

UK Venture Capital Financial Returns 2023

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Foreword

Our UK Venture Capital Financial Returns report, now in its fifth year, provides a comprehensive assessment of the performance of UK VC funds, drawing upon data directly sourced from fund managers, from the Bank's equity programmes, as well as from commercial data providers. The analysis for this year's report has widespread coverage of the market, allowing us to provide a robust and independent assessment of the performance of the asset class.

VC has a key role in supporting the UK economy by fuelling the growth of innovative smaller businesses and, since its inception, the Bank has been a key provider and enabler of VC finance as an important means of supporting these companies. By providing a transparent evidence base on how UK VC funds are performing, the Bank is seeking to help establish a clearer track record for the asset class and unlock greater levels of institutional investment for high-growth firms in the UK.

Due to a previous lack of information about the industry's financial returns, institutional investors have generally underinvested in UK VC when compared to other leading markets and asset classes. However, these report findings highlight that UK VC returns have closely matched those in the US and the rest of Europe for vintages since 2002, and have performed well against alternative investment types such as real estate and private debt.

In this context it is also encouraging that, as part of the Mansion House reforms, eight institutional investors have recently confirmed they are supportive of the government's ambitions to encourage additional capital into UK venture and growth assets through a new Growth Fund, and that a government established initiative run by the Bank could be a valuable addition to the market.

Looking at more recent trends, the middle of last year marked a turning point in VC finance markets after record levels of investment in 2021. Rising inflation and interest rates, alongside concerns about over-valuations and a lack of exit opportunities, has since led to a significant decline in dealmaking activity.

Against this backdrop it is unsurprising to see a decline in TVPI measures over the past year for UK VC funds, as some UK fund managers write down their portfolio valuations. While valuations are likely to fall further before they return to sustainable levels, on the other hand there may be attractive entry points for investors during the next phase of the market cycle.

The Bank is the largest UK-based investor in UK VC and has committed £2.8bn into 120 funds through its Enterprise Capital Funds programme and British Patient Capital¹, along with investment from other programmes such as the Managed Funds Programme. We will continue to show our commitment to UK VC during these challenging market conditions, as part of our strategic objective – Backing Innovation – to ensure innovative businesses can access the right capital to start and scale.

As the government's centre of expertise on smaller business finance, this research helps us to provide policy makers and the industry with a trusted source of information on how the market is performing. Working with the wider VC community to improve the coverage and accuracy of market data will continue to be an important part of helping finance markets operate more effectively for smaller businesses. I hope you find this year's UK Venture Capital Financial Returns report informative.

Louis Taylor
CEO, British Business Bank

Executive summary

Key findings



UK VC returns closely match the US and Europe across 2002-2018 in terms of TVPI, but lag behind on DPI measures

Traditionally there has been a general belief that US VC returns exceed UK returns by a significant margin. As in previous editions of this report our latest analysis finds that this is not necessarily the case, based on a comprehensive fund performance dataset covering 212 UK funds with vintages since 2002.

Across the 2002-2018 vintage period, UK VC funds generated a pooled TVPI multiple of 2.06, compared to 2.14 for US funds and 2.04 for funds in the rest of Europe. This indicates that, when including unrealised portfolio value, the UK is performing in line with these other leading markets.

When looking purely at realised returns using DPI measures, the UK's pooled multiple of 0.74 is lower than the US (1.15) and the rest of Europe (0.94). However, this is at least partly influenced by UK funds having a younger vintage on average.

UK funds performed particularly well in the vintage period after the dot-com bubble from 2002-2007. For example, the UK's pooled DPI multiple of 1.58 is higher than the US (1.43) and the rest of Europe (1.28).

Looking at more recent periods, although UK performance is lower than the US for 2008-2013 vintages, UK TVPI multiples are in line with the US and rest of Europe for fund vintages between 2014 and 2021.

2

The returns from the best performing UK funds are not as high as in the US

Previous reports have identified that the top US funds produce significantly higher returns than the best performing funds in the UK. This is partly because, as a more developed market, the US benefits from a positive cycle of large funds and high returns. Larger VC funds lead to better funded companies able to scale up, more exit opportunities producing higher returns, and therefore more capital allocated to VC funds by institutional investors.

This year's report confirms that the performance gap between the UK and the US at the top of the distribution still exists. Across the 2002-2021 vintage period, the top 1% of US funds generated TVPI multiples upwards of 9.4, compared to multiples upwards of 7.6 for UK funds. When using DPI measures for 2002-2014 vintages, the top 1% of

US funds generated multiples upwards of 10.1, compared to multiples upwards of 6.1 for UK VC funds.

While the gap between these two markets is relatively large at the top of the distribution, the median TVPI and DPI multiples for UK VC funds are only 0.15 and 0.21 points lower than US funds, respectively. However, ultimately the performance of outlier funds make a disproportionate contribution to overall market returns in the VC asset class.

3

UK VC returns have declined slightly since last year on TVPI measures, as some fund managers write down valuations

The report also analysed a sample of 130 funds that reported the latest performance data in both 2022 and 2023, to remove variation from different funds entering and exiting the dataset. The reported pooled

TVPI value for this sample fell by 0.2 (or 9%) from 2.18 to 1.98. This indicates that some UK fund managers are writing down portfolio valuations, for instance as companies reach the end of their runway and need to raise down rounds to finance their growth.

This decline in TVPI is based on only 23% of funds writing down their portfolio valuations, with the rest reporting no change or an increase. It is therefore likely that these multiples will continue to decline as fund managers re-assess, and report on, the unrealised value of their portfolios. Market research also suggests that average company valuations have continued to decline since 2023Q1.

Analysing DPI measures across this sample revealed no change between 2022 and 2023, with the pooled multiple remaining at 0.41. This highlights the current difficulties fund managers are experiencing in achieving successful company exits, which we explore further through survey evidence in chapter four of the report. These challenges have made it harder for fund managers to return capital to their investors.

4

ECF and BPC-supported funds generally outperform or perform in line with funds across the wider UK market

The report also presents returns data for funds the Bank has invested in through its Enterprise Capital Funds (ECF) programme and its commercial subsidiary, British Patient Capital (BPC). As the largest UK-based LP investor in the UK VC market, the Bank is committed to providing transparency on the performance of funds within its portfolio.

ECF-backed funds with a 2006-2021 vintage reported an overall pooled DPI of 0.64. As the programme involves a 'geared' returns structure, where the Bank receives a prioritised capped return, the DPI for other

LPs in these funds was higher at 0.76. For comparison, both of these figures exceed the wider VC market's pooled DPI of 0.46, showing that ECF-supported funds are generally outperforming the market in terms of their realised returns.

While ECF-backed funds have generated a pooled TVPI (1.88) similar to the wider UK VC market (1.86), the returns for other private sector LPs have been significantly higher at 2.67. The outperformance of ECF-supported funds can in part be attributed to the higher growth potential of early stage companies, and investments in businesses that have since achieved unicorn status.

BPC was established in 2018 but was seeded with funds from the Bank's VC Catalyst programme, which operated between 2013 and 2018. Across this period BPC-backed funds with a 2013-2021 vintage reported a pooled DPI multiple of 0.19, in line with those across the wider market (0.22). When including unrealised value, the pooled TVPI for this cohort is lower for BPC-supported funds (1.56) than the overall market (1.85).

A reason for this difference is that BPC-backed funds are half a year younger on average than wider market funds in our dataset, meaning they have had less time to develop companies and generate a return on their investments. The impact of portfolio age is highlighted by the similarity in average IRRs between these two groups, which were 19.7% and 20.8% respectively over the period.

BPC-supported funds are also more focused on later stage investments in more mature companies, and any recent declines in performance are more likely to have been captured for BPC-backed funds than other funds in the UK market.

5

Private equity and VC produce the highest returns on average when comparing asset classes, though the top performing VC funds can generate higher gains

This year's report also assesses how the returns of UK VC have compared to five other alternative asset classes, as another lens through which we can benchmark performance. Over the past ten years private equity has been the largest of these asset classes in the UK, accounting for half of their overall assets under management (AUM) in 2022. Other smaller asset classes have seen significant growth over the past decade, with private debt and VC now representing 19% and 6% of overall AUM, respectively.

Looking at how the returns of these asset classes compare, as reported by Preqin's aggregate benchmark data, UK PE and VC funds demonstrated the strongest performance on average across 2002-2018 vintage years, with median TVPIs of 1.78 and 1.67 respectively.

VC returns are more widely spread around the average, given that outlier funds can achieve very high performance, and its upper quartile multiple (2.54) is higher than any other asset class. Infrastructure has been the third best performing asset class, with a median multiple of 1.57, followed by real estate (1.30) and private debt (1.29).

When factoring in the volatility of these returns, though, VC has the highest risk profile. The standard deviation of the TVPIs in our UK dataset was 1.73, with the next highest being PE (at 0.63) and infrastructure (at 0.52). Real estate and private debt both display lower risk profiles, with standard deviations of 0.40 and 0.18.

6

Fundraising and exit conditions are challenging, while the majority of market participants expect valuations to decline or stabilise over the next year

During August and September the Bank undertook a survey of 58 UK fund managers to gauge their perceptions on current VC market conditions. Focusing on key market indicators, the survey found that a significant majority of fund managers see the fundraising and exit environments as particularly challenging. Almost two thirds (64%) thought conditions for raising a new fund were either poor or very poor, up from 29% in last year's survey, while seven in ten (72%) managers saw the availability of successful exit opportunities as poor or very poor.

In addition, 48% of respondents believed fundraising conditions have worsened since a year ago, and a quarter reported that they had needed to push back plans for raising a new fund. Higher interest rates and costs of capital have reduced the relative attractiveness of the VC asset class over the past 12-18 months. More difficult exit conditions, partly due to a refocus on profitability over expansion, have also limited the ability of GPs to realise returns and raise capital for new funds.

This year's survey evidence also points to a continuation of subdued dealmaking activity. Only 16% of fund managers believe there to be a high degree of competition in their area of the market, down from 21% in last year's survey and 59% in 2021. Almost half (48%) of respondents also reported that the pace of their investment has decreased due to the changing economic conditions, while a similar share (45%) said that they have prioritised existing portfolio companies compared to new investments.

Looking ahead, the path of company valuations will be an important indicator of the market's recovery. 41% of fund managers think average valuations will remain in line with current levels over the next year, suggesting some stability can be expected. However, as a higher share of fund managers think valuations are likely to fall further (33%) than increase (22%), there may be some more room for valuation declines before the market recovers.

Introduction

This is the British Business Bank's fifth annual report examining the financial performance of UK venture capital (VC) funds. The aim of this report is to improve the availability of information on UK VC returns by presenting anonymised market level data on the performance of UK VC funds.

As the largest UK-based LP investor in UK VC, and with the mission of making finance markets work more effectively for UK smaller businesses, the British Business Bank is seeking to address this information gap by improving the data available on the performance of UK VC funds.

The Bank has collected fund level data on VC financial returns directly from UK fund managers and has combined this with other data, including from PitchBook and Preqin, to provide the most comprehensive data source on the performance of UK VC funds. This data is collected on a best endeavours basis.

It is important to acknowledge that the fund performance data included in this report covers the period up to 31st March 2023, and so does not fully reflect more recent market conditions that have developed over the last six months.

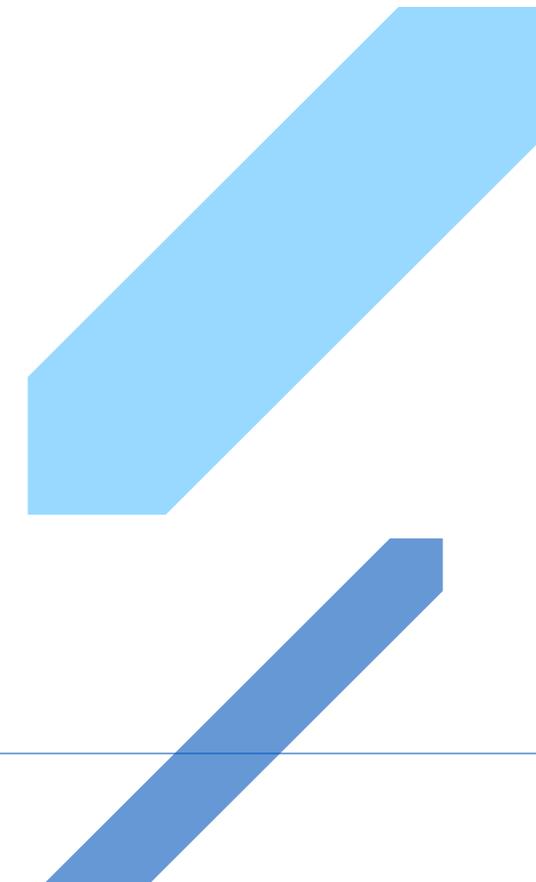
In addition to reporting fund performance data, this year 58 fund managers (covering 112 funds) completed our fund manager survey on current market conditions – representing the highest number of responses to date. Whilst this survey cannot be considered fully representative of the overall industry, it provides useful qualitative insights into the VC market and gives wider context to the performance trends observed in the first half of the report. Fieldwork for the survey was undertaken in August and September 2023.

The report is broken down into the following chapters:

- **Chapter 1** provides an overview of VC financial returns across the UK, US, and rest of Europe.
- **Chapter 2** assesses the performance of VC funds the Bank has invested in through its Enterprise Capital Fund (ECF) programme and through British Patient Capital (BPC), and compares them against the overall VC market for funds of a similar vintage.

- **Chapter 3** is a new section in this year's report which examines the financial returns of key alternative asset classes, such as private equity, private debt and real estate, and compares them to the performance of VC.
- **Chapter 4** provides an overview of current VC market conditions, covering fund managers' perspectives on fundraising, dealflow, valuations and exit opportunities using the results from our UK fund manager survey.

For further detail, the appendix provides definitions of key terms, an overview of data sources, the methodology used to create the dataset, more detailed results on returns, and charts from the fund manager survey not used in the main body of the report.



Chapter 1: Overall UK VC market performance

This chapter provides a summary of financial performance for the UK VC market up to 31 March 2023, using a combined fund level dataset with data from PitchBook, Preqin, British Business Bank Management Information and data the Bank has collected from fund managers directly. It then compares the performance of UK VC funds against their counterparts in both the US and the rest of Europe (ROE) using combined data from PitchBook and Preqin.

Firstly, we explore trends in the financial performance of UK VC funds by two-year vintage categories. Performance is also analysed by combining several vintage years together into distinct groups to provide a robust assessment of performance, and to allow for meaningful comparisons against the US and the rest of Europe.

The chapter finishes with a longitudinal assessment of UK VC returns. As the British Business Bank has been producing this report for five years, we are able to compare the reported performance of funds over multiple years if they are present across the previous datasets. In this report, we compare the reported 2023 performance for 64% of the UK VC funds in this year’s dataset against their reported performance last year.

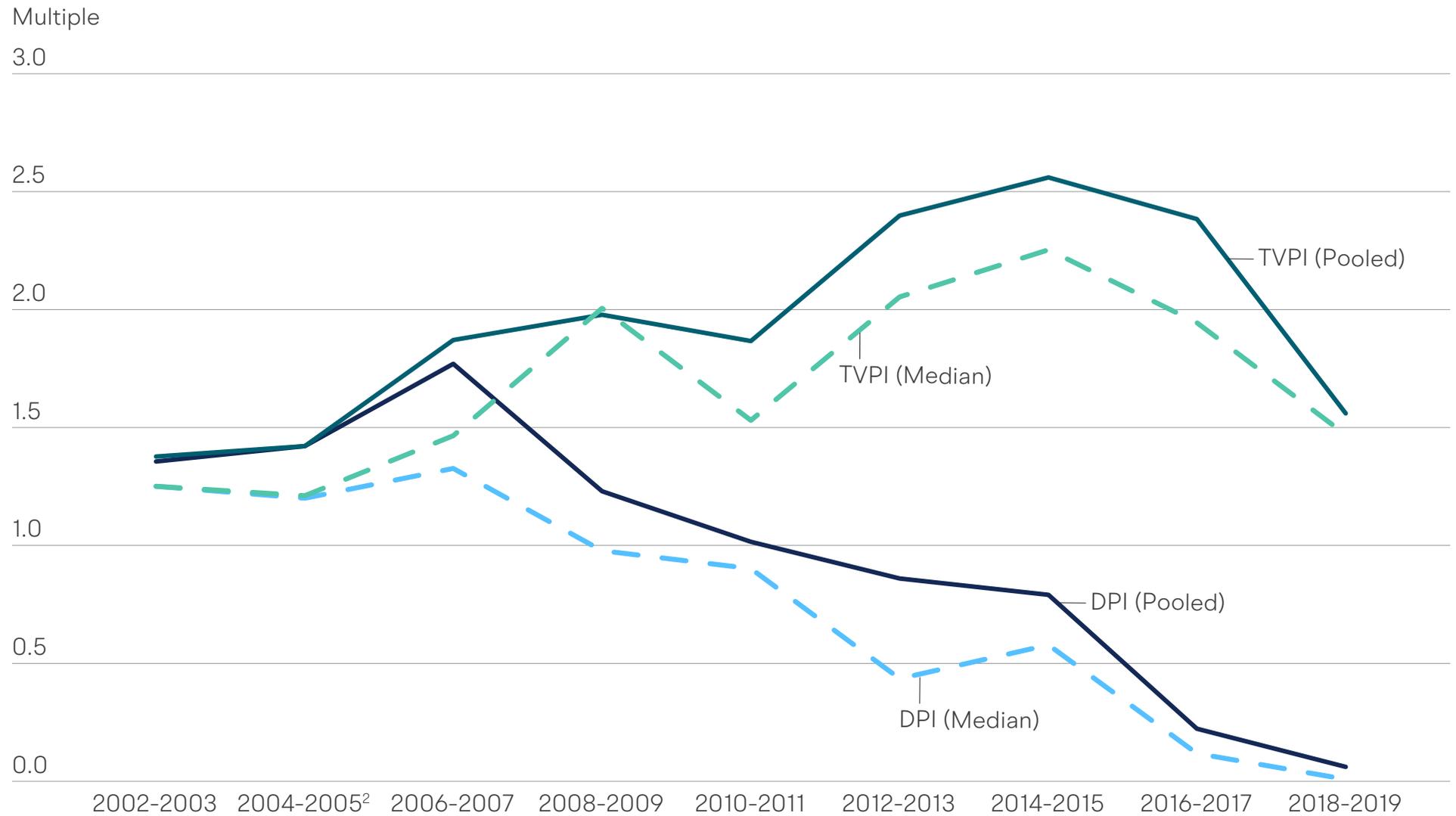
VC returns over time

Figure 1.1 provides an overview of UK VC financial returns over time using two-year vintage categories. These two-year categories are used to mitigate annual data volatility created by large outlier funds, which can have a significant impact on the aggregate figures, and to reduce the impact of small sample sizes for each vintage year.

Figure 1.1

UK VC funds financial returns by two-year vintage category

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



The analysis period begins with 2002 vintage funds, as this removes the impact of the dot-com crisis in 2001 and provides a more balanced measure of VC fund performance.

The data shows that the overall UK VC market has performed strongly for funds established in the 2000s, with several vintage year groups reporting pooled TVPI multiples near 1.5 or above, including 2008–2009 where the pooled TVPI multiple was 1.97. Pooled DPI multiples are also around 1.40 for most vintage year groups established in the 2000s decade, showing investors made returns on their VC investments.

From 2012 onwards the pooled DPI return multiple falls below one (indicating LPs have yet to make a profit), as there has been insufficient time for portfolio company exits to occur, which allow for capital to be distributed to investors. VC funds generally have a lifespan of up to 12 years, and it can take several years before VC funds start exiting their portfolio companies through IPOs, acquisitions and secondary sales. Therefore, early in a fund's life, the DPI return multiple is a less useful measure of current or expected performance.

As the TVPI multiple incorporates the unrealised value of assets in a fund's portfolio (based on the latest company

valuations), this makes it a more useful metric for assessing performance in the early stages of a fund's life. The relevance of the TVPI measure therefore increases for funds with vintage years from 2012 and onwards. Figure 1.1 shows that UK VC returned a pooled TVPI multiple of over two for the cohorts from 2012 to 2017, indicating that the asset class performed strongly during this period – particularly for 2014–2015 vintages which have a pooled TVPI multiple of over 2.5.

On the other hand, it is worth noting the limitations of using the TVPI multiple on its own to assess fund performance. For example, in the short run the multiple may fall below one due to the impact of fees, company failures and fund managers keeping the value of their unrealised investments close to cost until there is evidence of increased value (e.g. progress against milestones or additional funding rounds to validate company value).

As a result, the reported TVPI multiple in the first few years of a fund's life does not generally reflect the return investors can expect over the longer term. Many organisations publishing VC returns, such as the BVCA,³ do not publicly report since inception financial returns for funds less than four or five years old due to the 'J-curve' giving misleadingly low return figures.

Figure 1.1 shows that the TVPI multiples decline towards the end of the period and for 2018–2019 vintage funds are 1.55 (pooled multiple) and 1.46 (median). Last year's report showed 2018–19 vintage years generated a pooled and median TVPI of 1.61 and 1.66 respectively. This indicates the pooled and median TVPI have decreased by 0.06 and 0.19 in the space of a year showing that some funds have reduced valuations as part of the recent downturn in the VC market.

Figure 1.2 shows the pooled return, median and upper/lower quartile fund performance for UK, US and rest of Europe funds in the 2002–2018 vintage cohort. This time period was used to be consistent with the data reported in the latest 2022 BVCA Performance Measurement Survey Report⁴ and provides an overall summary of market performance over a longer time period than presented later on in this chapter. The BVCA returns data is calculated as at 31 December 2022, so the time period is similar but is not exactly the same. BVCA data is therefore less likely to capture any recent mark downs reflecting changing economic conditions seen in the first quarter of 2023.

UK funds with 2002–2018 vintage years have generated a pooled DPI multiple of 0.74 and a pooled TVPI multiple of 2.06. Combined with a mean IRR of 15.1%, this

indicates strong overall performance. However, the gap between the DPI and TVPI metrics highlights that a significant proportion of value remains unrealised for the average fund in this overall cohort.

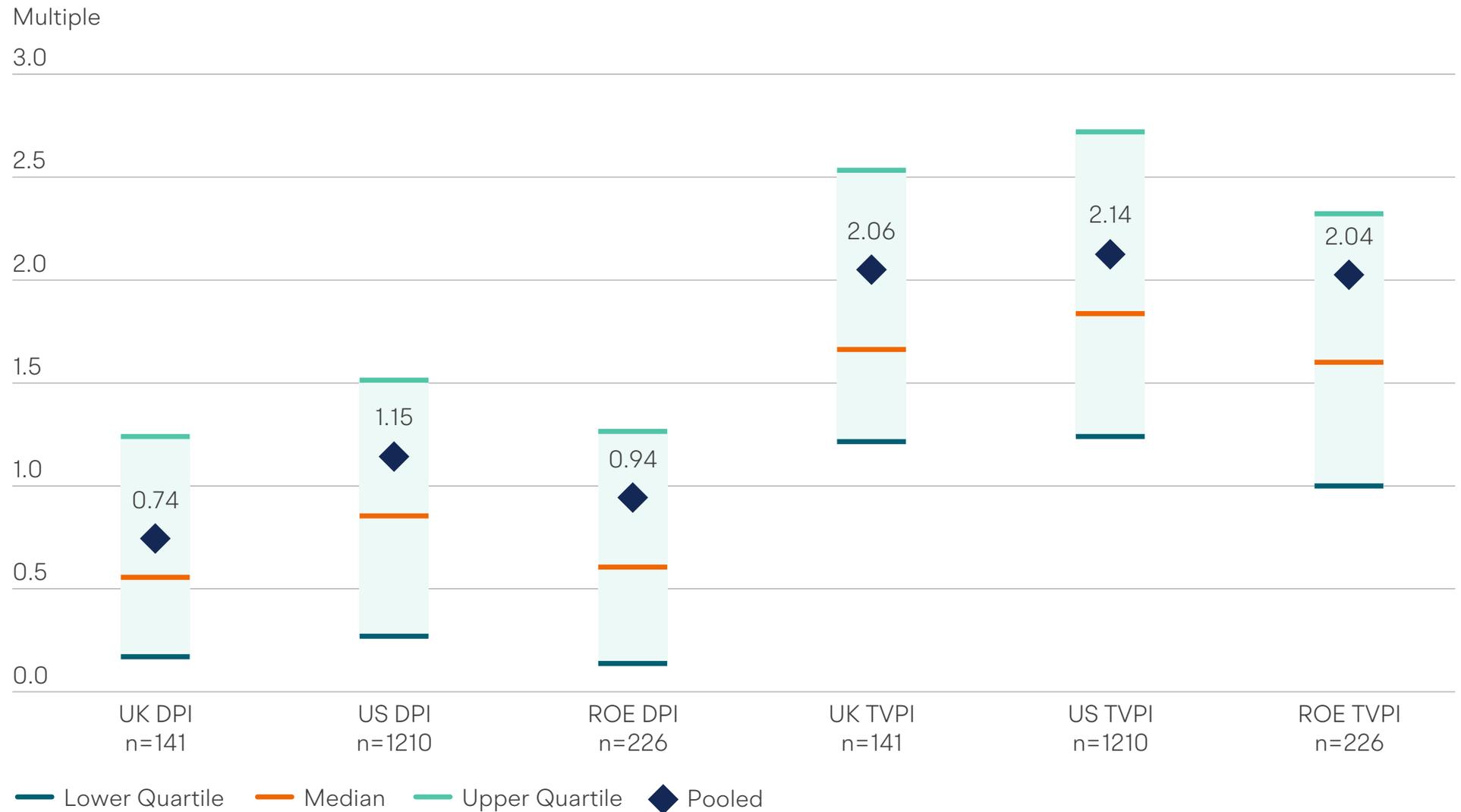
The BVCA reports a pooled DPI multiple of 0.84 and a pooled TVPI multiple of 1.97 for venture funds with a 2002–2018 vintage. The money multiples being broadly similar in scale to those reported by the BVCA for funds of the same vintage years, give reassurance on the validity of the reported market performance in this report. BVCA does, however, report a mean IRR of 11.9%, which is lower than the mean from this report’s dataset.

Comparing performance internationally, the US has a higher pooled DPI multiple (1.15) than the UK (0.74). This likely reflects differences in the average age of funds in the 2002-2018 vintage group between the two countries. The group of US funds has an average vintage of 2011, while UK funds in this subgroup have an average vintage of 2012. This means US funds have had additional time to exit their investment compared to their UK counterparts, which may explain the higher DPI multiple.

Figure 1.2

Performance multiples of UK, US and rest of Europe VC funds (2002-2018 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



In contrast, VC returns across these markets are very similar when incorporating unrealised portfolio value using TVPI measures. The pooled TVPI multiples for the UK, the US and rest of Europe are all within a range of 0.1 – again demonstrating that US returns have benefitted from more mature funds having additional time to exit their investments.

Furthermore the US has a mean IRR of 14.9%, which is very similar to that of UK funds over this period (15.1%). The fact that these IRRs are so similar, despite US funds being older, could mean that UK companies are exiting earlier than their US counterparts. The proportion of funds that report their money multiples as well as their IRR measures is also similar (86% for US and 83% for UK funds within the 2002-2018 vintage year category).

UK VC fund performance is relatively similar to that across the rest of Europe in the 2002-2018 vintage cohort. Although European funds have a higher pooled DPI multiple at 0.94 compared to the UK's 0.74, the median DPI is almost the same (0.55 for UK and 0.60 for rest of Europe). This suggests that the aggregated performance metrics of the European funds in our sample are influenced by a small number of large, well performing funds, rather than reflecting the better overall performance of the rest of Europe ecosystem.

The UK has a pooled TVPI multiple of 2.06 compared to the rest of Europe's 2.04, showing UK performance is close in comparison to US and European funds when including unrealised gains. Funds in the rest of Europe have a mean IRR of 17.2%, higher than both the UK and US, however only 76% of European funds reporting their multiples also reported their IRRs. It is useful to note that the coverage of financial performance data on funds in the rest of Europe overall is relatively low. This could mean that the funds that do report their data, are not representative of the overall population of rest of Europe VC funds.

While using a longer time period is useful to illustrate how overall VC returns compare with a significant sample size, financial performance can be affected by a range of economic factors during different stages of the market cycle. For these reasons, vintage years are also grouped into the following cohorts to analyse performance over different stages of the cycle:

- 2002–2007: Positive economic growth post dot-com crisis
- 2008–2013: Recession and economic recovery
- 2014–2021: VC market expansion (latest time period)

Insight into long-term performance is provided by earlier vintages, as these funds have had enough time to invest, develop and exit most of their investments as demonstrated by the closeness of their pooled DPI and TVPI multiples.

Funds with a vintage year between 2008–2013 have had more time to develop and exit their investments than the most recent cohort, so provide a clearer indication of likely performance going forward. Most of these funds will be approaching the end of their initial 10–12-year LP agreement but a sizeable proportion of the returns are yet to be realised.

Reported returns for the most recent 2014–2021 cohort are less likely to provide an accurate representation of actual underlying fund performance due to less time that has passed for companies to demonstrate progress in meeting their milestones. Whilst there is less evidence of a 'J-curve' in more recent fund vintages, there is greater uncertainty on the future returns investors will receive for these funds.

Fund TVPI multiples are themselves based on portfolio company valuations, which can change rapidly depending on company specific and wider market factors. Our Small Business Equity Tracker 2023⁵ report

found that the pre-money valuations of equity-backed companies decreased significantly in the second half of 2022, especially for growth stage companies. Comparing the two halves of the year, there was a 28% decline in average growth stage company valuations – and this trend has continued into 2023.

2002–2007 vintage year cohort

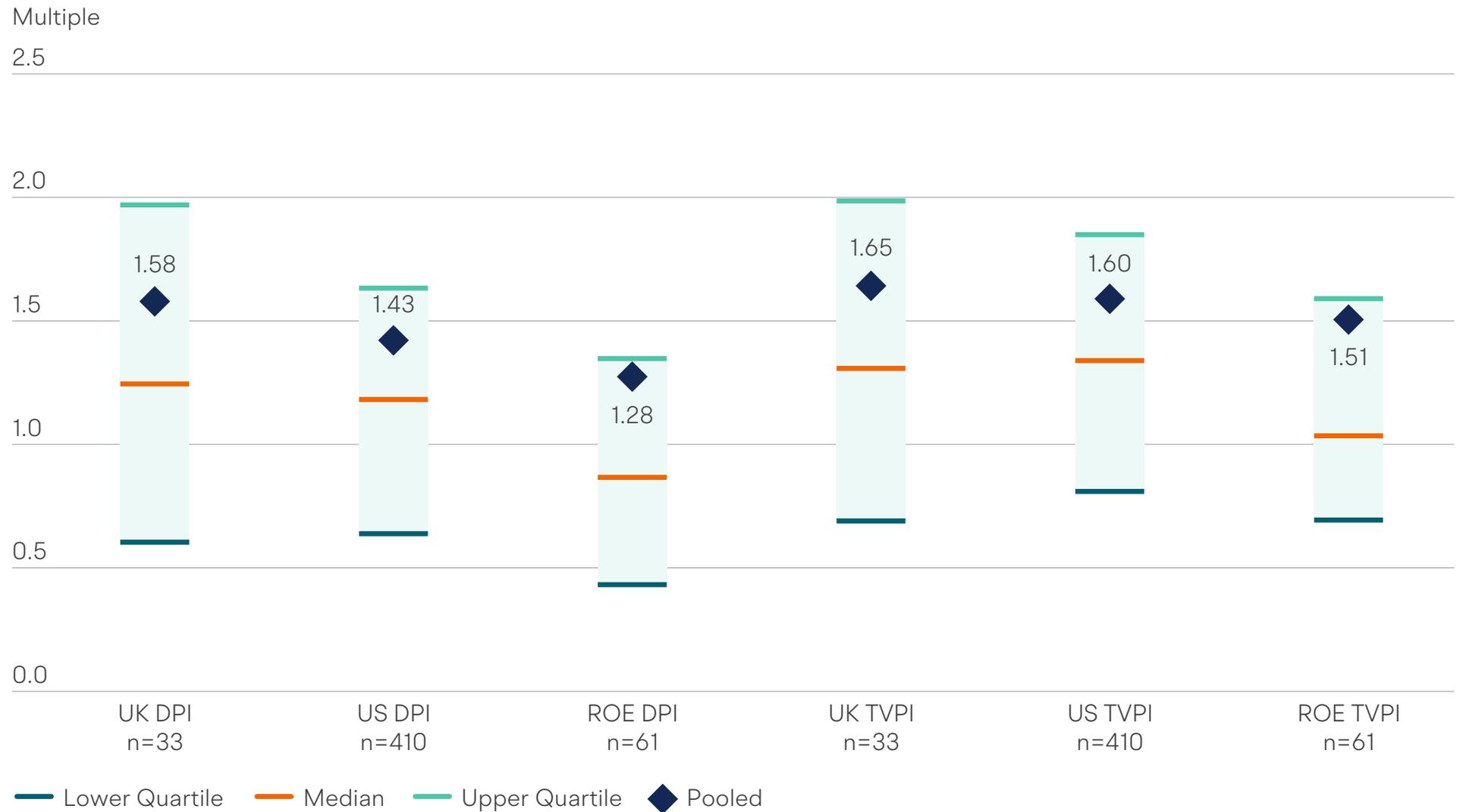
Figure 1.3 shows the pooled return, median and upper/lower quartile fund performance for UK, US and rest of Europe funds in the 2002–2007 vintage year cohort. These funds were established during a period of positive economic growth in the aftermath of the dot-com bubble, with the UK and the US achieving average annual GDP growth of 2.4% and 2.8%, respectively, during this period.⁶

UK funds performed strongly across all measures in this period, generating a pooled DPI multiple of 1.58 and a pooled TVPI multiple of 1.65. These measures being very close to one another shows that most assets have already been realised and the funds are nearly fully divested. Furthermore, given the age of these funds, the remaining value may ultimately not be realised.

Figure 1.3

Performance multiples of UK, US and rest of Europe VC funds (2002–2007 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



Comparing across countries, the UK has higher pooled DPI and TVPI multiples than the US, as the US pooled DPI multiple was 1.43 and the pooled TVPI multiple was 1.60 for funds of the same vintage. Rest of Europe funds in this cohort generated slightly lower returns with a pooled DPI multiple of 1.28 and a pooled TVPI multiple of 1.51.

It is worth noting that the distribution of UK and US VC funds TVPI multiples are similar to one another in terms of their upper and lower quartiles multiples. Both the UK and the US have higher upper and lower quartile TVPI figures than the rest of Europe funds. The pooled TVPI and DPI multiples for the rest of Europe funds lie very close to the edge of the interquartile range, indicating the pooled fund performance is heavily affected by large outlier funds. There are several large funds greater than £100m in size in the rest of Europe sample reporting high return multiples above the upper quartile. A strong performing large fund will have a larger impact on the pooled return than a smaller fund with equivalent performance, which can lead to upward distortions in the pooled return. This means, unless investors identify and invest in these outlier funds, actual returns would be lower.

One caveat is that fund coverage in the rest of Europe is substantially lower than for the UK and US. The Bank estimates that, in our 2002-2021 vintage year dataset, only 15% of funds in the rest of Europe report financial returns data, compared to 24% for the US and 49% for the UK.⁷

Given the lower overall coverage of European funds, it is possible that there is some additional selection bias affecting the results i.e., only the best performing European funds are sharing their data with commercial data providers. Additional caution is needed in interpreting the rest of Europe findings for these reasons. This reporting effect may also account for some of the UK's overall performance gap with the US, albeit to a lesser extent.

This year's US pooled DPI and TVPI multiples for the 2002 to 2007 vintage category have remained relatively unchanged from the figures reported in last year's report. This is not surprising given that most of these funds are now liquidated. The UK pooled DPI figure is slightly higher than the 1.49 multiple reported previously in 2022, however the pooled TVPI has declined slightly from 1.78.

2008–2013 vintage year cohort

Figure 1.4 assesses the performance of UK, US and rest of Europe VC funds with a 2008–2013 vintage year. This period was characterised by significant recession following the global financial crisis of 2007-2008 and gradual economy recovery in the following years; over this period UK and US average annual GDP growth was 0.4% and 1.0%, respectively, indicating a more challenging macroeconomic environment.

UK VC funds generated a pooled DPI multiple of 0.99 and a pooled TVPI multiple of 2.13. Given that funds in this cohort have had less time to develop and exit their investments than those in the previous cohort, it is unsurprising that the DPI multiple was lower than that of the 2002–2007 cohort. Many of these funds will be approaching the end of their 10–12-year initial LP agreements, however, a large proportion of the returns is yet to be realised.

The pooled TVPI of 2.13 is higher than for funds with a 2002–2007 vintage year which is an encouraging sign that these later vintage funds will produce either equivalent or greater performance than earlier vintages. The median TVPI multiple of 1.80 suggests that this

strong performance is broad based rather than being driven by a few outlier funds.

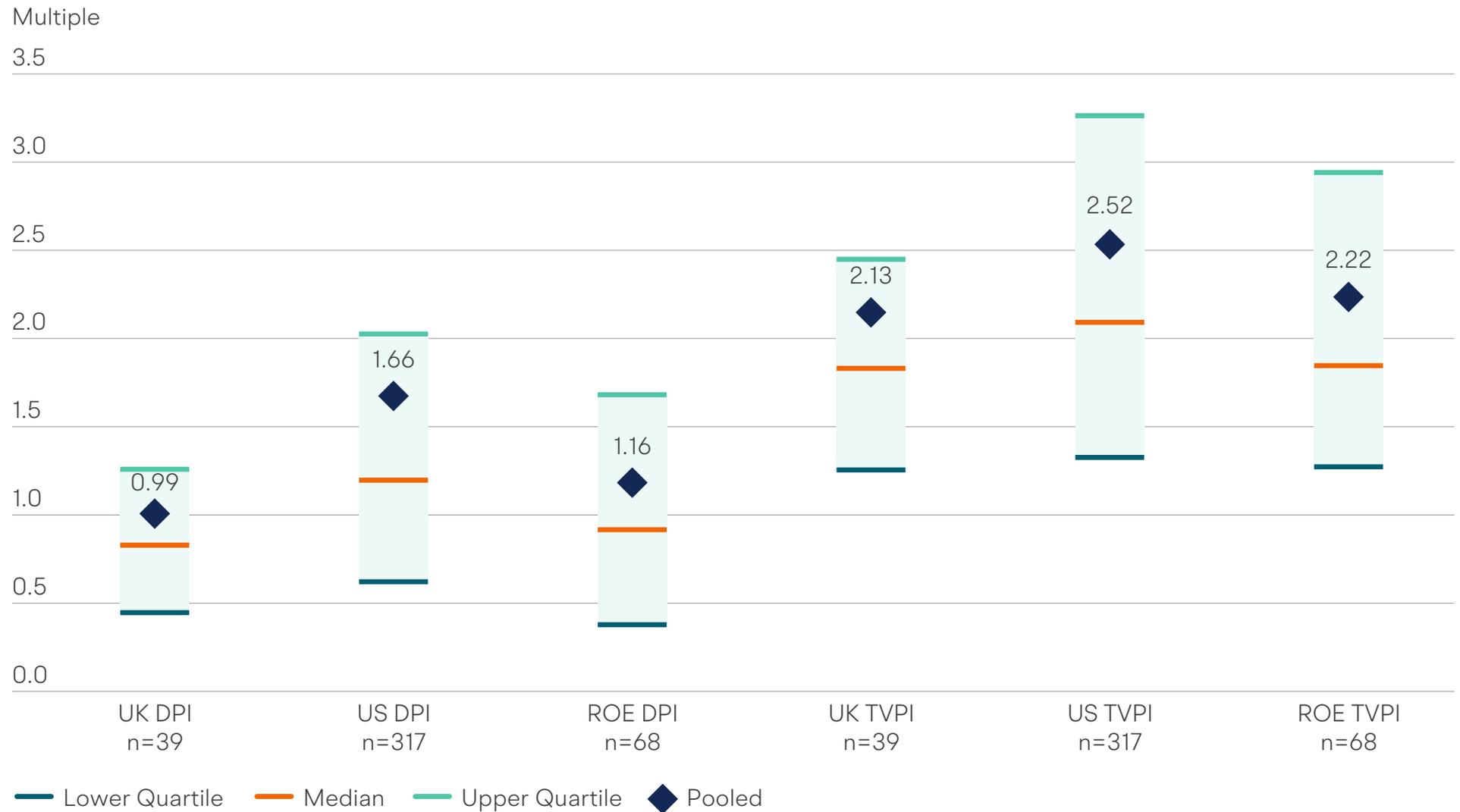
Despite the UK’s strong performance, these multiples are lower than those reported by US funds for the same vintage years. 2008–2013 vintage US VC funds generated a pooled DPI multiple of 1.66 and a pooled TVPI multiple of 2.52. While the median TVPI multiples are relatively similar (1.80 for UK and 2.07 for US funds), US funds in the upper quartile outperformed their counterparts in the UK. US VC funds in 75th percentile generated TVPI multiples upwards of 3.24 compared to 2.43 for UK funds, while funds across the rest of Europe generated returns similar to those generated by UK funds.

The ability of the VC asset class to perform through the market cycle is demonstrated by these resilient returns during, and in the immediate aftermath of, the GFC. These periods of economic recovery can allow VCs to invest in high potential companies at lower valuations. Several companies that have now generated multibillion-dollar valuations, such as Spotify, Uber and Airbnb, received VC backing for their first time during this period. This could suggest that funds established in 2022, 2023 or later may provide strong returns for their investors, given the current position of the market cycle.

Figure 1.4

Performance multiples of UK, US and rest of Europe VC funds (2008–2013 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



As part of our fund manager survey this year, detailed further in chapter four, we asked our respondents which VC vintage year funds they expected to generate the highest returns in the future. Out of 58 fund managers that responded to the survey, 12% in total selected the 2019, 2020, and 2021 vintages, 17% selected the 2022 vintage, 38% thought funds with a 2023 vintage would generate the highest returns, and 22% selected the 2024 vintage.⁸ As valuations return to sustainable levels as part of the current market correction, and the rising path of interest rates stabilises, there are likely to be attractive market entry points for VC investors over the next period of the cycle.

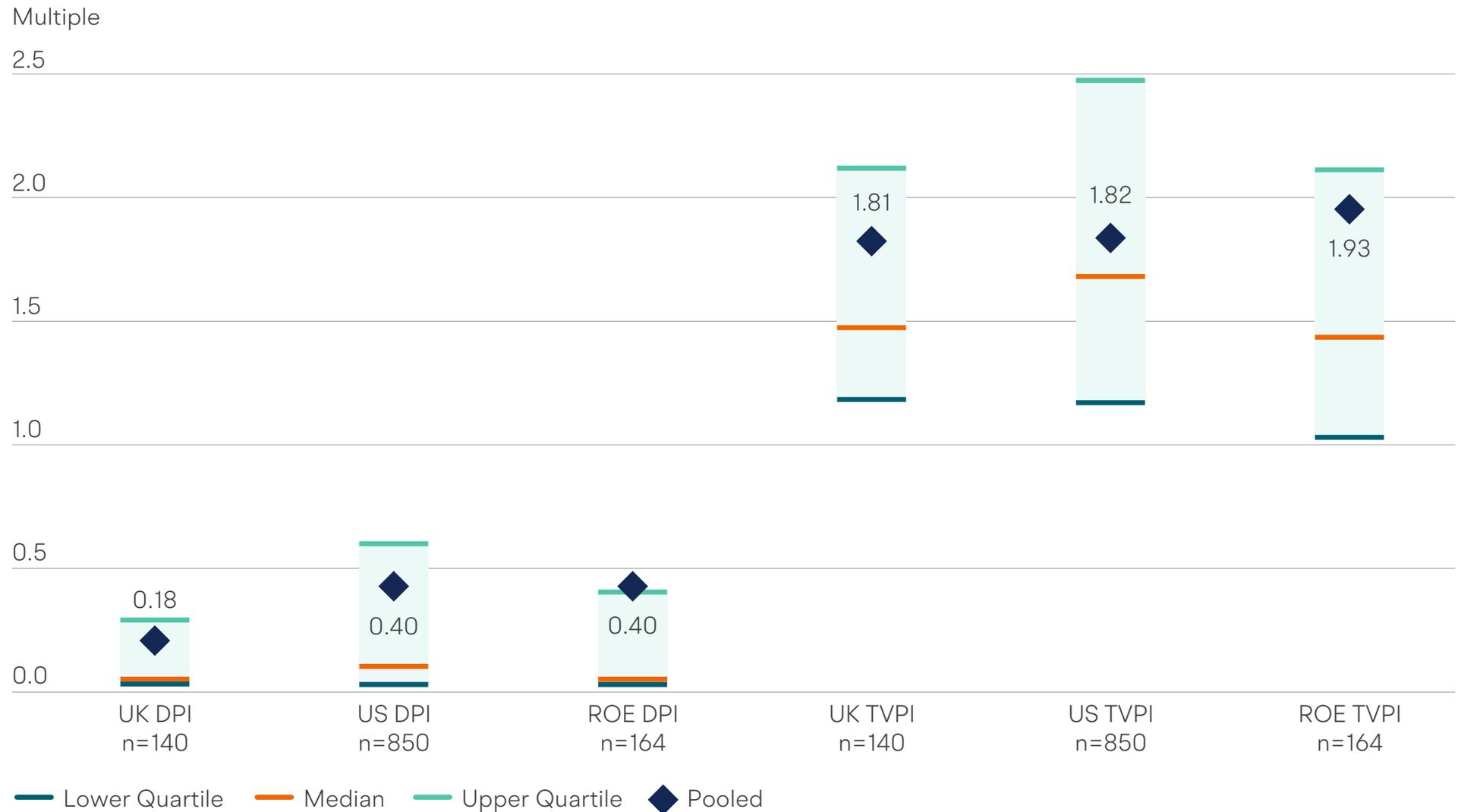
2014–2021 vintage year cohort

Figure 1.5 shows the performance of UK, US and rest of Europe funds with a vintage year between 2014 and 2021. Compared with previous cohorts, the number of UK funds has continued to increase relative to the number of US and European funds – highlighting both the progression of the UK fundraising market over time, and improvements in data coverage and reporting over the period.

Figure 1.5

Performance multiples of UK, US and rest of Europe VC funds (2014-2021 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



As highlighted in the Bank's Small Business Equity Tracker reports, this period has involved a significant expansion of VC market activity, driven by a range of factors including a low interest rate environment and rapidly accelerating innovation in sectors such as software, fintech, AI and deeptech. In the UK market specifically, the annual value of equity finance increased sixfold from £3.1bn in 2014 to £18.8bn in 2021.

It is too soon in the life of these funds to meaningfully assess the DPI multiple, as many of these funds have not had sufficient time to develop and exit their portfolio companies. The median DPI multiple for this cohort is 0.02 for the UK, 0.03 for the rest of Europe, and 0.08 for the US, showing most funds have yet to realise any real value from their investments. This highlights the importance of a long-term, patient perspective with VC investment, as it takes many years to grow a successful company before a trade sale or IPO exit can occur.

Therefore, the TVPI multiple is generally a more useful measure of performance for funds with these more recent vintages. UK VC funds in this cohort have

generated a pooled TVPI multiple of 1.81. This represents strong financial performance, especially so early in the life of these funds. It is worth noting that the strongest performing UK VC fund in the whole dataset has a TVPI multiple that falls within this cohort.

US funds have performed equally well over this period with a pooled TVPI multiple of 1.82 and a median TVPI multiple of 1.66. The rest of Europe funds reported a pooled TVPI multiple of 1.93, which is higher than both the UK and US. The median TVPI value of those funds is, however, lower than both the UK and US, which suggests that the performance of European funds is driven by a small number of larger, well performing funds.

Caution must be taken in interpreting these high recent multiples given they are currently only 'on paper' in unrealised assets. This may suggest this recent global cohort of VC funds will go on to perform very strongly for investors, but it is also possible that some of these high valuations may not be sustained at exit, as valuations can be very volatile. As discussed later in this chapter, performance data reported so far in 2023 suggests that fund managers are now beginning to write down valuations amid the current market downturn.

Distribution of fund returns

The overall performance of the VC market is primarily driven by the performance of the top outlier funds, which can generate very high returns for their investors. This is linked to the fact that, under the VC investing model, a very small number portfolio companies drive the majority of fund returns – recouping the losses that arise from the majority of portfolio businesses failing.

Last year's VC returns report found that the best performing US funds have higher TVPI multiples than the top UK VC funds, and the most recent data confirms this finding. US funds in the 99th percentile for the 2002-2021 vintage category generated TVPI multiples upwards of 9.4, with UK funds generating TVPI multiples upwards of 7.6. For comparison, the previous year's data reported TVPIs for the top 1% of funds with a 2002-2020 vintage being above 10.3 for the US and above 7.3 for the UK.

Figure 1.6 shows the distribution of fund TVPI multiples for UK, US, and rest of Europe VC funds with a 2002-2021 vintage. It confirms that VC fund returns follow the Pareto principle, where a small subset of outlier

funds yields significant returns, while the majority of funds achieve comparatively modest performance. The distribution of UK VC returns largely follows the same distribution of US VC returns. The exception is the top 2% of US funds where US VC funds have higher TVPI multiples compared to UK funds.

For the 212 UK VC funds reporting data this year, 25 generated a TVPI multiple over three (12%) and 37 generated a TVPI multiple between two and three (17%). Slightly more than half of all funds (51%) generated a TVPI multiple between one and two, whilst the rest (19%) generated a TVPI multiple below one. Again, this shows that the majority of VC funds generate some returns for investors, but only a small share produce exceptional gains.

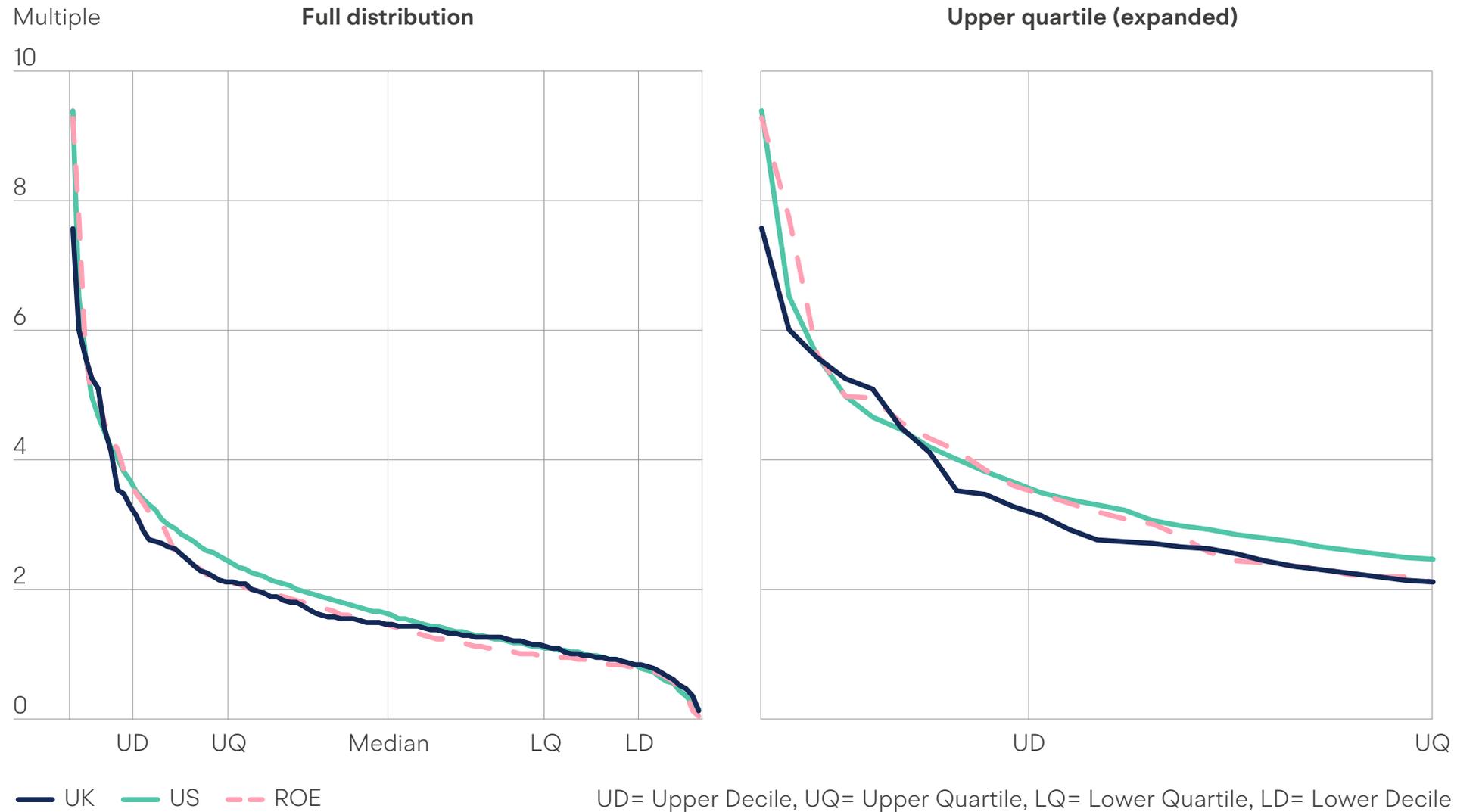
The distribution of TVPI multiples for the US is as follows: 16% of US funds in the sample reported TVPI values over three, and 20% reported TVPI multiples between two and three. 46% of US VC funds generated TVPI multiples between one and two, and for 18% of the funds, the value was less than one.

VC funds across the rest of Europe generally appear to have higher TVPI multiples along the distribution, when compared to UK funds. Rest of Europe funds, however,

Figure 1.6

Ranked TVPI multiple distribution of UK, US, and rest of Europe VC funds (2002-2021 vintage years)

Source: British Business Bank analysis of PitchBook, Prequin Ltd, Bank survey data and Bank MI data.



also have the lowest fund coverage, meaning the sample is likely impacted by selection bias where only the best performing funds report their data.

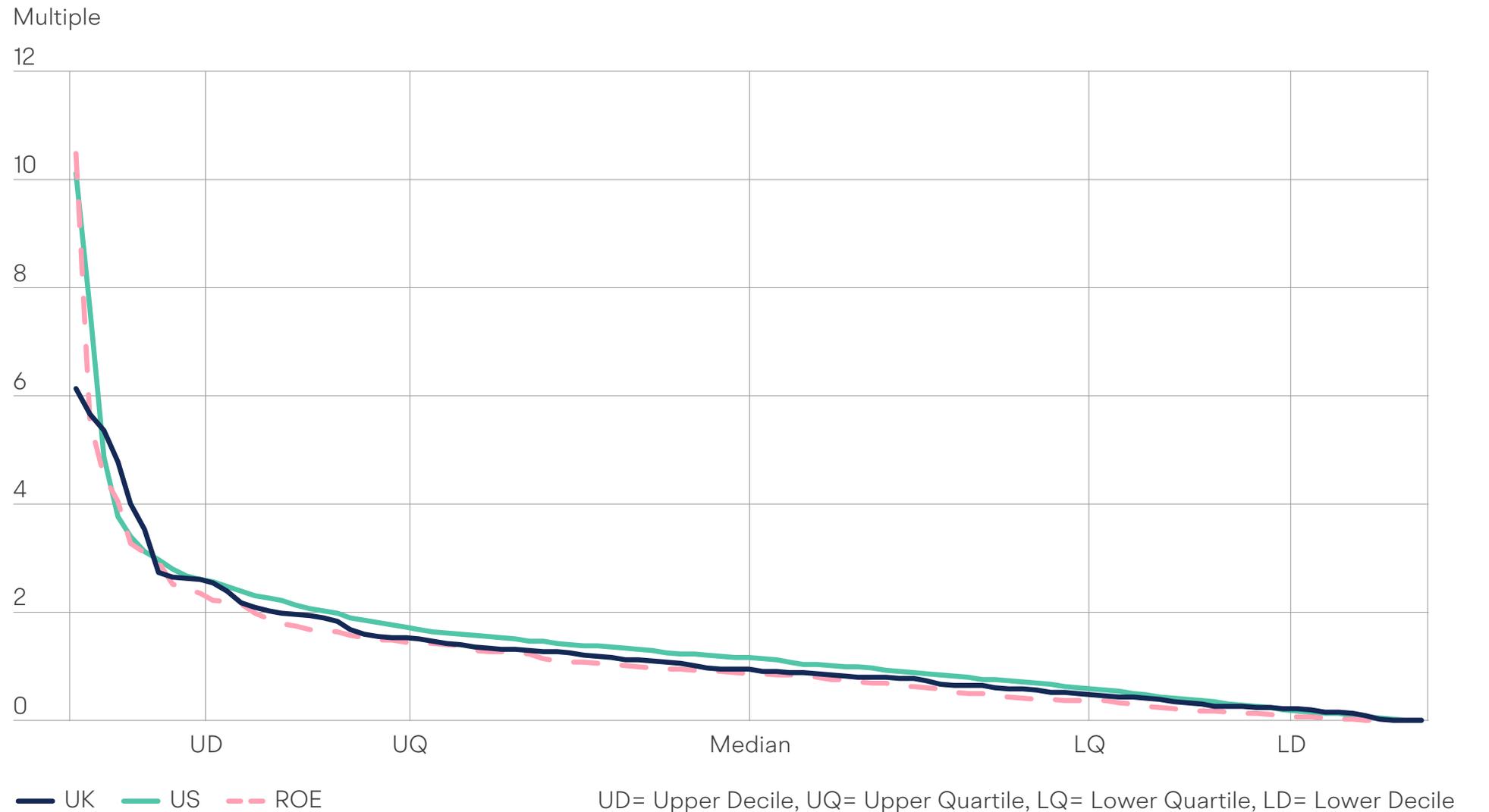
Figure 1.7 shows the distribution of fund DPI multiples for UK, US and rest of Europe VC funds with a 2002–2014 vintage. Vintages beyond 2014 are excluded since these funds have not had sufficient time to fully mature and realise their investments. Their inclusion would lead to a significant number of funds reporting DPI multiples equal to 0, distorting the distribution of fund returns.

The shape of UK’s DPI multiple distribution curve is broadly similar to that of the US, except for the following differences. The top funds (as is the case with TVPI multiples) generate significantly higher DPI multiples compared to their UK equivalents. US funds in the 99th percentile generate DPI multiples upwards of 10.1, compared to 6.1 for the UK funds. Rest of Europe funds in the 99th percentile outperform both the US and UK with DPI multiples upwards of 10.4. However, UK funds perform better than European counterparts across the entire distribution when excluding the top 1% from both samples.

Figure 1.7

Ranked DPI multiple distribution of UK, US, and rest of Europe VC funds (2002-2014 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



Assessment of performance compared to a year ago

As highlighted previously there was a rapid global increase in equity funding during 2020 and 2021, which contributed to excessive valuations of VC-backed companies – particularly at the later stages of the market. However, the Bank’s Equity Tracker 2023 report⁹ found that in the second half of 2022, equity market trends began to reverse. Rising inflation and interest rates, followed by concerns about potential over valuations and a decline in exit opportunities, led to a 47% reduction in equity finance between the first and the second half of 2022. Average pre-money valuations fell by 22% during the same period, with growth stage valuations declining by 28%. This downward trend continued into 2023.

UK fund managers participating in our 2023 survey reported that the market is currently much less competitive than it was in 2021 when UK VC activity was at its peak. Only 16% of fund managers said that they were experiencing high competition in the area of the VC market they focused on in 2023. In 2021, this number was equivalent to 59%.¹⁰ This decrease in competition, that was previously one of the main

drivers of high VC valuations, will likely continue to put downward pressure on company valuations.

As VC valuations are tied to periodic funding rounds and GP reporting, rather than daily price changes, the full extent of changes in valuations is still not fully clear. However, to assess the impact of recent declines in valuations, we compared reported performance figures between this year’s report (which covers data up to end of March 2023) and last year’s report. This being the fifth year we are publishing this report enables us to compare the reported performance of the same funds over multiple years

In the section below we conduct a comparative analysis of fund performance using an identical set of funds that reported data in both 2023 and 2022. This allows us to determine whether variations are due to changes in actual performance or different funds entering and exiting the dataset. Approximately 78% of UK VC funds, equivalent to 130 funds, reported their latest performance data in both years for this comparison.

Figure 1.8 shows less than half (48%) of UK VC funds have increased their reported TVPI multiple compared to a year ago, whilst 28% have kept them constant. This is based on 61% of UK funds in our dataset reporting

their latest financial performance data this year (as at March 2023). When restricting the sample to only funds with 2014-2021 vintages, the share is 92%.

Compared to the US, the UK has a higher proportion of funds writing down their reported TVPI values (23% compared to 10%), with the rest of Europe’s (20%) proportion being similar to the UK’s. The US market is often seen as leading global VC trends and serves as an indicator for future VC activity in the UK. Last year, we reported that 21% of US funds wrote down their TVPI values compared to 14% for UK funds, which seems to confirm this assumption.

Figure 1.9 shows the pooled return multiples for UK VC funds in 2023 compared to 2022, for funds that reported performance across both years. The year-on-year pooled DPI multiple remains unchanged, which is unsurprising given the challenging market environment over the past year. This has significantly limited the ability of companies to exit, a key factor restricting fund managers from returning capital to their investors.

On the other hand, the pooled TVPI value declined by 9% from 2.18 to 1.98. A decline in TVPI suggests that funds have had to reduce the value of some of their unrealised investments, likely due to the ongoing

market conditions and companies beginning to raise down rounds to finance their growth. The median TVPI value also declined by 11%, falling from 1.78 in 2022 to 1.58 in 2023.

The fund performance data in this report reflects their status up to March 2023, meaning any recent changes in valuations are not accounted for. It is highly likely that, given the current market conditions, funds will have to write down the value of their unrealised investments even further. In their 2023 Global Fund Performance report PitchBook noted that GPs – especially those with smaller fund sizes – might have so far been unwilling to mark down their portfolio to match the fair market value, either hoping for the market downturn to pass, or out of concern that they lack strong performance to present to LPs during future fundraising conversations.¹¹

Figure 1.8
Proportion of funds changing their reported TVPI multiple in 2023 compared to their reported 2022 multiple (identical funds n=130)¹²

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.

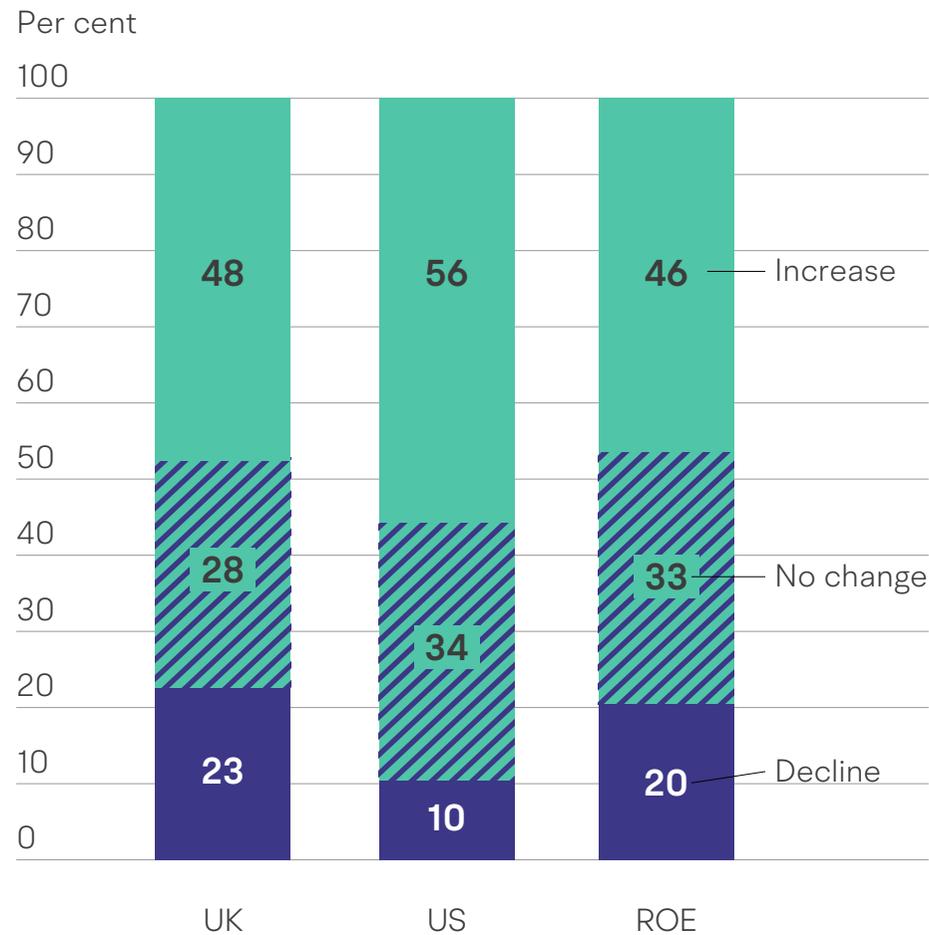


Figure 1.9
UK VC multiples, 2022 vs 2023 (identical funds n=130)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



Chapter 2: Comparing British Business Bank and BPC VC fund performance to the wider market

This chapter provides a comprehensive overview of the performance of VC funds the British Business Bank has invested in as a Limited Partner (LP) through its Enterprise Capital Fund (ECF) programme and through British Patient Capital (BPC).

The figures below may differ from those reported in the British Business Bank or the BPC annual reports. These variations are attributable to differences in fund coverage. The BPC annual report for instance, includes the performance data for all BPC-supported funds, even those classified as non-VC and those with more recent vintage years.

ECF programme returns

The ECF programme was established in 2006 with the aim of increasing the availability of early-stage equity finance for innovative UK companies. The programme is designed to mitigate market failures that contribute to the early stage equity funding gap, by facilitating the establishment of VC funds targeting high-growth potential companies that are seeking small sized equity investments.

A key feature of the ECF programme is its ‘geared’ return structure designed to increase returns for private investors, making them competitive with other investment opportunities in the market. While the British Business Bank receives a prioritised return

before other investors, after the repayment of capital the Bank receives a lower share of potential profits than other private investors in the fund. This means that, in cases where fund managers achieve strong performance, private investors (referred to as ‘other LPs’) receive a larger share of the profits.

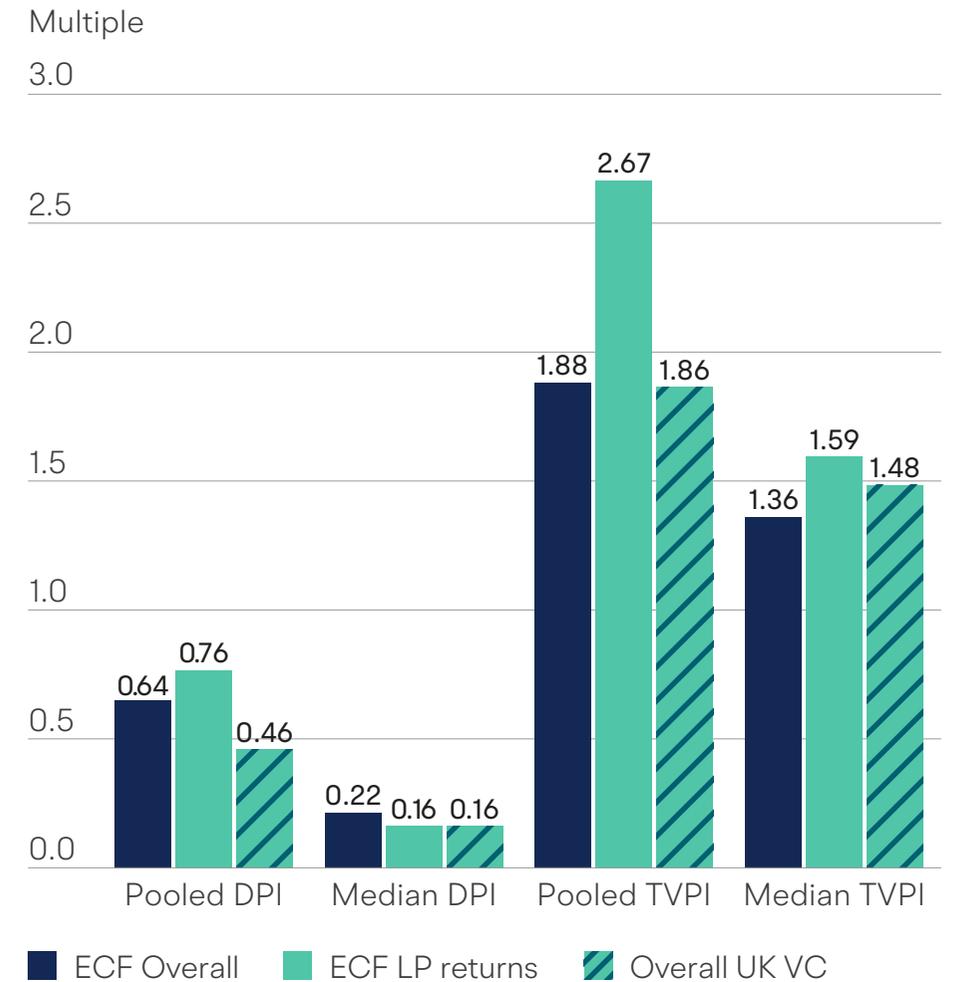
Figure 2.1 shows that VC funds within ECF generally outperform the overall UK VC market, using a vintage cohort period starting in 2006 to capture the full duration the programme. ECF-supported funds generated an overall pooled DPI multiple of 0.64, and a multiple of 0.76 for other LPs. Both of these measures are higher than the multiple for all UK VC funds across the wider market, which generated a pooled DPI of 0.46.

When including unrealised value, VC funds within the Bank’s ECF programme have generated a pooled TVPI multiple of 1.88, which equates to 2.67 for other LPs. Private investors in ECF-supported funds therefore have the potential to make substantially higher returns than the overall UK VC market (which recorded a TVPI multiple of 1.86 for the same vintage years). These results are showing that the British Business Bank prioritised return mechanism is working as intended.

Figure 2.1

ECF VC fund performance multiples (2006-2021 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



The above market returns of ECF funds can, in part, be attributed to their investments in several UK unicorn businesses, some of which were made during the early stages of these companies’ development at low valuations. UK unicorn status businesses currently supported by ECF funds include Improbable, Marshmallow, Tractable, Gelato, and Thought Machine.¹³ In general, ECF programme returns have benefitted from early investments in companies that have grown rapidly over the VC market expansion period up to 2022.

Early-stage VC funds, such as those supported by the ECF programme, generally carry higher risk given that the companies they invest in have less proven business models. The trade-off for this risk is that they also generally offer higher expected returns based on the long-term growth potential of these portfolio companies. Later-stage VC funds targeting more mature ventures with demonstrated market viability, on the other hand, generally carry lower risk in comparison but also lower expected returns.

BPC programme returns

British Patient Capital (BPC) was formed in 2018 in response to the government’s Patient Capital Review, with the aim of increasing the supply of long-term equity finance for later stage VC-backed companies in the UK. A commercial subsidiary of British Business Bank, BPC manages a £2.5bn programme which aims to unlock an additional £5bn in private capital to support UK businesses with high growth potential over ten years.

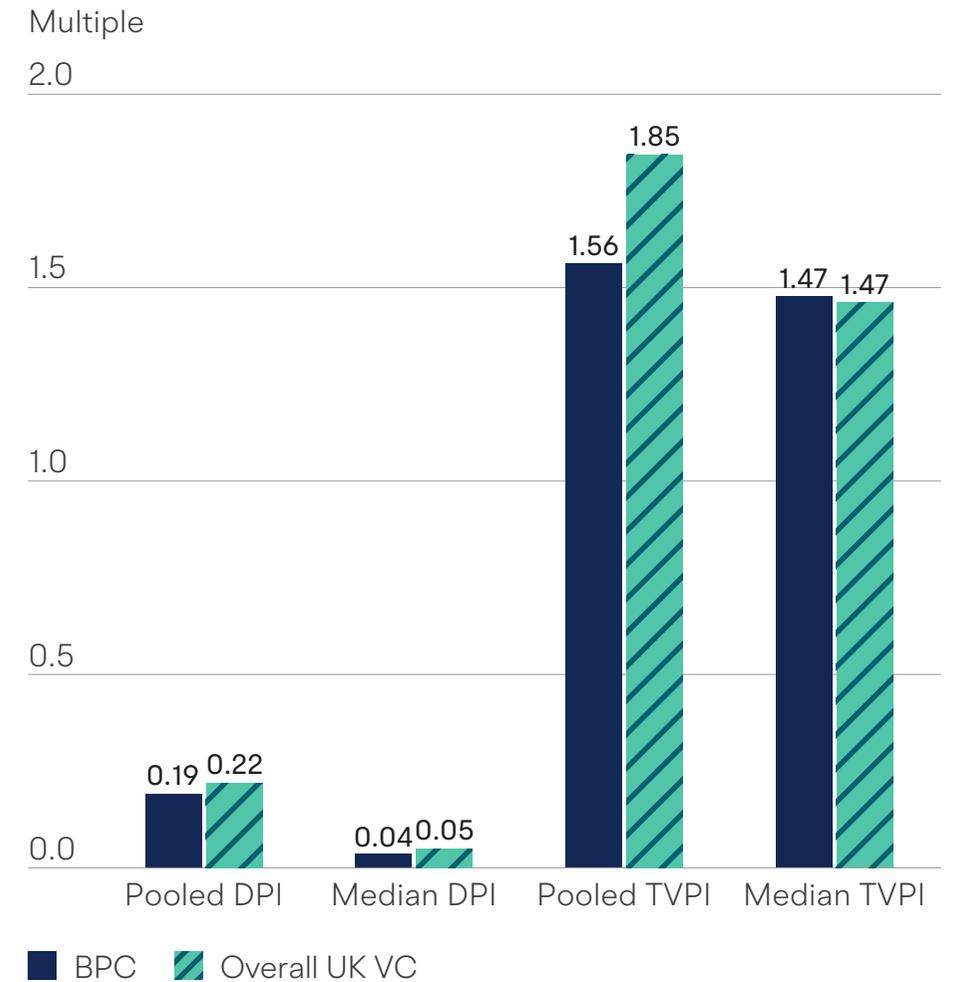
Prior to 2018, BPC’s portfolio was seeded with investments originating from the Bank’s VC Catalyst programme. This earlier initiative, which invested in funds with vintages between 2013 and 2017, operated under a slightly different mandate compared to BPC. BPC’s investment strategy has since evolved to focus on providing capital to funds that prioritise later-stage growth equity strategies. For the analysis in this section, a vintage cohort period starting in 2013 is used to provide a more complete assessment of BPC’s performance.

Figure 2.2 shows that the VC funds BPC has invested in with 2013-2021 vintages have generated a pooled DPI

Figure 2.2

BPC VC fund performance multiples (2013-2021 vintage years)

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.



multiple of 0.19, which is in line with the pooled return generated by funds in the wider UK VC market (0.22). The DPI multiple reported for BPC-supported funds is slightly lower compared to last year due to the inclusion of funds with 2020 and 2021 vintages in this year's report. The overall market DPI, however, has also declined from the 0.25 multiple that was reported last year.

When including unrealised value, BPC-supported funds reported a pooled TVPI multiple of 1.56, which is lower than for funds across the wider UK VC market (1.85) for the 2013-2021 vintage year period. The median reported TVPI multiples, however, are in line for BPC-supported and overall UK VC funds (1.47).

One possible explanation for the gap in pooled TVPI between the BPC portfolio and the overall VC market, is the fact that we have financial performance data as at March 2023 for all BPC-supported funds, whereas the percentage of VC funds reporting their latest financial performance data in the overall market is lower. There is likely to be a positive bias in wider market returns data, particularly in the current challenging market conditions, as underperforming funds may not report their performance as regularly.

It should also be noted that the average vintage year for the BPC fund portfolio is half a year younger than the overall VC market due to BPC substantially increasing its activity in 2018. 64% of BPC portfolio funds have a vintage year between 2018-2021, compared to 58% in the overall VC market comparison group. This gives less time for the BPC portfolio to have developed their portfolios compared to funds in the overall VC market.

The impact of portfolio age can be tested using the IRR measure, which takes into account the magnitude and the timing of cashflows, i.e., the time value of money. Because funds are still deploying significant portions of their investments in the initial years of their existence without distributing capital to investors, any IRRs calculated during the initial four years of a fund's life would not provide an accurate indication of the fund's performance upon liquidation. BPC's mean average fund IRR return for VC funds with a 2013-2018 vintage year is equal to 19.7%. The overall market figure for funds with the same vintage is only slightly higher at 20.8%, confirming that money multiple comparisons between BPC and the overall VC market funds are affected by the difference in portfolio ages between the two groups.

A comparison of 2013-2017 vintages shows BPC's pooled DPI multiple of 0.46 is very similar to the overall UK VC market pooled multiple of 0.49, which suggests the programme is performing as expected in terms of making a commercial return in line with the overall market. BPC's pooled TVPI multiple for this period is lower by 0.5 points compared to the overall market (1.96 vs 2.47).

For 2018-2021 vintage funds (covering the period since BPC was established), the programme's performance is in line with the overall market, with pooled DPI multiples of 0.05 and 0.04 respectively. For this period the overall VC market has a pooled TVPI multiple of 1.43 compared to 1.35 for BPC funds, showing BPC's performance is broadly similar to the overall market.

It is still too early in the life of the programme to draw conclusions about the long-term performance of BPC's portfolio, as some of BPC's funds are too young to be included in the analysis and a significant proportion of the portfolio value is currently unrealised. Compared with previous reports the performance gap with the overall VC market on these measures has narrowed, though, and is now broadly similar.

In addition, the positive impacts BPC funding has had on individual companies are already beginning to show. The 2022 Interim Evaluation of British Patient Capital¹⁴ reported that companies with investment from BPC-backed funds grew their employment by 55%, and their turnover by 15%. The pre-money valuations of beneficiary companies were also found to be £60m higher on average than they would have been in the absence of finance from BPC-backed funds.

Chapter 3: Comparing UK VC performance to other asset classes

The main focus of this report is to provide a comprehensive assessment of UK VC fund performance. In addition, for this year's publication we have also analysed how UK VC returns compare to the returns of other alternative asset classes in the UK – in particular private equity, private debt, real estate, infrastructure and natural resources.

This analysis provides another lens through which we can benchmark UK VC financial performance, on top of existing comparisons to other geographic markets and over time.

Alternative assets are generally defined as those outside of public equities and bond investments. These markets are generally less developed and therefore smaller in scale than traditional investments. According to research from the Securities Industry and Financial Markets Association (SIFMA), the value of the global public equity market reached \$106 trillion¹⁵ in market cap in 2023, while Preqin data indicates that the alternative investments market was worth around \$15 trillion in AUM.¹⁶

However, due to fundamental market factors including technological innovation, sustainability, a prolonged low interest rate environment, and government incentives, the alternatives industry has grown quickly in recent years – global AUM has increased at an annualised rate of 12.3% since 2016.¹⁷

Characteristics of alternative asset classes

These investments can offer a range of benefits to investors as they tend to behave differently to more mainstream asset classes – therefore helping to reduce volatility, adding diversification, and potentially enhancing returns. From a theoretical perspective each individual alternative asset class has its own unique characteristics – with similarities and differences to VC investing, for example. Taking each of these categories in turn:

i. Private equity

Private equity generally involves investing over the medium to long-term in private non-listed companies in exchange for ownership. In comparison to VC, BVCA's definition notes that “private equity funds invest in more mature companies with the aim of reducing inefficiencies and driving business growth through often increased margins and/or new sources of revenue growth”.¹⁸ The investment structure can include a combination of debt and equity (e.g. in leveraged buyout deals), whereas VC investment is usually only an equity purchase.

ii. Private debt

Preqin define private debt as “the provision of debt finance to companies from funds, rather than from banks, bank-led syndicates or public markets”.¹⁹ This asset class grew in the aftermath of the Great Financial Crisis (GFC) when traditional banks reduced their lending (particularly to SMEs), creating a gap in the market for private debt funds. Private debt investments generally offer more predictable and regular cash flows compared to equity. The risk-return profile of private debt varies depending on factors like the creditworthiness of the borrower, the structure of the loan and the macroeconomic environment.

iii. Real estate

Investing in real estate involves buying and managing physical properties such as residential, commercial, or industrial buildings. In its definition of the real estate asset class, Preqin note that, alongside private real estate funds, investors can also access the asset class through direct investments and listed real estate securities.²⁰

The return of this asset class is typically based on real estate investments generating rental income and

appreciating in value over time. The risk-return profile of real estate varies depending on factors like location, property type, and management.

iv. Infrastructure

Preqin define the infrastructure asset class as involving “investment in the facilities, services, and installations considered essential to the functioning and economic productivity of a society”²¹ – for example transportation systems, utilities, and public facilities. The asset class only properly emerged during the 1990s following the privatisation of these kinds of infrastructure systems in the previous decade. These assets typically provide essential services and, given their nature, often provide long-term, stable cash flows rather than substantial capital appreciation.

v. Natural resources

This asset class involves investing in assets and commodities that are derived from raw materials, with significant parallels to infrastructure investing. In their definition Preqin note that there are five key strategies for natural resources investment, including agriculture; energy (e.g. oil, natural gas, coal and renewables); metals and mining; timberland, and; water. Natural

resources represents another asset class that has mainly developed in the aftermath of the GFC as investors have sought returns from alternative investment types.²²

From an investor’s perspective these alternative asset classes can differ significantly in terms of their return, volatility and diversification benefits. Private equity and venture capital generally offer the highest absolute returns, but often come with the highest risk for investors due to the nature of the businesses they finance. Private debt typically provides lower risk than equity investing with more regular cashflows, and in a low interest rate environment can offer higher returns than traditional debt securities or fixed income investing.

Real estate provides the potential for regular rental income alongside property value appreciation, while large investors (e.g. pension funds and insurance companies) may look to infrastructure investments for stable income over a longer time horizon. Both of these asset classes also offer diversification and inflation hedge benefits, as tangible assets tend to hold their value as prices rise across the economy (unlike paper assets). Within real estate, rent reviews also allow for income to increase in inflationary times, for example.

Figure 3.1 illustrates recent trends in UK fundraising across these asset classes, using a three-year rolling average to smooth out the volatility in annual fundraising data. This data shows that private equity has consistently been the largest fundraising market in the UK over the past ten years, with overall fundraising increasing from £17.0bn in 2014 to £33.1bn in 2022 (on a three-year rolling average basis). This is followed by private debt, which raised £20.5bn on this basis in 2022 and has seen strong fundraising growth over this period.

VC and infrastructure funds in the UK have attracted similar amounts of capital and have also seen significant fundraising growth over the past ten years. Real estate, on the other hand, is the only asset class that has experienced a decline in fundraising over this period, now receiving similar levels of funding to both VC and infrastructure.

Many of these asset classes have struggled to raise capital in 2023 so far under challenging macroeconomic conditions. Private debt is an exception to this trend, however, and has seen a 9% increase in fundraising compared to 2022 (on a rolling average basis). This is likely in part due to the recent deterioration in wider market conditions and risk appetite increasing the

attractiveness of private debt’s more stable returns. In addition, natural resources has seen a record £1.7bn raised on this basis in 2023 – though caution is required when interpreting trends in this asset class given the very small number of funds reporting data.

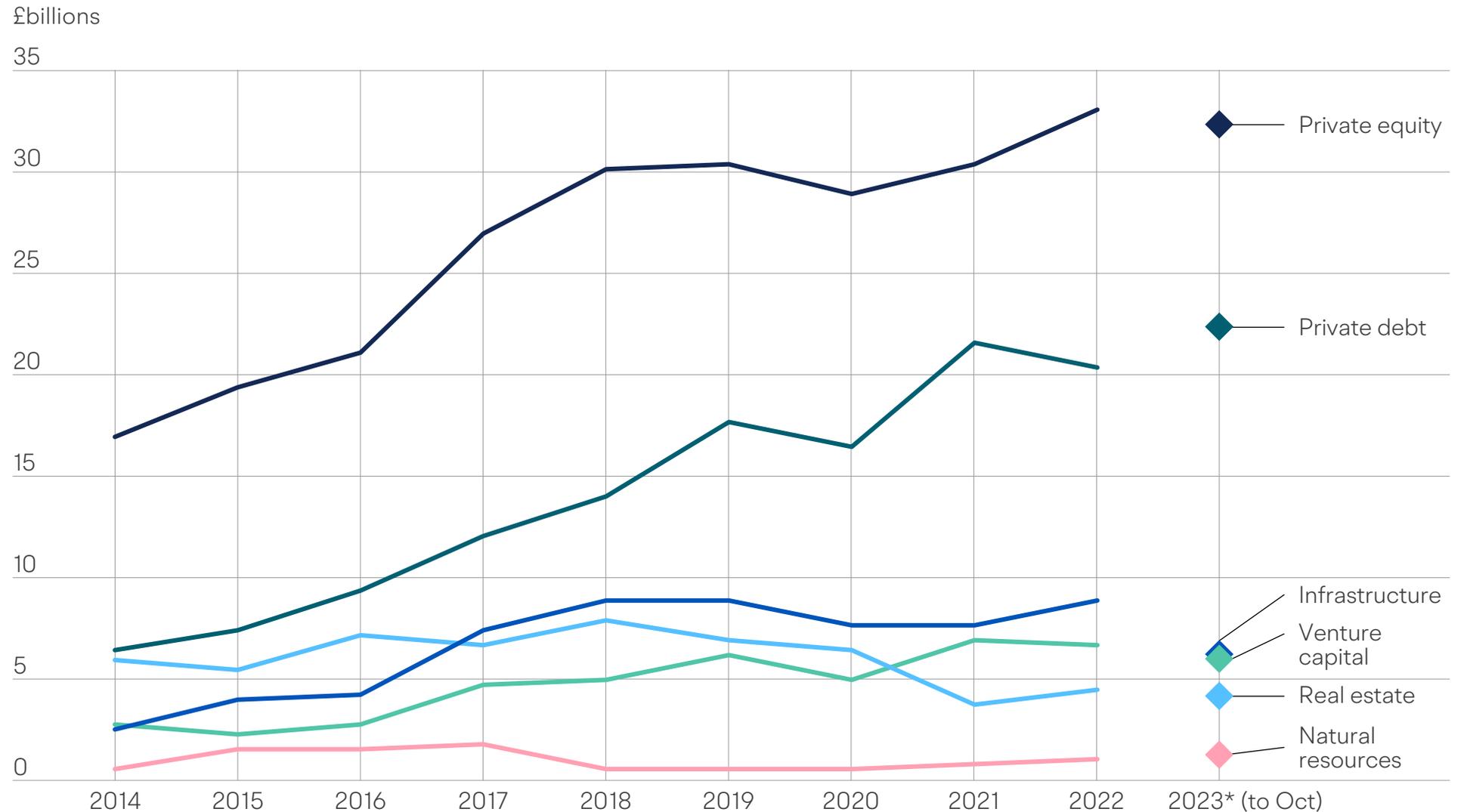
Figure 3.2 illustrates the share of total assets under management (AUM) by alternative asset class in the UK.²³ Private equity’s position has been gradually contracting over the past decade – from 58% of UK private capital AUM in 2013 to 50% in 2022. The other main asset class that has followed this trend is real estate, which has experienced a four-percentage point decline in its share from 13% to 9%.

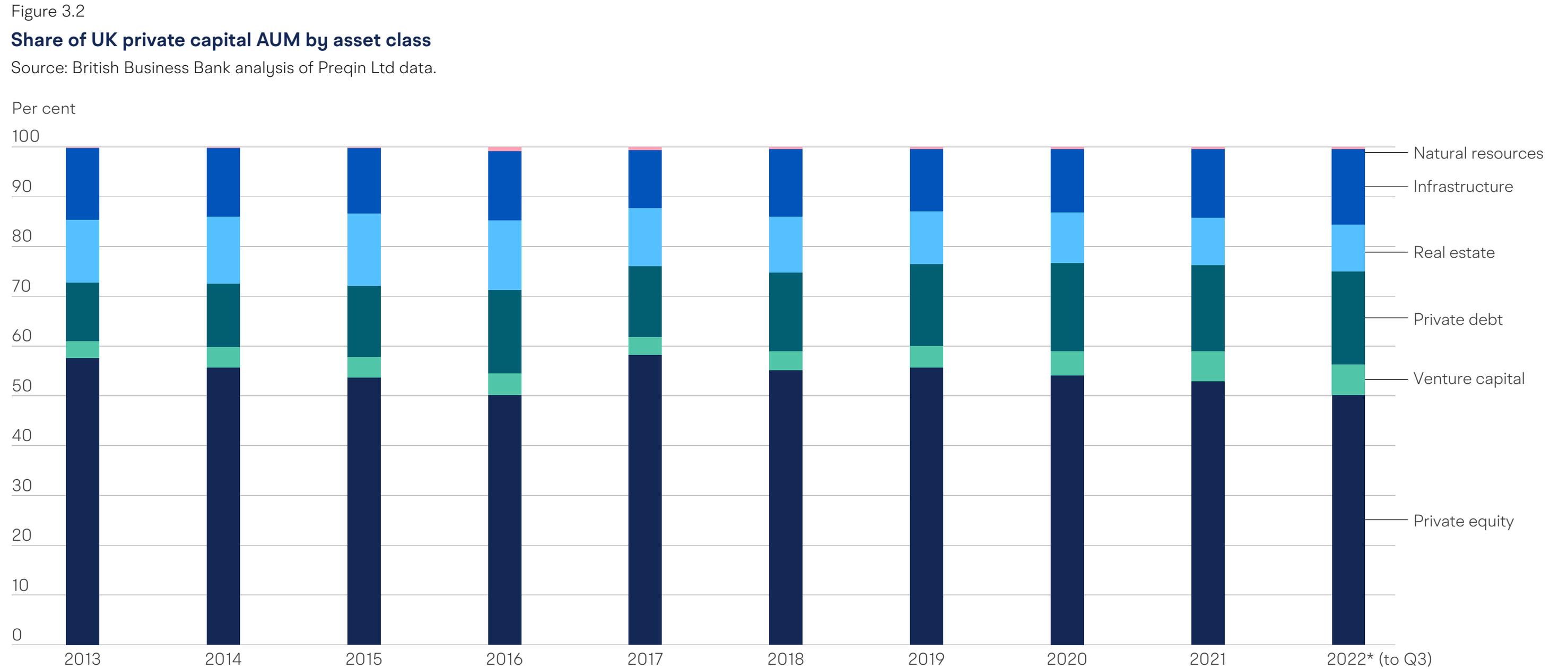
This gap has largely been filled by private debt and VC, both of which have seen AUM growth of over 300%. As a result, their share of total UK private capital AUM is now 19% and 6%, respectively, as of 2022. The AUM shares of infrastructure and natural resources have both remained relatively stable – however the former is a much larger UK asset class in absolute terms (£159.6bn versus £3.2bn in 2022).

Figure 3.1

UK fundraising value by asset class (three-year rolling average)

Source: British Business Bank analysis of PitchBook data.





Comparison of returns across asset classes

Having established the relative scale of the main alternative UK asset classes, this section explores what available data can tell us about their financial performance over time. **For this comparison we use Preqin’s asset class definitions²⁴, with performance metrics based on Preqin’s aggregate asset class benchmarks for UK-based funds with UK investment exposure.**

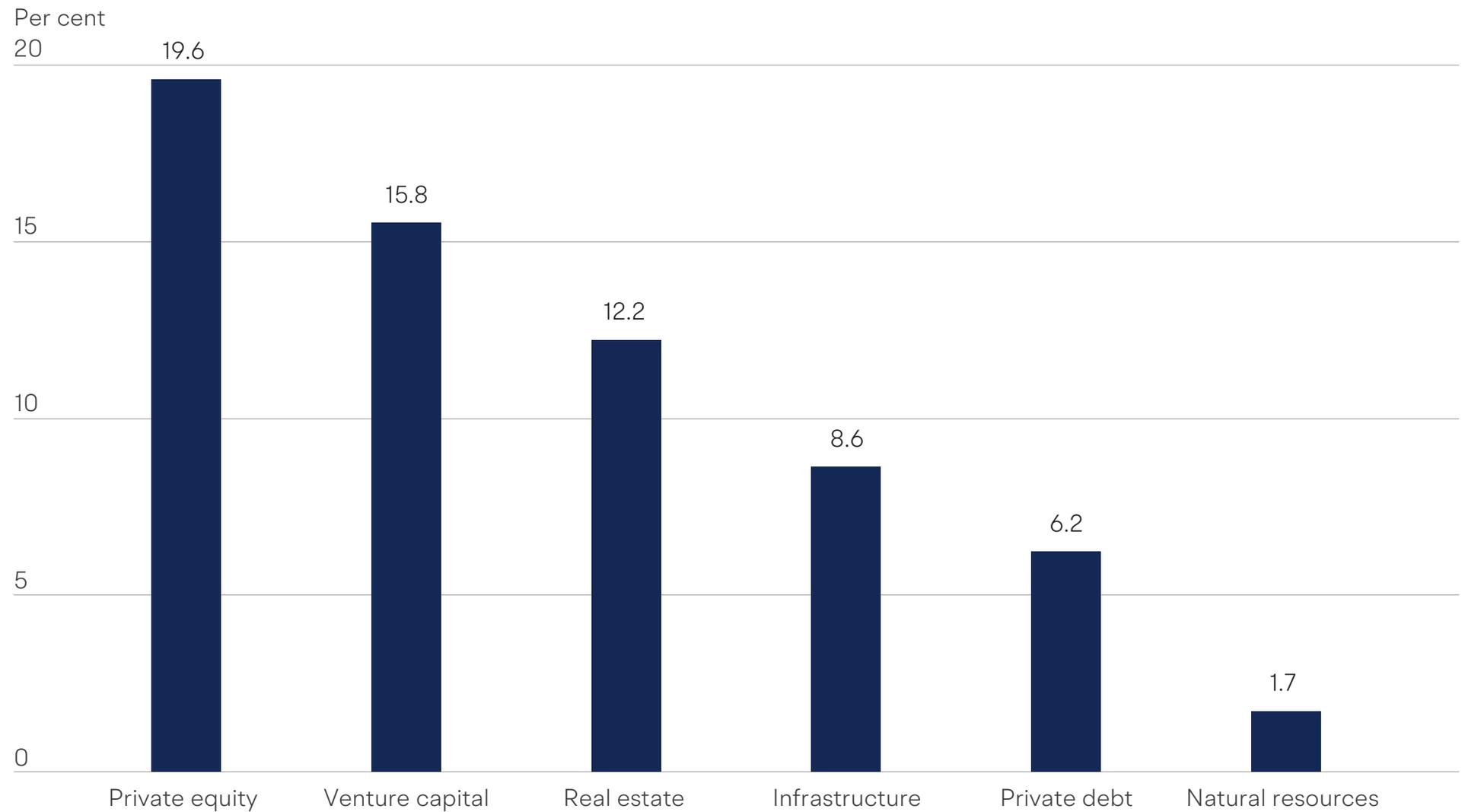
Whilst Preqin has market leading data coverage of the alternative assets industry, we have not constructed bespoke fund-level datasets for each asset class in the same way that we have for the VC analysis in chapters one and two.

Figure 3.3 compares median IRRs by UK asset class across 2002-2018 vintages. This time period has been chosen to provide a historical picture of how returns differ, to increase the sample size of UK funds, and to remain consistent with the analysis in previous chapters. PE and VC have generated the highest returns over this vintage period with IRRs of 19.6% and 15.8%, respectively, reflecting the riskier nature of these asset classes.

Figure 3.3

Median net IRR by UK asset class, 2002-2018 vintages

Source: British Business Bank analysis of Preqin Ltd data. VC estimates drawn from this report's UK VC returns dataset.



With a median IRR of 12.2%, real estate has also produced significant returns over the period – in part due to the low interest rate environment and cost of capital throughout much of this period supporting real estate prices (and therefore capital accumulation). While private debt has a lower IRR of 6.2%, it is fundamentally a less risky asset class. It is a fast-growing sector, though, and is likely to see increased demand through the current market downturn as investors seek greater liquidity and stable returns.

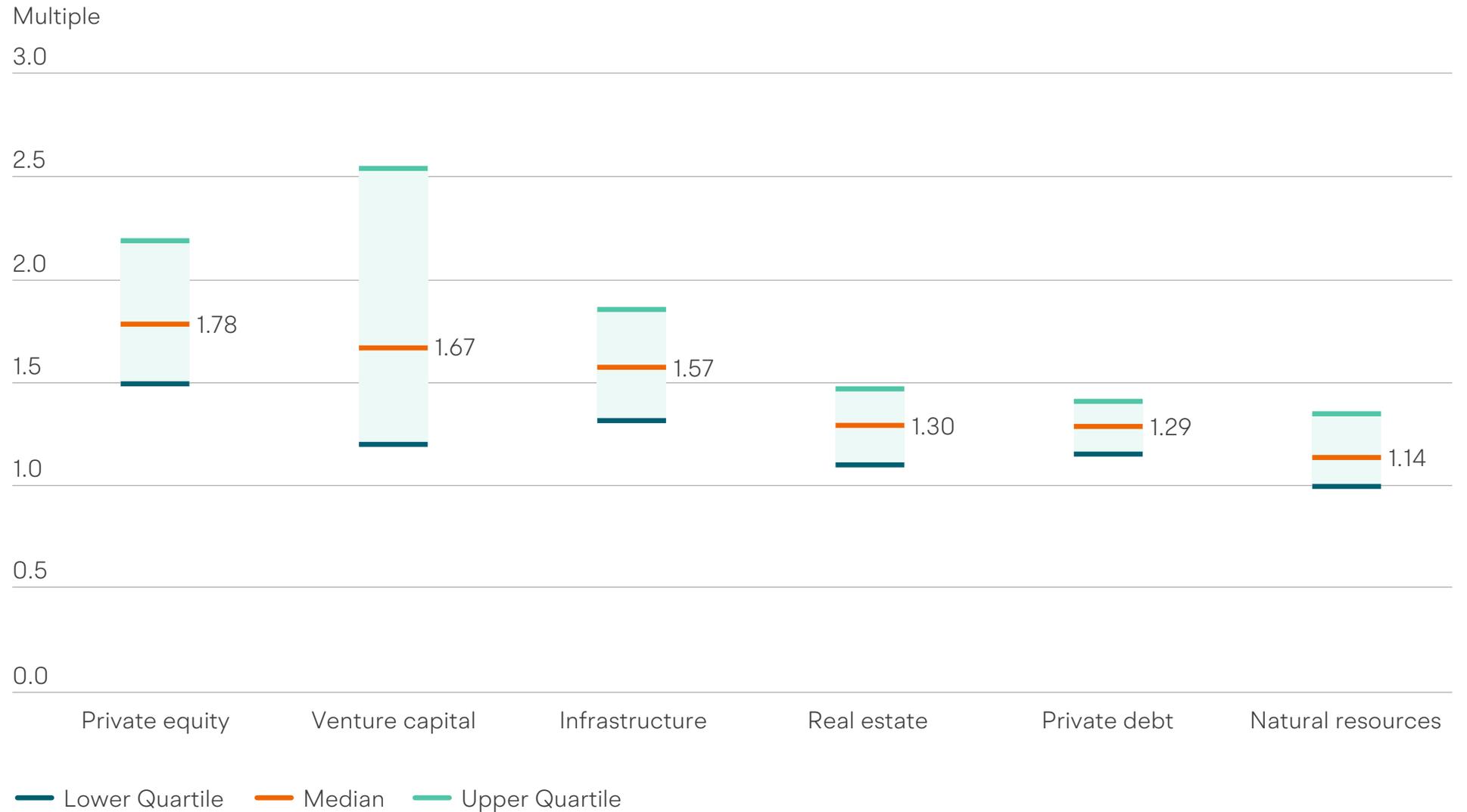
Figure 3.4 compares median TVPI return multiples by UK asset class across 2002-2018 vintages – including the median, lower quartile and upper quartile to give a sense of their overall return distributions. This data provides a similar picture of comparative returns to the IRR measures.

For example, PE and VC funds have demonstrated the strongest performance, with median TVPI multiples of 1.78 and 1.67, respectively. Infrastructure has been the third best performing asset class, with a median multiple of 1.57 – followed by real estate and private debt, which both share very similar return profiles and multiples of 1.30 and 1.29, respectively.

Figure 3.4

TVPI return multiple by UK asset class, 2002-2018 vintages

Source: British Business Bank analysis of Preqin Ltd data. VC estimates drawn from this report's UK VC returns dataset.



The trends here are very similar to the asset class performance data published by PitchBook in their 2023 Global Fund Performance Report.²⁵ Furthermore, for private equity in particular, the estimated TVPI of 1.78 is in line with the BVCA's latest published performance data²⁶ – which indicates a TVPI of between 1.66 and 1.85 over this period (depending on whether the fund is small, mid or large private equity).

For comparison, when looking at DPI measures of performance over this 2002-2018 vintage period, private equity has also generated the highest average returns (with a median multiple of 1.37). In contrast to the TVPI measures, this is followed by real estate (0.99) and private debt (0.89) – indicating that the performance of these asset classes is less dependent on unrealised asset value. VC, with a median DPI of 0.74, and infrastructure (0.62) rank fourth and fifth across alternative asset classes on this performance metric.

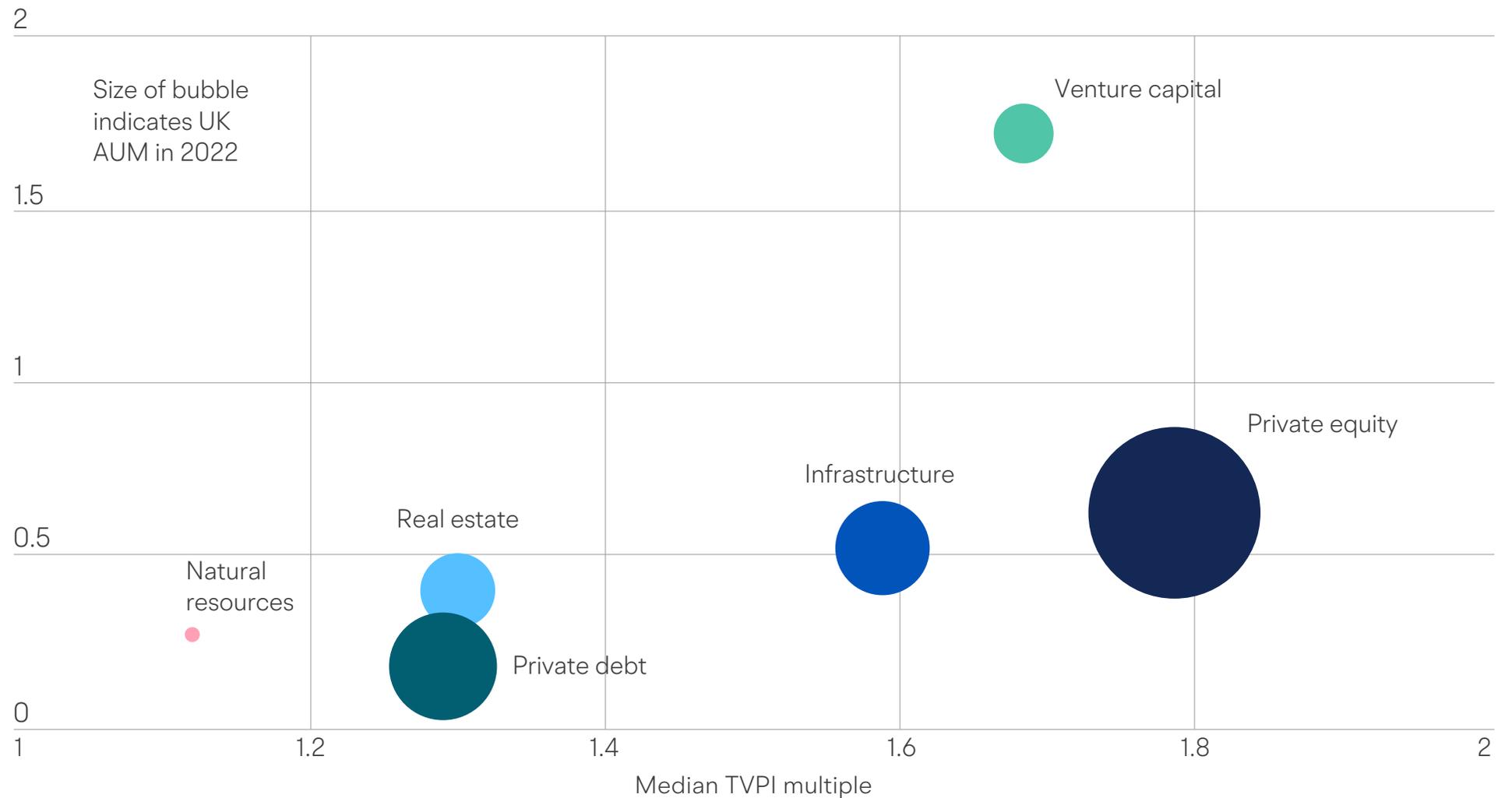
The patterns in performance observed in this data broadly align with economic theory on the relative risk and return profiles of these different asset types. Private equity and VC have the potential to generate the highest absolute returns over the long term, though this comes at the cost of increased risk and lower liquidity (VC funds typically take 10-15 years to fully liquidate and

Figure 3.5

Risk/return profile by UK asset class, 2002-2018 vintages

Source: British Business Bank analysis of Preqin Ltd data. VC estimates drawn from this report's UK VC returns dataset..

Standard deviation of TVPI multiples



distribute their returns to LPs). Real estate and private debt, on the other hand, benefit from greater stability and lower risk.

These characteristics can also be seen through the varying returns distributions for each asset class. For example, VC and PE have the highest interquartile ranges of 1.3 and 0.7, respectively. This indicates that returns for these asset classes are more widely spread around the median – particularly in the case of VC, where outlier funds can achieve very high performance.

The interquartile ranges for the other asset classes, however, are between 0.3 and 0.5, illustrating that returns are more tightly clustered around the average. The distributions for private debt and real estate in particular show that, while being considerably lower on average, these assets have more stable and predictable returns.

Building on this comparison of return distributions, figure 3.5 plots the average return of each UK asset class (measured by the median TVPI for 2002-2018 vintages) against their observed risk or variance (measured by the standard deviation of these TVPIs). Areas towards the bottom left of the chart have demonstrated a lower risk and return profile over the period, while the opposite is

true for areas towards the top right. The size of each bubble represents total UK AUM in 2022 to give a sense of the relative scale of each asset class. This analysis draws upon performance data from Preqin and shows a similar distribution to that of European funds in its Alternatives in Europe 2023 report.

With a TVPI standard deviation of 1.73, VC has the highest risk profile on this measure – with the next highest being PE (at 0.63) and infrastructure (at 0.52). While PE generates higher median returns with lower variance than VC, it is worth noting again that VC outperforms towards the top of the distribution, with higher upper quartile returns. Real estate, private debt and natural resources all display lower levels of risk and return, though real estate has a slightly higher standard deviation (at 0.40) than private debt (at 0.18). This is likely to reflect the role of capital appreciation, alongside rental income, in generating real estate returns.

Looking at the equivalent risk profiles using DPI measures, again UK VC has the highest standard deviation of 1.21. This is followed by private equity, with a standard deviation of 0.78 and infrastructure (0.70). As with the TVPI measures, on DPI metrics lower risk asset classes on average are real estate (0.53), natural resources (0.40) and private debt (0.39).

Impact of the market downturn

Alongside the more historical comparison provided so far in this chapter, it is also useful to assess how the returns of these asset classes have fared during the current market downturn, and over more recent time periods. As mentioned previously, investments in private equity and VC can behave quite differently to investments in private debt and real estate, for example, during shifts in the economic environment.

Figure 3.6 displays the horizon IRRs for each asset class over a one, three, five and ten-year period up to March 2023, using Preqin aggregate benchmark data for all asset classes at the global level. Horizon IRRs indicate how particular fund strategies have performed over a defined time period, without specifying fund vintages. For a fund to be included in the sample for a given time horizon, it must be active at the start and the end of the period i.e. have an unrealised value reported at both start and end dates.²⁷

This data shows that, while achieving the highest IRRs over a five and ten year horizon, VC and private equity have seen the lowest performance in the past year – with IRRs of -13.2% and -4.7% respectively. The returns of other less volatile asset classes, such as natural

Figure 3.6

Horizon IRRs by global asset class

Source: British Business Bank analysis of Preqin Ltd data.



resources, infrastructure and private debt, have held up more recently. However, over longer term horizons their IRRs have been considerably lower than VC and PE.

Comparing these trends to those reported by the BVCA, their latest published data also finds that VC has been particularly impacted by the market downturn, with a one year horizon IRR of -0.8% recorded (up to the end of 2022). As with the Bank's dataset, BVCA explain that "it is important to note that many venture funds in our sample are funds investing in technology. This sector was impacted the most by the broader slowdown in public markets and falling valuations".²⁸

PE and VC asset classes in particular have been affected by the increasing path of interest rates in the UK, which has raised the cost of capital and reduced the risk-adjusted returns available to investors. While overall UK PE fundraising has been relatively resilient in 2023, attracting capital from LPs has become more challenging.

PitchBook data indicates that the median time to close a fund increased from 9.2 months in 2022 to 17.1 months in 2023. GPs are also approaching dealmaking with an increased focus on due diligence and business fundamentals, resulting in smaller deals and lower average valuations. These reduced valuations are also

causing a decline in exit activity as investors seek to hold on to their assets for longer.

However, while these factors will have an effect on returns in the short term, looking ahead there may be better vintages over the next few years in PE and VC as we reach the bottom of the market cycle. Of the 58 UK VC fund managers that participated in our market conditions survey (explored in more detail in chapter four), a total of 35 (60%) believed that 2023 or 2024 vintages would produce the highest returns (from a recent selection of vintages from 2019 to 2024).

Private debt is an asset class that can benefit from a tighter monetary policy environment and help provide diversification and stable returns throughout the market cycle. As economic conditions become more challenging and traditional bank lenders become more risk averse, this allows private debt funds to play a more significant role in providing business finance. Alongside increasing market share, the returns from private debt investments are also supported during times of rising interest rates as funds generally tend to use floating rate instruments.

In its Investor Outlook Survey from June 2023,²⁹ Preqin reported that North American investors were most positive about the near-term performance of private debt and infrastructure assets. When asked "What are

your return expectations in the coming year compared with the year before?", over 90% of LPs stated that private debt would perform the same or better, followed by 80% of LPs for infrastructure. Investors were the least optimistic about VC, with half of the LPs surveyed expecting this asset class to perform worse over the next year.

Real estate also typically plays an important diversification role during more challenging economic conditions, reducing portfolio volatility, acting as a hedge against inflation, and offering more reliable income streams. However, recently the returns from this asset class have been negatively affected by rising interest rates, impacting demand and price growth, as well as structural factors such as a continued shift away from commercial office investment following the pandemic.

However, looking ahead, real estate performance may be supported by the fact that rents are holding up well in the residential market and there remains growth opportunities in the industrial sector. As with infrastructure, which is also generally regarded as a countercyclical asset class with low volatility, the UK's transition to net zero and a decarbonised economy could provide a range of infrastructure investment opportunities for funds in this market.

Chapter 4: Fund manager views on current VC market conditions

This chapter of the report explores UK fund manager perceptions on the current state of the UK VC market and provides insights into market conditions compared to the previous year. Fund managers' views were tested on key aspects of the market such as dealflow, competition, exit opportunities for portfolio companies and the fundraising environment.

During August and September 2023, the Bank undertook its VC fund manager survey for the fourth successive year, producing detailed qualitative evidence on the current state of the VC market.

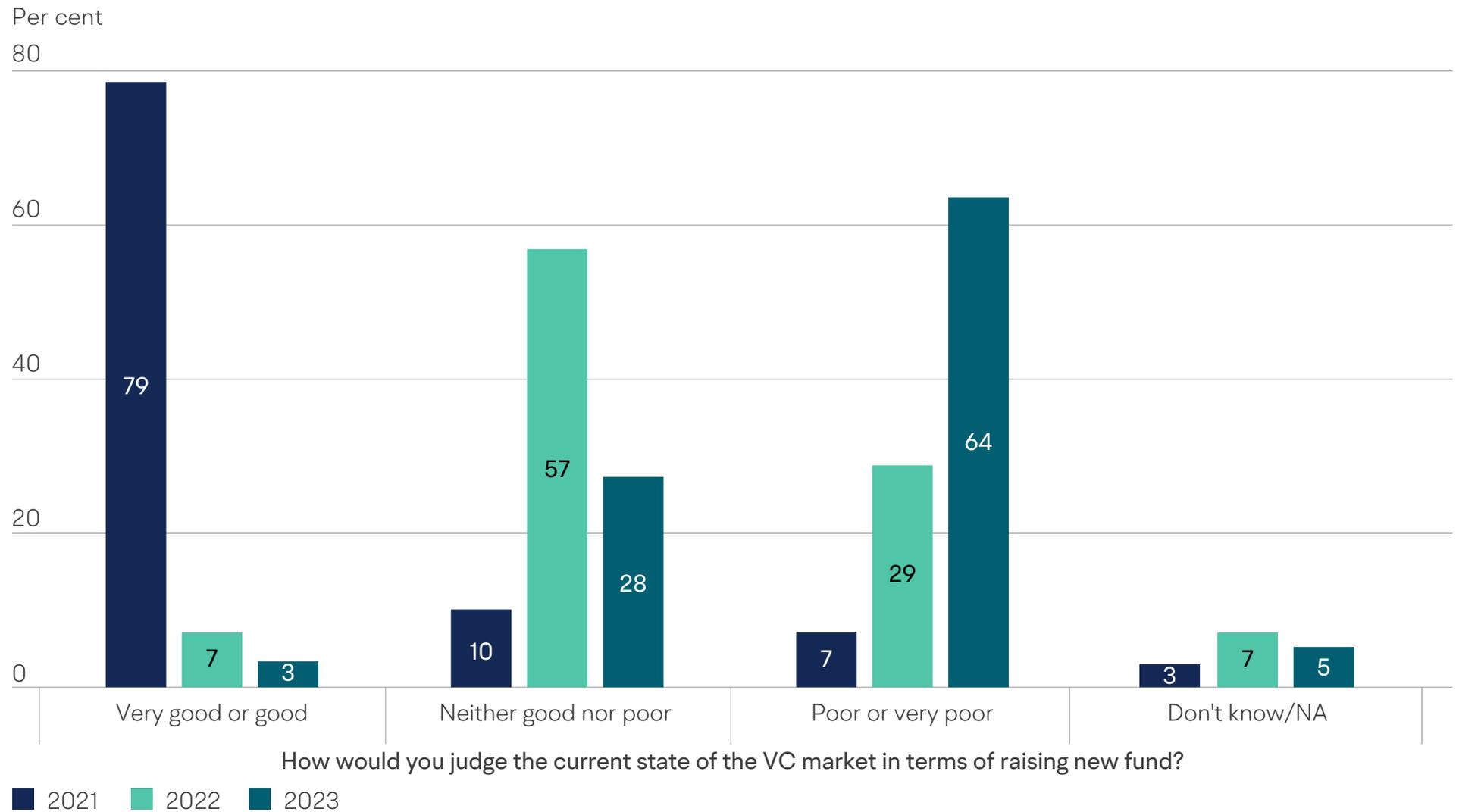
A total of 58 fund managers completed the survey this year, the highest response rate achieved to date. The Bank estimates that these 58 fund managers form 51% of the total population of UK-based fund managers that are currently active (113 estimated in total), and therefore provides significant coverage from which inferences can be drawn.

Figure 4.1 shows that a majority of fund managers reported that the current state of the UK VC market in terms of raising a new fund was either poor or very poor (64%). A minority of fund managers (28%) thought the market conditions for raising a new fund were neither good nor poor, and only 3% reported that they were very good or good. This is a significant adjustment from two years ago when around eight in ten fund managers reported that the market conditions for raising a fund were either very good or good. Compared to last year's

Figure 4.1

Fund manager views on current fundraising conditions

Source: Bank survey of VC fund managers (2021 n=29, 2022 n=14, 2023 n=58).



survey, the majority view has shifted from neutral (neither good nor poor conditions) to pessimistic (poor or very poor conditions).

The survey respondents also provided views of how these fundraising conditions compared to a year ago. 48% reported that fundraising conditions have worsened, while 38% thought they were about the same and 9% thought they had improved.³⁰ When asked to what extent their future fundraising plans have changed compared to a year ago, a quarter said that they have had to push back their plans for raising a new fund.³¹

This survey evidence on fundraising conditions is supported by UK market data from PitchBook, as illustrated in figure 4.2. 2021 was an exceptional year for fundraising with a total of £9.5 billion raised by UK-based VC funds. However, since the middle of 2022, the increased economic uncertainty and a wider market downturn has resulted in a steady decline in fundraising – both in terms of average capital raised and the number of funds closing. Total fundraising has fallen from £9.3bn in the four quarters between 21Q2-22Q1, to £5.1bn in between 22Q4-23Q3.

Figure 4.2

Quarterly UK VC fundraising (four-quarter rolling average)

Source: British Business Bank analysis of user defined PitchBook search.

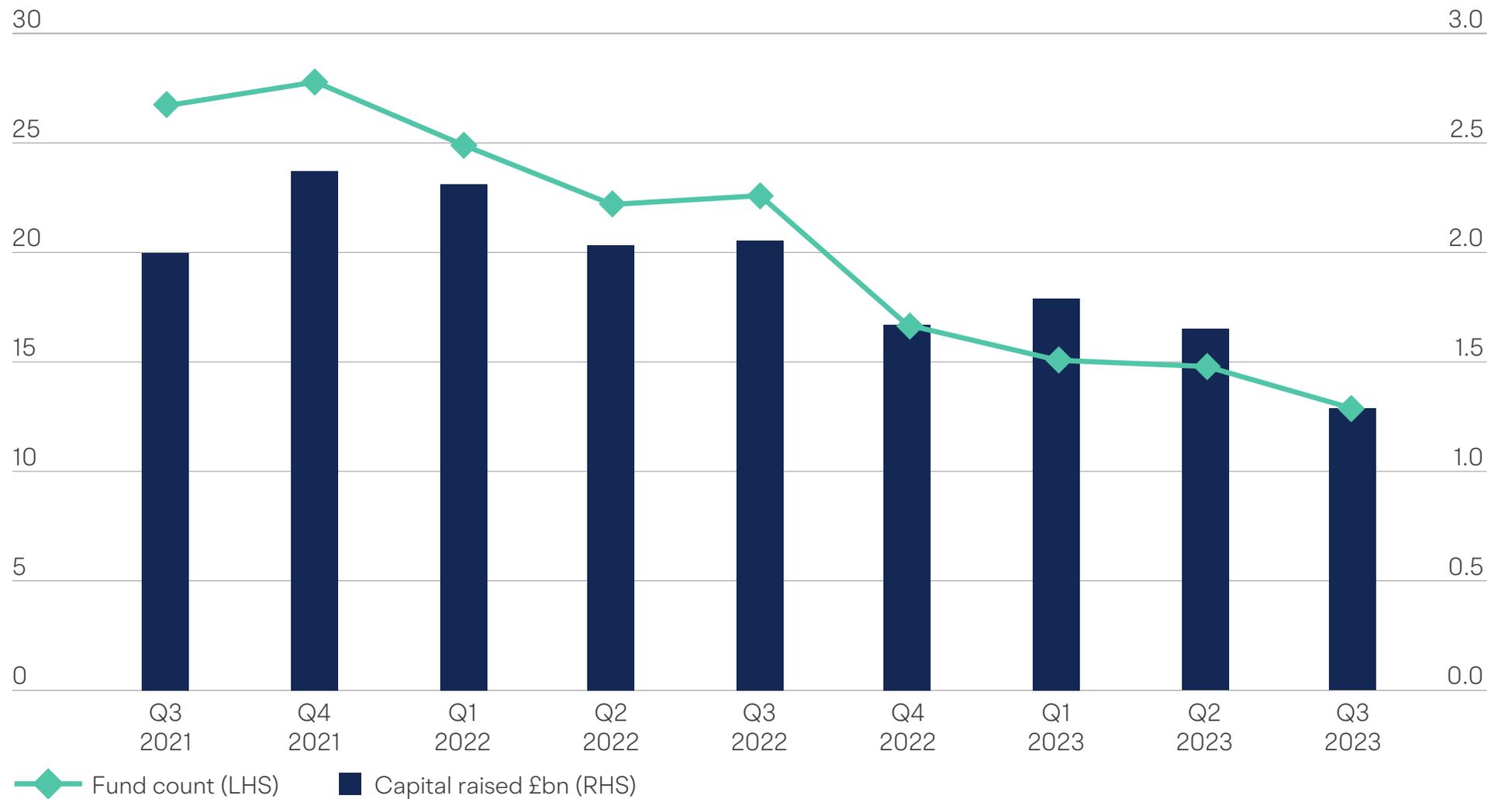
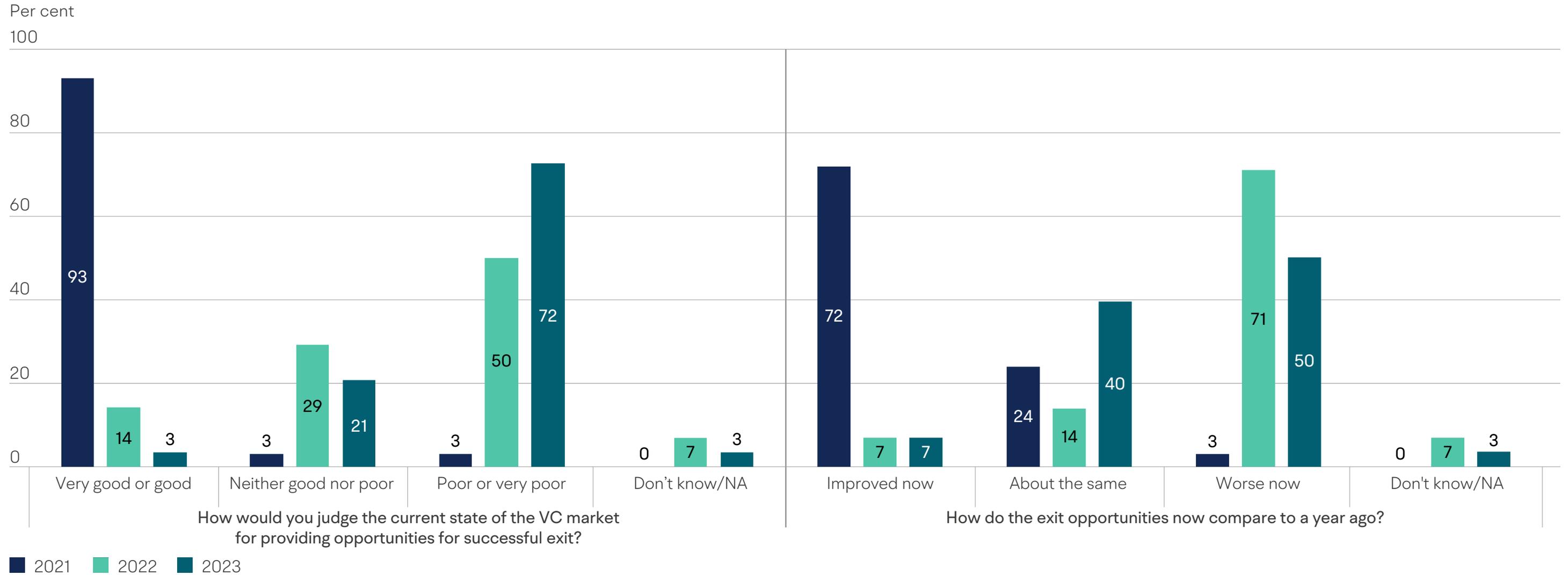


Figure 4.3

Fund manager views on current exit conditions

Source: Bank survey of VC fund managers (2021 n=29, 2022 n=14, 2023 n=58).



The stagnant exit environment has severely limited the ability of fund managers to convert the unrealised value of their investments into realised gains. This has reduced their ability to generate returns for LPs and, as a result, attract additional capital for few funds. The rise in inflation and the upward trajectory of interest rates has also reduced the risk-adjusted returns available to investors from the VC asset class, while other alternative investments with greater liquidity and more regular income streams have become more attractive. One fund manager noted: “We have seen a significant reduction in appetite from potential LPs”.

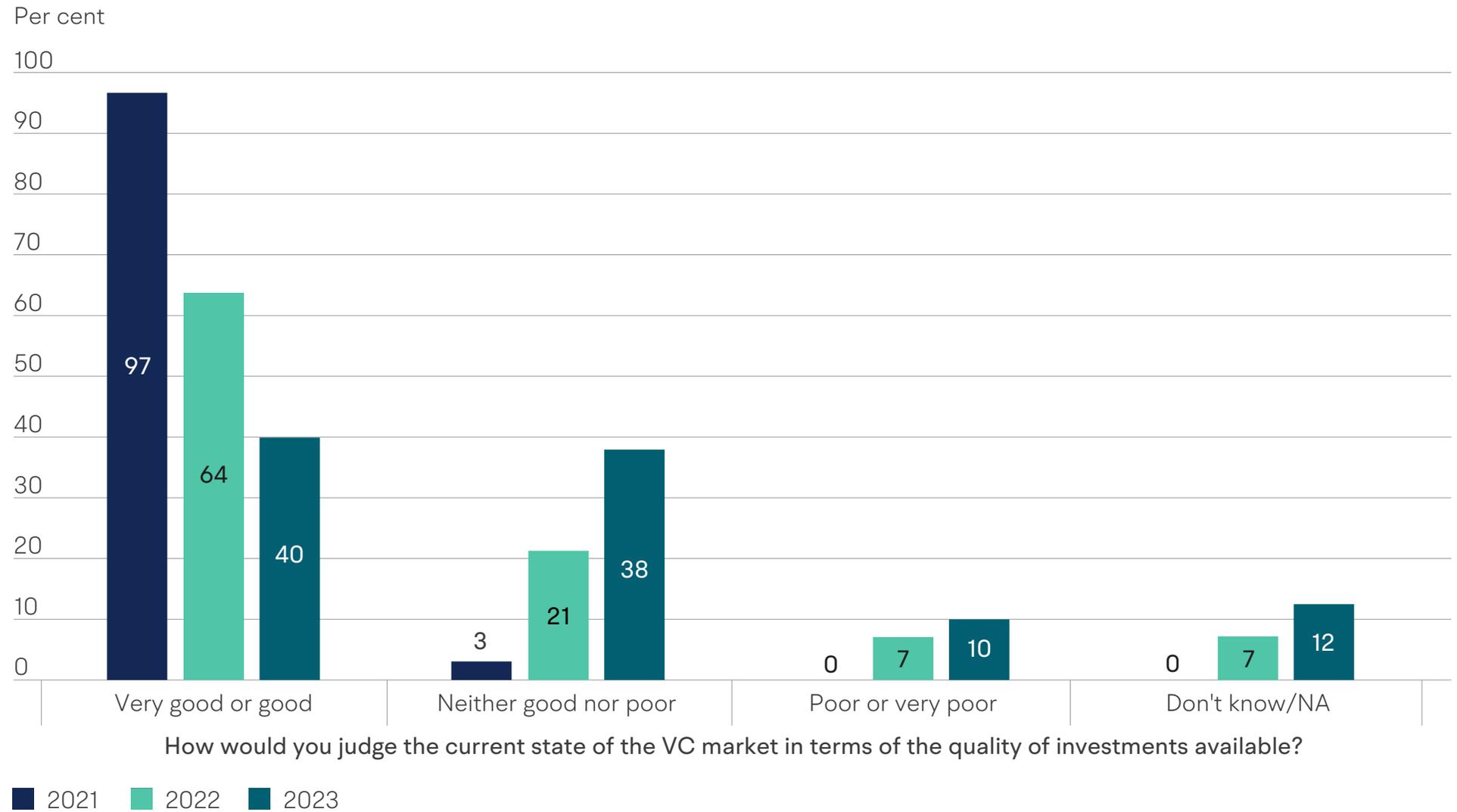
Fund managers in our survey also expressed this general deterioration in exit conditions. A majority of respondents (57%) reported that current opportunities for successful exits are poor – up from 29% in last year’s survey – and a further 16% said they were very poor. Furthermore, 50% said that exit opportunities have worsened this year compared to market conditions in 2022, while 40% said they were about the same.

IPOs have been heavily impacted by wider macroeconomic factors affecting public market valuations, while acquisitions have also been impacted by a return to focusing on profitability over expansion.

Figure 4.4

Fund manager views on current quality of investments

Source: Bank survey of VC fund managers (2021 n=29, 2022 n=14, 2023 n=58).



As a result, market data from PitchBook³² shows that the total value of VC-backed exits in the UK has remained very subdued at around the £1bn mark since 2022Q2. There were a total of 38 VC-backed exits in 2023Q2, the lowest number since 2020Q3.

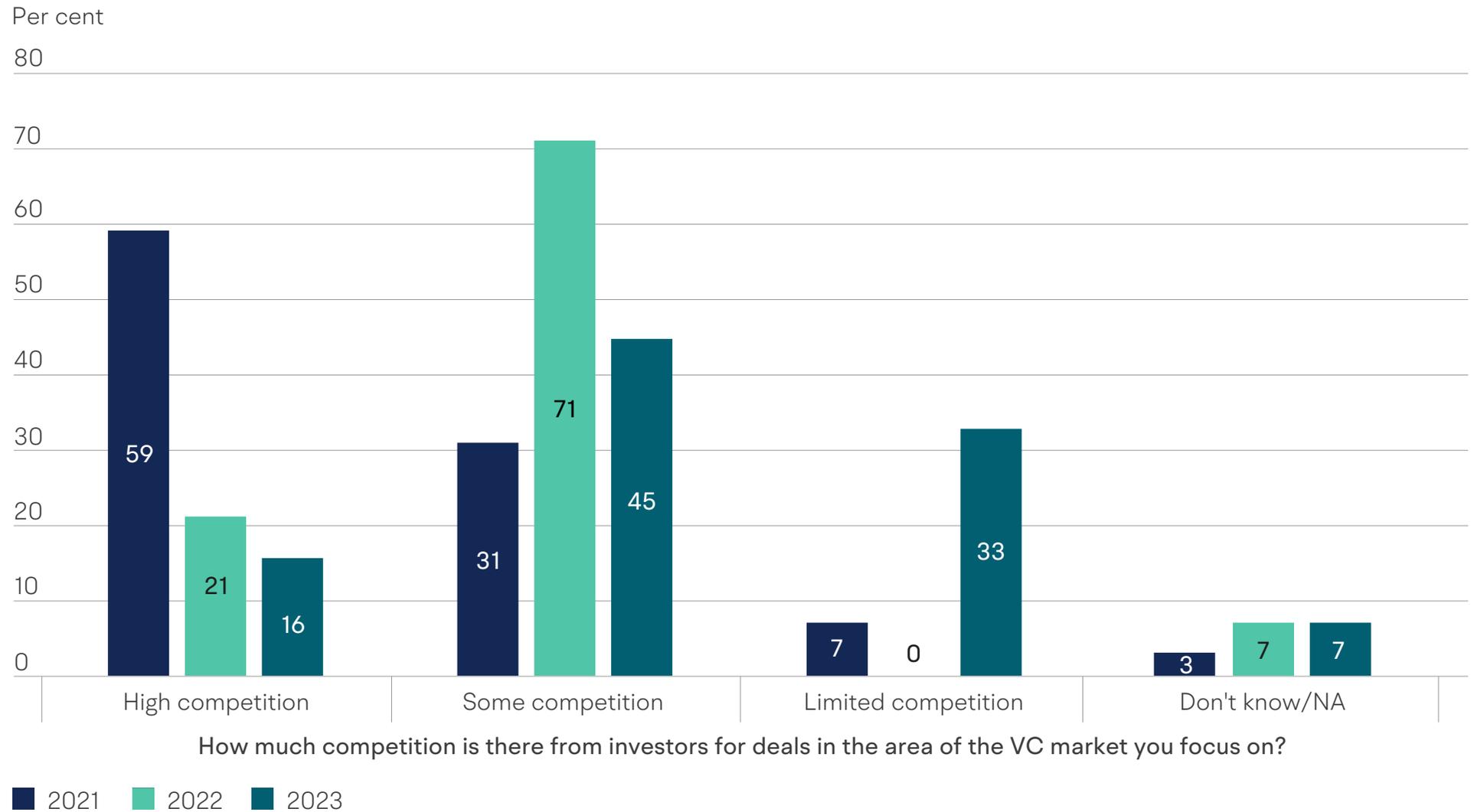
Figure 4.4 shows that fund manager views on the quality of investments available in the VC market have worsened since our 2021 survey. The share of respondents rating the quality of investments as ‘good’ or ‘very good’ has declined from 97% in 2021 to 40% in 2023. 10% of fund managers surveyed also rated the quality of investments as ‘poor’, compared with 0% in 2021. Similarly, as shown in figure 4.5, fund managers’ perceptions of deal competition are also deteriorating. Only 16% of respondents are experiencing high levels of competition from other investors in their area of the VC market, while a third believed the degree of competition to be limited.

When asked how competition levels were different to a year ago, the majority of fund managers believed it was about the same (41%) or less competitive (35%).³³ Almost half (48%) of respondents also reported that the pace of their investment has decreased due to the changing economic conditions,³⁴ while 45% said that they have

Figure 4.5

Fund manager views on current competition for deals

Source: Bank survey of VC fund managers (2021 n=29, 2022 n=14, 2023 n=58).



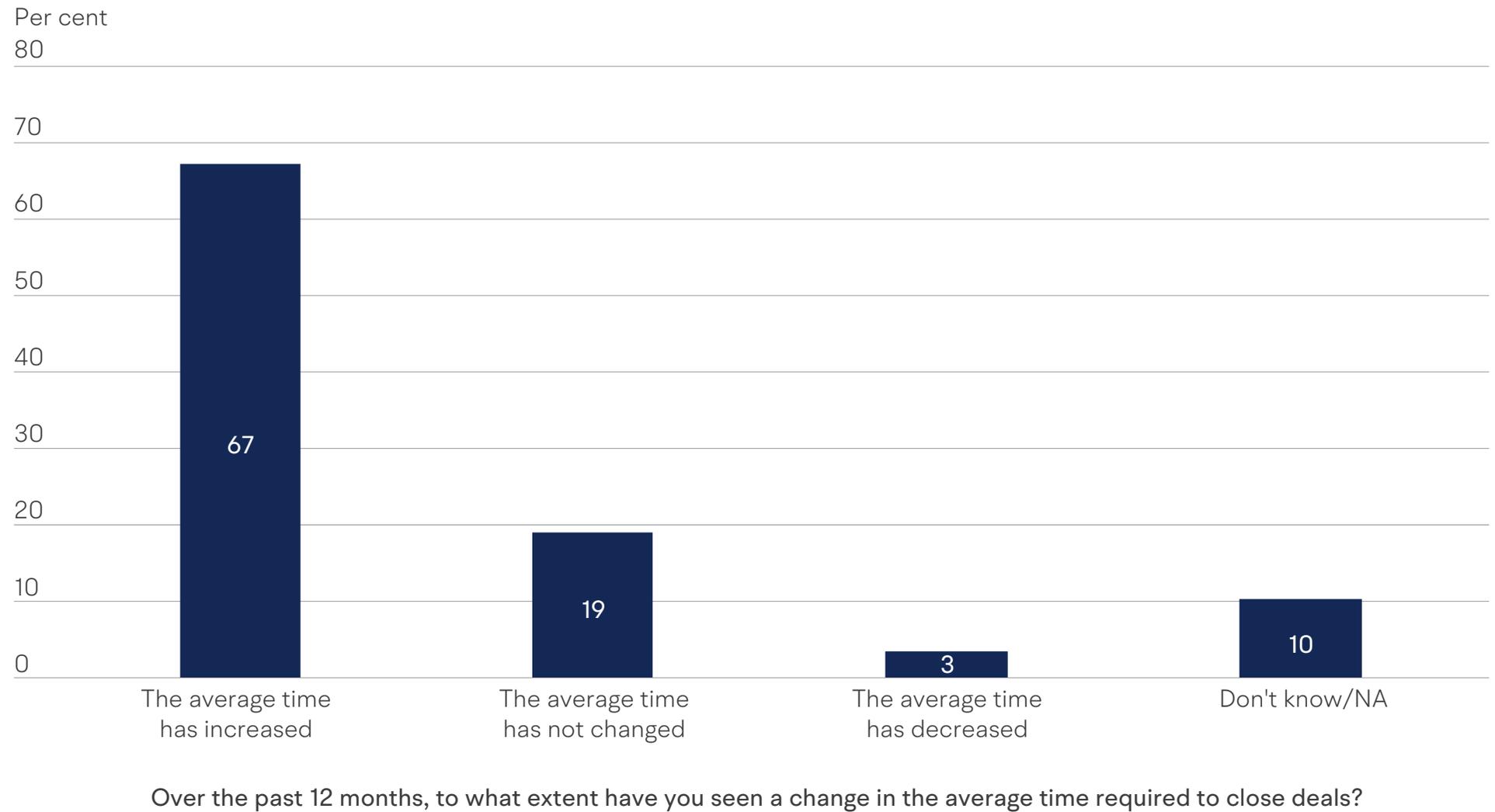
prioritised existing portfolio companies compared to new investments.³⁵ These findings are backed up by deal-level data from Beauhurst, which shows that UK SME equity finance in 2023H1 was £4.4bn, down from £5.8bn in 22H2. VC dealmaking continues to remain subdued and has stabilised to general historical levels seen before 2021 – both in terms of deal volumes and values.

Figure 4.6 also illustrates how current market conditions have affected the average time taken by GPs and companies to close VC deals. The survey findings paint a clear picture on this issue, with over two thirds of respondents stating that the average time to close a deal has increased over the past 12 months (while only 3% reported that the average duration has shortened). PitchBook note that “in an investor-favoured dealmaking environment, VCs have slowed their pace of investment, which allows them to conduct more thorough due diligence and uncover red flags that may have previously been overlooked or missed during the scramble to access deals in 2021 and early 2022.”³⁶

Figure 4.6

Fund manager views on the average time required to close deals

Bank survey of VC fund managers (2023 n=58).



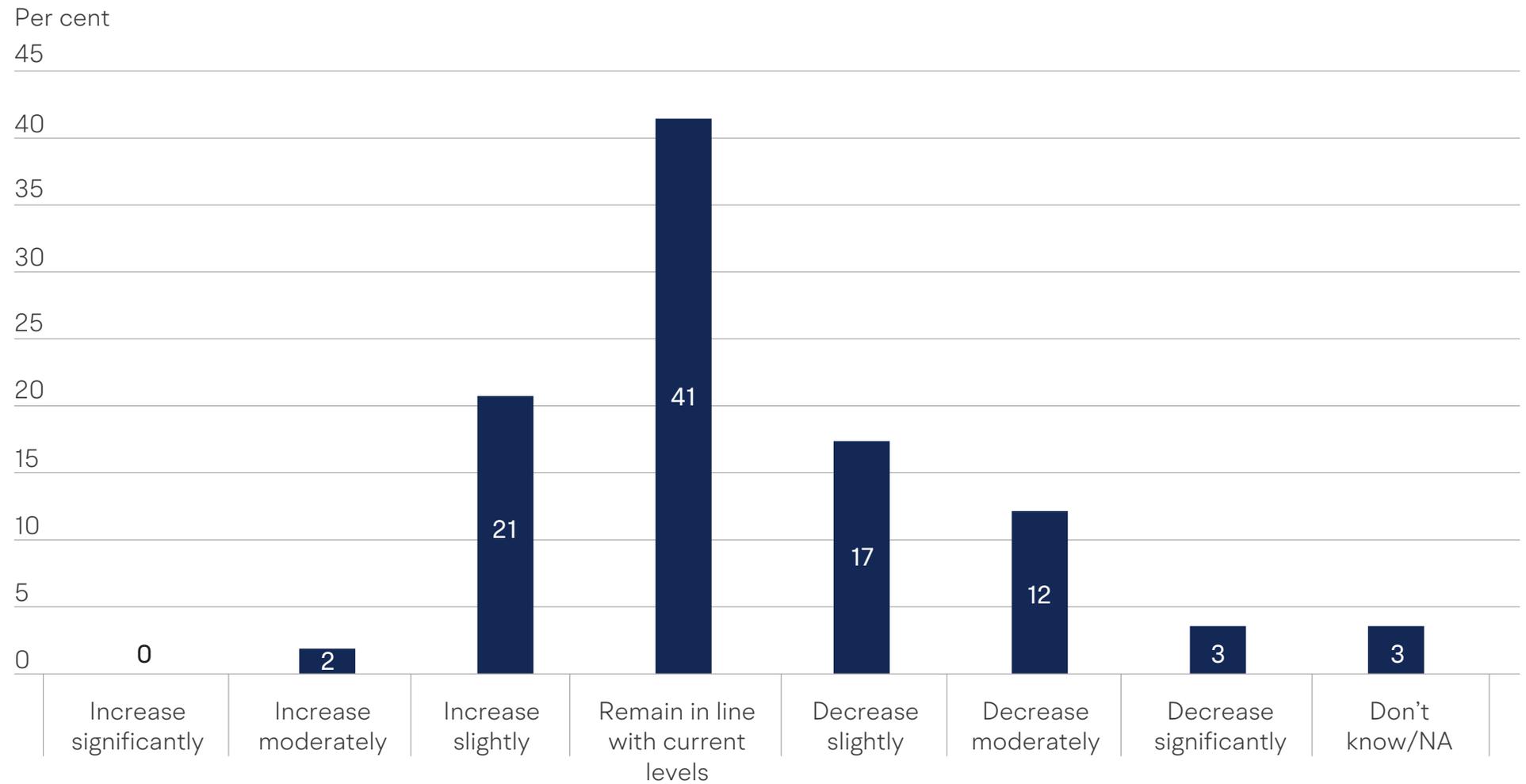
One of the key factors behind the more investor-friendly investment environment has been a significant decline in company valuations over the past year, particularly at the later stages of the market. The Bank’s Small Business Equity Tracker 2023 report highlighted that there had been a 16% fall in median growth stage valuations in 2022, to £36.9m. More recent Beauhurst data for 23H1 indicates that this trend has continued this year, with median growth stage valuations falling a further 38% to £22.7m.

Looking ahead, the extent to which valuations fall further before reaching the bottom of the cycle is likely to influence how quickly exit and dealmaking activity recovers. Evidence from our survey indicates that 41% of fund managers think average valuations will remain in line with current levels over the next year, suggesting some stability can be expected. However, as a slightly higher share of fund managers think valuations are likely to fall further (33%) than increase (22%), there may be some more valuation declines before the market recovers.

Figure 4.7

Fund manager views on future changes in valuations

Source: Bank survey of VC fund managers (2023 n=58).



Over the next 12 months, how do you expect average valuations to change across the VC market?

Appendix 1

Definitions

Venture Capital

Venture Capital (VC) is a type of Private Equity (PE) finance provided by investors into small early-stage companies with the potential for very high growth. Finance is provided in return for an equity stake in the business and investors generate a financial return (or profit) on their investment when they sell their stake through an Initial Public Offering (IPO), trade sale or secondary sale. Many early-stage VC-backed companies are unlikely to have positive cash flows, or even be generating sales at the time of VC investment. It may therefore take many years until a company has developed its technology and market position to allow a VC investor to exit with a positive return. VC-backed companies therefore differ to PE-backed companies which are more established.

This report focuses on the returns made by funds focused on making VC investments only. It does not compare the performance of returns generated from wider PE or other asset classes like investing in public markets.

Financial performance metrics

There are several ways to measure VC financial returns. Deciding which measure to use is often context specific and dependent on the data available. The following measures are used to assess fund performance in this report:

- Internal Rate of Return (IRR)
- Money multiples:
 - Distributions to Paid-In capital (DPI)
 - Residual Value to Paid-In capital (RVPI)
 - Total Value to Paid-In capital (TVPI)

Money multiples are the main measure used to assess fund performance throughout this report.

Internal Rate of Return (IRR)

IRRs are widely used in private capital industries as they offer a way of comparing two investments with irregular cashflow timings and sizes. The IRR represents

the discount rate at which the Net Present Value (NPV) of an investment's future cashflow is equal to zero.

The IRR measure incorporates the time value of money, so that £100 of returns generated sooner is valued more than £100 realised in the future.

Money multiples

Multiples provide a relatively simple measure of an investor's return on their invested capital, providing a cash-on-cash measure of how much investors are receiving back from the capital they have committed. Multiples are useful in that they show the scale of the returns, but a key limitation is that the time value for money is completely ignored. A fund returning twice the invested amount will have the same multiple regardless of whether the return took two or ten years to materialise. Two multiples that are typically reported by funds are Distribution to Paid-In capital (DPI) and Total Value to Paid-In capital (TVPI), but it is also useful to know the Residual Value to Paid-In Capital (RVPI) which is the difference between the two multiples:

$$TVPI = DPI + RVPI$$

- **Distributions to Paid-In capital (DPI):** The ratio of cumulative distributions to LPs divided by the amount of capital contributed by the LPs. At the start of a fund's life, this ratio will be zero due to there being no exits to date but will begin to increase as distributions (portfolio company exits) occur. When the DPI is equal to one the fund has broken even, as the money paid in is equal to money distributed. Any number above one indicates that the fund has paid out more than has been paid in, so that LP investors get more than their initial capital back. This measure is therefore useful at the later stages of a fund's life as it is an actual measure of fund performance directly measuring cash received from exits.
- **Residual Value to Paid-In capital (RVPI):** The sum of cumulative net asset value of the investment, divided by the capital contributed by the LPs. It calculates

the multiple of the investment would be returned to investors if the unrealised assets were sold at current valuations. Valuation of early-stage companies can be very difficult because of the inherent uncertainty surrounding the prospects of the company. However, the concept of 'fair value' is used to value the unrealised assets at each measurement date, with a number of recognised valuation techniques used. The 'Book value' of unrealised investments is useful for assessing performance during the early part of a fund's life, but offers no guarantee on future performance as valuations can change over time due to changes in wider economic and market conditions. For instance, a high RVPI may be indicative of an inflated market versus an accurate representation of how much the portfolio can actually be sold for eventually'. Globally, there are a number of well-known later stage unicorn businesses that have received funding at a lower valuation to their previous funding round (known as a down round). This will effectively lead to disappointed LP investors as the DPI does not match up to the projected RVPI.

- **Total Value to Paid-In capital (TVPI):** The sum of cumulative distributions to LPs and the net asset value of the investments, divided by the capital contributed by the LPs. It calculates what multiple of the investment would be returned to LP investors if the unrealised assets were sold at current valuations and added to distributions that have already been received. This is useful for assessing performance during the early part of a fund's life, like the RVPI measure. While this can provide a more complete picture on the returns from the fund, it is significantly impacted by the valuation that is placed on the unrealised investments remaining in the fund, although the impact should reduce as the fund matures and investments are realised.

Given this difference, many LPs rely on the TVPI measure earlier in the life of a fund and DPI measure towards the end of a fund's life. Multiples tend to be a more conservative measure than IRR as a zero-rate reinvestment of cash flows is assumed.

Distribution of returns

There are large variations in performance between the top performing funds and the remaining funds. It is therefore useful to look at both the pooled return and median fund return figures, alongside the upper and lower quartiles. The VC industry has a focus on benchmarking upper quartile funds but there is no universal method for choosing the reference period or specific reporting metric, which will fluctuate from year to year depending on the composition of the funds included.

- **Pooled Return:** The return for the total group of funds being analysed. This is calculated by aggregating the realised and unrealised values across all funds, which accounts for different fund sizes. This is the best measure for estimating total market returns as it includes the performance of all outlier funds.
- **Median:** The fiftieth percentile. The return of a fund in the middle of the ranking. This represents the return of a ‘typical fund’.

- **Upper quartile:** The return of the fund in the top 25th ranking. When all VC funds are considered, upper quartile fund performance is higher than the remaining three quarters of other funds.

Fees

The financial return metrics presented for LP funds in this report are net of fees (i.e. fees are deducted). Management fees allow VC funds to meet their own operating costs, whilst carried interest fees relates to performance related share of fund profits from realised investments.

Appendix 2

Overview of data sources

BVCA

The British Private Equity and Venture Capital Association (BVCA) is the industry body and public policy advocate for the private equity (PE) and venture capital (VC) (private capital) industry in the UK. The BVCA's membership of around 620 firms includes the vast majority of all UK-based private capital firms, as well as their professional advisers and a large base of UK and global investors. The BVCA, in association with PwC, undertakes an annual survey of its eligible members asking about the performance of the funds that they manage. To be eligible for inclusion the PE firm must be a full BVCA member, raise money from third-party investors and manage that money from the UK (although it may be invested elsewhere). BVCA members investing from their own balance sheet, quoted vehicles such as VCTs and listed PE are excluded from the fund returns. The BVCA annually publishes financial returns information through its Performance Measurement Survey. The report examines the performance of PE and VC funds and then benchmarks them against other asset classes,

notably the UK public equity market. Overall, 105 fund managers responded to the latest BVCA survey providing data as of 31 December 2022. Fund data is presented anonymously in pre-defined categories relating to vintage year.

Commercial data providers

Commercial data providers like Preqin and PitchBook primarily source information on the performance of funds from public filings by pension funds, Freedom of Information (FOI) requests and voluntary disclosures by fund managers (GPs) or LPs.

Preqin

Preqin is a provider of data and intelligence to the alternative assets industry including PE, real estate, hedge funds, infrastructure, private debt and natural resources. It collects a range of information including funds and fundraising, performance, fund managers, institutional investors, deals and fund terms.

PitchBook

PitchBook is a financial data and software company that provides data on capital markets. PitchBook collects and analyses detailed data on the entire venture capital, private equity, and M&A landscape – including public and private companies, investors, funds, investments, exits, and people.

Other sources of information on VC financial returns

The British Business Bank is the largest UK-based LP investor in UK VC. The Bank monitors the performance of the funds it has invested in by collecting information directly from fund managers. LP status ensures this information is fully verified and has full coverage of funds invested in. In line with the Bank's role in addressing market failures in finance markets, the characteristics of funds invested in through the Enterprise Capital Fund (ECF) programme may differ to the wider UK VC market due to their focus on early-

stage market, smaller deals sizes affected by the equity gap and emerging fund managers.

Since 2013, BPC through the Bank's previous VC Catalyst programme has invested on commercial terms in VC funds targeting UK scale up companies. The VC Catalyst programme was targeted at helping VC funds to reach a first close, which differs to the objective BPC has for increasing the amount of patient capital to UK scale up businesses. It is early days in the life of these funds, but a summary of performance to date compared to the wider VC market is included in chapter two of the report.

This year's report also includes the results of data the British Business Bank has directly collected from UK VC fund managers. The Bank collected fund level financial returns information from 58 fund managers (covering 112 funds), and also captured the views of these fund managers on current market conditions on quality of deal flow, exit opportunities for portfolio companies and the fund-raising environment. These fund managers were UK based, active in the VC market managing closed end funds, with a vintage year of between 2002 to 2021 vintage making VC investments in the UK.

Appendix 3

Methodology for compiling dataset

Data on individual UK VC funds with a 2002 to 2021 vintage year was downloaded from PitchBook and Preqin in September 2023. 2002 was chosen as the first vintage year to avoid picking up effects from the dot-com bubble and to be consistent with BVCA reporting.

- Data from British Business Bank MI systems was also extracted for funds under the ECF, UKIIF and British Patient Capital (including VC Catalyst) programmes as these programmes are delivered by private sector fund managers that have raised funding from private sector sources.
- Funds with missing data relating to fund size, PIC, TVPI, and DPI were removed from the underlying databases as it was not possible to calculate market return figures. For instance, the reported PIC, TVPI, and DPI multiples were used to calculate the commitment drawn, realised value and unrealised value in relation to the reported fund size for the pooled financial return metrics. The individual reported fund TVPI and DPI multiples were used to calculate the median and quartile returns figures.
- The PitchBook and Preqin data was then cleaned to remove ‘old’ fund data, which might relate to funds

strategically reporting returns, for instance taking advantage of initial early returns. For funds with a vintage year between 2002-2011, funds with the latest reporting date less than seven years were excluded. For funds with a vintage year of 2012 onwards, a reporting date of at least 2018 was required.

- The data was then visually checked for errors with a focus on the largest reported TVPI and DPI multiples, but it was not possible or feasible to check the accuracy of information for every fund.
- Funds were assessed to ensure only VC funds were captured. This sometimes involves reclassifying funds from their PitchBook and Preqin fund classification. All PE growth capital and buyout funds were removed from the dataset. In addition, VC funds which entirely invested in geographic areas and developing countries outside of their listed location was also removed from the dataset.
- This gave a total dataset of 2,724 VC funds (Table A2). Financial returns figures may therefore differ to the numbers published by PitchBook and Preqin themselves which include all VC funds in their relevant fund populations.

– To increase coverage of funds, the individual funds from PitchBook, Preqin and British Business Bank were all merged into one single data file. To avoid the same fund appearing more than once, funds were deduplicated using the following sequential preference logic:

- 1.** British Business Bank supported fund. This information has been verified/ audited.
- 2.** British Business Bank survey data. This information has been supplied directly by fund managers.
- 3.** Most up to date reporting date. This to ensure the latest information is captured.
- 4.** Lowest TVPI multiple. This is to ensure most conservative data source is chosen.
- 5.** Largest fund. This is to ensure subsequent fundraising closures are captured.
- 6.** Oldest vintage – This gave a total combined dataset of 2,078 unique VC funds (Table A3)

Table A.1

**Number of VC funds 2002-2021 by data source
(Raw downloaded numbers)**

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.

Region	Bank MI	Bank Survey	PitchBook	Preqin	Total
UK	146	107	101	95	449
US	5	0	1,825	1,553	3,383
ROE	22	5	169	325	521
Total	173	112	2,095	1,973	4,353

Table A.2

**Number of VC funds 2002-2021 by data source
(Cleaned)**

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.

Region	Bank MI	Bank Survey	PitchBook	Preqin	Total
UK	127	101	67	61	356
US	3	0	1,221	1037	2,261
ROE	18	5	102	229	354
Total	148	106	1,390	1327	2,724

Table A.3

**Number of VC funds 2002-2021 by data source
(Cleaned and de-duplicated)**

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.

Region	Bank MI	Bank Survey	PitchBook	Preqin	Total
UK	114	70	15	13	212
US	3	0	847	726	1,573
ROE	18	5	88	182	293
Total	132	75	950	921	2,078

Appendix 4

Detailed UK performance by two-year vintage category

Table A.4

DPI performance multiple by two-year vintage category

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.

Years	Pooled Return	Upper Quartile	Median	Lower Quartile	Number of funds
2002-2003	1.35	1.48	1.24	0.72	11
2004-2005	*	*	*	*	3
2006-2007	1.77	2.63	1.32	0.43	19
2008-2009	1.22	1.27	0.97	0.80	9
2010-2011	1.01	1.22	0.90	0.67	12
2012-2013	0.85	1.05	0.43	0.27	18
2014-2015	0.83	1.47	0.58	0.25	28
2016-2017	0.21	0.32	0.10	0.03	27
2018-2019	0.05	0.06	0.00	0.00	43
2020-2021	0.02	0.00	0.00	0.00	43

* Fewer than five funds

Table A.5

TVPI performance multiple by two-year vintage category

Source: British Business Bank analysis of PitchBook, Preqin Ltd, Bank survey data and Bank MI data.

Years	Pooled Return	Upper Quartile	Median	Lower Quartile	Number of funds
2002-2003	1.37	1.48	1.24	0.77	11
2004-2005	*	*	*	*	3
2006-2007	1.87	2.80	1.46	0.46	19
2008-2009	1.97	2.35	2.00	1.27	9
2010-2011	1.86	1.87	1.53	1.21	12
2012-2013	2.39	2.72	2.05	1.20	18
2014-2015	2.58	3.18	2.26	1.48	28
2016-2017	2.37	2.59	1.74	1.28	27
2018-2019	1.55	1.78	1.46	1.22	43
2020-2021	1.29	1.42	1.25	0.96	43

* Fewer than five funds

Appendix 5

Further results from fund manager survey

Figure A.1

Fund manager views on future fund vintage performance

Source: Bank survey of VC fund managers (2023 n=58).

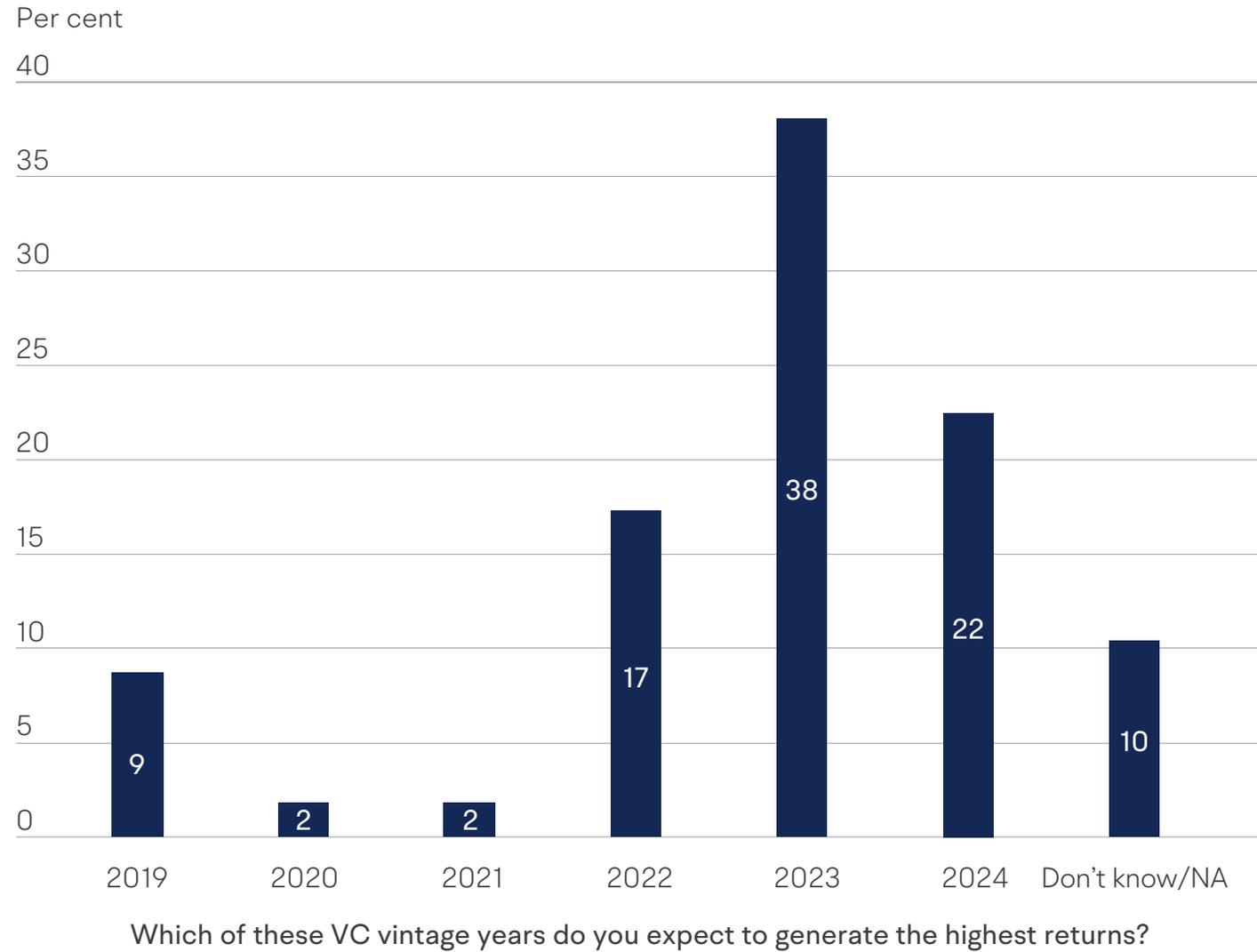


Figure A.2

Fund manager views on future fundraising plans

Source: Bank survey of VC fund managers (2023 n=58).

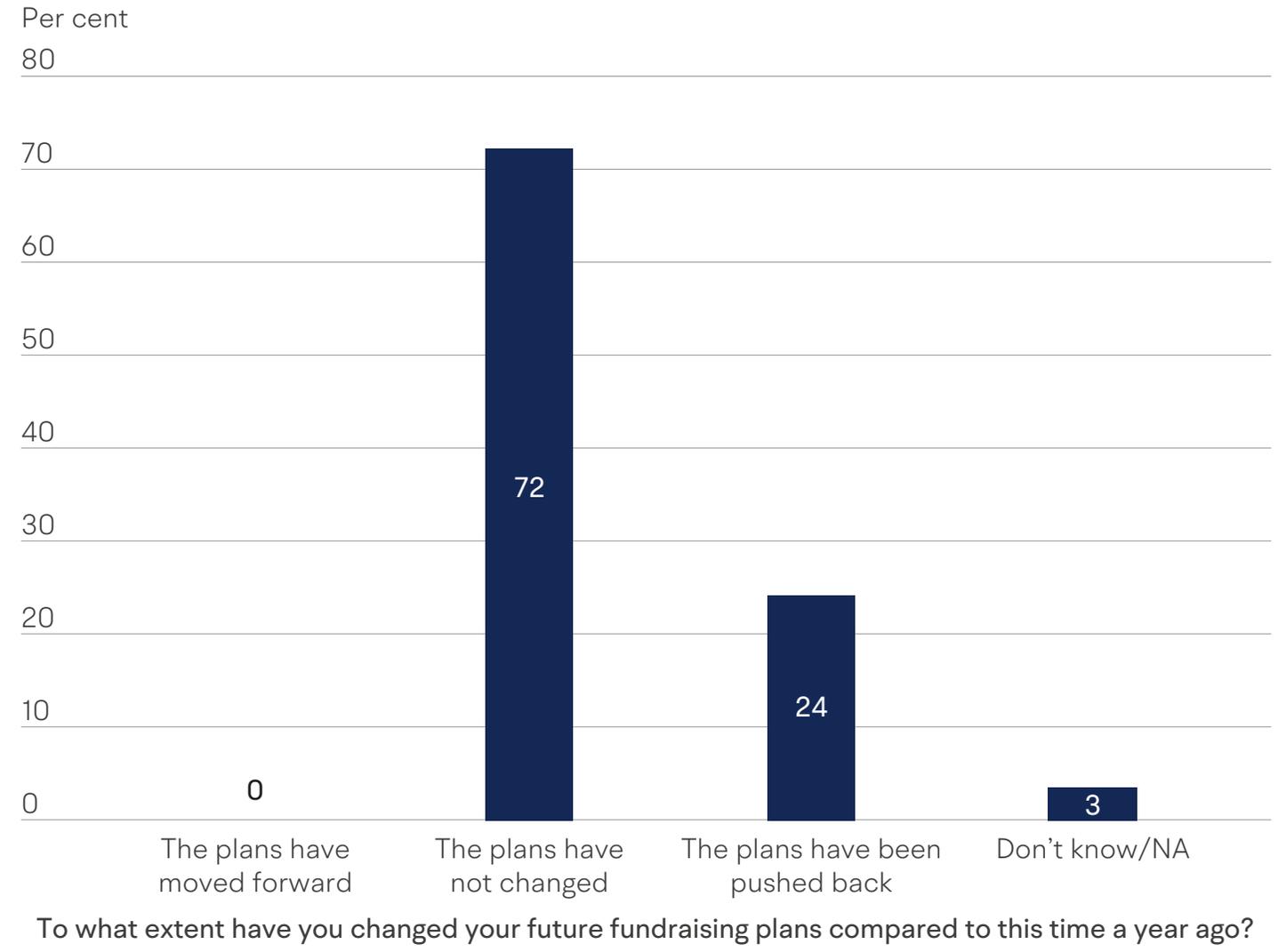


Figure A.3

Fund manager views on current fundraising conditions

Source: Bank survey of VC fund managers (2023 n=58).

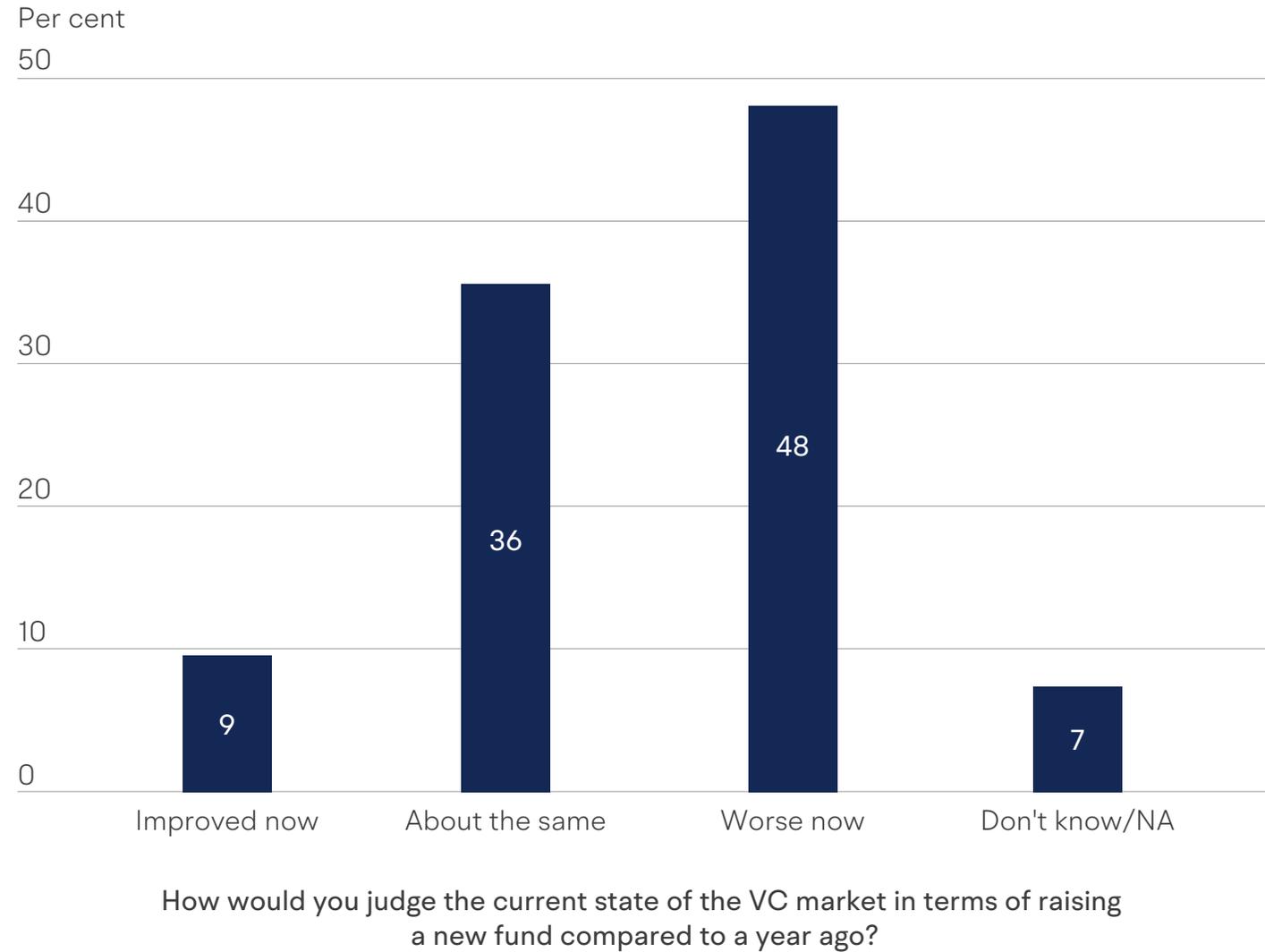


Figure A.4

Fund manager views on current competition for deals

Source: Bank survey of VC fund managers (2023 n=58).

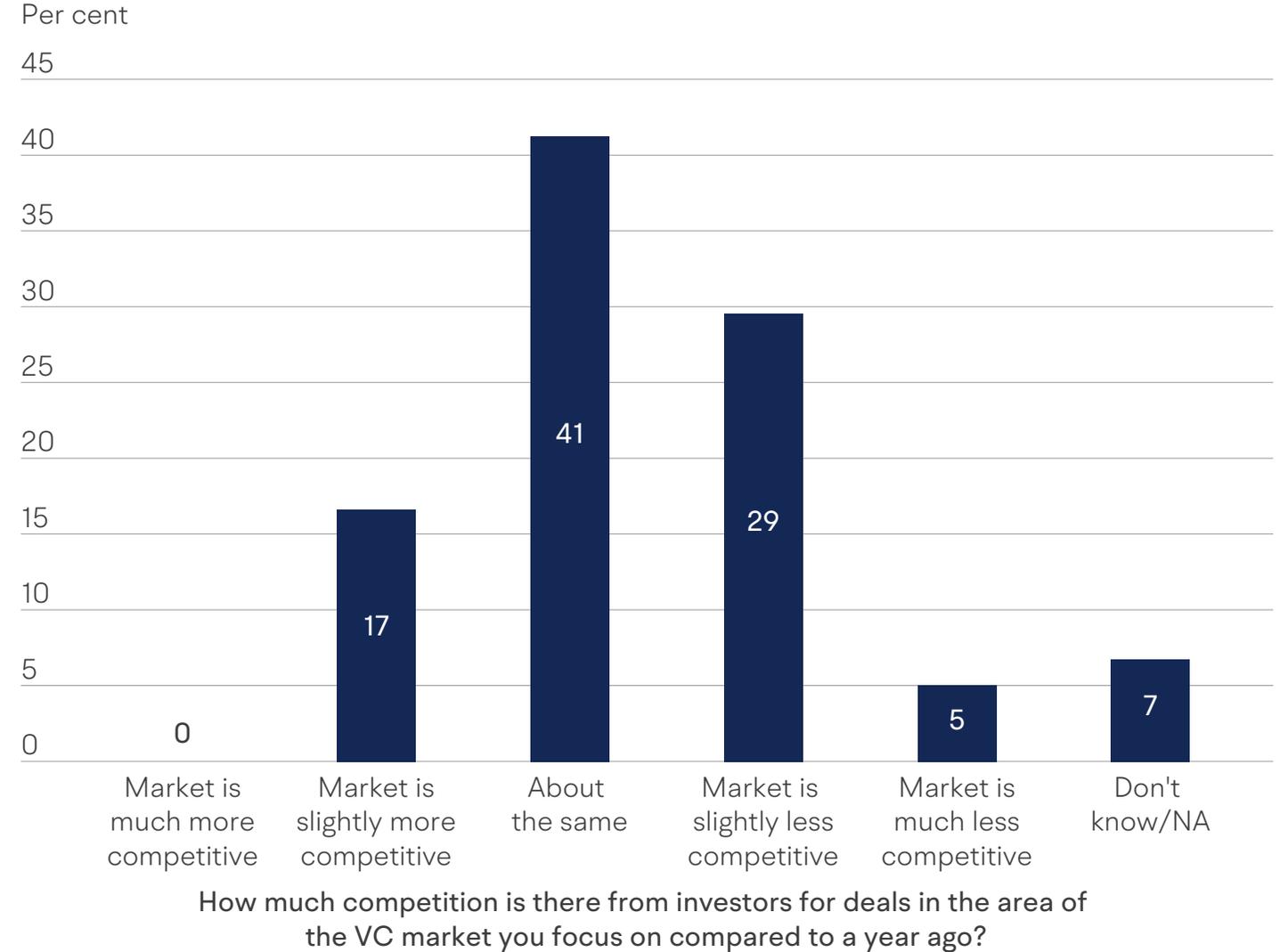


Figure A.5

Fund manager views on investment priorities

Source: Bank survey of VC fund managers (2023 n=58).

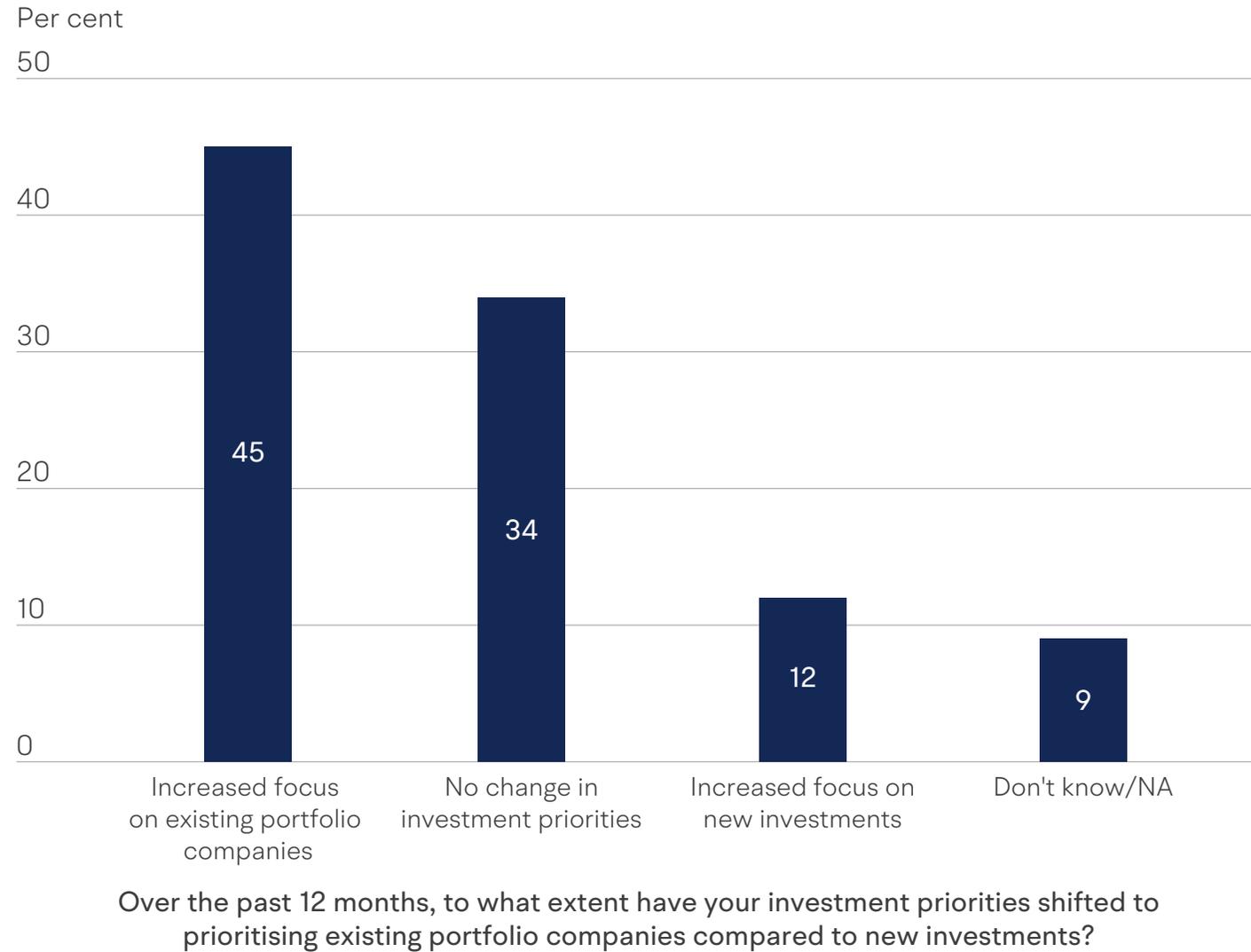
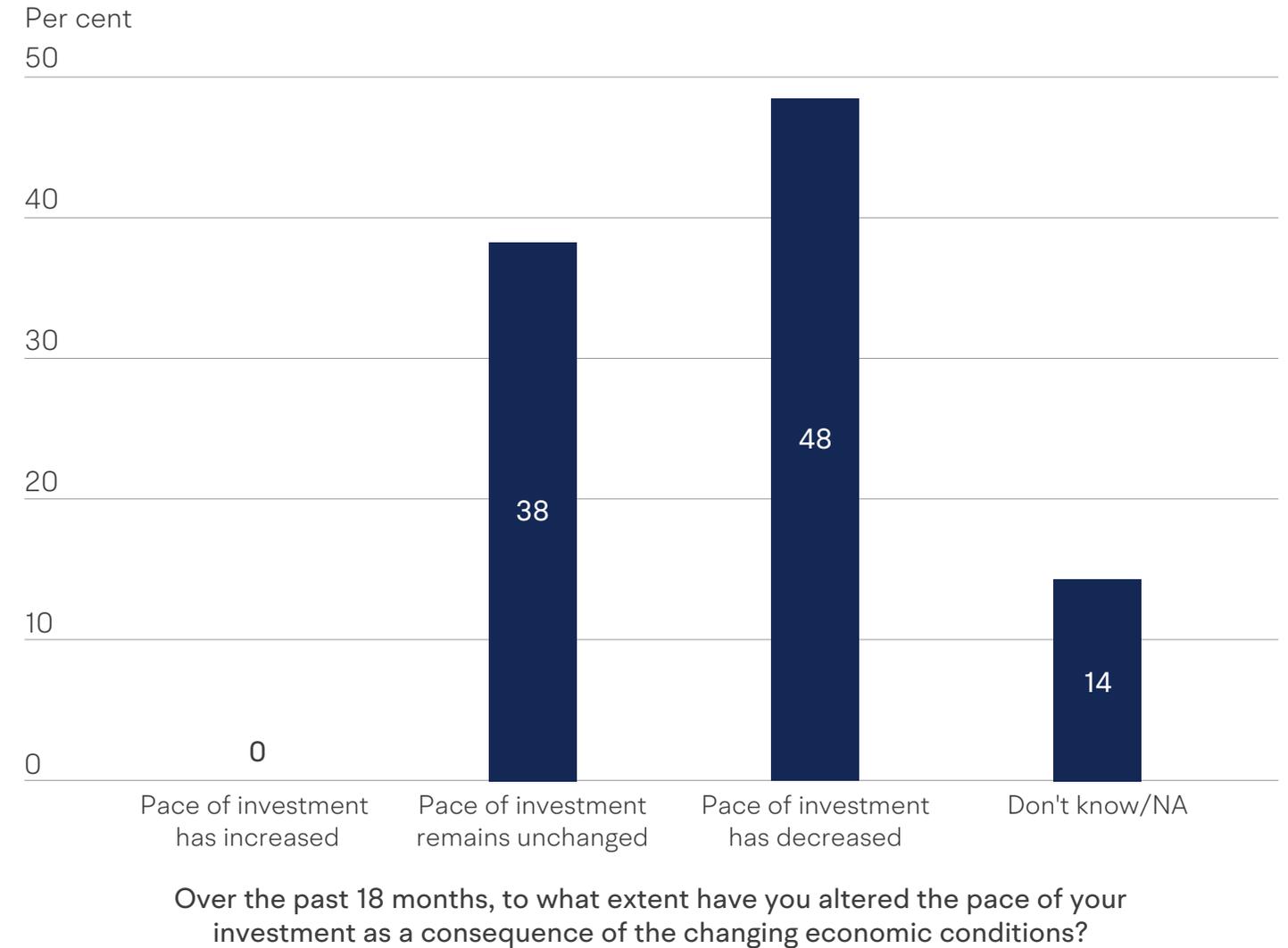


Figure A.6

Fund manager views on changes in investment pace

Source: Bank survey of VC fund managers (2023 n=58).



Endnotes

1. The total value of the Bank's equity commitments for ECF and BPC since October 2014, including NLF commitments and excluding deferred commitments.
2. The 2004-2005 cohort has a small sample size of three funds. The pooled TVPI value has been adjusted downwards, due to one outlier fund which has not yet liquidated based on its most recent reported data from 2019.
3. BVCA Performance Measurement Survey 2022.
4. BVCA Performance Measurement Survey 2022.
5. British Business Bank: Small Business Equity Tracker 2023.
6. World bank national accounts data – <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>.
7. This is based on assessing the number of funds contained in our cleaned dataset, compared to the number of VC funds that Preqin and PitchBook identify as VC.
8. Figure A1 in Appendix 5.
9. British Business Bank (2023), Small Business Equity Tracker 2023.
10. Figure 4.5, Chapter 4.
11. PitchBook (2023) "Global Fund Performance Report as of 2022Q4 with preliminary 2023Q1 data" <https://pitchbook.com/news/reports/2023-global-fund-performance-report-as-of-q4-2022-with-preliminary-q1-2023-data#:~:text=Through%20Q4%202022%20and%20into,posted%20results%20greater%20than%2015%25>.
12. Funds are only included if their latest reporting date in last year's data set was 2022, and if their most recent reporting date in this year's dataset is 2023. If a fund was included in last year's dataset but it's most recent reporting date last year was 2020, it is not included in the sample even if it reported data in 2023 in this year's dataset.
13. British Business Bank (2023), Small Business Equity Tracker 2023.
14. British Business Bank (2022), British Patient Capital Interim Evaluation Report.
15. Securities Industry and Financial Markets Association (SIFMA) Research Quarterly: Equities.
16. Preqin (2023) Future of Alternatives 2028.
17. Preqin (2023) Future of Alternatives 2028.
18. BVCA "What is Private Equity?" <https://www.bvca.co.uk/Our-Industry/Private-Equity>.
19. Preqin "What is Private Debt?" <https://www.preqin.com/academy/lesson-4-asset-class-101s/private-debt>.
20. Preqin "What is Real Estate?" <https://www.preqin.com/academy/lesson-4-asset-class-101s/real-estate>.
21. Preqin "What is Infrastructure?" <https://www.preqin.com/academy/lesson-4-asset-class-101s/infrastructure>.
22. Preqin "What are Natural Resources?" <https://www.preqin.com/academy/lesson-4-asset-class-101s/natural-resources>.
23. Further detail on Preqin's definition of AUM can be found here <https://www.preqin.com/help-center/articles/view/private-capital-performance-data-guide>.
24. Further detail on the asset class definitions used for Preqin's aggregate benchmark return data can be found here - <https://www.preqin.com/academy/industry-definitions/private-capital-fund-strategies-definitions>.
25. PitchBook 2023 Global Fund Performance Report.
26. BVCA Performance Measurement Survey 2022.
27. Further detail on Preqin's definition of horizon IRRs can be found here - <https://www.preqin.com/help-center/articles/view/private-capital-performance-data-guide>.
28. BVCA Performance Measurement Survey 2022.
29. Preqin, 2023, Alternatives in North America 2023.
30. Figure A3 in Appendix 5.
31. Figure A2 in Appendix 5.
32. PitchBook 2023Q2 UK Market Snapshot.
33. Figure A4 in Appendix 5.
34. Figure A5 in Appendix 5.
35. Figure A6 in Appendix 5.
36. PitchBook NVCA Venture Monitor 2023Q3.

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