 2020 (R&D-(wider market) intensive) Percentage acquired by Percentage acquired by Percentage acquired by other UK company US company overseas company



The UK has history of being an open economy encouraging cross border trade and investment. Outside of National Security considerations, there has been little academic research to date quantifying the costs and benefits to the UK economy of overseas exits of UK equity backed companies. There are concerns that exits to overseas companies and overseas listing lead to full or partial relocation of resources including its technology and key staff, leading to a deterioration of UK's competitiveness. This concern is based on historic experiences of important and prestigious UK industrial assets being purchased by overseas companies. For instance, Arm Holdings which designed the computer chips used in the Apple iPhone was purchased by SoftBank in 2016.<sup>45</sup>

However, any Government initiated restrictions to listing or selling to overseas firms could reduce the attractiveness of investing in UK venture capital and may lead to lower equity funding overall. This is especially the case for overseas investors who, as PitchBook<sup>46</sup> data shows, make a large contribution to the UK equity ecosystem contributing to deals worth £9.4bn in 2020 (78% of the total market).

**Chapter 4** 

# British Business Bank activity

- British Business Bank supported around 21% of all equity deals in 2020
- Funds supported by the British Business Bank were more likely to invest in technology/IP-based businesses than the overall equity market in 2020
- The concentration of deals undertaken in London has reduced sharply over the last couple of years due to the contribution of the Bank's regional programmes
- The Bank recognises the importance of data on the gender diversity of companies funded by its programmes



#### Introduction

This chapter explores the characteristics of equity deals completed by equity funds supported by the British Business Bank, with comparisons made against the wider UK equity market overall and also against VC investors only.

As a government owned financial institution, the British Business Bank has the stated objective of increasing the supply of finance to smaller businesses in areas of the market that are not working as effectively as they could be.

From 2018, the British Business Bank also has an objective to reduce regional imbalances in access to finance. The Bank's equity programmes are designed to address market failures in small business finance markets. The Bank mainly does this by investing in VC funds as a Limited Partner (LP)<sup>47</sup> alongside private sector investors through the ECF and BPC programmes. More recently, the Bank has established the Managed Funds and Regional Angels Programme which also provide equity investment. The Bank has also established three

region-specific programmes<sup>48</sup> which make both debt and equity investments to reduce geographic imbalances in the availability of finance in these areas:

- Northern Powerhouse Investment Fund (NPIF)
- Midlands Engine Investment Fund (MEIF)
- Cornwall and Isles of Scilly Investment Fund (CloSIF)

British Business Bank analysis of PitchBook data shows the Bank (including BPC) to be the largest UK based LP investor in UK VC funds between 2017 to 2021 YTD, based on amount committed and also the number of funds committed to.<sup>49</sup> Since the Bank's creation in 2014, the Bank has committed £1.8bn into 71 equity funds.

This chapter also assess the characteristics of recipient businesses to the Future Fund programme for deals made in 2020. The Future Fund made Convertible Loan Agreements (CLAs) in innovative companies affected by the Covid-19 pandemic. The Future Fund has issued 1.190 CLAs to the value of £1.1bn.

Table 5 provides a detailed overview of the British Business Bank equity programmes included within this analysis. Deals completed by British Business Bank supported funds are matched to deals in the Beauhurst dataset using Company House ID Number (CHID). Deals are then only classed as being backed by a British Business Bank equity programme if the name of the fund manager is listed in the named investors for that specific deal.

This year the matching is undertaken at the programme level as several fund managers are now funded across several British Business Bank programmes. This cautious approach is likely to underestimate the actual coverage of deals involving British Business Bank supported funds as not all deals have complete investor information, however this approach minimises the chance of wrongly including deals that were not funded by a British Business Bank programme. <sup>50</sup> Equity deals involving the Future Fund were identified in a similar way. <sup>51</sup>

Table 5

Description of British Business Bank Equity programme activity

British Business Bank activity	Description	Year programme started	Currently investing in SMEs
Future Fund	The Future Fund was designed to help support equity backed companies affected by Covid-19. The Future Fund provides Convertible Loan Agreements (CLAs) of between £125,000 to £5 million to equity backed businesses alongside at least equal matched funding from private investors. The Future Fund scheme has now closed to new applications.	2020	No
Managed Funds Programme	The Managed Funds Programme is part of the Government's response to the Patient Capital Review and helps address the UK's patient capital funding gap. This £500m programme makes cornerstone investments in a number of large-scale, private sector managed funds of funds that invest in venture and growth capital funds backing innovative, high-growth businesses. The programme aims to draw in institutional capital into the UK's venture and growth capital markets.	2018	Yes
CloSIF (Cornwall and Isles of Scilly Investment Fund)	The £40m programme was established in partnership with the Cornwall & Isles of Scilly LEP to support access to debt and equity finance for businesses in the area.	2018	Yes
MEIF (Midlands Engine Investment Fund)	MEIF provides over £250m of investment to boost small and medium business (SME) growth in the Midlands and is a collaboration between the British Business Bank and LEPs in the West Midlands and East and South East Midlands.	2018	Yes
Regional Angels Programme	The £100m Regional Angels Programme is established to help reduce regional imbalances in access to early stage equity finance for smaller businesses across the UK. It aims to raise the profile and professionalism of angel investment activity and to attract further third-party capital alongside business angels while generating a market rate of return.	2018	Yes
BPC (British Patient Capital)	British Patient Capital manages a £2.5bn investment programme designed to unlock an additional £5bn of institutional capital to support UK businesses with high growth potential to access the long-term financing they need to scale up. BPC invests on a commercial basis to demonstrate that a long-term patient capital investment strategy can produce commercially attractive returns.	2018	Yes



#### Table 5 (continued)

British Business Bank activity	Description	Year programme started	Currently investing in SMEs
NPIF (Northern Powerhouse Investment Fund)	NPIF is a £500m programme in collaboration between the British Business Bank and LEPs in the North West, Yorkshire and Humber and Tees Valley to support smaller businesses across the Northern Powerhouse region.	2017	Yes
ACF (Angel CoFund)	The British Business Bank supported the establishment of the Angel CoFund to increase the supply of business angel finance available to viable small businesses with growth potential, and to improve the quality of angel investment through setting high standards for due diligence and scrutiny of deals.	2011	Yes
UKIIF (UK Innovation Investment Fund)	UKIIF was established as a fund of funds programme to increase the supply of equity finance to technology businesses in strategically important sectors such digital technologies, life sciences, clean technology and advanced manufacturing.	2009	No
ECF (Enterprise Capital Fund)	The ECF programme aims to increase the supply of equity to UK growth companies and to lower the barriers to entry for fund managers looking to operate in the VC market. The Bank invests alongside VC funds on terms that improve the outcome for private investors when those funds are successful. We do this to encourage VC funds to operate in a part of the market where smaller businesses are not able to access the growth capital they need.	2006	Yes



Coverage of Future Fund deals is lower than for other Bank equity programmes. This is because lead investors and companies may not wish to disclose Future Fund co-investment for commercial reasons, but also the use of a CLA instruments are not captured through Company House SOH1 filings until the CLA converts to equity.

Beauhurst also includes deals made by other Government funds including ERDF backed JEREMIE funds, as well as funds delivered by the devolved administrations including the Development Bank of Wales and Scottish Investment Bank and also local Government funds. British Business Bank funds delivered by private sector fund managers involving private sector sources of capital, such as the ECF and BPC programmes, are not included in Beauhurst's definition of Government funds.

This chapter assesses deals made by British Business Bank supported funds overall, but it is important to recognise the wider contribution Government funds make to local equity markets. For instance, 58% of all announced equity deals in Wales and 42% of all announced equity deals in Scotland in 2020 involved a Government fund.

#### Table 6

## Beauhurst coverage of British Business Bank supported fund equity deals by programme

Source: British Business Bank analysis of MI data and Beauhurst data

British Business Bank Programme	Number of matched companies	Company population	Relative coverage
ECF	358	591	61%
BPC	210	374	56%
UKIIF	68	135	50%
ACF/ Aspire	74	107	69%
NPIF	91	107	85%
MEIF	50	62	81%
Regional Angel Programme	31	49	63%
Managed Funds	16	41	39%
CloS	7	8	88%
Overall	905	1474	61%
Future Fund	223	933*	24%

<sup>\*</sup> At time of analysis

Between 2011 and 2020 there were 1,336 visible equity deals undertaken by funds supported by the Bank's equity programmes in the Beauhurst dataset (henceforth British Business Bank supported deals). This relates to £6.1bn of investment in 835 unique companies. Table 7 outlines the number of unique companies invested in by British Business Bank programmes, as well as the Beauhurst coverage of deals for each programme. The investments figures are likely to exclude follow on funding as these deals are less likely to be announced compared to new equity deals.

## British Business Bank supported around 21% of all Equity deals in 2020

Figure 4.1 shows the number of British Business Bank supported deals over time as identified in the Beauhurst dataset. The number of identified British Business Bank supported deals has increased from 35 in 2011 to 264 in 2019. This increases to 436 if the Future Fund deals are included in the total. This 2020 figure should be treated as preliminary, as Beauhurst will continue to identify deals and investors as more deals are announced over time. The ECF programme previously had the highest number of deals per year, but over the last two years, BPC has a higher number of announced deals. However, in 2020, 223 Future Fund deals were identified. Equity deals can involve multiple investors, and so it is possible some equity deals involve both British Business Bank supported funds and the Future Fund.

Fig 4.1

Number of announced equity deals involving
British Business Bank supported funds by year

Source: British Business Bank analysis of MI data and
Beauhurst data

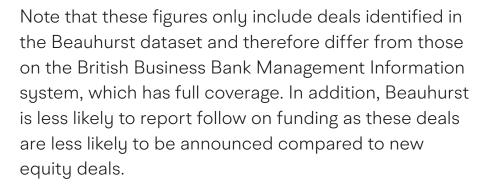
Number of deals
300
250
200

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

— ACF/Aspire

 All Bank supported equity funds (excluding Future Fund)

100



British Business Bank Equity programmes are estimated to have supported 13% of UK equity deals in 2020, with these deals forming 17% of the overall invested equity amount in that period. This is an increase from 10% of deals in 2019 (14% by value). The Bank's higher share of the market is due to increased number of deals made by BPC supported funds, with the number of deals identified by Beauhurst increasing from 81 deals in 2019 to 101 deals in 2019, but also due to the inclusion of Regional Angel Programme (29 deals) and managed funds. BPC's share of identified British Business Bank deals rose from 25% in 2018 to 38% in 2019.

The Future Fund contributed 223 deals, so contributed to 11% of all UK equity deals in 2020. Combining British Business Bank's structural programmes with the Future Fund, the Bank estimates it supported 21% of all equity deals in 2020. The value of these deals was also 21%.

Table 7 shows there are slight differences by stage, with British Business Bank supported funds involved in 13% of seed stage deals (22% by value), 13% of venture stage deals (17% by value) and 12% of growth stage deals (16% by value). It is important to recognise the value figures relate to total deal size, not British Business Bank's contribution to the deal.

The Future Fund has a higher share of venture deals (14%) but formed 8% of all seed deals and 12% of all growth stage deals. The lower proportion of seed deals reflects the minimum deal sizes and previous investment amounts required to access funding under the programme.

For the remainder of the chapter British Business Bank pre-existing structural programmes will be compared alongside the Future Fund. The overall combined figure including both pre-existing and Future Fund will not be reported.

Table 7

#### British Business Bank market share 2020 by stage

Source: British Business Bank analysis of MI data and Beauhurst data

By number of deals	Bank Equity programmes	Future Fund	Total
Seed	13%	8%	19%
Venture	13%	14%	24%
Growth	12%	12%	21%
Total	13%	11%	21%

By investment value	Bank Equity programmes	Future Fund	Total
Seed	22%	6%	26%
Venture	17%	9%	24%
Growth	16%	3%	19%
Total	17%	5%	21%



Figure 4.2 shows that the stage distribution of deals completed by British Business Bank supported funds in 2020 was broadly similar to the wider equity market. Although most British Business Bank programmes mostly operate through VC funds, some of these programmes such as the Regional Angel Programme are classified as non-PE/VC investor types. In light of these developments, it is useful to compare against the overall equity market and also the wider PE/VC market.

The venture stage received the highest proportion of deals completed by British Business Bank supported funds with 43% of deals going to venture stage companies, slightly more than the overall equity market where 42% of deals went to venture stage companies.

British Business Bank supported funds had the same percentage of deals as the overall equity market at the seed stage (42%), which is higher than the comparable PE/VC market (33%). A lower proportion of British Business Bank supported funds are at the growth stage (14% of deals compared to 16% for wider market). This is despite the increased activity from BPC supported funds, which focus on later stage companies.

A lower proportion of Future Fund deals are at the seed stage (29%) compared to the overall equity market (42%) and PE/VC market (33%). This is due to minimum investment levels raised. 54% of Future Fund deals went to venture stage companies, which is higher than the overall market. Whilst the proportion of Future Fund deals going to growth stage companies is higher than the overall market (17% compared to 16%), it is lower than for the PE/VC market.

As demonstrated by Figure 4.3, the stage composition of British Business Bank supported deals is volatile and has changed over time. Between 2011 and 2014 there was a shift away from deals at the seed stage to venture and growth stage deals, with seed stage deals falling from 37% of all British Business Bank deals in 2011 to 19% in 2014. Conversely, the proportion of British Business Bank supported deals at the venture stage increased from 40% in 2011 to 55% in 2014. Between 2014 and 2016 there was a large shift back towards seed stage investment, with the proportion of British Business Bank fund deals in seed stage companies increasing from 19% in 2014 to 51% in 2016. This transition was largely due to the ECF programme investing in Entrepreneur First in 2016, an accelerator fund backing a relatively high number of early stage businesses. Since 2016 there has been a reduction in the percentage of deals at the seed stage, to 31% in 2019 due to a combination of Entrepreneur First reaching the end of its investment period, but also the number of growth and especially venture stage deal numbers increasing.

Fig 4.2 **Proportion of equity deals by stage in 2020** 

Source: British Business Bank analysis of MI data and Beauhurst data

Per cent

60

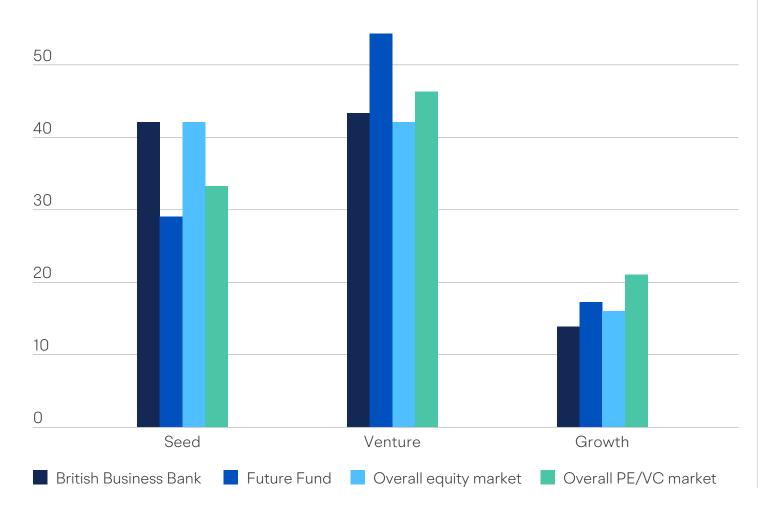
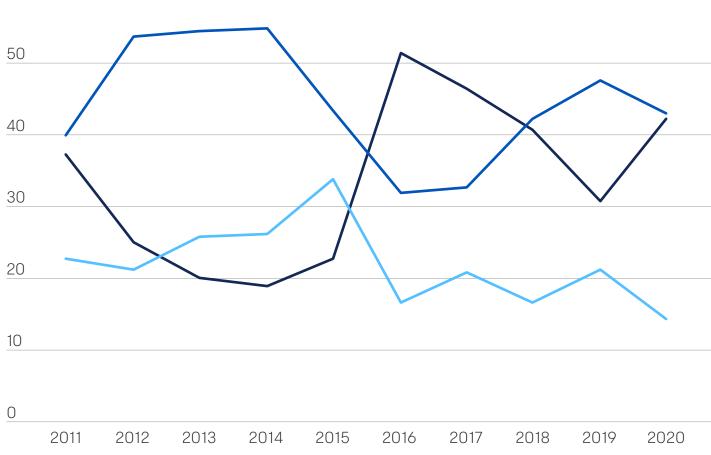


Fig 4.3 **Proportion of equity deals by stage by year** 

Venture — Growth

Source: British Business Bank analysis of MI data and Beauhurst data

Per cent





This shift in investment focus is a result of the Bank focusing on supporting the UK patient capital ecosystem following the 2017 Patient Capital Review and the investments of BPC. Nevertheless, the Bank's Enterprise Capital Fund programme continues to address market failures affecting smaller deal sizes at the earlier funding stages.

The average size of deals completed by British Business Bank supported funds varies widely by stage:

- Seed: The average size of British Business Bank supported fund seed stage deals in 2020 was £1.5m, compared to £0.9m and £1.7m for the overall equity and PE/VC market, respectively.
- Venture: The average size of British Business Bank supported fund venture stage deals in 2020 was £4.6m, compared to £3.6m and £5.0m for overall equity and PE/VC market respectively. The size of venture stage deals completed is therefore largely in line with the wider PE/VC market, which is as to be expected since most of the Bank's supported deals at this stage are completed by VC funds.

- Growth: The average size of British Business Bank supported fund growth stage deals in 2020 was £22.0m, compared to £18.4m and £23.2m for overall equity and PE/VC markets, respectively. The average size of growth stage deals completed by funds supported by the Bank's programmes is therefore larger than the wider equity market. The average size of the Bank's growth deals has increased over time from £4.2m in 2011 to £22.8m in 2018. Although it declined to £16.2m in 2019, the average deal size increased to £22m in 2020. The success of the BPC programme in supporting UK scale-ups since 2018 is a major driver of this increase in deal sizes, so that companies are now better capitalised.

The average total deal size of deals involving the Future Fund is £2.3m which closely aligns to figures reported in British Business Bank's Management Information systems. The Future Fund co-invests alongside other investors. Future Fund overall deal sizes are slightly smaller than the wider equity market.

- Seed: £740k

- Venture: £2.4m

- Growth: £4.7m

Table 8

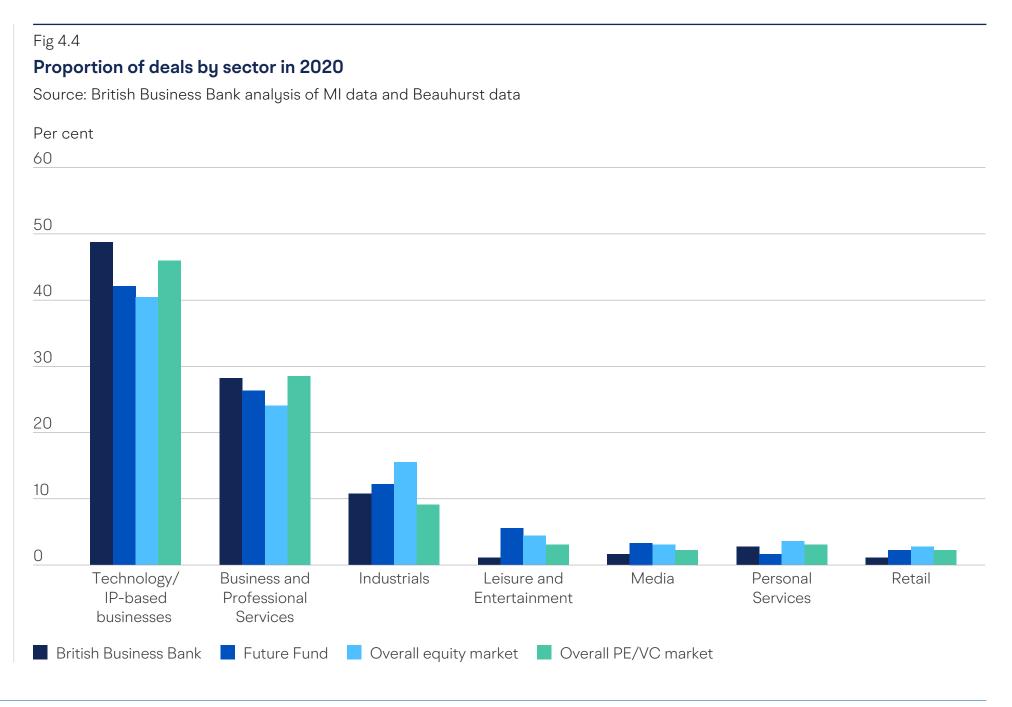
#### Average deal size by stage in 2020

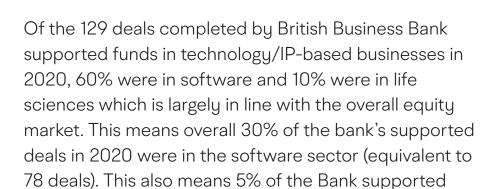
Source: British Business Bank analysis of MI data and Beauhurst data

Deal stage	British Business Bank	Overall market	PE/VC market	Future Fund
Seed	£1.5m	£0.9m	£1.7m	£0.7m
Venture	£4.6m	£3.6m	£5.0m	£2.4m
Growth	£22.0m	£18.4m	£23.2m	£4.7m



Figure 4.4 shows that funds supported by the British Business Bank were more likely to invest in technology/IP-based businesses than the overall equity market in 2020, with 49% of British Business Bank supported deals in this sector compared to 40% of the wider market. The second highest sector in terms of proportion of deals was the business and professional services (forming 28% of all British Business Bank supported deals), followed by industrials (11%). These rankings follow the wider market, although industrials make up a higher proportion of overall equity market deals (16%). The proportion of British Business Bank deals and investment in technology/IP-based businesses is higher than for PE/VC investors where 46% of deals went to the sector in 2020.





companies was in the life sciences sector (equivalent to

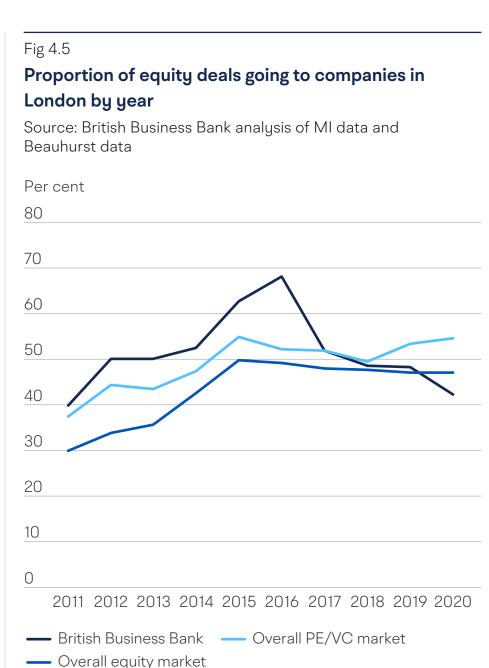
The sectoral distribution of the Future Fund is also similar to the wider market with 42% of deals going to the technology sector, which is similar to wider market 40%. 26% of Future Fund deals went to the business and professional services compared to 24% for wider sector and 12% to industrials (16% wider market). Assessing the technology deals in more detail, also shows 60% was in software (equivalent to 25% of the entre deals), but 9% was in clean technology (equivalent to 4% of the deals, which is double the wider market share).

#### The concentration of deals undertaken in London has reduced sharply over the last couple of years due to the contribution of the Bank's regional programmes

Figure 4.5 shows that the concentration of deals undertaken in London by British Business Bank supported funds has reduced sharply over the last couple of years, from 68% in 2016 to 42% in 2020. The proportion of deals completed by British Business Bank supported funds in companies based in London is now 5 percentage points lower than the wider equity market but is 12 percentage points lower than the distribution of PE/VC funds.

There are several factors driving this including the Bank's geographically focused programmes making an impact.<sup>53</sup>

NPIF began investing in 2017, with MEIF following in 2018. Beauhurst picked up 82 deals completed by these two regionally focussed funds in 2020, with MEIF and NPIF contributing to 25% and 20% of equity deals in the Midlands and North respectively in 2020.



13 deals).



The share of NPIF supported deals in the North has increased from 14% and 15% in 2018 and 2019, to 20% in 2020. This is due to a 49% increase in NPIF activity in 2020 identified in the Beauhurst dataset, with deal numbers increasing from 35 in 2019 to 52 in 2020. The overall number of deals in the North increased by 10% between 2019 and 2020, leading to an increased market share.

Entrepreneur First, an investor within the ECF programme, has come to the end of its initial investment period. Entrepreneur First was a key driver of the concentration of British Business Bank supported deals in London previously due to its high number of deals and geographical focus.

Figure 4.6 shows the regional split for 2020. 51% of Future Fund deals were in London, which is higher than the wider market, but lower than PE/VC funds.

The Future Fund was a rules-based programme and so largely followed existing market trends.

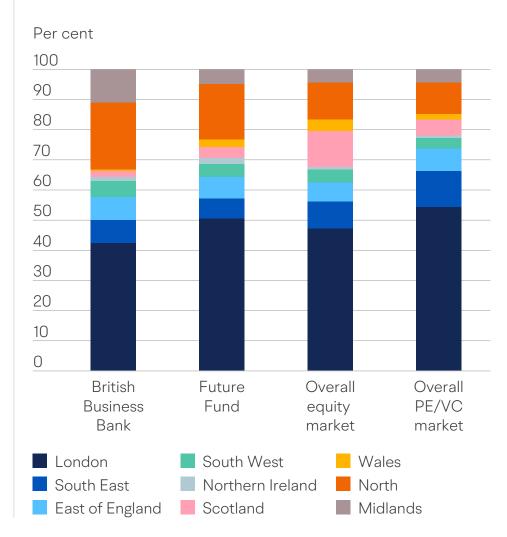
# The Bank recognises the importance of data on the gender diversity of companies funded by its programmes

For the first time, the Equity Tracker report includes findings from the gender diversity of founders and management of companies supported by the British Business Bank. Beauhurst offer nearly complete coverage of founder and key person gender, giving confidence in the robustness of these findings. For instance, Beauhurst records the gender composition of founders for 95% of deals in 2020 and 99% of deals in 2020 for the gender composition of key people.<sup>54</sup> The percentages mentioned in the following analysis relates to companies with information on founder gender and key person gender only. Companies with insufficient information are excluded from the denominator to allow robust comparisons. These numbers will differ to the numbers reported by the Future Fund itself which is based on information the company provided itself.

Fig 4.6

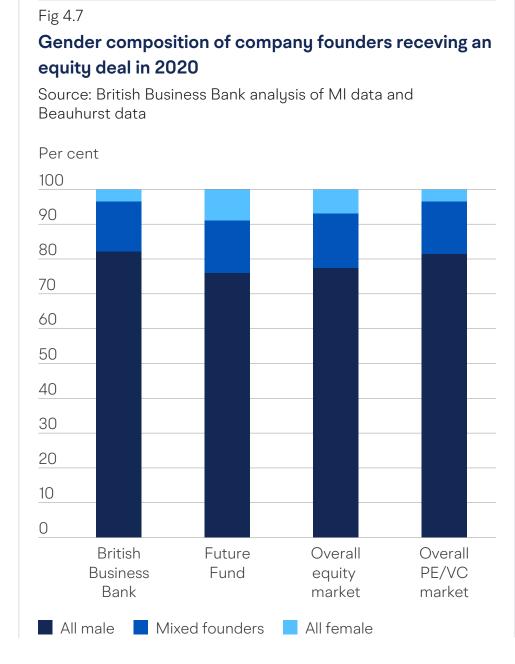
### Proportion of equity deals by region and devolved administration in 2020

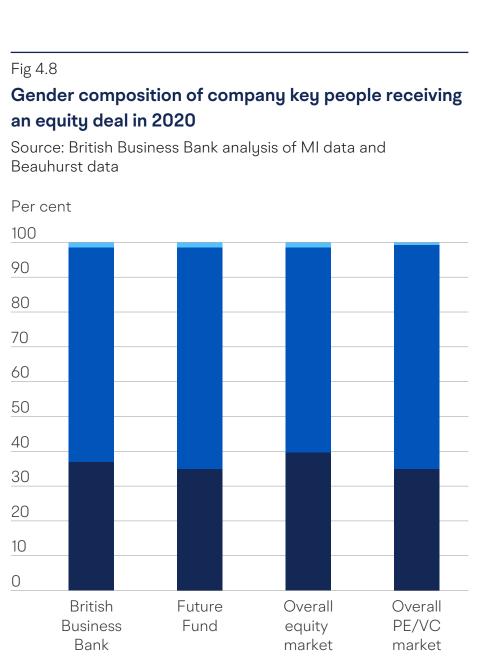
Source: British Business Bank analysis of MI data and Beauhurst data



The IWC<sup>55</sup> report identified the proportion of equity deals made by venture capitalists going to female founders is small. 4% of all PE/VC deals went to companies with all female founder teams and 15% for mixed gender founder teams in 2020. This suggests 19% of VC deals went to a company with at least female founder. These numbers are consistent to the numbers published here.

Figure 4.7 shows 18% of existing British Business Bank programme supported deals in 2020 went to a company with at least one female founder (All female and mixed founder teams combined). This is lower than the overall equity market (23%) but is similar to the proportion in VC/ PE funds. 24% of identified Future Fund deals went to a company with at least one female founder, which is higher than the wider equity market and PE/VC market in 2020. Only 4% of British Business Bank deals in 2020 went to a company with an all-female founder team which is lower than the overall market (7%), but in line with the market for VC/PE funds. The proportion of Future Fund deals going to companies with an all-female founder team is higher at 9% compared to the wider equity market.





Mixed team All female



Whilst it is useful to assess the proportion of funding going to female founders, as companies grow and develop, they are likely to take on additional people. Therefore, it is useful to assess the current composition of the key people. By its nature, this will lead to the proportion of all female companies declining assuming companies are just as likely to employ male or female employees within its key functions. Figure 4.8 shows 63% of British Business Bank supported deals and 65% of Future Fund deals in 2020 want to an all-female or mixed team, compared to 61% of the overall equity market (65% for PE/VC funds). This is broadly similar to the wider market but shows more must be done.

The Investing in Women Code<sup>56</sup> helps drive the change necessary to improve venture capital markets for female founders, so they can raise the capital they need for their businesses to reach their full potential. The British Business Bank is a founding signatory of the Code and manages it, on behalf of HM Government, for venture capital funds. The findings presented here provides valuable new data, which is an important step towards greater transparency across the industry. Such transparency can, in turn, help to identify whether measures are working and where further measures are needed.

**Appendix** 

# Overview of Beauhurst announced deal data

In this report 'equity investment' includes any form of external equity finance, excluding transactions on public equity markets, buyouts and family and friends rounds which do not involve outside investors. The definition therefore captures the activity of business angels, equity crowdfunding platforms, venture capital funds, corporate venture and private equity funds.

The investment reported in the Equity Tracker are all publicly announced equity deals, which includes deals that are announced via government regulatory organisations, confirmed with the investee or investor or via a press release or news source. Beauhurst also identifies unannounced deals using share allotment filings. When a company allocates its shares, an SH01 form is submitted to Companies House, but details of who the new shareholders are is not included in the SH01 form.

Whilst it is desirable to include as many deals as possible in the analysis, less information is available on these unannounced deals. In many cases it is difficult to identify the type of investor and in some cases, these deals will include investment from friends and family or the issuance of shares to employees of the business. Employees in early stage start-ups frequently receive compensation in the form of equity in the place of salary. This report therefore focuses on announced equity deals only as these are verified deals.

Only a small proportion of equity deals are announced, showing UK equity finance is much larger than practice than the announced deal and investment figures contained in this report. For instance, in 2020 there were 2,044 announced equity deals and 3,506 unannounced equity deals giving a total estimated market size of 5,550 equity deals. By number, announced deals made up a minority of all equity deals in 2020 (37%).

There is some variation in the proportion of deals that are announced by region. Figure A.1 shows that over half of the deals in the devolved nations were announced in 2020 (55% of deals in Northern Ireland, 58% of deals in Scotland and 59% in Wales) whilst the proportion in other parts of the country were lower such as in the South East, South West and London where the proportions were 28%, 30% and 34% respectively. This may be a result of differences in the types of investor active in each region and their relative likelihoods to publicly disclose deals.

However, by investment value the picture is reversed with announced equity deals contributing 77% of the total value invested (£11.4bn). This further provides support for focusing on announced deals only, as many of the unannounced deals are very small.

There are likely to be differences in the willingness of investors to make their deals publicly known. For instance, angel and private investors are less likely to formally announce their investments than Private Equity/Venture Capital investors. The larger the equity deal, the more likely it is to be announced. Equity crowdfunding is a slightly different case, by its nature of opening the opportunity to invest to the public, nearly all the deals made will be publicly announced.

This year's report builds on the previous 2020 Equity Tracker Report, as there have been continued refinements to the underlying dataset to ensure that this year's report is the most accurate assessment of the UK SME equity market. The figures in this latest report supersede those previously quoted due to the inclusion of new equity deals since the previous reports were undertaken. Comparisons between figures in the year's Equity Tracker and last year's report are not recommended due to revisions in the number of historical deals. For more information on the methodology Beauhurst used to collect this equity data, please see previous Equity Tracker reports or Beauhurst's own website.



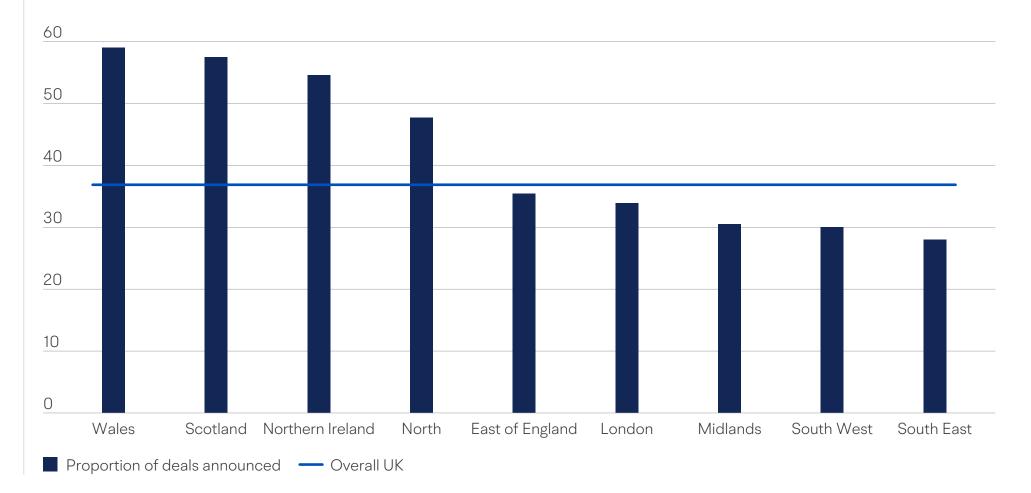
It is important to acknowledge that other data sources exist which also cover equity deals, including the British Venture Capital Association (BVCA) and Invest Europe. These predominantly measure the investment activities of their members, which are mainly comprised of Private Equity and Venture Capital funds. There are also other commercial data providers which gather data through a combination of technology (e.g. web-scrapers), analyst research and self-disclosure by fund managers. These data sources will therefore have coverage of different types of investors and are not always consistent with one another. No single data source captures all equity deals in the market.

Whilst the Beauhurst dataset has good coverage of equity deals involving institutional investors, business angels are less likely to seek publicity on completed investments and are therefore less likely to be captured in the investment numbers. The UK Business Angel Association (UKBAA), which covers 18,000 investors investing through 60 groups, confirms that no robust statistics exist on the annual number of equity deals undertaken by angel investors in the UK.



Source: British Business Bank analysis of Beauhurst data

Per cent





# **Endnotes**

- Financial Times (2020) https://www.ft.com/content/43ee2bb8-0ec4-4137-9185-f4571a3642d1
- 2. https://www.beauhurst.com/research/the-deal/
- 3. TechCrunch (2021) https://techcrunch.com/2021/03/28/uks-cazoo-will-list-on-the-nyse-by-way-of-a-spac-valuing-it-at-7b-and-raising-1-6b/
- 4. Harvard Business Review (2018) https://hbr.org/2018/07/the-other-diversity-dividend
- BVCA (2021) Diversity & Inclusion Survey March 2021 https://www.bvca. co.uk/Research/BVCA-Research-Reports
- Extend Ventures (2020) Diversity Beyond Gender https://www.extend.vc/ reports
- Reuters (2020) https://www.reuters.com/article/us-usa-stocksidUSKBN28D1LG
- 8. LinkedIn (2015) https://www.linkedin.com/pulse/so-what-exactly-deep-technology-swati-chaturvedi
- 9. The University of Manchester https://www.graphene.manchester.ac.uk/learn/discovery-of-graphene/
- 10. Study UK https://study-uk.britishcouncil.org/why-study/access-world-leading-research
- 11. Dealroom (2021) 2021: The year of Deep Tech https://dealroom.co/blog/2021-the-year-of-deep-tech
- 12. Tech Nation (2021) https://technation.io/news/what-does-it-take-to-scale-a-deeptech-company/
- 13. Hello Tomorrow and BCG (2021) Deep Tech: The Great Wave of Innovation https://hello-tomorrow.org/deep-tech-observatory/
- 14. Oxford Nanopore Technology (2021) https://nanoporetech.com/covid-19
- 15. Lerner and Nanda (2020) Venture Capital's Role in Financing Innovation: What we Know and How much We Still Need to Learn
- 16. Rest of Europe covers the whole of Europe excluding the UK.

- 17. PitchBook use a different taxonomy for classifying deal stages seed, early stage VC and later stage VC. This classification is roughly analogous to the seed, venture and growth definition used throughout the rest of this report, but direct comparisons should not be made.
- 18. Tech Nation (2018) International Competitiveness https://technation.io/insights/report-2018/international-competitiveness/
- 19. https://www.gov.uk/government/publications/advanced-research-and-invention-agency-aria-statement-of-policy-intent/advanced-research-and-invention-agency-aria-policy-statement
- 20. Atomico (2020) The State of European Tech https://2020. stateofeuropeantech.com/
- 21. https://www.cityam.com/deliveroos-fresh-funding-round-brings-valuation-to-over-7bn-ahead-of-ipo/
- 22. https://news.sky.com/story/darktrace-targets-3-8bn-valuation-as-it-picks-banks-for-london-float-12125415
- 23. PitchBook (2020) https://pitchbook.com/news/articles/2020-vc-in-charts
- 24. Crunchbase (2020) https://news.crunchbase.com/news/tech-cos-gone-public-in-2020/
- 25. Crunchbase (2020) As SPACs Hunt Targets, They Could Disrupt VC World Crunchbase News
- 26. PitchBook (2021) 'SPAC glut powers exit spree for PE- and VC-backed companies' https://pitchbook.com/news/articles/spac-glut-powers-exit-spree-for-pe-and-vc-backed-companies
- 27. Bloomberg (2021) https://www.bloomberg.com/news/articles/2021-03-29/online-car-dealer-cazoo-agrees-to-sell-to-spac-for-7-billion
- 28. Financial Times (2021) US Spac boom lures UK tech companies in blow to London | Financial Times (ft.com)
- 29. Guardian (2020) https://www.theguardian.com/business/2020/nov/18/uk-electric-vehicle-maker-arrival-to-list-on-nasdaq-amid-surging-demand
- 30. Longfinance.net (2021) https://www.longfinance.net/programmes/financial-centre-futures/global-financial-centres-index/

- 31. Financial Times (2021) https://www.ft.com/content/425f163d-56ab-4ad3-b53f-d48f89395d30
- 32. City of London Corporation (2021) London's Equity Capital Markets Ecosystem https://www.theglobalcity.uk/resources/capital-markets
- 33. City of London Corporation (2021) London's Equity Capital Markets Ecosystem https://www.theglobalcity.uk/resources/capital-markets
- 34. Financial Times (2021) https://www.ft.com/content/358c2138-3b48-4488-8a39-f5a8158268f9
- 35. UK Listings Review (2021) https://www.gov.uk/government/publications/uk-listings-review
- 36. https://www.british-business-bank.co.uk/wp-content/uploads/2019/09/ Oliver-Wyman-British-Business-Bank-The-Future-of-Defined-Contribution-Pensions.pdf
- 37. Kalifa Review (2021) Kalifa Review of UK Fintech https://assets.publishing. service.gov.uk/government/uploads/system/uploads/attachment\_data/file/978396/KalifaReviewofUKFintech01.pdf
- 38. UK Listings Review (2021) https://www.gov.uk/government/publications/uk-listings-review
- 39. Financial Times (2021) Investors hit back at dual-class reforms after Deliveroo IPO flop | Financial Times
- 40. Kalifa Review (2021) Kalifa Review of UK Fintech https://assets.publishing. service.gov.uk/government/uploads/system/uploads/attachment\_data/file/978396/KalifaReviewofUKFintech01.pdf
- 41. Financial Conduct Authority (2021) Investor Protection measures for special purpose acquisition companies: Proposed changes to the Listing Rules https://www.fca.org.uk/publication/consultation/cp21-10.pdf
- 42. https://www.gov.uk/government/publications/uk-listings-review/uk-listings-review-government-response
- 43. Financial Times (2021) https://www.ft.com/content/cf2a6090-c843-4310-af81-f45874f53014
- 44. A high proportion of these values are missing.

- 45. Guardian (2016) https://www.theguardian.com/commentisfree/2016/jul/18/sell-off-british-businesses-must-stop
- 46. Based on British Business Bank user defined search, results may differ to PitchBook's own published figures
- 47. Limited Partners are predominantly institutional investors that invest in private equity and venture capital funds. British Business Bank funds delivered by private sector fund managers including private sector sources of capital are not included in Beauhurst's definition of Government funds.
- 48. These regional programmes also provide debt finance, but this is excluded from the analysis.
- 49. British Business Bank user defined search of PitchBook platform. Results may differ to PitchBook's own published figures.
- 50. This has led to some differences in reported deals by programme in the historical data compared to previous Equity Tracker reports, although overall British Business Bank deals remains the same.
- 51. This is based on the British Business Bank matching the Company House IDs of companies using the Future Fund into Beauhurst. Some equity deals are not publicly disclosed and so this does not cover the full Future Fund population of supported companies or all equity deals in the market. Companies was matched into Beauhurst if they were recorded as drawing down a Future Fund CLA or if Beauhurst states the Future Fund was listed as an investor and the company is recorded as being approved by the Future Fund. Future Fund deals recorded in the Beauhurst dataset that are not within the British Business Bank's data portal (i.e. no CHID listed) are excluded. This mainly applies to crowdfunding campaigns which report they are Future Fund eligible but not confirmed as receiving Future Fund funding.

Deals occurring in Jan to May prior to the Future Fund announcement and application period are included when there is a record of drawdown on the portal (subject to there being no duplicate deal announced in later time periods). If duplicate deals exist for the same company, deals with the Future Fund as a named investor takes priority, or otherwise the latest deal.

- 52. The British Business Bank has refined its matching process this year, with all matches undertaken at the programme level. This may mean figures will differ to those presented in last year's report.
- 53. These market share figures are calculated on the region only, relating to the region Beauhurst allocated the company to. There are incidences of NPIF and MEIF companies being in regions outside of their respective areas.
- 54. Beauhurst define a key person as someone with a c-suite or department head level role.
- 55. Gov.uk (2021) https://www.gov.uk/government/publications/the-annual-investing-in-women-code-report
- 56. Gov.uk (2021) https://www.gov.uk/government/publications/the-annual-investing-in-women-code-report

#### **Acknowledgments**

This report and the analysis contained in it was produced by George Anderson and Dan van der Schans in the British Business Bank Economics Team.

We would like to thank Beauhurst and PitchBook for their support and use of their data in this report.



#### **British Business Bank plc**

Steel City House West Street Sheffield S1 2GQ

t. 0114 206 2131

e. info@british-business-bank.co.uk

#### british-business-bank.co.uk

Publication date: June 2021

British Business Bank plc is a public limited company registered in England and Wales (registration number 08616013, registered office at Steel City House West Street Sheffield S1 2GQ). As the holding Company of the Group operating under the trading name of British Business Bank, it is a development bank wholly owned by HM Government which is not authorised or regulated by the Prudential Regulation Authority (PRA) or the Financial Conduct Authority (FCA). It operates under its own trading name through a number of subsidiaries, one of which is authorised and regulated by the FCA. British Business Bank plc and its subsidiary entities are not banking institutions and do not operate as such. Accordingly, none of the British Business Bank group of companies takes deposits or offers banking services. A complete legal structure chart for British Business Bank plc and its subsidiaries can be found at www.british-business-bank.co.uk